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# **Control surfaces**

# Overview of using control surfaces in Logic Pro

Control surfaces are hardware devices that typically feature controls such as faders, rotary knobs, buttons, and displays. They allow you to select parameters for editing, or select tracks, channel strips, or channel strip banks for playback and recording. Some control surfaces offer a jog wheel to move the playhead precisely, transport buttons to control project playback, and other physical controls.

More sophisticated control surfaces can feature motorized faders, rotary encoders, LED rings, and programmable displays. The additional feedback these provide makes them easier to use without looking at your computer screen or relying on mouse interaction.

Logic Pro provides dedicated support profiles (plug-ins) for a number of hardware control surfaces, enabling control of transport, mixing, recording, automation, and other tasks.

Many USB MIDI keyboard controllers can also act as control surfaces. In addition to a musical keyboard, these devices can include drum pads (used for note entry or as buttons to execute Logic Pro commands), faders, rotary controls, transport controls, and assignable buttons that can be mapped to Logic Pro commands. Logic Pro provides Lua scripting support, rather than a dedicated profile, for dozens of keyboard (and desktop) controllers from various manufacturers. USB MIDI keyboards can be automatically mapped to Smart Controls and other Logic Pro functions, or you can create and modify your own assignments.

The *Logic Pro User Guide* contains a section that shows you how to set up your control surface device to work with Logic Pro. See Add a control surface to Logic Pro in the *Logic Pro User Guide*.

*Note:* A number of devices such as Nektar Panorama, Native Instruments Komplete Kontrol, and other units, provide a manufacturer-supplied plug-in. Refer to the device manufacturer's support materials for setup information.

All Logic Pro Mixer controls, such as level and pan, can be adjusted onscreen with your mouse and computer keyboard. However, this is not an ideal method for precise realtime control. You can enhance your creative flow and can achieve greater flexibility and precision by connecting a hardware control surface to your computer.

Control surfaces or MIDI keyboard controllers are ideal for creating dynamic live performances using a portable Mac and an audio interface. In the studio, you can record control surface automation for mixer and plug-in parameters (even when Logic Pro is not in record mode). Track automation appears in the Tracks area and in the Piano Roll Editor. Moving a fader on the control surface prompts the corresponding fader in the Logic Pro Mixer to move, and rotary knobs (or other controls) can be used to control EQ or other parameters, with the corresponding parameters updating instantly in Logic Pro.

Because communication between Logic Pro and your control surface is bidirectional, adjustments to parameter values onscreen are immediately reflected by the corresponding control on the control surface. Visual feedback on the control surface is determined by the facilities of the device itself, such as LCD screens, LED indicators, or motorized faders.

When you use a supported control surface with Logic Pro, some controls are pre-mapped to common functions. You can map unassigned controls to other Logic Pro commands and functions.

For detailed information about how to assign controllers on your control surface device to Logic Pro functions, see Assign hardware controllers in the *Logic Pro User Guide*.

For devices supported by Lua scripts, you can also remap controls in this way, or you can use the Smart Controls mapping options. See Use Smart Controls in the *Logic Pro User Guide*.

The following sections explain how to use specific control surfaces with Logic Pro.

# **Mackie Control**

# Overview of the Mackie Control in Logic Pro

You can control Logic Pro with a Mackie Control and can extend its functionality with several expansion devices, such as the XT and C4 units.

The controls of the Mackie Control are physically grouped into different areas that are clearly labeled and distinguished by different shades of gray on the device. The Mackie Control features and functions described in the documentation are organized by these groupings.

Any powered Mackie Control unit connected to your system is automatically detected when you open Logic Pro. You can use the Mackie Control immediately—with the default settings—or you can customize its settings.

Once set up, you can use the Mackie Control to control Logic Pro in the following ways, or perhaps take an alternate approach that best meets your working preferences.

- With your project open in the Tracks window, select the channel strips you want to control by pressing the fader bank buttons on the Mackie Control. See Bank buttons.
- Select the parameters you want to edit, and whether you want to edit multiple channels (Mixer view) or a single channel (Channel view), using the Assignment buttons. See Assignment buttons overview.
- Start playback, and move the playhead to the position where you want to work, using the Mackie Control transport buttons and jog wheel. See Transport buttons overview and Jog/Scrub wheel.
- Edit the project with the channel strip controls. See Channel strips overview and V-Pots.

*Note:* The term *Mackie Control* is used for the Mackie Control Universal, the original Mackie Control, the Logic Control, and the Mackie (or Logic) Control Extender (XT) throughout the documentation. It also applies to devices that offer a Mackie Control emulation mode.

# Mackie Control displays

## Overview of Mackie Control displays in Logic Pro

The displays are located along the top of the Mackie Control. Each shows different information:

### Displays

• *Main Liquid Crystal Display (LCD):* The main LCD is divided into eight columns, each with two lines of text. Each column displays information for the channel strip controls directly below it. The information displayed changes when you edit different parameters and when Mixer view or Channel view is active. In general, the upper row of each column displays the abbreviated track (or channel) name, and the lower row displays the abbreviated parameter name and its value.

In some modes, a long parameter name (or other text) appears briefly onscreen while you are moving the corresponding control. You can set the display and duration of long parameter names in Control Surfaces preferences. For information on setting preferences, see the *Logic Pro User Guide*.

*Note:* On the LCD, 8-bit ASCII characters such as curly quotes and umlauts are replaced with the best-possible 7-bit ASCII equivalent.

- Assignment display: The Assignment display (also referred to as the mode display), to the right of the main LCD, shows a two-digit abbreviation for the current assignment state. A period (.) appears at the bottom-right corner of the display when Channel view is active.
- *Time display:* The Time display, to the right of the Assignment display, shows the current playhead position, either in musical time divisions (BEATS) or in SMPTE timecode format (SMPTE). A small LED to the left of the display indicates the current display format.
  - When the format is set to Beats, the four segments of the Time display show the current playhead position as bars, beats, beat subdivisions, and ticks.
  - When the format is set to SMPTE, the four segments of the Time display show the current playhead position as hours, minutes, seconds, and frames.

Press the SMPTE/BEATS button to switch between formats. You can also set the default format with the Clock Display parameter in the Control Surfaces Setup window. See the *Logic Pro User Guide*.

• Solo LED: The Solo LED (Rude Solo on the Mackie Control) is lit when a channel strip is set to solo or when Solo mode is turned on. It is a helpful reminder in situations where you have soloed a channel strip, then switched the fader bank, resulting in the Solo LED of the soloed channel strip being hidden on the control surface.

## Mackie Control display control buttons in Logic Pro

The control buttons, located just below the left edge of the Time display, affect what you see in the main LCD and Time display.

#### **Display buttons**

- *SMPTE/BEATS:* Press the SMPTE/BEATS button to switch between the two time formats (SMPTE time or beats). See Displays overview.
- *NAME/VALUE*: Press the NAME/VALUE button to switch between the two parameter display formats (either the parameter name or value is shown) on the main LCD.

Hold down the SHIFT button, then press the NAME/VALUE button to cycle through three level meter modes on the main LCD:

- *Vertical:* In this mode, the last character of each channel (in both LCD rows) is overlaid by a vertical bar that shows the channel level. The text characters reappear when the level meter is not visible.
- *Horizontal with Peak Hold:* In this mode, the lower row of the LCD is replaced by horizontal channel level bars. Peak Hold appears as a hollow box, which disappears after a few seconds. Signal overloads (clipping) are indicated by an asterisk, which remains on the LCD display until cleared.
- Off: In this mode, no level meter bars are displayed in the main LCD.

In all three modes, the SIGNAL LEDs of the channel strips function as per usual, indicating the presence of a signal.

Hold down the CONTROL button, then press the NAME/VALUE button to clear any overload (clipping) indicators in the Logic Pro Mixer and in the LCD if the Horizontal with Peak Hold mode is active.

Hold down the CMD/ALT or OPTION button, then press the NAME/VALUE button to turn on Control Surface Group Settings mode. This mode lets you edit the outlined control surface group settings, some of which are not accessible with a single button.

You can exit Control Surface Group Settings mode by pressing NAME/VALUE or by entering one of the Marker or Nudge modes. See Marker button overview and Nudge button overview.

Control	Action
V-POT 5	Sets the track name display format.
	• Name: Displays the track name only.
	• No: Name: Displays the track number and name.
V-POT 6	Switches Channel view to Lock mode.
	<ul> <li>Off: The standard mode, in which selecting a channel strip makes it the active (currently being edited) channel strip.</li> </ul>
	<ul> <li>On: Locks the active channel strip. Selection of another channel strip has no impact on the channel strip being edited.</li> </ul>
	When you switch from On to Off, the channel strip is also updated.

Control	Action
V-POT 7	Switches the LCD display format.
	<ul> <li>Name: The upper line of the LCD displays global information, and the lower line displays parameter names.</li> </ul>
	<ul> <li>Value: The upper line of the LCD displays parameter names, and the lower line displays parameter values.</li> </ul>
	Functionally, this is identical to pressing the NAME/VALUE button.
V-POT 8	Switches the Clock display format.
	• Beats: Clock is displayed in bars, beats, beat subdivisions, and ticks.
	• SMPTE: Clock is displayed in SMPTE format.
	Functionally, this is identical to pressing the SMPTE/BEATS button.

## Mackie Control channel strips

## Overview of Mackie Control channel strips in Logic Pro

Directly below the main LCD display are eight sets of channel strip controls. You can use these to control Logic Pro channel strip parameters, plug-in parameters, and other functions. Each channel strip of both the Mackie Control and XT units includes the controls described in the linked sections:

- V-Pot rotary encoder with button. See V-Pots.
- REC/RDY button and LED. See Channel strip buttons and LEDs.
- Touch-sensitive motorized fader. The Mackie Control also provides a dedicated Master fader. See Faders.

### Mackie Control V-Pots in Logic Pro

The V-Pot is a rotary encoder, with an integrated button (accessed by pressing down on the top of the encoder). You can use the V-Pot to adjust the channel's send level and pan/balance (in Channel view) or to adjust effect or instrument plug-in parameters. The V-Pot can also be used to scroll through and choose items such as plug-ins, software instruments, and more from menus, and to determine send destinations. The faster you turn the V-Pot, the quicker it changes values, scrolls through menus, and so on.

The top of each V-Pot has an integrated push button, which typically sets a default parameter value (if a parameter has more than two possible values) or switches between two parameter values (on/off). The button can also be used to activate a function you have selected with the V-Pot. For example, you can turn the V-Pot to scroll through a list of effect plug-ins for one of the channel Insert slots. Once the effect you want is displayed in the main LCD, press the top of the V-Pot to select and insert the effect, and open the plug-in window. The button is also sometimes used to switch to a special assignment mode.

When a value or name (such as a plug-in) has been preselected, but not confirmed or inserted, the value (or name) flashes on the main LCD until you press the V-Pot button.

The current value of the parameter you are adjusting with the V-Pot is displayed on the main LCD (depending on the Name/Value setting) and is also indicated by the ring of LEDs encircling the V-Pot. The way that parameter values are displayed on the LED ring varies depending on the type of parameter being displayed.

Hold down the CMD/ALT button to set V-Pots to high-resolution (fine) mode, for parameters where this mode applies.

Hold down the OPTION button and turn a V-Pot to switch between the minimum, default, and maximum values for the parameter.

### Mackie Control channel strip buttons and LEDs in Logic Pro

Each channel strip provides identical buttons and LEDs.

#### **Channel strip buttons**

• *REC/RDY button:* Press the REC/RDY button to arm the channel strip for recording. If the channel is currently armed, pressing the REC/RDY button disarms it. Each REC/RDY button features a red LED, which is illuminated when the channel is armed for recording.

Hold down the OPTION button while pressing the REC/RDY button of *any* channel strip to disarm all channel strips.

• SOLO button: Press the SOLO button to hear the channel strip in isolation. Each SOLO button has an amber LED that is lit when the channel strip is soloed. The Rude Solo LED on the right edge is also lit whenever any channel is soloed.

Hold down the OPTION button while pressing any channel strip SOLO button to disable solo for all channel strips.

In the Send Destination/Level view (see Send button overview), the SOLO button controls the Pre/Post mode selection for both Mixer view and Channel view.

• *MUTE button:* Press the MUTE button to silence the channel. Each MUTE button has a red LED that is lit when the channel is muted.

Hold down the OPTION button while pressing any channel strip MUTE button to unmute all muted channel strips.

In the EQ Frequency/Gain and Send Destination/Level views, the MUTE button controls the EQ bypass or Send Mute function. This affects both Mixer and Channel views.

• SELECT button: Press the SELECT button to choose and activate the channel for channel-based editing or assignment commands. Each SELECT button has a green LED that is lit when the channel is selected.

Hold down the SHIFT button while pressing a channel strip SELECT button to set the channel volume to unity level (0 dB).

*Note:* While holding down the SHIFT button, the SELECT button LED indicates if the channel volume is set to 0 dB.

Hold down the OPTION button while pressing the SELECT button of any channel strip to create a new track—assigned to the same channel strip as the selected track.

Hold down the SHIFT and OPTION buttons while pressing a channel strip SELECT button to create a new track with the next channel strip (the one following the selected track).

• *Signal LED:* Indicates the presence of an outgoing MIDI or audio signal. During recording, it indicates the presence of an incoming signal.

## Mackie Control faders in Logic Pro

The motorized fader of each channel strip is generally used to control the channel level, just like a volume fader on a mixing console. You can, however, also assign the fader to control other parameters by using Flip mode.

Flip mode is activated by pressing the FLIP button, just above the MASTER fader. When Flip mode is activated, you can control the parameter that is currently assigned to the channel's V-Pot with the fader. This allows more precise control of pans, aux returns, MIDI track parameters, EQs, effects, software instrument, or other channel parameters.

You can switch between channels being controlled with the eight faders by pressing one of the CHANNEL or FADER BANK buttons. See Channel buttons and Bank buttons.

The behavior of the faders changes in different modes, as outlined below:

- In Flip mode: Duplicates or swaps parameters with the V-Pot on the same channel.
- In Surround Angle/Diversity view: Adjusts surround diversity.
- In EQ Frequency/Gain view: Adjusts the gain of the selected EQ band.
- In Send Destination/Level Mixer view: Adjusts the send level of the selected send.
- In Send Destination/Level Channel view: Adjusts the send level of the send on the selected channel strip.

The Mackie Control also provides a Master fader that controls the level of the primary master channel strip in the Logic Pro Mixer. This raises or lowers the level of all output channel strips, without changing their relative levels.

When no Master channel strip exists in the project, the Mackie Control Master fader is mapped to output channel strip 1–2.

If you use multiple audio systems simultaneously, the Master fader only controls the Master channel strip of the *first* device (matching the order shown in the Audio Preferences window).

# Mackie Control assignment buttons

### Mackie Control Assignment buttons in Logic Pro

Directly below the Assignment LED are six ASSIGNMENT buttons.

Press one of the ASSIGNMENT buttons to select the type of parameter that you want to control or edit with the channel strip V-Pots, faders, and switches. The corresponding LED is lit to indicate the currently active assignment, and the Assignment display shows a two-digit abbreviation of the assignment type.

The ASSIGNMENT buttons work in both Single and All views. Views are discussed in Assignment views.

### Mackie Control assignment views in Logic Pro

Each ASSIGNMENT button has two views: Mixer view and Channel view. These views provide two ways to edit parameters in your project.

- *Mixer view:* Displays, and allows you to edit, a single parameter in multiple channels.
- *Channel view*: Displays, and allows you to edit, multiple parameters for a single channel. The mode display shows a period (.) in the lower-right corner when Channel view is active.

Pressing an ASSIGNMENT button once selects it, and switches to Mixer view, except when switching between Instrument Edit view and Plug-in Edit view. In this case, the mode remains in Channel view.

*Note:* For each of the ASSIGNMENT buttons, the parameters you can edit change, depending on the active view.

The NAME/VALUE button also affects what is shown on the main LCD when in the Mixer and Channel views. For more information, see Function keys.

## Mackie Control Track button

### Mackie Control Track button in Logic Pro

Press the TRACK button to select Channel view and assign the channel strip controls to edit channel strip parameters.

- Press the TRACK button once to edit a single parameter in multiple channel strips and to activate Mixer view.
- Press the TRACK button again to edit multiple parameters for a single channel strip and switch to Channel view.
- Hold down the TRACK button to display the Track shortcut menu on the LCD.
- Hold down the TRACK button to display the Track shortcut menu on the LCD, then press V-Pot 8 or F8 to switch to Channel strip setup view.

### Mackie Control Mixer view in Logic Pro

Mixer view allows you to edit a single parameter in multiple channel strips: volume, pan, input format, input assignment, output assignment, or automation mode. When you switch to Mixer view, the parameter being edited is briefly displayed on the right side of the main LCD. The mode display shows "tr" (for track), and the upper row of the LCD shows track names.

Press NAME/VALUE to display parameter values on the lower row of the LCD. These are shown when you turn a V-Pot, or press its button.

You can manipulate the following controls for editing in Mixer view:

- Rotating the V-Pots changes the associated channel strip parameter.
- Pressing the button on a V-Pot sets the parameter to its default value.
- The Cursor Left/Cursor Right buttons switch to the next or previous channel strip parameter. The selected parameter is displayed briefly in the upper row of the LCD.

*Note*: Ensure that the ZOOM button isn't active when using the cursor buttons.

#### Mackie Control Channel view in Logic Pro

Channel view allows you to edit the most important channel strip parameters for a single channel strip: volume, pan, instrument, Insert slot 1 assignment, Insert slot 2 assignment, Send 1 level, Send 2 level, and Send 3 level. When you switch to Channel view, the mode display shows "tr.," and the upper row of the LCD shows the name of the channel strip.

Press NAME/VALUE to show parameter names in the upper row and parameter values in the lower row.

Control	Action
V-Pot 1	Edits volume. The current value is shown in the lower row of the LCD.
V-Pot 2	Edits pan. The current value appears in the lower row of the LCD.
V-Pot 3	For software instrument tracks, turn to choose the instrument. Press the V-Pot 3 button to confirm your choice, insert the instrument, and open the plug-in window.
V-Pot 4	For audio and software instrument tracks, turn to choose the plug-in used on Insert slot 1. Press the V-Pot 4 button to confirm your choice, insert the effect, and open the plug-in window.
V-Pot 5	For audio and software instrument tracks, turn to choose the plug-in used on Insert slot 2. Press the V-Pot 4 button to confirm your choice, insert the effect, and open the plug-in window.
V-Pot 6	Edits the send level of Send 1.
V-Pot 7	Edits the send level of Send 2.
V-Pot 8	Edits the send level of Send 3.

The table outlines V-Pot edits in Channel view:

Hold down SHIFT while pressing one of the MUTE or V-Pot buttons to switch between mute and bypass.

Control	Action
V-Pot 1 or Mute 1	Mutes (or unmutes) the channel strip.
V-Pot 2 or Mute 2	Mutes (or unmutes) the channel strip.
V-Pot 3 or Mute 3	For software instrument tracks, mutes (or unmutes) the software instrument used on the channel strip.
V-Pot 4 or Mute 4	For audio and software instrument tracks, bypasses the effect plug-in used in Insert slot 1.
V-Pot 5 or Mute 5	For audio and software instrument tracks, bypasses the effect plug-in used in Insert slot 2.
V-Pot 6 or Mute 6	Mutes (or unmutes) Send 1.
V-Pot 7 or Mute 7	Mutes (or unmutes) Send 2.
V-Pot 8 or Mute 8	Mutes (or unmutes) Send 3.

### Mackie Control Track shortcut menu in Logic Pro

Hold down the TRACK button to display the Track shortcut menu on the LCD. When this menu is active, the mode display shows "t\_" (for Track shortcuts). Press one of the V-Pot or Function buttons to make the outlined changes.

Control	Action
V-Pot 1 or F1	Switches to Mixer view, and selects volume as the parameter edited by the V-Pot.
V-Pot 2 or F2	Switches to Mixer view, and selects pan as the parameter edited by the V-Pot.
V-Pot 3 or F3	Switches to Mixer view, and selects input format as the parameter edited by the V-Pot.
V-Pot 4 or F4	Switches to Mixer view, and selects the input assignment as the parameter edited by the V-Pot.
V-Pot 5 or F5	Switches to Mixer view, and selects the output assignment as the parameter edited by the V-Pot.
V-Pot 6 or F6	Switches to Mixer view, and selects the automation mode as the parameter edited by the V-Pot.
V-Pot 7 or F7	Switches to Mixer view, switches Logic Pro to Arrange view, and selects the automation parameter selected in the Tracks window.
V-Pot 8 or F8	Switches to Channel Strip Setup view.

### Mackie Control Channel strip setup view in Logic Pro

Hold down the TRACK button to display the Track shortcut menu on the LCD, then press V-Pot 8 or F8 to enter Channel Strip Setup view. In this view, you can edit the listed parameters for the selected channel strip.

Control	Action
V-Pot 1	Edits the channel strip format (mono, stereo, left, right, and surround).
V-Pot 2	Edits the Spread parameter.
V-Pot 3	Selects the channel strip input assignment. Confirm by pressing V-Pot 6.
V-Pot 4	Selects the channel strip output assignment. Confirm by pressing V-Pot 7.
V-Pot 5	Edits the automation mode.
V-Pot 6	Edits group membership. You can only choose one group or Off. To make a channel strip a member of multiple groups, use Group Edit mode.

## Mackie Control Pan/Surround button

#### Mackie Control Pan/Surround button in Logic Pro

Press the PAN/SURROUND button once to activate Pan/Surround Mixer view.

Press the PAN/SURROUND button repeatedly to switch between Pan/Surround Mixer view and Pan/Surround Channel view.

Hold down the PAN/SURROUND button to display the Pan/Surround mode options submenu on the LCD.

### Mackie Control Pan/Surround Mixer view in Logic Pro

Pan/Surround Mixer view allows you to edit one pan/surround parameter for all channel strips: Angle or Pan (on non-surround channel strips), Diversity, LFE, and Spread (on surround channel strips). The parameter being edited is displayed briefly when switching to this mode. Regardless of the selected (and active) surround parameter, non-surround channel strips always display the standard Pan control.

In a project containing both surround and non-surround channel strips, you can edit a specified surround parameter for surround channel strips, while the V-Pots of nonsurround channel strips edit pan position, as usual.

In Pan/Surround Mixer view:

- The mode display shows "Pn" (for Pan).
- The upper row of the LCD shows channel strip names.
- Rotating the V-Pots changes the current pan/surround parameter.
- The Surround Angle parameter rotates between 0 and 359 degrees, avoiding any angle limits.

- Pressing the button on a V-Pot sets the parameter to its default value.
- The Cursor Left/Cursor Right buttons switch to the next or previous surround parameter. The selected parameter appears briefly in the upper row of the LCD.

*Note*: Ensure that the ZOOM button isn't active when using the cursor buttons.

#### Mackie Control Pan/Surround Channel view in Logic Pro

Pan/Surround Channel view allows you to edit all surround parameters for the selected channel strip.

- The mode display shows "Pn" (for Pan).
- The upper LCD row shows the name of the channel strip and "Pan/Surround."

Control	Action
V-Pot 1	Edits angle (or pan on non-surround channel strips).
V-Pot 2	Edits diversity.
V-Pot 3	Edits LFE level.
V-Pot 4	Edits spread.
V-Pot 5	Edits Surround X.
V-Pot 6	Edits Surround Y.

*Note:* The Angle/Diversity and X/Y pairs influence each other. Only the Angle/Diversity parameters are automated and recorded.

### Mackie Control alternative Pan/Surround mode options in Logic Pro

Hold down the PAN/SURROUND button to display the alternate Pan/Surround mode options submenu on the LCD. The V-Pots and function keys allow you to make the changes outlined in the table.

0	
Control	Action
V-Pot 1 or F1	Switches to Pan/Surround Mixer view and selects Angle.
V-Pot 2 or F2	Switches to Pan/Surround Mixer view and selects Diversity.
V-Pot 3 or F3	Switches to Pan/Surround Mixer view and selects LFE level.
V-Pot 4 or F4	Switches to Pan/Surround Mixer view and selects Spread.
V-Pot 5	_
V-Pot 6 or F5	Switches to Pan/Surround Channel view.

Control	Action
V-Pot 7 or F6	Switches to Surround Angle/Diversity Mixer view.
	<ul> <li>The mode display shows "Ad" (Angle/Diversity).</li> </ul>
	<ul> <li>The upper LCD row shows channel strip names.</li> </ul>
	<ul> <li>The lower LCD row shows the surround angle currently assigned to each channel strip.</li> </ul>
	<ul> <li>Rotating a V-Pot changes the surround angle (or adjusts pan position on non-surround channel strips).</li> </ul>
	<ul> <li>Pressing a V-Pot sets the surround angle to its default value.</li> </ul>
	The faders edit surround diversity.
V-Pot 8 or F7	Switches to Surround X/Y Mixer view.
	<ul> <li>The mode display shows "XY."</li> </ul>
	<ul> <li>The upper LCD row shows channel strip names.</li> </ul>
	<ul> <li>The lower LCD row shows the surround X value currently assigned to each channel strip.</li> </ul>
	<ul> <li>Rotating a V-Pot changes the surround X value (or adjusts pan positio on non-surround channel strips).</li> </ul>
	<ul> <li>Pressing a V-Pot sets surround X to its default value.</li> </ul>
	The faders edit surround Y.

*Note:* The X and Y parameters are limited to a rectangular coordinate system. As such, value pairs outside the surround circle are not possible. If you try to set a Y value that is invalid, the X coordinate is automatically adjusted to a valid position, and vice versa. For example, moving Y to +1000 results in an X coordinate value of 0. When only one coordinate value is edited, the other coordinate value defaults to the setting of the most recently selected channel strip. This helps you to create linear movements. X and Y have a value range of -1000 to +1000, but the resolution is not that high because surround positions are currently recorded as 7-bit data.

### Mackie Control EQ button

### Mackie Control EQ button in Logic Pro

Press the EQ button to activate EQ Mixer view.

Press the EQ button repeatedly to switch between EQ Mixer view and EQ Channel view.

Hold down the EQ button to access the Options in EQ edit mode submenu in the LCD.

*Note:* If no Channel or Linear Phase EQ is present on the selected channel strip, a Channel EQ is inserted automatically when you enter EQ Channel view.

### Mackie Control EQ Mixer view in Logic Pro

EQ Mixer view allows you to edit one equalizer parameter for all channel strips: Frequency, Gain, Q, or EQ bypass. The EQ band number, and parameter being edited, are displayed briefly when you switch to this mode.

- The mode display shows E1 to E8, indicating the selected EQ band.
- The upper LCD row shows channel strip names.
- Rotating the V-Pots changes the current EQ parameter.

- Pressing a V-Pot button sets the parameter to its default value.
- The Cursor Up/Cursor Down buttons switch to the next or previous EQ band.
- The Cursor Left/Cursor Right buttons switch to the next or previous EQ parameter. The selected parameter is displayed briefly in the upper LCD row.
- Pressing a MUTE button while holding down the SHIFT button switches the current EQ band's Bypass state.
- When Flip mode is turned on, the MUTE buttons display, and switch, the current EQ band's Bypass state.

*Note:* Ensure that the ZOOM button isn't active when using the cursor buttons.

#### Mackie Control EQ Channel view in Logic Pro

EQ Channel view allows you to edit all EQ parameters—in all bands—for the selected channel strip.

- The mode display shows EQ (EQ channel strip).
- The upper row of the LCD shows the name of the channel strip, EQs, the page number, and the total number of pages (for example: "Page 1/2").

Control	Action
V-Pot 1	Edits the frequency of odd-numbered EQ bands.
V-Pot 2	Edits the gain of odd-numbered EQ bands.
V-Pot 3	Edits the Q-factor of odd-numbered EQ bands.
V-Pot 4	Switches the bypass state of odd-numbered EQ bands.
V-Pot 5	Edits the frequency of even-numbered EQ bands.
V-Pot 6	Edits the gain of even-numbered EQ bands.
V-Pot 7	Edits the Q-factor of even-numbered EQ bands.
V-Pot 8	Switches the bypass state of even-numbered EQ bands.

The Cursor Left and Cursor Right buttons switch to the next or previous EQ band. The LCD displays two EQ bands. If you have one or more connected Mackie Control (XT) units, each XT can display two EQ bands—up to a total of eight bands.

*Note:* Ensure that the ZOOM button isn't active when using the cursor buttons.

### Mackie Control alternate EQ edit mode options in Logic Pro

Hold down the EQ button to access the alternate EQ edit mode options submenu in the LCD. The mode display shows  $E_{\rm or} E_{\rm .}$ , depending on whether you are in EQ Mixer or EQ Channel view.

Control	Action	
V-Pot 1 or F1	Switches to EQ Mixer view and selects frequency.	
V-Pot 2 or F2	Switches to EQ Mixer view and selects gain.	
V-Pot 3 or F3	Switches to EQ Mixer view and selects Q.	
V-Pot 4 or F4	Switches to EQ Mixer view and selects bypass.	
V-Pot 6 or F6	Switches to EQ Channel view.	
V-Pot 7 or F7	Switches to Frequency/Gain Mixer view. In this mode, you can edit the frequency and gain parameters of a specific EQ band (1 to 8) for all channel strips.	
	• The mode display shows F1 to F8, indicating the selected EQ band.	
	<ul> <li>The upper LCD row shows channel strip names.</li> </ul>	
	<ul> <li>The lower LCD row shows the frequency of the selected EQ band.</li> </ul>	
	<ul> <li>Rotating a V-Pot changes EQ frequency.</li> </ul>	
	<ul> <li>Pressing a V-Pot sets the EQ frequency to its default value.</li> </ul>	
	<ul> <li>Use the Mute buttons to bypass the EQ.</li> </ul>	
	<ul> <li>Use the faders to adjust the EQ gain.</li> </ul>	
V-Pot 8 or F8	Switches to Frequency/Gain Channel view. In this mode, you can edit the frequency and gain parameters for all EQ bands of the selected channel strip. Each pair of channel strips corresponds to one EQ band.	
	<ul> <li>The mode display shows FG.</li> </ul>	
	<ul> <li>V-Pots 1 to 8 control the frequency of EQ bands 1 to 8.</li> </ul>	
	<ul> <li>Mute buttons 1 to 8 control the bypass of EQ bands 1 to 8.</li> </ul>	
	<ul> <li>Faders 1 to 8 control the gain of EQ bands 1 to 8.</li> </ul>	

*Note:* The faders form a frequency response curve in this mode, if the EQ bands have ascending frequency values.

**Tip:** You can edit another channel strip's EQ without leaving this view by selecting the channel strip in Logic Pro or by pressing the appropriate SELECT button on the Mackie Control.

### Mackie Control Send button

### Mackie Control Send button in Logic Pro

Press the SEND button to activate Send Mixer view.

Press the SEND button repeatedly to switch between Send Mixer view and Send Channel view.

Hold down the SEND button to access the Options in Send edit mode submenu in the LCD.

### Mackie Control Send Mixer view in Logic Pro

Send Mixer view allows you to edit one send parameter for all channel strips: Destination, Level, Position, or Mute. The Send slot number and the parameter being edited are displayed briefly on the LCD when switching to this mode.

- The mode display shows S1 to S8, indicating the selected Send slot.
- The upper LCD row shows channel strip names.
- Rotating the V-Pots changes the current send parameter.
- Pressing a V-Pot confirms the preselected send destination and sets the other send parameters to their defaults.
- · Cursor Up/Cursor Down switches to the next or previous Send slot.
- Cursor Left/Cursor Right switches to the next or previous send parameter. The selected parameter appears briefly in the upper LCD row.
- Pressing a MUTE button while holding down the SHIFT button switches the current send's mute state.
- When Flip mode is turned on, the MUTE buttons display and edit the current send's mute state.

Note: Ensure that the ZOOM button isn't active when using the cursor buttons.

### Mackie Control Send Channel view in Logic Pro

Send Channel view allows you to edit all send parameters for the selected channel strip. The mode display shows "SE." (for send channel strip). The upper row of the LCD shows the name of the channel strip, the text "Sends," the page number and the total number of pages—"Page 1/4," for example.

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Control	Action		
V-Pot 1	Edits the destination of odd-numbered sends.		
V-Pot 2	Edits the level of odd-numbered sends.		
V-Pot 3	Edits the position (pre/post) of odd-numbered sends.		
V-Pot 4	Sets the mute state of odd-numbered sends.		
V-Pot 5	Edits the destination of even-numbered sends.		
V-Pot 6	Edits the level of even-numbered sends.		
V-Pot 7	Edits the position (pre/post) of even-numbered sends.		
V-Pot 8	Sets the mute state of even-numbered sends.		

The Cursor Left and Cursor Right buttons shift between pages. The number of sends that can be displayed simultaneously depends on the number of Mackie Control XTs you have.

*Note*: Make sure that the ZOOM button isn't active when using the cursor buttons.

#### Mackie Control alternate Send edit mode options in Logic Pro

Hold down the SEND button to access the alternate Send edit mode options submenu in the LCD. The mode display shows S\_ or S\_., depending on whether you are in Send Mixer view or Send Channel view.

Control	Action
V-Pot 1 or F1	Switches to Send Mixer view and selects destination.
V-Pot 2 or F2	Switches to Send Mixer view and selects send level.
V-Pot 3 or F3	Switches to Send Mixer view and selects position.
V-Pot 4 or F4	Switches to Send Mixer view and selects mute.
V-Pot 5 or F5	Switches to Send Channel view.
V-Pot 6 or F6	Switches to Send Channel Strip 2 view. This mode is similar to Send Channe view, but parameters are arranged in a slightly different way. You can contro one parameter for all Send slots used in the selected channel strip. • The mode display shows "SE." (Send channel strip).
	<ul> <li>The upper LCD row shows the name of the channel strip, the text "Sends," the page number, and total number of pages.</li> </ul>
	<ul> <li>V-Pots 1 to 8 edit the displayed parameter.</li> </ul>
	<ul> <li>The horizontal cursor buttons shift between pages. The number of parameters that can be displayed simultaneously depends on the number of Mackie Control XTs you have.</li> </ul>
V-Pot 7 or F7	Switches to Destination/Level Mixer view. In this mode, you can control one Send slot for all channel strips. Each channel strip corresponds to the channel strip name shown in the upper LCD row.
	• The mode display shows d1 to d8, indicating the selected send.
	<ul> <li>The upper LCD row shows channel strip names.</li> </ul>
	<ul> <li>The lower LCD row shows the destination of the selected send.</li> </ul>
	<ul> <li>Rotating a V-Pot preselects the send destination.</li> </ul>
	<ul> <li>Pressing a V-Pot confirms the preselected send destination.</li> </ul>
	<ul> <li>The SOLO buttons edit send position—a lit SOLO LED indicates Pre Fader mode.</li> </ul>
	The MUTE buttons set the send mute state.
	The faders edit the send level.
V-Pot 8 or F8	Switches to Destination/Level Channel view. You can control all Send slots for the selected channel strip in this mode. Each channel strip corresponds to the (embossed) send number shown below the LCD. • The mode display shows "dL."
	<ul> <li>Rotating a V-Pot preselects the corresponding send destination.</li> </ul>
	<ul> <li>Pressing a V-Pot confirms a preselected send destination.</li> </ul>
	The Solo buttons edit send position—a lit Solo LED indicates Pre Fader mode
	<ul> <li>The MUTE buttons set the send mute state.</li> </ul>
	The faders edit the send gain.

If one or more sends are activated on multiple channels, you can switch between them while in the Channel views by pressing the SELECT button of the channel.

## Mackie Control Plug-in button

### Mackie Control Plug-in button in Logic Pro

Press the PLUG-IN button to activate Plug-in Mixer view.

Press the PLUG-IN button repeatedly to switch between Plug-in Mixer view and Plug-in Channel view.

*Note:* There is one exception to this behavior. If you are in Instrument Edit view, pressing the PLUG-IN button switches to Plug-in edit view. For more information, see Instrument edit view.

### Mackie Control Plug-in Mixer view in Logic Pro

In this view, you can edit the plug-ins associated with a particular Insert slot for all channels. The mode display shows P1 to P9, or 10 to 16, indicating the selected Insert slot number.

Note: If a software instrument channel is selected, the display shows P1 to P9 and 10 to 15.

In Plug-in Mixer view:

- The upper row of the LCD shows channel strip names.
- The lower row of the LCD shows the currently selected plug-in for the active Insert slot. Muted plug-ins are shown with an asterisk (\*) that precedes the plug-in name.
- Rotating the V-Pots preselects a new plug-in. The plug-in name flashes until confirmed by pressing the V-Pot button.
- Rotating another channel's V-Pot cancels any earlier preselection, and starts preselection on the newly selected channel strip.
- Pressing a V-Pot button:
  - Confirms or activates the preselected plug-in (assuming that you've made your preselection by rotating the V-Pot).
  - Opens a plug-in window, if none is open. If a plug-in window is open and Link mode is turned on, the selection of another plug-in replaces the existing plug-in window.
  - Switches to Plug-in Edit view.
- The Cursor Up/Cursor Down buttons change the currently displayed plug-in Insert slot (1 to 15).
- Pressing a V-Pot or MUTE button while the SHIFT button is held down mutes or unmutes the plug-in.

*Note:* Ensure that the ZOOM button isn't active when using the cursor buttons.

#### Remove a plug-in

Preselect the "--" value (by rotating the V-Pot fully counterclockwise), then press the V-Pot button of the appropriate Insert slot.

The Mackie Control does not switch to Plug-in Edit view, and no plug-in window opens when the "--" value is chosen. If a plug-in window is open, it closes (if Link mode is inactive).

### Mackie Control Plug-in Channel view in Logic Pro

This view shows the plug-ins associated with all Insert slots for the selected channel.

In Plug-in Channel view:

- The mode display shows the text "PL."
- The upper LCD row shows Ins1PI through Ins8PI.
- The lower LCD row shows the plug-in that is currently selected for this Insert slot. Muted plug-ins are indicated by an asterisk (\*), which precedes the plug-in name.
- Rotating the V-Pots preselects a new plug-in. The plug-in name flashes until activated.
- Rotating another channel's V-Pot cancels any previous preselection and starts preselection on the newly selected channel strip.
- Pressing a V-Pot button:
  - Activates the preselected plug-in (assuming that you've made your preselection by rotating the V-Pot).
  - Opens a plug-in window if none is open. (If a plug-in window is open and Link mode is turned on, the selection of another plug-in replaces the existing plug-in.)
  - · Switches to Plug-in Edit view.
- Pressing a V-Pot button while the SHIFT button is held down mutes/unmutes the plug-in.

#### Remove a plug-in

Preselect the "--" value (by rotating the V-Pot fully counterclockwise), then press the V-Pot linked to the appropriate Insert slot.

The Mackie Control does not switch to Plug-in Edit view, and no plug-in window opens. If one was previously opened, it closes (if Link mode is inactive).

### Mackie Plug-in edit view in Logic Pro

You can view and edit plug-in parameters in this mode.

*Note:* Mackie Control can edit all plug-ins that can be automated. The plug-in type (Logic Pro native or Audio Units) is irrelevant. Some third-party manufacturer plug-ins don't provide parameter names or values as text. In such cases, parameters are named and enumerated as "Control #1," "Control #2," and so on, with values displayed as numbers ranging between 0 and 1000. Contact the plug-in manufacturer to obtain a version that supports this feature.

In Plug-in Edit view:

- The mode display shows P1. to P8., indicating the number of the selected plug-in Insert slot.
- Depending on the NAME/VALUE button, the LCD display changes between the two modes in the following ways:
  - Name: The upper LCD row shows the channel strip's name, insert number, plug-in name, current parameter page, and total number of parameter pages. The lower LCD row shows the name of the parameter, which can be edited via the corresponding V-Pot (the one below the parameter name).
  - *Value:* The upper LCD row shows the name of the parameter that can be edited via the corresponding V-Pot. The lower LCD row shows the current value of the parameter. If there is sufficient onscreen space, the unit type will be added; for example, Hz or dB.
- Rotating the V-Pots changes parameter values.
- Pressing a V-Pot button sets the parameter to its default value, except when the parameter only has two values (on/off, for example). In this case, pressing the V-Pot button switches between these values.
- The Cursor Left/Cursor Right buttons switch to the next or previous parameter page.

*Note:* Ensure that the ZOOM button isn't active when using the cursor buttons.

When using the cursor buttons to switch between parameters, the parameters change in groups of eight (unless the parameters on the last page do not make a complete group of eight). For example, if a plug-in has 19 parameters, and the Mackie Control is controlling parameters 1 to 8:

- Pressing the Cursor Right button shifts to parameters 9 to 16.
- Pressing the Cursor Right button again shifts to parameters 12 to 19.
- Pressing the Cursor Left button shifts back to parameters 9 to 16, not 4 to 11.

This way, you always revert to the page positions you expect to find and are comfortable with.

- To switch by a single parameter, rather than by page, hold down the CMD/ALT key while pressing the Cursor Left or Cursor Right button.
- The Cursor Up/Cursor Down buttons change the currently displayed Insert slot (1 to 15).

If you have a control surface group consisting of several Mackie Control and XT units, the parameters are distributed across their displays. The number of parameters shown depends on the Multiple Controls per Parameter settings in Logic Pro > Control Surfaces > Preferences. See *Logic Pro User Guide*.

Note: When you leave Plug-in Edit view, the plug-in window closes.

## Mackie Control Instrument button

### Mackie Control Instrument button in Logic Pro

Press the INSTRUMENT button to activate Instrument Mixer view, unless the Mackie Control is currently in Plug-in edit view. In this case, pressing the INSTRUMENT button switches to Instrument edit view.

If you can't see the software instrument channel strips, use the BANK or CHANNEL buttons in the Fader Bank zone, or switch to All view by pressing the INSTRUMENT button. (This assumes that you have created at least one or more software instrument tracks.)

#### Mackie Control Instrument Mixer view in Logic Pro

In this view, you can edit the Instrument slots of all channels.

In Instrument Mixer view:

- The mode display shows "In" (for instrument).
- The upper LCD row shows channel strip names.
- The lower LCD row shows the currently selected instrument. Muted instrument names are preceded by an asterisk (\*).
- Rotating the V-Pots preselects a new instrument. The preselected instrument name flashes until activated.
- Rotating another channel's V-Pot cancels any previous preselection and starts preselection on the newly chosen channel strip.
- Pressing a V-Pot button:
  - Activates the preselected instrument plug-in (assuming that you've made your preselection by rotating the V-Pot).
  - Opens a plug-in window, if none is open. If a plug-in window is open and Link mode is turned on, the selection of another instrument plug-in replaces the existing one.
  - · Switches to Instrument Edit view.
- Pressing a V-Pot or MUTE button while holding down the SHIFT button mutes/unmutes the instrument.

#### **Remove an instrument**

- 1. Preselect the "--" value (by rotating the V-Pot fully counterclockwise).
- 2. Press the V-Pot button.
  - Mackie Control does not switch to Instrument Edit view, and no plug-in window opens. If a plug-in window is open, it closes.

### Mackie Control Instrument edit view in Logic Pro

In this view, you can edit instrument parameters.

*Note:* Mackie Control can edit all instruments that can be automated, regardless of the type of plug-in you are using (Logic Pro native or Audio Units). Some third-party manufacturer instruments do not provide parameter names or values as text. In such cases, parameters are named and enumerated as "Control #1," "Control #2," and so on, with values displayed as numbers ranging between 0 and 1000. Contact the plug-in manufacturer to obtain a version that supports this feature.

In Instrument edit view:

- The mode display shows "In."
- Depending on the state of the NAME/VALUE button, the LCD changes in the following ways:
  - *Name:* The upper LCD row shows the channel strip name, instrument name, current parameter page, and total number of parameter pages. The lower LCD row shows the name of the parameter that can be edited with the V-Pot directly below.
  - *Value:* The upper LCD row shows the name of the parameter that can be edited with the V-Pot below. The lower LCD row shows the current value of the parameter being edited. If there is sufficient space on the LCD row, the unit type is shown after the value; for example, Hz or dB.
- Rotating a V-Pot changes the corresponding parameter.
- Pressing a V-Pot button sets the parameter to its default value, except when the parameter only has two values (on/off, for example). In this case, pressing the V-Pot button switches between these values.

# Mackie Control fader bank buttons

## Mackie Control Bank buttons in Logic Pro

The Mackie Control provides eight sets of channel strip controls, allowing you to edit eight corresponding channels. The BANK LEFT and BANK RIGHT buttons let you move between "banks" of eight channel strips. For example, if you are editing channel strips 1–8, pressing the BANK RIGHT button moves to channel strips 9–16. Pressing BANK RIGHT again moves to channel strips 17–24. Pressing BANK LEFT returns to channel strips 9–16, then to 1–8 with one more button press.

If you are using a control surface group, the BANK LEFT and BANK RIGHT buttons shift the active channel strips by the total number of channels in the control surface group. For example, if you have a Mackie Control and two Mackie Control XT units, the view shifts by 24 channels—the total number of channels in the control surface group.

The BANK buttons always change channel strips in groups of eight, unless the last channel strips do not make a complete group of eight. For example, if a project has 19 channel strips, and the Mackie Control is controlling channel strips 1 to 8:

- Pressing the BANK RIGHT button shifts to channel strips 9 to 16.
- Pressing the BANK RIGHT button again shifts to channel strips 12 to 19.
- Pressing the BANK LEFT button shifts back to channel strips 9 to 16, not 4 to 11.

This way, you always revert to the channel strips you expect to find and are comfortable with.

### Notes on using the Bank or Channel buttons

Hold down the OPTION button, then press the BANK or CHANNEL LEFT button to jump to the first set of channel strips in the project. Pressing the BANK or CHANNEL RIGHT button jumps to the last set of channel strips in the project. For example, if your project has 64 channel strips, pressing BANK or CHANNEL LEFT jumps to channel strips 1 through 8, and pressing BANK or CHANNEL RIGHT jumps to channel strips 57 through 64.

For views where one type of channel strip is displayed (such as audio, instruments, or busses), Logic Pro remembers the last group of eight channel strips shown in the view, and returns to it when you switch back from another view. For example, if you start in a view with audio channel strips 4 through 11 visible, switch to an instruments view, scroll to instruments 6 through 13, and then switch back to the audio Channel view, you will return to audio channel strips 4 through 11 (not 6 through 13). Switching to the Instrument Channel view displays instruments 6 through 13.

## Mackie Control Channel buttons in Logic Pro

You can use the CHANNEL LEFT and CHANNEL RIGHT buttons to move up or down by a single channel strip. Pressing the CHANNEL RIGHT button shifts the active channel strips up by a single channel strip, while pressing CHANNEL LEFT shifts them down by a single channel strip. For example, if you are viewing channel strips 1 to 8 and press the CHANNEL RIGHT button, channel strips 2 to 9 are displayed.

### Notes on using the Bank or Channel buttons

Hold down the OPTION button, then press the BANK or CHANNEL LEFT button to jump to the first set of channel strips in the project. Pressing the BANK or CHANNEL RIGHT button jumps to the last set of channel strips in the project. For example, if your project has 64 channel strips, pressing BANK or CHANNEL LEFT jumps to channel strips 1 through 8, and pressing BANK or CHANNEL RIGHT jumps to channel strips 57 through 64.

For views where one type of channel strip is displayed (such as audio, instruments, or busses), Logic Pro remembers the last group of eight channel strips shown in the view and returns to it when you switch back from another view. For example, if you start in a view with audio channel strips 4 through 11 visible, switch to an instruments view, scroll to instruments 6 through 13, and then switch back to the audio Channel view, you will return to audio channel strips 4 through 11 (not 6 through 13). Switching to the Instrument Channel view displays instruments 6 through 13.

## Mackie Control Flip button in Logic Pro

Press the FLIP button (alone, or in combination with a modifier key) to activate or deactivate one of the following modes: Flip, Swap, or Zero.

- Flip mode: In Flip mode, the current assignments of the eight V-Pots are mirrored by the eight channel faders, so that both control the same parameter. Rotating one of the V-Pots causes the corresponding fader to move, and vice versa. When you activate Flip mode, the LED next to the FLIP button illuminates. Pressing the FLIP button again turns off Flip mode. Flip mode offers the following advantages:
  - You can edit any type of parameter with a fader, which allows more precise editing control.
  - Unlike the V-Pots, the faders are touch-sensitive. This allows you to overwrite existing controller automation movements with a constant value.
- Swap mode: Hold down the SHIFT button while pressing the FLIP button to activate Swap mode. In Swap mode, the encoder assignments are swapped with the fader assignments, so that the faders control the parameter previously assigned to the V-Pots, and vice versa. The LED next to the FLIP button flashes when Swap mode is active.

When Swap mode is active, pressing FLIP again reverts to Flip mode. Holding down the SHIFT button and pressing FLIP turns off Swap mode, and returns the V-Pot and fader assignments to the state they were in before you activated Flip or Swap mode.

 Zero mode: Hold down the CONTROL button while pressing the FLIP button to activate Zero mode. In Zero mode, the faders are set to the zero position and do not move. This is useful in situations where the Mackie Control is located close to microphones, and you want to make sure that you don't capture the mechanical noise of the faders moving.

When Zero mode is active, pressing FLIP again reverts to Flip mode. Holding down the CONTROL button while pressing FLIP turns off Zero mode, and reactivates the faders.

## Mackie Control Global View buttons in Logic Pro

The GLOBAL VIEW button is used in conjunction with the other eight GLOBAL VIEW buttons to display (and edit) specific types of channel strips. Pressing any of the buttons activates All View; when this view is active, the green LED to the right of the GLOBAL VIEW button is lit.

When you press one of the Global View buttons, the corresponding type of channel strip appears in the main LCD. You can edit each channel strip with the corresponding channel strip controls. Pressing multiple buttons (Audio Tracks, Instruments, and Aux, for example) displays all channels of the selected types.

#### View (and edit) multiple All View channel strips

While holding down any button in the Global View zone, press another button to add this channel strip type to those currently displayed. If a channel strip type is already displayed, pressing its button removes it from the display.

For example, to display both the audio and output channel strips, hold down the AUDIO TRACKS button, then press the OUTPUTS button.

# Mackie Control function keys in Logic Pro

Function key buttons (F1 through F8) assignments are outlined in this section.

Hold down the specified modifier button while pressing one of the function keys to perform the function or command:

Function key	No modifier	SHIFT	CMD/ALT
F1	Screenset 1	Open/close Tracks window	Cut
F2	Screenset 2	Open/close Mixer	Сору
F3	Screenset 3	Open/close Event List	Paste
F4	Screenset 4	Open/close Score Editor	Clear
F5	Screenset 5	Open/close Step Editor	Select All
F6	Screenset 6	Open/close Piano Roll Editor	Select All Following
F7	Screenset 7	Open/close Control bar	Select Similar Regions/ Events
F8	Screenset 8	Open/close Project Audio Browser	Select Inside Locators

In modal dialogs, pressing one of the function keys is equivalent to using the computer keyboard number keys:

Function key	Action
F1	1
F2	2
F3	3
F4	4
F5	5
F6	6
F7	7
F8	8
The buttons located directly below the function keys complete the numeric input functions:	
MIDI Tracks button	9
Inputs button	0

In some other modes, the function keys perform other actions, such as shortcuts to markers. For more information, see Marker button overview. Also see the tables in Assignments overview.

# Mackie Control modifier buttons in Logic Pro

The four Modifier buttons correspond to the modifier keys on your computer keyboard (but function independently from them). You can use these buttons, along with the appropriate key on your computer keyboard or with the mouse or trackpad, in place of using the corresponding modifier key. This also applies to modified Mackie Control commands.

## **Modifier buttons**

- SHIFT: Provides an alternate function or meaning for a button.
- OPTION: The function applies to all channel strips. For relative value changes, sets the value to its minimum, default, or maximum, depending on whether you're increasing or decreasing it.
- CONTROL: Hold down to turn on group clutch and temporarily disable channel strip groups.
- CMD/ALT: Allows fine-tuning or a variation of the function.

# Mackie Control automation buttons in Logic Pro

The automation buttons activate corresponding automation modes in Logic Pro. You use the automation buttons in conjunction with the channel strip SELECT buttons.

## Automation buttons

- *READ/OFF:* If no automation mode is active, pressing the READ/OFF button switches between Read mode and Off.
  - *Read:* The fader reads (follows) any existing automation data but does not record any new automation data.
  - *Off:* Automation is off. The fader neither sends nor receives automation data. Existing automation data is not changed. The fader still adjusts the volume or pan position as usual when moved.
- *TOUCH:* Writes new data when the fader is touched or the V-Pot is turned during playback. Any existing automation data (of the current fader type) is replaced with new data for as long as the control is active (while the fader is being touched or the V-Pot is being turned).
- *LATCH:* Similar to Touch mode, but the control remains active, even when the fader is no longer being touched or the V-Pot is not being turned. When you release the fader, the current fader value replaces all existing automation data for as long as the sequencer is in playback (or record) mode. Press STOP to prevent existing automation data from being overwritten.
- *WRITE:* Overwrites *all* existing automation data, or creates new automation data if none exists. Only use this option if you want to destroy all existing automation data.

Hold down the OPTION button, then press one of the Automation buttons to assign the selected automation mode to *all* channels. When an automation mode has been assigned to all channels, the corresponding automation mode button LED illuminates whenever you hold down the OPTION button.

**Important:** This behavior is slightly different for the Off automation mode. Holding down the OPTION button and pressing READ/OFF dims the LEDs for the other Automation buttons, but this does not necessarily indicate that all channel strips are in Off mode—they could still be set to other modes. To make sure that you have set all channel strips to Off mode, press READ/OFF twice while holding down the OPTION button. The READ/OFF button LED turns on, then off.

#### Set the automation mode for a channel

To use with Logic Pro:

- 1. Press the SELECT button on the channel strip you want to automate.
- 2. Press the Automation mode button.
- 3. Do one of the following:
  - Move the channel strip fader.
  - Rotate the channel strip V-Pot.
  - Press the Solo or Mute button.

# Mackie Control Group button in Logic Pro

Press the GROUP button to activate group edit mode that allows you to edit various Mixer group parameters.

- The upper row of the LCD displays channel strip names.
- The lower row of the LCD displays group parameters.
- The Assignment display shows the currently displayed group-G1, for example.
- The Time display shows the group name. (If the name is longer than ten characters, the last ten characters are displayed.)
- You can switch between group parameters with the V-Pot buttons.
- The Cursor Up and Cursor Down buttons select the previous or next group.
- The Cursor Left and Cursor Right buttons shift the group parameter display.
- The SELECT buttons determine group membership. Pressing a SELECT button adds the channel strip to the group (or removes it from the group, if already a member). An illuminated SELECT button LED indicates active group membership.
- The LED next to the GROUP button is illuminated.

Note: Make sure that the ZOOM button isn't active when using the cursor buttons.

If Group Edit mode is off, holding down the GROUP button and pressing one or more SELECT buttons allows you to create a new group.

Pressing the GROUP button while holding down the SHIFT button creates a new group, opens the Group window, and activates group edit mode.

Pressing the GROUP button while holding down the TRACK button switches to Mixer view, with the channel strip group parameter shown. It displays the group that the selected channel strip belongs to. Multiple group membership is displayed as in the Mixer window. Rotating a V-Pot changes group membership.

Note: You can select only one group (or Off) with this function.

# Mackie Control utilities buttons in Logic Pro

The four utilities buttons activate the Save, Undo, Cancel, and Enter commands in Logic Pro.

### **Utilities buttons**

• *SAVE button:* Press to save the current project file. The first time you save a project, a Save dialog appears on your computer screen. Enter a name and location for the file, then click the Save button in the dialog.

The main LCD displays this message: "There is a file select dialog on the screen." The Position/Time display shows "ALERT." All LEDs are unlit. Once the Save operation has been confirmed in Logic Pro, the Mackie Control returns all controls to their previous state (before you pressed the SAVE button).

Once you have named a project and saved it, further presses of the SAVE button store the current project state without presenting a Save dialog onscreen or showing any alerts on the LCD. This allows you to quickly save incremental changes you make as your project develops.

The SAVE LED is illuminated as soon as you make (savable) changes to your project.

Holding down the OPTION button while pressing SAVE opens the Save As dialog on the computer screen. This allows you to rename a project or save it in a different location.

- UNDO button: Press to undo the last undoable action. Because Logic Pro supports a nearly unlimited number of undo/redo steps, the green UNDO LED illuminates to indicate that Redo is available, not to indicate an undoable step. The LCD provides a warning that performing a reversible editing step will render all Redo steps unavailable.
  - Hold down the SHIFT button while pressing UNDO to perform a Redo.
  - Hold down the OPTION button while pressing UNDO to open the Undo History window.
- CANCEL button: Press to cancel or exit an alert that appears on your computer screen.

Pressing the CANCEL button when no alert is visible onscreen does the following:

- It opens the Toolbox at the current pointer position.
- Alternatively, it performs any function currently assigned to the computer keyboard's Esc (Escape) key.
- If the Mackie Control currently shows the contents of a folder track, pressing the CANCEL button exits the folder.
- The CANCEL button also lets you invalidate a (blinking) parameter value preselection.
- ENTER button: Press to activate the default button in an onscreen alert.

If there is no alert onscreen, and the selected track is a folder track, pressing the ENTER button opens the folder.

# Mackie Control transport buttons

## Mackie Control transport buttons in Logic Pro

The transport buttons provide standard control bar functions.

### **Transport buttons**

- REWIND button: Rewinds through your project. Press repeatedly while rewinding to
  accelerate the rewind speed. Press the FAST FWD button repeatedly while rewinding to
  slow down, stop, and eventually reverse the shuttle direction. Press the STOP button to
  halt the rewind process at the current playhead position. Rotating the Jog/Scrub Wheel
  also exits rewind shuttle mode.
  - When one of the Marker modes is activated, pressing the REWIND button moves the playhead to the previous marker.
  - When one of the Nudge modes is activated, the REWIND button moves the selected regions or events backward by the value defined in Large Nudge mode.
- *FAST FWD button:* Fast forwards through your project. Press FAST FWD repeatedly while fast forwarding to accelerate the shuttle speed. Press the REWIND button repeatedly while fast forwarding to slow down, stop, and eventually reverse the shuttle direction. Press the STOP button to halt the fast forward process. Rotating the Jog/ Scrub Wheel also exits forward shuttle mode.
  - When one of the Marker modes is active, pressing the FAST FWD button moves the playhead to the next marker.
  - When one of the Nudge modes is active, pressing the FAST FWD button moves the selected regions or events forward by the value defined in Large Nudge mode.

**Tip:** You can combine markers with cycle areas by pressing the respective buttons on the Mackie Control. This, in conjunction with navigation between markers (using the REWIND and FAST FWD buttons), moves the playhead, and automatically sets a cycle area between adjacent markers. Try this, and other options, with various button combinations.

- STOP button: Stops project playback or recording and stops all other Transport functions. Press the STOP button a second time to return the playhead to the project start point or to the beginning of the nearest cycle area if Cycle mode is active. Press STOP repeatedly to switch between these two functions.
- *PLAY button:* Starts playback from the current playhead position. Press PLAY repeatedly to jump to the beginning of the nearest cycle area if Cycle mode is active. Press SHIFT and PLAY simultaneously to pause playback.
- *RECORD button:* Starts recording on the selected MIDI, audio, or software instrument channel strip if it is armed for recording.

*Note:* It is possible that the *first* time you arm an audio channel strip (by pressing the REC/RDY button for the channel), a Save dialog will appear on your computer screen. Enter a filename (and a save location) in the dialog, then press Save. The Mackie Control LCD display shows "There is a file select dialog on the screen." The Position/Time display shows "ALERT." All LEDs are unlit. Once you enter the filename (and press Save), all controls on the Mackie Control return to their previous state. After the default audio filename has been entered, you can select and arm any audio channel strip, then press the RECORD button. No alert messages and file save dialogs will appear onscreen.

**Tip:** To minimize the appearance of the dialog, save your project with Assets before you start recording. Saving your project this way bypasses the need to define filenames and makes handling faster and easier when using Logic Pro with the Mackie Control.

Just above the transport buttons are seven small, circular buttons for different recording and playback modes: Marker, Nudge, Cycle, Drop, Replace, Click, and Solo. You can use these buttons independently or in conjunction with one another, to navigate and edit your projects. Each button has a dedicated LED that indicates its current status.

### Mackie Control Marker button

#### Mackie Control Marker button in Logic Pro

Press the MARKER button to activate one of three marker modes: Small Marker mode, Large Marker mode, and Temporary Marker mode. You can use these modes to create or delete markers and jump to markers in your project.

*Note:* The Marker and Nudge modes are mutually exclusive; activating one deactivates the other.

- Small Marker mode: Press the MARKER button to activate Small Marker mode. Small
  Marker mode is useful if you want to jump to markers while using the V-Pots for other
  purposes. In this mode, pressing the FAST FWD or REWIND button moves the playhead
  to the next or previous marker. Pressing the MARKER button again reverts to the default
  behavior of the FAST FWD and REWIND buttons. (See Transport buttons overview.)
- Large Marker mode: Hold down the SHIFT button, then press the MARKER button to show three create options on the LCD, assigned to the three rightmost V-Pot buttons. (See Large Marker mode.)
- Temporary Marker mode: Hold down the MARKER button if you want to enter Marker mode temporarily to quickly perform a few marker functions. Press one (or more) of the V-Pot buttons to execute the marker function and then leave Marker mode by releasing the MARKER button.
  - Press function keys F1 to F8 to move the playhead to the first eight markers (if created). For example, to navigate to marker 3, hold down the MARKER button and press F3.
  - To jump between markers, with (or without) the MARKER button held down, press the FAST FWD or REWIND button.
#### Mackie Control Large Marker mode in Logic Pro

Hold the SHIFT button, then press the MARKER button to show three create options on the LCD, assigned to the three rightmost V-Pot buttons.

Once markers have been created, press the V-Pot button listed below to create or delete a marker at the current playhead position.

Control	Action	
V-Pot 1 to 5	Displays the first five markers by name. Pressing a V-Pot button moves the playhead to the corresponding marker. When the playhead position is inside a marker, the lower line displays INSIDE, and the V-Pot LED ring is lit.	
V-Pot 6	Cr w/o—Creates a marker, without rounding to the nearest bar.	
V-Pot 7	Create—Creates a marker, rounded to the nearest bar.	
V-Pot 8	Delete—Deletes the marker above the current playhead position.	

A recommended workflow for creating or deleting markers is to use the jog/scrub wheel. Turn the wheel to move the playhead to the required project position, and then press the appropriate V-Pot to create or delete a marker.

- For coarse placement, use the wheel to move the playhead.
- For fine placement, press the SCRUB button, then use the wheel to precisely position the playhead. (This technique is only appropriate if creating or deleting an unrounded marker.)

For more information about using the jog/scrub wheel, see Jog/Scrub wheel.

Large Marker mode is ended by pressing the MARKER button again.

### Mackie Control Nudge button

#### Mackie Control Nudge button in Logic Pro

The NUDGE button allows you to move (nudge) selected audio or MIDI regions (or events) in Small, Large, or Temporary Nudge mode.

*Note:* The Marker and Nudge modes are mutually exclusive; activating one deactivates the other.

- Small Nudge mode: Press the NUDGE button to reassign the behavior of the FAST FWD and REWIND buttons; pressing either FAST FWD or REWIND nudges the selected regions or events by the value defined in Large Nudge mode. Pressing the NUDGE button a second time reverts to the default behavior of the FAST FWD and REWIND buttons. (See Transport buttons overview.) Small Nudge mode is useful if you want to nudge regions or events but still use the V-Pots for other purposes.
- Large Nudge mode: Hold down the SHIFT button, then press the NUDGE button to show eight functions on the LCD that are mapped to the corresponding V-Pot buttons. These functions allow you to move the selected region or events by various amounts or to a specific position. See Large Nudge mode.

 Temporary Nudge mode: Hold down the NUDGE button and use one or more of the V-Pots to use Nudge temporarily for one or two small moves. This action executes the selected function, then exits Temporary Nudge mode as soon as you release the NUDGE button. See Temporary Nudge mode.

#### Mackie Control Large Nudge mode in Logic Pro

Hold down the SHIFT button, then press the NUDGE button to show eight functions on the LCD that are mapped to the corresponding V-Pot buttons. These functions allow you to move the selected region or events by various amounts or to a specific position. Press the NUDGE button a second time to turn off Large Nudge mode.

The position of the first selected region or event is displayed above V-Pots 3 and 4. If nothing is displayed, either a window that does not allow the selection of regions or events is open or no regions or events are selected.

Control	Label	Action
V-Pot 1	Nudge	Selects the nudge value used by the REWIND and FAST FWD buttons. These buttons move the selected objects backward/forward by the defined value.
V-Pot 2	Pickup	Moves to the current playhead position.
V-Pot 3	Bar	Moves by one bar.
V-Pot 4	Beat	Moves by the current project denominator value (beats).
V-Pot 5	Division	Moves by the current project division value.
V-Pot 6	Ticks	Moves by single ticks.
V-Pot 7	Frames	Moves by one SMPTE frame.
V-Pot 8	Fram/2	Moves by half a SMPTE frame.

The cursor buttons emulate the computer keyboard's arrow keys, allowing easy selection of a region or event.

*Note:* Make sure that the ZOOM button is not active when using the cursor buttons.

#### Mackie Control Temporary Nudge mode in Logic Pro

Hold down the NUDGE button and use one or more of the V-Pots to use Nudge temporarily for one or two small moves. This action executes the selected function, then exits Temporary Nudge mode as soon as you release the NUDGE button.

In Temporary Nudge mode, the cursor buttons emulate the computer keyboard's arrow keys, allowing easy selection of a region or event.

The Nudge value for the REWIND and FAST FWD buttons can also be defined with the function buttons.

Function button	Action
F1	Sets Ticks.
F2	Sets Division.
F3	Sets Beat.
F4	Sets Bar.
F5	Sets Frames.
F6	Sets Half Frames.

#### Use the Mackie Control Cycle button in Logic Pro

The CYCLE button turns Cycle mode on or off. By default, the cycle area falls between the first two markers.

Subsequent markers can act as left and right boundaries for further cycle areas.

#### Jump between cycle areas defined by the markers

- 1. Press the MARKER button.
- Press the CYCLE button, and when active (as indicated by the LED), press the REWIND or FAST FWD button.

#### Set the left or right locator to the current playhead position

Hold down the CYCLE button and press REWIND or FAST FWD.

This also activates Cycle mode.

#### Quickly define a new cycle area

- 1. Navigate to the target left locator position with the Jog/Scrub Wheel.
- 2. Press the CYCLE and REWIND buttons.
- 3. Navigate to the right locator position with the Jog/Scrub Wheel.
- 4. Press the CYCLE and FAST FWD buttons.

#### **Use Cycle view**

1. To activate Cycle view, press the SHIFT and CYCLE buttons.

The mode display shows "Cy."

2. To return to a regular assignment mode, press one of the Assignment buttons.

Control	Action	
Rotate V-Pot 1	Shows and edits the current cycle state (off or on); you can also use the CYCLE button.	
Rotate V-Pot 2	BySel—sets the current cycle area by the selection made in the Tracks window (selected audio or MIDI region).	
Rotate V-Pot 3	Move—moves the current cycle by a bar with each click of the V-Pot.	
Press V-Pot 5	Picks up the current playhead position for the left locator.	
Rotate V-Pot 5	Changes the left locator in bars.	
Rotate V-Pot 6	Changes the left locator in beats (denominator steps).	
Press V-Pot 7	Picks up the current playhead position for the right locator.	
Rotate V-Pot 7	Changes the right locator in bars.	
Rotate V-Pot 8	Changes the right locator in beats (denominator steps).	

## Use the Mackie Control Drop button in Logic Pro

The DROP button turns Autopunch mode on or off.

#### Navigate between punch in areas

To use with Logic Pro:

- 1. Press the MARKER button.
- Press the DROP button, and when active (as indicated by the lit LED), press the FAST FWD or REWIND button.

#### Set the punch in or punch out locator to the current playhead position

To use with Logic Pro:

Hold down the DROP button and press FAST FWD or REWIND.

This also activates Autopunch mode.

#### Quickly define a new punch in area

To use with Logic Pro:

- 1. Navigate to the target punch in locator position with the Jog/Scrub Wheel.
- 2. Press the DROP and REWIND buttons.
- 3. Navigate to the target punch out locator position with the Jog/Scrub Wheel.
- 4. Press the DROP and FAST FWD buttons.

#### **Use Punch view**

To use with Logic Pro:

1. To activate Punch view, press the SHIFT and DROP buttons.

The mode display shows "Pu."

2. To return to a regular assignment mode, press one of the Assignment buttons.

*Note:* Changing a punch locator value with the Mackie Control automatically activates Autopunch mode in Logic Pro.

Control	Action	
Rotate V-Pot 1	Shows and edits the current Autopunch state (off or on); you can also use the DROP button.	
Rotate V-Pot 3	Move—moves the current punch area by a bar with each click of the V-Pot.	
Press V-Pot 5	Picks up the current playhead position for the punch in locator.	
Rotate V-Pot 5	Changes the punch in locator in bars.	
Rotate V-Pot 6	Changes the punch in locator in beats (denominator steps).	
Press V-Pot 7	Picks up the current playhead position for the punch out locator.	
Rotate V-Pot 7	Changes the punch out locator in bars.	
Rotate V-Pot 8	Changes the punch out locator in beats (denominator steps).	

### Mackie Control Replace, Click, and Solo buttons in Logic Pro

These buttons are used for a number of global Logic Pro functions.

#### Replace, Click, and Solo buttons

- REPLACE button: Press to turn Replace mode on or off. There are independent click settings for play and record. To access the click settings, choose File > Project Settings > Metronome.
- CLICK button: Press to turn the MIDI or Klopfgeist metronome click on or off.

Press the SHIFT and CLICK buttons to activate or deactivate both External Sync mode and transmission of MMC.

• *SOLO button:* Press to turn the Solo function on or off. This behaves like the Solo key command.

Individual channels can be soloed with the SOLO buttons on each channel strip. MIDI or audio regions can be selected, and soloed, along with the selected channels. Each channel features an independent SOLO LED, which is lit when a channel strip is soloed. The RUDE SOLO LED—just to the right of the Position/Time display—is lit when any channel strip is soloed.

Press the SHIFT and SOLO buttons to activate Solo Lock mode.

# Use Mackie Control cursor and zoom keys in Logic Pro

The five buttons to the left of the jog/shuttle wheel serve a number of purposes. The four cursor buttons—Up, Down, Left, and Right—encircle the central ZOOM button.

When the ZOOM button is not active (its LED is unlit), the four cursor buttons select the current parameter, or shift the current parameter page or Send/EQ/Insert slot, depending on the current V-Pot assignment.

- When the OPTION button is held down: The Cursor Left and Cursor Right buttons scroll to the first and last page, and the Cursor Up and Cursor Down buttons scroll to the first and last slot.
- When the CMD/ALT button is held down: The Cursor Left and Cursor Right buttons shift the parameter display by one parameter, rather than one page.

#### Use Zoom mode

Do one of the following:

- To turn Zoom mode on or off: Press the ZOOM button.
- To change the vertical or horizontal zoom factor of the window with key focus: Use the cursor buttons.

In the Tracks window:

- OPTION and Up or Down changes the zoom factor of the selected track.
- OPTION and Left resets the zoom factor of the selected track.
- OPTION and Right resets the zoom factor of all tracks of the same class (audio, MIDI, and so on) as the selected track.

#### Use the cursor buttons as computer keyboard arrow keys

In modes that don't require page or slot shifts, the cursor buttons emulate the computer keyboard arrow keys. As an example, the left and right buttons select channel strips when in Mixer view.

In Large and Temporary Nudge modes, the Cursor Left and Cursor Right buttons emulate the computer keyboard arrow keys, allowing region or event selection.

• Hold down the SHIFT button, then use the Up, Down, Left, or Right buttons as you would use the equivalent computer keyboard arrow keys.

When SHIFT and ZOOM are pressed, the cursor buttons enter Permanent Cursor Key mode—they mimic the computer arrow keys without the need to hold down the SHIFT button. The ZOOM button LED flashes when in this mode. Press the ZOOM button to turn off this mode.

# Mackie Control Jog/Scrub wheel in Logic Pro

The Jog/Scrub Wheel and SCRUB button can be used to navigate through the project, which is useful for a number of transport tasks. Turn the dial to use it. The outlined Scrub modes change the behavior of the Jog/Scrub Wheel.

- Scrub mode off: The Jog/Scrub Wheel moves the playhead.
- Scrub mode on: The Jog/Scrub Wheel performs scrubbing, which allows you to hear the data of the selected (or soloed) tracks while scrolling or moving through the project.

Audio tracks are normally played back at their original speed. If you would rather hear them at double speed, choose Logic Pro > Preferences > Audio > Drivers, and set Maximum Scrub Speed to Double in the pop-up menu.

Note: You can also use the SCRUB button for Pause functionality.

• SHUTTLE mode: The Jog/Scrub Wheel shuttles the playhead—Rotating it increases or decreases the speed at which the playhead moves. The SCRUB button LED flashes when in Shuttle mode.

# Mackie Control programmable user modes in Logic Pro

The Mackie Control provides six programmable user modes, which you can use for your own assignments. You can activate each of these modes by holding down the SHIFT button and one of the Assignment buttons, as follows:

- TRACK + SHIFT = User mode 1.
- PAN/SURROUND + SHIFT = User mode 2.
- EQ + SHIFT = User mode 3.
- SEND + SHIFT = User mode 4.
- PLUG-IN + SHIFT = User mode 5.
- INSTRUMENT + SHIFT = User mode 6.

The Assignment display shows user modes as u1, u2, and so on.

#### Create an assignment in one of the user modes

To use in Logic Pro:

- Activate the user mode you want to use by holding down the SHIFT button and pressing one of the Assignment buttons, as listed above.
- 2. In Logic Pro, use the Learn process to create one or more assignments. See *Logic Pro User Guide*.

# Mackie Control foot switches in Logic Pro

You can connect a momentary foot pedal—with either positive or negative polarity—to the foot switch sockets. By default, foot switches control the outlined functions:

- USER SWITCH A is assigned to Start/Stop.
- USER SWITCH B is assigned to Record. (Note that a track must be selected and armed for recording to take place.)
- EXTERNAL CONTROL is assigned to the MASTER fader level. Use only an expression pedal with this socket.

The polarity of the foot switches is determined by the Mackie Control when powered up. You should first connect the foot switches, then turn on the Mackie Control.

## Mackie Control assignments

### Mackie Control assignments in Logic Pro

Each of these sections outline how Mackie Control interface elements are assigned to Logic functions.

- Display buttons table
- Channel strips assignments table
- Assignment buttons table
- Assign Function keys table
- Global View buttons table
- Modifier buttons table
- Automation buttons table
- Utilities buttons table
- Transport buttons table
- Cursor keys table
- Jog/Scrub wheel assignments table
- External inputs table

## Mackie Control Display buttons in Logic Pro

The table outlines the display controls and their functions:

Button	Modifier	Function/Comments
NAME/VALUE	_	Switch between parameter name and parameter value display.
	SHIFT	Cycle through level meter displays: vertical, horizontal, and off.
	OPTION	Switch between track name and track number: name display.
	CONTROL	Clear clip/overload flags.
	CMD/ALT	Enter control surface group settings mode.
SMPTE/BEATS	_	Switch between SMPTE and beat format in clock display.

## Mackie Control channel strips in Logic Pro

The table outlines the channel strip controls and their functions:

Control	Modifier	Function/Comments
Rotate V-Pot	_	Modify parameter displayed in LCD.
	OPTION	Set parameter to minimum, default, or maximum value.
	CMD/ALT	Modify parameter at high resolution
Press V-Pot button	_	Set parameter displayed on LCD to default value, or switch between two possible values.
	Flashing preselection:	
	_	Enter the preselected value.
	Menu options:	
	_	Enter whatever option is visible in display.
	If track is folder:	
	_	Enter folder.
REC/RDY button	_	Activate/deactivate Record Enable button of track.
	OPTION	Disable Record Enable button for al tracks.
SOLO button	_	Activate/deactivate Solo button of

Control	Modifier	Function/Comments	
	OPTION	Disable Solo button for all channel strips.	
	In Send Destination/Level Mixer view:		
	_	Switch pre/post state of selected send.	
	In Send Destination/Level Channel view:		
	_	Switch between pre/post fader mode of send on selected channel strip.	
/UTE button	_	Activate/deactivate Mute button of track's channel strip.	
	OPTION	Disable Mute button for all channe strips.	
	In Mixer view:		
	SHIFT	Activate/deactivate mute/bypass o the shown parameter.	
	In EQ Mixer view:		
	SHIFT	Activate/deactivate bypass of the current EQ band.	
	In EQ Frequency/Gain view:		
	_	Activate/deactivate bypass of selected EQ band.	
	In Send Mixer view:		
	SHIFT	Activate/deactivate bypass of selected send.	
	In Send Destination/Level Mixer view:		
	-	Activate/deactivate bypass of selected send.	
	In Send Destination/Level Channel view:		
	_	Activate/deactivate mute of send o selected channel strip.	
	In Plug-in Mixer view:		
	SHIFT	Activate/deactivate bypass of plug in.	
	In Instrument Mixer view:		
	SHIFT	Activate/deactivate bypass of instrument.	

Control	Modifier	Function/Comments
SELECT button	_	Select channel strip.
	SHIFT	Set channel strip volume to unity level (0 dB).
	OPTION	Creates a new track with the same assignment as the selected track and switches to Arrange view.
	SHIFT+OPTION	Create a new track with the next channel strip (following the selected track) and switches to Arrange view
Fader	_	Adjust volume.
	In Flip mode "Duplicate":	
	_	Same function as V-Pot of same channel.
	In Flip mode "Swap":	
	_	Swap function with V-Pot of same channel.
	In Surround Angle/Diversity view:	
	_	Adjust surround diversity.
	In EQ Frequency/Gain view:	
	_	Adjust gain of selected EQ band.
	In Send Destination/Level Mixer view:	
	_	Adjust send level of selected send.
	In Send Destination/Level Channel view:	
	_	Adjust send level of send on selected channel strip.

## Mackie Control Assignment buttons in Logic Pro

Hold down to show a shortcut menu on the LCD. Functions or commands are assigned to V-Pots. Release the chosen assignment button to switch V-Pots to Multi Channel or Channel views. The table outlines both the standard use of assignment buttons and their use when used in conjunction with a modifier button.

Button	Modifier	Function/Comments
TRACK	_	Channel strip parameters
		User mode 1
	SHIFT	User mode 1
PAN/SURROUND	_	Pan/Surround parameters
	SHIFT	User mode 2
EQ	_	EQ parameters
	SHIFT	User mode 3
SEND	_	Send parameters
	SHIFT	User mode 4
PLUG-IN	_	Plug-in selection or Plug-in Edit mode
	SHIFT	User mode 5
INSTRUMENT	_	Instrument selection or Instrument Edit mode
	SHIFT	User mode 6
BANK <>	_	Shift fader bank LEFT/RIGHT by number of channel strips.
	OPTION	Shift fader bank to beginning or end.
CHANNEL<>	_	Shift fader bank LEFT/RIGHT by one channel.
	OPTION	Shift fader bank to beginning or end.
FLIP	_	Switch Flip mode between Off and Duplicate.
	SHIFT	Switch Flip mode between Off and Swap.
	CONTROL	Switch Flip mode between Off and Zero (turns fader motors off).
GLOBAL VIEW	_	Switch between Arrange view and All view.
	SHIFT	Switch between Arrange view and Tracks view.

## Mackie Control function keys in Logic Pro

The table outlines the function key controls and their functions:

Button	Modifier	Function/Comments
F1	_	Recall screenset 1.
	SHIFT	Open or close Tracks window.
	CMD/ALT	Cut
	TRACK	Switch to Mixer view Volume.
	PAN/SURROUND	Switch to Mixer view Pan/surround angle.
	EQ	Switch to Mixer view Bypass.
	SEND	Switch to Mixer view Destination.
	MARKER	Create marker without rounding.
	NUDGE	Nudge value: Tick
n modal dialog:		F1 key is equivalent to computer keyboard 1 key.
-2	-	Recall screenset 2.
	SHIFT	Open or close Mixer window.
	CMD/ALT	Сору
	TRACK	Switch to Mixer view Pan.
	PAN/SURROUND	Switch to Mixer view Pan/surround radius.
	EQ	Switch to Mixer view EQ Type.
	SEND	Switch to Mixer view Level.
	MARKER	Create marker with rounding.
	NUDGE	Nudge value: Format
n modal dialog:		F2 key is equivalent to computer keyboard 2 key.
-3	_	Recall screenset 3.
	SHIFT	Open or close Event Editor.
	CMD/ALT	Paste
	TRACK	Switch to Mixer view Channel Strip mode.
	PAN/SURROUND	Switch to Mixer view Pan/surround LFE.
	EQ	Switch to Mixer view Frequency.
	SEND	Switch to Mixer view Position.

Button	Modifier	Function/Comments
	MARKER	Delete marker.
	NUDGE	Nudge value: Beat
n modal dialog:		F3 key is equivalent to computer keyboard 3 key.
-4	_	Recall screenset 4.
	SHIFT	Open or close Score Editor.
	CMD/ALT	Clear
	TRACK	Switch to Mixer view Input.
	PAN/SURROUND	Switch to Mixer view Pan/surround mode.
	EQ	Switch to Mixer view Gain.
	SEND	Switch to Mixer view Mute.
	NUDGE	Nudge value: Bar
n modal dialog:		F4 key is equivalent to computer keyboard 4 key.
5	-	Recall screenset 5.
	SHIFT	Open or close Step Editor.
	CMD/ALT	Select All
	TRACK	Switch to Mixer view Output.
	PAN/SURROUND	Switch to Channel view.
	EQ	Switch to Mixer view Q Factor.
	SEND	Switch to Channel view.
	NUDGE	Nudge value: Frame
n modal dialog:		F5 key is equivalent to computer keyboard 5 key.
-6	-	Recall screenset 6.
	SHIFT	Open or close Piano Roll Editor.
	CMD/ALT	Select All Following.
	TRACK	Switch to Mixer view Automation.
	PAN/SURROUND	Switch to Angle/Diversity view.
	EQ	Switch to Channel view.
	SEND	Switch to Channel Strip 2 view.
	NUDGE	Nudge value: 1/2 Frame
n modal dialog:		F6 key is equivalent to computer

Button	Modifier	Function/Comments
F7	_	Recall screenset 7.
	SHIFT	Open/Close Control bar.
	CMD/ALT	Select Similar Regions/events.
	TRACK	Switch to Mixer view Displayed parameter.
	PAN/SURROUND	Switch to Surround X/Y view.
	EQ	Switch to Frequency/Gain Mixer view
	SEND	Switch to Destination/Level Mixer view.
n modal dialog:		F7 key is equivalent to computer keyboard 7 key.
-8	_	Close topmost floating window.
	SHIFT	Open or close Project Audio Browser
	CMD/ALT	Select Inside Locators.
	TRACK	Switch to Channel Strip Setup view.
	EQ	Switch to Frequency/Gain Channel view.
	SEND	Switch to Destination/Level Channel view.
n modal dialog:		F8 key is equivalent to computer keyboard 8 key.

## Mackie Control Global View buttons in Logic Pro

The table outlines the global view controls and their functions:

Button	Modifier	Function/Comments
MIDI TRACKS	_	Switch to All view and show MIDI tracks.
	SHIFT	Set to fader bank no. 1 (channel strips 1 to 8, for example).
In modal dialog:		MIDI TRACKS button is equivalent to computer keyboard 9 key.
INPUTS	_	Switch to All view and show input channel strips.
	SHIFT	Set to fader bank no. 2 (channel strips 9 to 16, for example).
In modal dialog:		INPUTS button is equivalent to computer keyboard 0 key.
AUDIO TRACKS	_	Switch to All view and show audio channel strips.

Button	Modifier	Function/Comments
	SHIFT	Set to fader bank no. 3 (channel strips 17 to 24, for example).
In modal dialog:		AUDIO TRACKS button is equivalent to computer keyboard's Period key.
AUDIO INSTRUMENTS	_	Switch to All view and show software instrument channel strips.
	SHIFT	Set to fader bank no. 4 (channel strips 25 to 32, for example).
In modal dialog:		AUDIO INSTRUMENTS button is equivalent to computer keyboard / key.
AUX	_	Switch to All view and show aux channel strips.
	SHIFT	Set to fader bank no. 5 (channel strips 33 to 40, for example).
In modal dialog:		AUX button is equivalent to computer keyboard * key.
BUSSES	_	Switch to All view and show bus channel strips.
	SHIFT	Set to fader bank no. 6 (channel strips 41 to 48, for example).
In modal dialog:		BUSSES button is equivalent to computer keyboard - key.
OUTPUTS	_	Switch to All view and show output and master channel strips.
	SHIFT	Set to fader bank no. 7 (channel strips 49 to 56, for example).
In modal dialog:		OUTPUTS button is equivalent to computer keyboard + key.
USER	_	Currently unassigned.
	SHIFT	Set to fader bank no. 8 (channel strips 57 to 64, for example).

## Mackie Control modifier buttons in Logic Pro

The table outlines the modifier buttons (while held down) and their functions:

Button	Function/Comments	
SHIFT	Switch to second function.	
OPTION	Apply function to all channel strips or set parameter to minimum, default, or maximum value.	
CONTROL	Disable Group functions while held down.	
CMD/ALT	Enable Fine mode; shift parameter page by one parameter instead of page.	

## Mackie Control automation buttons in Logic Pro

The table outlines the automation controls and their functions:

Mackie Control	Modifier	Function/Comments
READ/OFF	_	Set selected track's automation to Read or Off.
	OPTION	Set all tracks' automation to Read or Off.
ТОИСН	-	Set selected track's automation to Touch.
	OPTION	Set all tracks' automation to Touch.
LATCH	_	Set selected track's automation to Latch.
	OPTION	Set all tracks' automation to Latch.
WRITE	_	Set selected track's automation to Write.
	OPTION	Set all tracks' automation to Write.
TRIM		Currently unassigned.
GROUP	_	Enter Group Edit mode.
	SHIFT	Create a new group, open the Group window and enter Group Edit mode.
	TRACK	Switch to Mixer view, displaying group parameter.
	OPTION	Switch to Single view.

## Mackie Control utilities buttons in Logic Pro

The table outlines the utility controls and their functions:

Button	Modifier	Function/Comments
SAVE	_	Save project.
	OPTION	Save project as.
UNDO	_	Undo
	SHIFT	Redo
	OPTION	Open Undo History.
CANCEL	_	Leave folder.
	Flashing preselection:	
	_	Cancel preselection.

Modifier	Function/Comments
In alerts:	
_	Execute Cancel button.
_	Enter folder of selected track.
In alerts:	
_	Execute default button.
	In alerts: — —

## Mackie Control transport buttons in Logic Pro

The table outlines the transport controls and their functions:

Button	Modifier	Function/Comments
MARKER	_	Switch Small Marker mode on/off.
	SHIFT	Switch Large Marker mode on/off.
NUDGE	_	Switch Small Nudge mode on/off.
	SHIFT	Switch Large Nudge mode on/off.
	MARKER	Create a marker. This allows you to create a marker with one hand without entering Large Marker mode.
CYCLE	-	Activate/deactivate Cycle mode.
	SHIFT	Switch to Cycle view.
DROP	_	Activate/deactivate Autopunch mode.
	SHIFT	Switch to Punch view.
REPLACE	_	Activate/deactivate Replace mode.
CLICK	_	Activate/deactivate metronome click (separately for playback and record).
	SHIFT	Activate/deactivate internal/externa sync and MMC.
SOLO	_	Activate/deactivate Solo Lock function.
	SHIFT	Enable Solo Lock function.
REWIND <<	_	Shuttle rewind.
	MARKER	Go to previous marker.
	NUDGE	Nudge left by chosen value.
	CYCLE	Engage Cycle mode and set left locator to playhead.

Button	Modifier	Function/Comments
	DROP	Engage Autopunch mode and set punch in locator.
	In Marker mode:	
	-	Go to previous marker.
	In Nudge mode:	
	_	Nudge left by chosen value.
F.FWD >>	_	Shuttle forward.
	MARKER	Go to next marker.
	NUDGE	Nudge right by chosen value.
	CYCLE	Engage Cycle mode and set right locator to playhead.
	DROP	Engage Autopunch and set punch out to locator.
	In Marker mode:	
	_	Go to previous marker.
	In Nudge mode:	
	_	Nudge right by chosen value.
STOP	_	Stop
PLAY	_	Play
	SHIFT	Pause
RECORD	_	Record

# Mackie Control cursor keys in Logic Pro

The table outlines the cursor controls and their functions:

Modifier	Function/Comments
If in Mixer view:	
_	Select previous/next parameter of current view.
ZOOM	Scroll window horizontally by page
If in Channel Strip EQ, Send view, or Plug-in/Instrument Edit view:	
_	Shift current editor page by one page.
CMD/ALT	Shift current editor page by one parameter.
	If in Mixer view:  ZOOM If in Channel Strip EQ, Send view, or Plug-in/Instrument Edit view: 

Mackie Control	Modifier	Function/Comments
	ZOOM	Scroll window horizontally by page.
	Otherwise (always in Nudge mode):	
	_	Mimic computer keyboard Left/Righ Arrow keys.
	ZOOM	Scroll window horizontally by page
	In Zoom mode:	
	-	Change horizontal zoom level.
	SHIFT	Reset individual track zoom of current track (Cursor Left) or all tracks of same type (Cursor Right).
Cursor Up/Down	In Channel Strip EQ, Send view, or Plug-In/Instrument Editor view:	
	_	Select previous/next EQ band, Sen or Insert slot.
	ZOOM	Scroll window vertically by page.
	Otherwise (always in Nudge mode):	
	_	Mimic computer keyboard Up/Down Arrow keys.
	ZOOM	Scroll window vertically by page.
	In Zoom mode:	
	_	Change vertical zoom level.
	SHIFT	Change individual track zoom of current track.
ZOOM	_	Switch between default cursor button behavior (see above) and Zoom mode.
	SHIFT	Switch between default cursor button behavior and permanently mimicking computer keyboard arro keys.

## Mackie Control Jog/Scrub wheel in Logic Pro

The table outlines the Jog/Scrub wheel controls and their functions:

Control	Modifier	Function
Jog wheel	_	Move the playhead forward or back.
	CYCLE	Set the left locator to the current playhead position, advance the playhead as normal, then set the right locator to the playhead position. Further jog wheel turns while still holding down CYCLE advances the playhead and sets the right locator again. Tip: Rotating the jog wheel counterclockwise while holding down CYCLE defines a skip- cycle range.
	DROP	Set the punch in locator to the current playhead position, advance the playhead as normal, then set the punch out locator to the playhead position. Further jog wheel turns while still holding down DROP advances the playhead and sets the punch out locator again.
SCRUB button	_	Activate/deactivate Scrub mode.
	SHIFT	Enable Shuttle mode on the jog wheel (SCRUB button LED flashes).

## Mackie Control external inputs in Logic Pro

The table outlines the external input controls and their functions:

Input	Modifier	Function
USER SWITCH A	_	Play/Stop
USER SWITCH B	_	Record
EXTERNAL CONTROL	_	Master Volume

# **M-Audio iControl**

# Overview of M-Audio iControl in Logic Pro

You can use the iControl with Logic Pro to make working with GarageBand projects easier. When you open a GarageBand project in Logic Pro, you can edit it using the iControl just as you would in GarageBand. You can also take full advantage of the greater control, editing, and processing power afforded by Logic Pro.

Given the hugely expanded functionality of Logic Pro over GarageBand, some iControl buttons may not be assigned as you might expect. You can, however, easily reassign iControl buttons in the Controller Assignments window; see the *Logic Pro User Guide*.

In addition to editing volume, pan, and other channel strip functions, the iControl lets you edit any plug-in that can be automated in Logic Pro. Many Logic Pro effect and instrument plug-ins, and those of third-party manufacturers, feature dozens of parameters. You can access each of these parameters with the iControl.

*Note:* If a third-party plug-in that you're using does not support remote editing or other features mentioned in this documentation, contact the plug-in manufacturer to obtain an updated version.

When you connect the iControl to any of your computer's USB ports, Logic Pro automatically detects the device. If any channels are muted, soloed, or record-enabled in the current project, the LED on the corresponding channel strip control is lit to reflect the channel strip's state. If Cycle mode is active, a lit LED also indicates this.

# M-Audio iControl Assignment buttons in Logic Pro

You can use the buttons along the left side of the iControl, in the areas labeled All Tracks and Selected Track, to select different functions for the rotary encoders located along the right edge, in the channel strip area. In some cases, the channel strip area controls can change the functionality of the Select buttons.

## Assignment buttons

- Volume button: Press the Volume button to assign the rotary encoders (in the channel strip area) to control volume for the eight active channels. The channel strip buttons— Select, Record Enable, Mute, and Solo—work as described in iControl channel strip controls.
- *Pan button:* Press the Pan button to assign the rotary encoders to control the pan/ balance of the eight active channels. The channel strip button functionality is as per their defaults.
- *Track Info button:* Press the Track Info button to activate Channel view. In this view, you can use the Select (Sel) buttons and rotary encoders to edit global parameters of the selected channel strip. The Record Enable, Mute, and Solo buttons retain their default functions.
  - Sel button 1 to 5: Switches the bypass state of the first five Insert slots.
  - Sel button 6 and 7: Switches the bypass state of the first and second Send slots.
  - Sel button 8: Not assigned

In Channel view, each of the Select buttons is lit when the respective Insert or Send slot is enabled, and unlit when the slot is bypassed.

- *Encoder 1:* If the selected channel is an audio channel strip with a Noise Gate effect, controls the Threshold parameter of the Noise Gate (if inserted in the *selected* channel strip).
- *Encoder 2:* If the selected channel is an audio channel strip with a Compressor effect, controls the Compressor's Ratio.

*Note:* The assignments for Encoder 1 and 2 are optimized for GarageBand Real Instrument tracks, which have a default Noise Gate and Compressor effect inserted.

- Encoder 3: Not assigned
- Encoder 4: Not assigned
- Encoder 5: Controls the Pan knob of the channel.
- Encoder 6: Controls the send level for the first send of the channel.
- Encoder 7: Controls the send level for the second send of the channel.
- Encoder 8: Controls the Volume fader of the channel.
- Generator button: If the selected channel strip is a software instrument channel strip, pressing the Generator button assigns the rotary encoders to edit the sound generation parameters of the instrument. These assignments are in groups of eight parameters. The Arrow Up and Arrow Down buttons switch to the previous or next page of eight parameters. Use of the Generator button has no effect if the selected channel strip is not a software instrument channel strip.

• Effect 1 and Effect 2 buttons: Press Effect 1 to assign the rotary encoders to edit the parameters of the third Insert slot of the selected channel strip. Press Effect 2 to assign the rotary encoders to edit the parameters of the fourth Insert slot (if a fourth Insert slot exists). The Arrow Up and Arrow Down buttons switch to the previous or next page of parameters.

Hold down Option while pressing the Effect 1 or Effect 2 button to switch the bypass state of Insert slots 3 and 4, respectively.

When using the Arrow buttons to switch between parameter pages—accessed through use of the Generator, Effect 1, or Effect 2 button—the parameters change in groups of eight (unless the parameters on the last page do not make a complete group of eight). For example, if a plug-in has 19 parameters and the iControl is controlling parameters 1 to 8:

- Press the Arrow Up button to shift to parameters 9 to 16.
- Press the Arrow Up button again to shift to parameters 12 to 19.
- Press the Arrow Down button to shift back to parameters 9 to 16, not 4 to 11.

This way, you always revert to the page positions you expect to find and are comfortable with.

• *EQ button:* Press the EQ button to edit the EQ parameters of the selected channel strip. If a Channel or Linear Phase EQ is inserted in the selected channel strip, pressing the EQ button opens the EQ plug-in window. If no Channel or Linear Phase EQ exists on the selected channel strip, a Channel EQ is inserted automatically. The Arrow Up and Arrow Down buttons switch to the next or previous parameter page.

Each Assignment button has two modes—Mixer view and Channel view—that determine whether the rotary encoders (and in some cases, the Select buttons) edit separate channels or the same channel. For more information, see iControl Mixer and Channel view.

## M-Audio iControl Arrow buttons in Logic Pro

The iControl has channel strip controls for eight channel strips, which default to channel strips 1 to 8. To access further channel strips, press the Arrow Up button. This allows you to control channel strips 9 through 16. Press the Arrow Up button again to control channel strips 17 to 24, or press the Arrow Down button to control channel strips 1 to 8.

When using the Arrow buttons to switch between groups of channel strips, the channel strips follow groupings of eight (starting from channel strip 1) unless the last group of channel strips does not make a complete group of eight. For example, if a project has 19 channel strips, and the iControl is controlling channel strips 1 to 8:

- Press the Arrow Up button to shift to channel strips 9 to 16.
- Press the Arrow Up button again to shift to channel strips 12 to 19.
- Press the Arrow Down button to shift back to channel strips 9 to 16, not 4 to 11.

Hold down the Option button while pressing the Arrow Up button to jump to the first eight channel strips in the project. Press the Option and Arrow Down buttons to jump to the last eight channel strips in the project. For example, if a project has 64 channel strips, pressing Option–Arrow Up jumps to channel strips 57 to 64, and pressing Option–Arrow Down jumps to channel strips 1 to 8.

*Note:* If the Generator, EQ, Effect 1, or Effect 2 button is lit, the functions of the Arrow Up and Arrow Down buttons are as described in iControl Assignment buttons.

# M-Audio iControl channel strip controls in Logic Pro

The right side of the iControl features eight rows of controls that you can use to edit channel strips. Each row includes Select, Record Enable, Mute, and Solo buttons plus a rotary encoder.

### **Channel strip controls**

• Select button: Press to select the channel for channel-based editing or assignment commands. When a channel is selected, "Sel" is lit on the button.

*Note:* If the Track Info button is lit, the Select buttons behave differently. See iControl Assignment buttons for details.

• *Record Enable button:* Press to arm the associated channel strip for recording. When a channel is armed for recording, the dot is lit. Press the Record Enable button a second time to disable recording for the channel.

Hold down the Option button and press the Record Enable button of any channel to disarm all channel strips.

• *Mute button:* Press to mute the channel. The speaker icon is lit when the channel strip is muted. Press the Mute button a second time to unmute the channel strip.

Hold down the Option button and press the Mute button of any channel to unmute all channel strips.

• Solo button: Press to solo the associated channel strip in the application. The headphone icon is lit when the channel strip is soloed. Press the Solo button a second time to exit Solo mode for the channel strip.

Hold down the Option button and press the Solo button of any channel to hear (unsolo) all channel strips.

• *Rotary encoder:* Each channel features a rotary encoder, located to the right of the Solo button. The function assigned to the encoders changes when different Assignment buttons are pressed. See iControl Assignment buttons.

Pressing the Option button while turning a rotary encoder—regardless of the active assignment mode—switches between the parameter's minimum, default, and maximum values.

# M-Audio iControl Mixer and Channel view in Logic Pro

The rotary encoders operate in two views: Mixer view and Channel view. The view determines whether the rotary encoders (and in some cases, the Select buttons) edit multiple channels or a single channel.

- *Mixer view:* Accesses the same parameter for eight channel strips, such as pan or volume (normally a section of the Mixer window).
- · Channel view: Accesses eight parameters of the selected channel strip.

Press one of the Assignment buttons to access Mixer or Channel view. For more information about using the Assignment buttons, see iControl Assignment button functions.

# Use the M-Audio iControl jog wheel in Logic Pro

You can navigate through projects with the jog wheel, located toward the lower-left area of the iControl, just above the transport controls.

#### Navigate with the iControl jog wheel

- Turn the wheel to the right to move the playhead forward.
- Turn the wheel to the left to move the playhead backward.

## M-Audio iControl transport controls in Logic Pro

The transport controls at the bottom-left corner of the iControl feature six large buttons: Record, Return to Zero, Rewind, Play, Fast Forward, and Cycle. You can use these buttons to navigate your projects and to perform a number of recording and editing tasks.

#### **Transport controls**

- *Record button:* Press to activate recording on channel strips that are currently armed for recording. See iControl Assignment buttons.
- Return to Zero button: Press to move the playhead to the beginning of the project.
- *Rewind button:* Quickly press to move the playhead backward by one bar. Hold down the Rewind button to continuously move the playhead backward in one-bar steps.

You can also press the Rewind and Cycle buttons simultaneously to activate Cycle mode, and set the left cycle border (left locator) to the current playhead position.

- *Play/Stop button:* Press to start playback from the current playhead position or to stop playback if the project is currently playing or recording.
- *Fast Forward button:* Quickly press to move the playhead forward by one bar. Hold down the Fast Forward button to continuously move the playhead forward in one-bar increments.

You can also press the Fast Forward and Cycle buttons simultaneously to activate Cycle mode, and set the right cycle border (right locator) to the current playhead position.

• Cycle button: Press to turn Cycle mode on or off.

You can activate Cycle mode—and set the left and right cycle locators, respectively—by using the Rewind or Fast Forward and Cycle buttons together. See iControl locators with Cycle mode.

# M-Audio iControl locators and Cycle mode in Logic Pro

The left and right locators are used to mark a section of your Logic Pro project. These are often used in conjunction with cycle facilities, which repeatedly play back the section of your project between the locators.

#### Set left and right locators and turn on Cycle mode

- 1. Use the jog wheel to move the playhead to the left locator position, then press both the Cycle and Rewind buttons.
- 2. Do one of the following:
  - Navigate to the position where you want to set the right locator with the jog wheel, then press the Cycle and Fast Forward buttons simultaneously.
  - Hold down the Cycle button, navigate to the position where you want to set the right locator using the jog wheel, then release the Cycle button.
  - Rotating the jog wheel counterclockwise (to the left) while holding down Cycle defines a skip-cycle range.

# M-Audio iControl Master fader in Logic Pro

Move the Master fader on the iControl to set the level of the Master fader in the Logic Pro Mixer. The Master fader changes the level of all output channels, but does not affect the relative levels of channels that precede the Master fader in the signal path. Move the fader left to decrease the master level, or to the right to increase the master level.

# iControl assignments

## Overview of M-Audio iControl assignments in Logic Pro

The assignment tables show all assignments for each control, both with and without the Option button for the Assignment buttons and channel strip controls and the Cycle button for the jog wheel and transport buttons.

- iControl Assignment button functions
- iControl channel strip functions
- iControl jog wheel functions
- iControl transport functions

## M-Audio iControl Assignment button functions in Logic Pro

The Assignment buttons in the All Tracks and Selected Track areas define the behavior of the channel strip controls.

iControl button	Modifier	Function/Comments
Volume	-	Encoders control channel's Level fader.
Pan	_	Encoders control channel's Pan/ Balance control.
Generator	_	Encoders control software instrument parameters.
Track Info	-	Encoders control channel strip parameters.
EQ	_	Encoders control EQ parameters.
Effect 1	_	Encoders control Insert 3 parameters.
Effect 2	_	Encoders control Insert 4 parameter.
Option	_	Modifier for other controls; while held down, the modified control either applies the function to all channel strips, or sets the parameter to its minimum, default, or maximum value.
Arrow Up/Arrow Down	_	Shift fader bank left/right by numb of channel strips.
	Option	Shift fader bank to first or last group of channels in the project.

## M-Audio iControl channel strip functions in Logic Pro

The table outlines the channel strip controls and their functions:

iControl	Modifier	Function/Comments
Encoder	_	Modifies currently selected parameter.
	Option	Sets parameter to minimum, default, or maximum value.
Record Enable	_	Turns Record Enable button of channel strip on or off.
	Option	Disables Record Enable buttons of all channel strips.
Solo	-	Turns Solo button of channel strip on or off.

iControl	Modifier	Function/Comments
	Option	Disables Solo buttons of all channel strips.
Mute	_	Turns Mute button of channel strip on or off.
	Option	Disables Mute buttons of all channel strips.
Sel	_	Selects channel strip, except in Channel view.

## M-Audio iControl jog wheel functions in Logic Pro

The table outlines the jog wheel controls and their functions:

iControl	Modifier	Function/Comments
Jog wheel	_	Moves playhead.
	Cycle	Sets the left locator to the current playhead position, advances the playhead as usual, then sets the right locator to the new playhead position. Further jog wheel turns (to the right) while holding down the Cycle button advance the playhead and reset the right locator position.

## M-Audio iControl transport functions in Logic Pro

The table outlines the transport controls and their functions:

iControl	Modifier	Function/Comments
Record	_	Record
Return to Zero	_	Go to beginning of project.
Rewind	_	Moves the playhead one bar backward. If held down, continues to scroll backward.
	Cycle	Engages Cycle function, and sets left locator to playhead position.
Play	_	Play or Stop.
Fast Forward	-	Moves the playhead one bar forward. If held down, continues to scroll forward.
	Cycle	Engages Cycle function, and sets right locator to playhead position.
Cycle	_	Switches Cycle mode on or off.

# **Euphonix devices**

## Set up your Euphonix device in Logic Pro

Logic Pro supports the EuCon protocol developed by Euphonix. This protocol allows enhanced communication between the MC Pro, System 5-MC, MC Control, MC Mix, or MC Transport and Logic Pro.

*Note:* Euphonix were acquired by Avid in 2010. Newer devices that use the EuCon protocol now carry the Avid name.

The term *Euphonix device* is used when describing all devices as a group, regardless if they are Avid or Euphonix-branded units. *MC Professional device* is used when speaking about the MC Pro and System 5-MC. *Avid or MC Artist device* is used when speaking about the Avid Artist series, MC Mix, MC Transport, and MC Control. For any exceptions to the above, individual device names are used.

*Note:* This is an addendum to the Avid or Euphonix user documentation and is limited to descriptions of features specific to Logic Pro. Refer to the Avid or Euphonix documentation for more information about the individual control surfaces.

Depending on the specific Euphonix device you have, the setup process varies. Follow the steps below to use your Euphonix device with Logic Pro.

*Note:* EuCon support in Logic Pro works in a different way than other supported control surface devices. As a consequence, you cannot use the Controller Assignments window to change assignments. See the documentation provided with your Euphonix device for information on the use of parameters and device features. EuCon devices do *not* appear in the Control Surfaces Setup window.

#### Set up your MC Professional device for use with Logic Pro

- 1. Set up your device as described in the Euphonix user documentation.
- 2. Install the latest EuCon software on your computer. (If necessary, go to the Euphonix website to download the most recent version.)

*Note:* Installing EuCon software on the MC Professional device requires the installation of two applications—one for the MC Pro device (EuConMC software), and a second for the computer (EuConWS client). Full details are in the Euphonix user documentation.

3. Open Logic Pro.

The startup screen lets you know that Logic Pro is starting EuCon.

4. On the MC Pro, press the workstation button associated with your computer.

The MC Pro display shows an Attaching to Logic Pro progress bar.

#### Set up your MC Artist device for use with Logic Pro

- 1. Set up your device as described in the Euphonix user documentation.
- 2. Install the latest EuCon software on your computer. (If necessary, go to the Euphonix website to download the most recent software version.)
- 3. With the EuControl application running on your computer, open Logic Pro.

Your MC Artist device automatically connects to the application.

# Change the Euphonix track display in Logic Pro

By default, tracks shown in the Mixer and on the display of your Euphonix device mirror the Mixer's Arrange View. This means that all channel strips with corresponding Track window tracks are displayed in the same order.

*Note:* Redundant tracks—where multiple tracks are routed to the same channel strip—are not accessible.

Switching the Mixer view to another mode (using the view buttons or channel strip filter buttons) does not update the Euphonix device display. You can, however, override the default behavior.

#### Switch the view of channel strips on Euphonix devices

Choose Logic Pro > Control Surfaces > Setup window, and change the Channel Strip View in the Control Surface Group 1 menu.

# Set up Euphonix MC Pro Soft Key assignments in Logic Pro

The "Logic Pro.xml" Application Set file—installed with the EuCon software on your MC Professional device—features a number of useful Soft Key assignments. It is possible to edit these assignments.

#### Change a Soft Key assignment on your MC Professional device

With your EuCon device connected to Logic Pro:

- 1. Press the Setup button in the lower-right corner of the Soft Keys section on the device.
- 2. Select the respective Soft Key by pressing it.
- 3. Choose the EuCon command from the menu.

Logic Pro supports the following EuCon commands:

 Key Commands: All Logic Pro keyboard shortcuts (except the transport commands) are found here. The touchscreen uses the same hierarchy as the Key Commands window. Many of these keyboard shortcuts switch between states (on/off, for example) or set a value. Most also provide feedback on the Soft Key; for example, a Soft Key assigned to the Open/Close Score Editor command is illuminated when a Score Editor window is open.

- Left Wheel/Right Wheel: The commands found here allow you to configure the left or right wheel to perform a certain action when turned. This includes horizontal or vertical zoom, waveform zoom, individual track zoom, move locators, adjust left locator, adjust right locator, move punch locators, adjust punch in or punch out locator, move markers, adjust marker lengths, nudge selected regions or events, left/right pan (surround X), and front/back pan (surround Y).
- Project > Markers: All markers defined in the open project are shown as a list (which only appears once you create the first marker in that project). Assigning a Soft Key to a marker displays the marker title on the Soft Key, but only if the marker title consists of six characters or fewer. A marker name with more than six characters is replaced on the Soft Key by the marker number (1, for example). With this same limitation, renaming a marker in Logic Pro also changes the associated Soft Key display. Pressing the Soft Key moves the playhead to the marker start point. The Soft Key is illuminated while the playhead is within the marker boundaries. Moving a marker disconnects the Soft Key from the marker.

*Note:* Marker Soft Keys are a part of the Application Set, not the project. Don't forget to save the User Set after defining a Marker Soft Key.

• *Transport:* All transport-related key commands are found here.

## Choose Euphonix automation modes in Logic Pro

The Euphonix devices only support Read and Write automation modes. Logic Pro, however, also features Touch and Latch automation modes. When you use the Euphonix devices, activating Read/Write mode activates Touch mode in Logic Pro. Latch mode cannot be activated with these devices.

#### Choose an automation mode on the MC Pro

For use with Logic Pro:

- 1. Press the Wave and Select keys simultaneously.
- 2. Select the automation mode you want from the pop-up menu displayed on the touchscreen. You can choose between:
  - Isolate: Automation mode is off.
  - Read: Activates Read mode in Logic Pro.
  - Write: Activates Write mode in Logic Pro.
  - Read/Write: Activates Touch mode in Logic Pro.

You can also use the Select key to switch between automation modes in Logic Pro:

- When you set the automation mode to Off or Read, the Select key switches between these two modes.
- When you set the automation mode to Read or Touch, the Select key switches between these modes.

#### Choose an automation mode on a CM408T channel strip

With your CM408T connected to Logic Pro:

1. Press the Wave and Y keys simultaneously.

The available automation modes are displayed in a pop-up menu on the CM408T display.

- 2. Use the fader of the channel strip to scroll through the following options:
  - Isolate: Automation mode is Off.
  - Read: Activates Read mode in Logic Pro.
  - Write: Activates Write mode in Logic Pro.
  - Read/Write: Activates Touch mode in Logic Pro.
- 3. Use the Y key to confirm your selection, or the N key to cancel the operation.

*Note:* If a write automation mode (Touch, Latch, Write) is active (and an automation parameter is enabled in the Logic Pro > Preferences > Automation > Touch/Latch/Write Erase settings), the red "W" LED is lit. The green LED is lit when a read automation mode is active. Both LEDs are lit when Touch or Latch mode is active.

#### Choose an automation mode on MC Artist devices

With your MC Artist device connected to Logic Pro:

- 1. Hold down the Shift key.
- 2. Press the AUTO key repeatedly until your chosen automation mode appears on the display screen. You can choose between:
  - Blank: Automation mode is Off.
  - Read (r): Activates Read mode in Logic Pro.
  - Write (w): Activates Write mode in Logic Pro.
  - *Read/Write (rw):* Activates Touch mode in Logic Pro.

## Euphonix fader strips in Logic Pro

The number of fader strips differs across each of the Euphonix devices. This section outlines the behavior of some fader strip elements in Logic Pro.

*Note:* This section is limited to descriptions of features specific to Logic Pro. Refer to the Euphonix user documentation for information about basic fader behavior.

- *On key:* The On key provides the same function as the Mute button in Logic Pro but behaves in a way that may not be expected.
  - The track is unmuted when the On key is lit (the Logic Pro Mute button is unlit).
  - The track is muted when the On key is unlit (the Logic Pro Mute button is lit).
- *L LED:* On MC Professional devices, when the Logic Pro channel strip being controlled by the fader belongs to an automation group, the L LED of the channel strip is lit.
- Touching fader selects track: The "Touching fader selects track" preference of Logic Pro does not apply to the Euphonix devices when they are used with the EuCon protocol. This function is offered by the individual devices, using the device's "Select channel by touching fader/joystick" or "Select by Touch" General preference. This is the same as pressing the Select/Sel key.

# Control of plug-ins with Euphonix devices in Logic Pro

Logic Pro supports the Euphonix "Open plug-ins on workstation when editing" and "Close plug-ins on workstation when exiting" preferences.

If the Link button is enabled in an open plug-in window:

- "Open plug-ins on workstation when editing" does not open a new window when a new plug-in is selected but replaces the open window's contents.
- "Close plug-ins on workstation when exiting" does nothing.

If the Link button is disabled in an open plug-in window:

- "Open plug-ins on workstation when editing" opens a new plug-in window.
- "Close plug-ins on workstation when exiting" closes the plug-in window.

# Euphonix knobsets

## Overview of Euphonix knob sets in Logic Pro

When using the Euphonix devices with Logic Pro, the Mixer's channel strip functions can be accessed and edited using knobsets. A knobset contains pages, each comprised of eight parameters. Knobsets are organized hierarchically.

The top-level knobset leads to the following knobsets:

- Inserts: Press the Inserts knob top to display all effect plug-ins inserted in the currently selected channel strip. (See Inserts knobset.) If a plug-in is enabled (and does not belong to the dynamic, EQ, or filter plug-in groups), either the On key is lit (MC Pro and MC Mix) or the knob's image shows a small green LED on the lower left (MC Control). To switch the bypass state, press the respective On key or knob image, or the Ins In key on the CM408T channel strip.
- *Input:* Press the Input knob top to display all possible channel input values for the selected channel strip. (See Input knobset.)
- Dyn: The Dyn knob top is not currently used to display a list, or allow editing, of dynamic plug-ins. If a dynamic plug-in is enabled, either the On key is lit (MC Pro and MC Mix) or the knob's image shows a small green LED on the lower left (MC Control). To switch the bypass state, press the respective On key or knob image or the Dyn In key on the CM408T channel strip.
- *EQ:* Press the EQ knob top to switch to EQ editing mode. (See EQ knobset.) If an EQ plug-in is enabled, either the On key is lit (MC Pro and MC Mix) or the knob's image shows a small green LED on the lower left (MC Control). To switch the bypass state, press the respective On key or knob image or the EQ In key on the CM408T channel strip.
- Aux or Sends: Press the Aux or Sends knob top to switch to send editing mode. See Aux or Sends knobset. If an Aux or Send is enabled, either the On key is lit (MC Pro and MC Mix) or the knob's image shows a small green LED on the lower left (MC Control). Pressing the respective On key or knob image switches the bypass state.

- Pan: Press the Pan knob top to switch to pan/surround editing mode. (See Pan/Surround knobset.)
- Group: Press the Group knob top to switch to group editing mode. (See Group knobset.)
- Mix or Output: Press the Mix or Output knob top to switch to output editing mode. (See Mix or Output knobset.)

### Use the Euphonix Inserts knobset in Logic Pro

This knobset allows you to:

- Edit an effect plug-in (Inserts mode)
- Change or insert an effect plug-in (Inserts Configuration mode)

Note: This knobset only relates to insert effects and not to instrument plug-ins.

#### Edit an effect plug-in

With your EuCon device connected to Logic Pro:

1. Press the Inserts knob top, or key, to display all effect plug-ins inserted in the currently selected channel strip. This key is labeled "\*" (asterisk) on the CM408T channel strip.

Note: If using the MC Mix, press the CHAN key to enter Channel mode.

The effect plug-in names are displayed on the Soft Keys, the touchscreen, or the display, depending on the system you are using.

If more than eight effect plug-ins are inserted, you can use the Page keys to display ensuing plug-ins.

2. Press the knob top that features the name of the effect plug-in you want to edit.

The parameters are displayed in the order shown in the Controls view of the effect.

3. Rotate the respective knob to change the value.

Depending on the system you are using, for parameters with only two values, you can either press the On key, or turn the respective knob, to switch between the two values. The On key is lit when the value is 1 (or on) and unlit when the value is 0 (or off).

Pressing a knob top sets the controlled parameter to its default value.

If there are more than eight parameters, use the Page keys to navigate between them.

4. Press the Back key to return to the top-level knobset.

#### Change or insert an effect plug-in

With your EuCon device connected to Logic Pro:

1. Press the Inserts knob top or key. The key is labeled "\*" (asterisk) on the CM408T channel strip.

Note: If using the MC Mix, press the CHAN key to enter Channel mode.

2. Press both Page keys simultaneously to display the Inserts Configuration knobset.

The first eight Insert slots of the selected channel strip are displayed.

If an Insert slot already contains an effect plug-in, the On key is lit (on the MC Professional and MC Mix devices). On the MC Control, it is indicated by a small green LED in the lower left of the knob image.

3. Select the Insert slot you want by pressing the respective knob top. Press the Page keys to display Insert slots 9 to 15.

The Effect plug-in menu appears. Press the Page keys to display ensuing plug-ins and to move through the effect plug-in hierarchy.

- 4. Choose the effect plug-in you want:
  - Pressing the knob top enters a submenu or inserts a selected effect plug-in.
  - · Pressing the Back key navigates up one level in the menu hierarchy.

### Use the Euphonix Input knobset in Logic Pro

The Input knobset behaves differently, depending on the channel strip type you are working with—audio or software instrument.

On audio channel strips, this knobset allows you to:

- Set a channel strip's input value (Input mode)
- Set a channel strip's input format (Input Configuration mode)

On software instrument channel strips, this knobset allows you to:

- Edit an instrument plug-in (Input mode)
- Change or insert an instrument plug-in (Input Configuration mode)

#### Set a channel strip's input value

With your EuCon device connected to Logic Pro:

1. Press the Input knob top, or key, to display all possible channel input values for the selected channel strip.

Note: If using the MC Mix, press the CHAN key to enter Channel mode.

The input values are displayed on the Soft Keys, the touchscreen, or the display, depending on the system you are using.

You can use the Page keys to display ensuing input values.

2. Press the knob top that features the name of the channel input value you want to set.

The currently active input value is indicated by a lit On key (on the MC Professional and MC Mix devices). On the MC Control, it is indicated by a small green LED in the lower left of the knob image.
#### Set an audio channel strip's input format

With your EuCon device connected to Logic Pro:

1. Press the Input knob top or key.

Note: If using the MC Mix, press the CHAN key to enter Channel mode.

2. Press both Page keys simultaneously to switch to Input Configuration mode.

The selected channel strip's input format values—Mono, Stereo, Left, Right, Surround— are displayed.

The currently active format value is indicated by a lit On key (on the MC Professional and MC Mix devices). On the MC Control, it is indicated by a small green LED in the lower left of the knob image.

3. Press the respective knob top to choose the input format you want.

#### Edit an instrument plug-in

With your EuCon device connected to Logic Pro:

1. Press the Input knob top, or key, to display the software instrument plug-in inserted in the currently selected channel strip.

The instrument plug-in name is displayed on the Soft Keys, the touchscreen, or the display, depending on the system you are using.

- 2. Press the knob top to display the instrument plug-in parameters in the order shown in the Controls view of the instrument.
- 3. Rotate the respective knob to change the value.

Depending on the system you are using, for parameters with only two values, you can either press the On key, or turn the respective knob, to switch between the two values. The On key is lit when the value is 1 (or on) and unlit when the value is 0 (or off).

Pressing a knob top sets the controlled parameter to its default value.

If the instrument plug-in features more than eight parameters, use the Page keys to navigate between pages of parameters.

4. Press the Back key to return to the top-level knobset.

#### Change or insert an instrument plug-in

With your EuCon device connected to Logic Pro:

- 1. Press the Input knob top, or key.
- 2. Press both Page keys simultaneously to switch to Input Configuration mode.

The Instruments plug-in menu appears. Press the Page keys to display ensuing plug-ins.

If an instrument plug-in is already inserted, the On key is lit (on the MC Professional and MC Mix devices). On the MC Control, it is indicated by a small green LED in the lower left of the knob image.

- 3. Choose the instrument you want:
  - Pressing the knob top activates a submenu or inserts a selected instrument plug-in.
  - · Pressing the Back key navigates up one level in the menu hierarchy.

### Use the Euphonix EQ knobset in Logic Pro

The EQ knobset allows you to edit the first Channel or Linear Phase EQ inserted in the selected channel strip.

There are two pages, each showing four EQ bands on eight knobs:

- One page contains the parameters of EQ bands 1, 2, 7, and 8.
- One page contains the parameters of EQ bands 3, 4, 5, and 6.

When no Channel or Linear Phase EQ is present on the selected channel strip, pressing the knob top labeled AddChEQ inserts a Channel EQ.

- The first knob of an EQ band (the upper or left knob of the pair) controls either Frequency or Q. To switch between Frequency and Q, use the Select/SEL key if working with the MC Professional devices or the MC Mix. If using the MC Control, press the Shift key while touching the knob's image on the touchscreen. (When active, a small yellow LED lights on the upper left of the image.) Pressing the knob top sets the controlled parameter to its default value.
- The second knob of an EQ band (the lower or right knob of the pair) controls Gain (or Slope). Pressing the knob top sets the controlled parameter to its default value.
- If working with the MC Professional devices or the MC Mix, the On key switches the bypass state of the band. On the MC Control, press the knob's touchscreen image.

#### Edit an EQ plug-in

With your EuCon device connected to Logic Pro:

1. Press the EQ knob top, or key, to display the EQ bands of the EQ plug-in inserted in the currently selected channel strip.

Note: The MC Mix automatically switches to Channel mode.

The EQ band parameters are displayed on the Soft Keys, the touchscreen, or the display, depending on the system you are using.

You can use the Page keys to display ensuing parameters.

2. Rotate the respective knob to change the parameter value.

Pressing a knob top sets the controlled parameter to its default value.

3. Press the Back key to return to the top-level knobset.

#### Use the Euphonix Aux or Sends knobset in Logic Pro

The Aux or Sends (Configuration) knobset allows you to:

- · Edit a send destination (Aux or Sends mode)
- · Change or set a send destination (Aux or Sends Configuration mode)

The Select key (labeled SEL on the MC Mix) switches between Pre Fader (off-unlit) and Post Fader (on-lit) modes.

#### Edit a send destination

With your EuCon device connected to Logic Pro:

1. Press the Aux or Sends knob top, or key, to display all send options for the currently selected channel strip.

Note: If using the MC Mix, press the CHAN key to enter Channel mode.

The send options are displayed on the Soft Keys, the touchscreen, or the display, depending on the system you are using.

2. Rotate the respective knob to change the send level.

Pressing a knob top sets the controlled parameter to its default level.

3. Press the Back key to return to the top-level knobset.

#### Change or set a send destination

With your EuCon device connected to Logic Pro:

1. Press the Aux or Sends knob top, or key.

*Note:* If using the MC Mix, press the CHAN key to enter Channel mode.

2. Press both Page keys simultaneously to switch to Send Configuration mode.

The eight Send slots of the currently selected channel strip are displayed.

3. Select the Send slot you want by pressing the respective knob top.

The first eight send destinations are displayed. You can use the Page keys to display further send destinations (busses).

- 4. Choose the send destination:
  - Pressing the knob top changes, or sets, a selected destination.
  - Pressing the Back key navigates up one level in the menu hierarchy.

#### Use the Euphonix Pan/Surround knobset in Logic Pro

The Pan/Surround knobset allows you to adjust a channel strip's Pan/Surround control. If the channel strip's input format is set to Surround, the knobset displays the following parameters:

- Surround Angle
- Surround Diversity
- LFE Level
- Surround X (left/right)
- Surround Y (front/back)
- Spread
- Center Level

#### Adjust the pan/surround control

With your EuCon device connected to Logic Pro:

1. Press the Pan/Surround knob top, or key, to display the Pan/Surround parameters for the currently selected channel strip.

Note: If using the MC Mix, press the CHAN key to enter Channel mode.

The parameter names are displayed on the Soft Keys, the touchscreen, or the display, depending on the system you are using.

2. Rotate the respective knob to change the parameter value.

Pressing a knob top sets the controlled parameter to its default value.

3. Press the Back key to return to the top-level knobset.

#### Use the Euphonix Group knobset in Logic Pro

The Group knobset allows you to edit a channel strip's group membership.

#### Add a channel strip to a group

With your EuCon device connected to Logic Pro:

 Press the Group knob top, or key, to display the list of groups that the currently selected channel strip is assigned to. This key is labeled Grp on the CM408T channel strip.

Note: If using the MC Mix, press the CHAN key to enter Channel mode.

The group names are displayed on the Soft Keys, the touchscreen, or the display, depending on the system you are using.

If a channel strip is associated with more than the first eight groups, you can use the Page keys to display ensuing groups.

- 2. Press the knob top that features the name of the group you want to associate the channel strip with.
  - When you choose an inactive group number, the Group Settings window opens automatically, with the channel strip being added to the group.

• When you choose an active group number, the channel strip is added directly to the group.

**Tip:** The On key can also be used to switch between active and inactive group membership for the selected channel strip.

3. Press the Back key to return to the top-level knobset.

#### Remove a channel strip from a group

With your EuCon device connected to Logic Pro:

 Press the Group knob top, or key, to display the list of groups that the currently selected channel strip is assigned to. This key is labeled Grp on the CM408T channel strip.

Note: If using the MC Mix, press the CHAN key to enter Channel mode.

2. Press the knob top that features the name of the group you want to remove the channel strip from.

That particular channel is removed from the group.

**W** Tip: The On key can also be used to switch between active and inactive group membership for the selected channel strip.

3. Press the Back key to return to the top-level knobset.

#### Use the Mix or Output knobset in Logic Pro

The Mix/Output knobset allows you to change the mix or output destination of a channel strip.

#### Change the output destination of a channel strip

With your EuCon device connected to Logic Pro:

1. Press the Mix or Output knob top, or key, to display all possible mix or output values for the currently selected channel strip.

Note: If using the MC Mix, press the CHAN key to enter Channel mode.

The value names are displayed on the Soft Keys, the touchscreen, or the display, depending on the system you are using.

- 2. To select the output destination, do one of the following:
  - Press the knob top that features the name of the mix or output value.
  - Press the On key for the relevant mix or output value.

You can use the Page keys to display ensuing outputs.

The currently active output is indicated by a lit On key (on the MC Professional and MC Mix devices). On the MC Control, it is indicated by a small green LED in the lower left of the knob image.

3. Press the Back key to return to the top-level knobset.

## **Euphonix Logic Pro features**

This section describes other features specific to Logic Pro.

- *Layouts:* Tracks assigned to channel strips can be saved as a Layout. This Layout can then be recalled at a later time. Any Layouts saved on Euphonix devices are automatically saved with the Logic Pro project.
- *Monitors and Control Room:* Logic Pro does not support EuCon monitoring control. Use the Studio Monitor Pro application.
- *Control Surface bar:* The control surface bar of the Logic Pro Tracks area offers a special feature on the Euphonix devices: it shows focused tracks in blue.

*Note:* The color of the control surface bar cannot be changed in the Control Surfaces Setup inspector.

## **CM Labs Motormix**

## Set up your CM Labs Motormix in Logic Pro

Follow these steps to use your CM Labs Motormix control surface with Logic Pro

#### Set up your CM Labs Motormix in Logic Pro

- 1. Ensure that your Motormix unit is connected bidirectionally with the MIDI interface connected to Logic Pro.
- 2. Choose Logic Pro > Control Surfaces > Setup.
- 3. Choose Install from the Setup window's New menu.
- 4. Select Motormix in the Install window, click Add, then set the appropriate MIDI In and Out ports in the Setup window.

Assignments of CM Labs Motormix interface elements to Logic Pro are covered in these sections:

- Motormix Select buttons
- Motormix faders and pots
- Motormix A to H multi buttons
- Motormix I to P burn buttons
- Motormix Solo and Mute buttons
- Motormix view controls
- Motormix left function buttons
- Motormix right function buttons

## Motormix assignments

## CM Labs Motormix Select buttons in Logic Pro

The Select buttons (the buttons just below the LCD) have multiple uses, depending on the current mode.

Mode	Assignment		
Normal	Selects the channel displayed in the upper LCD line. Channels can be shifted to the left and right with the View left and right buttons.		
Bank button LED flashing	Channel View: Select buttons switch between displayed channel strips:		
	• 1: Switches to Single view.		
	• 2: Switches to Arrange view.		
	3: All view, MIDI channels		
	4: All view, input channels		
	• 5: All view, audio channels		
	6: All view, instrument channels		
	<ul> <li>7: All view, aux and bus channels</li> </ul>		
	8: All view, output and master channels		
WINDOW/tool button LED on	Window Select mode: Select buttons open, assign key focus, or close a particular window type. LED off: If the window is not open, the button opens it. LED on: If the window is open but does not have key focus, the button activates it. LED flashes: If the window has key focus, the button closes it.		
	<ul> <li>1: Tracks window</li> </ul>		
	• 2: Mixer		
	• 3: Event List		
	4: Score Editor		
	5: Step Editor		
	6: Piano Roll Editor		
	• 7: Control bar		
	8: Project Audio Browser		
WINDOW/tool button flashes	Select Tool mode: Select buttons choose a tool.		
	• 1: Pointer		
	• 2: Pencil		
	• 3: Eraser		
	• 4: Text tool		
	• 5: Scissors		
	6: Glue tool		
	7: Solo tool		
	8: Mute tool		

Mode Assignment		
PLAY/transport button flashes	Transport section mode	
	1: Record	
	• 2: Pause	
	• 3: Stop	
	• 4: Play	
	• 5: Rewind	
	6: Fast Forward	
	<ul> <li>Upper LCD row displays current playhead position.</li> </ul>	
STOP/locate button flashes	Locate mode	
	1: Goes to the left locator.	
	2: Goes to the right locator.	
	• 3: Enables or disables Cycle mode.	
	• 4: Enables or disables Autopunch mode.	
	• 5: Enters Marker mode (see below).	
	• 6: Opens Marker List.	
	• Upper LCD row displays the current playhead position.	
Marker mode	<ul> <li>1 to 6: Select markers 1 to 6. Marker names are displayed in the upper LCD row.</li> </ul>	
	• 7: Creates a new marker.	
	8: Deletes the selected marker.	
Group Edit mode	Switches between group parameters. Parameter display can be shifted by the View left and right buttons when the SHIFT button is held down.	
Effect Assign mode	Enters Effect Edit mode for the selected channel.	
Effect Edit mode	Enables or disables the selected parameter, or resets it to the default value.	
Instrument Assign mode	Enters Instrument Edit mode for the selected (instrument) channel.	
Instrument Edit mode	Enables or disables the selected parameter, or resets it to the default value.	

*Note:* In modal dialogs, the Select buttons generate the computer keyboard character shown on the button face.

## CM Labs Motormix faders and pots in Logic Pro

The faders normally control volume. When in Flip mode, however, they duplicate the rotary encoder assignments.

The table outlines the rotary pot controls and their assignments.

Control	Modifier	Assignment
Rotary pots 1 to 8		Control parameter chosen with the Rotary Selector, as displayed in the 7 segment display (see below)
7 segment display		Shows the current selection for rotary pots:
		Send/EQ editing (S-MUTE or PRE/ PST LED is on):
		<ul> <li>S1 to S8 = Send 1 to 8 level</li> </ul>
		<ul> <li>F1 to F8 = EQ band 1 to 8 frequency</li> </ul>
		<ul> <li>G1 to G8 = EQ band 1 to 8 gain</li> </ul>
		<ul> <li>q1 to q8 = EQ band 1 to 8 Q factor</li> </ul>
		Pan/Surround editing (select LED is on):
		• Pn = Pan
		<ul> <li>An = Surround Angle</li> </ul>
		<ul> <li>dv = Surround Diversity</li> </ul>
		<ul> <li>FE = Surround LFO</li> </ul>
		<ul> <li>Sp = Surround Spread</li> </ul>
		<ul> <li>X = Surround X</li> </ul>
		<ul> <li>Y = Surround Y</li> </ul>
		Channel parameter editing (eff-4 LED is on):
		<ul> <li>VL = Volume</li> </ul>
		<ul> <li>Pn or An = Pan/Surround Angle</li> </ul>
		<ul> <li>FM = Channel input format</li> </ul>
		<ul> <li>In = Channel input assignment</li> </ul>
		<ul> <li>Ou = Channel output assignment</li> </ul>
		<ul> <li>Au = Automation mode</li> </ul>
		<ul> <li>Gr = Group membership</li> </ul>
		Assignment:
		<ul> <li>d1 to d8 = Assign Send 1 to 8 destination.</li> </ul>
		Effect editing (DSP/compare LED is on):
		<ul> <li>P1 to 15 = Assign Insert slot 1 to 15 to effect.</li> </ul>
		<ul> <li>P1. to 15. = Effect parameter editing</li> </ul>
		Instrument editing (DSP/compare LED is on):
		<ul> <li>IA = Assign instrument to Instrument slot.</li> </ul>
		<ul> <li>IE. = Instrument parameter editing</li> </ul>
		Group property editing (group LED is on):
		<ul> <li>G1 to 32 = group number</li> </ul>

Control	Modifier	Assignment
Rotary Selector		Selects a slot or parameter for rotary encoders, depending on the parameter types being edited with the rotary encoders:
		<ul> <li>Send slot when editing send leve or assigning send destination</li> </ul>
		<ul> <li>EQ band when editing an EQ parameter</li> </ul>
		<ul> <li>Effect/Instrument slot when assigning an effect or instrumen</li> </ul>
		<ul> <li>Pan/Surround parameter when editing a Pan/Surround parameter</li> </ul>
		<ul> <li>Channel parameter when editing a channel parameter</li> </ul>
		<ul> <li>Effect/instrument parameter page when editing an effect or instrument plug-in</li> </ul>
Rotary Selector push button		Switches Flip mode between Off an Duplicate (faders mirror the rotary encoder assignments).
	SHIFT	Switches the channel strip display mode between:
		<ul> <li>Page info in upper line, parameter name in lower line</li> </ul>
		<ul> <li>Parameter name in upper line, parameter value in lower line</li> </ul>

## CM Labs Motormix multi buttons in Logic Pro

These buttons (labeled A to H) have multiple uses depending on the current mode, as indicated by the green and yellow LEDs to the right.

Mode	Modifier	Assignment
fx bypass		Enables or disables bypass of the currently selected insert effect.
	SHIFT (eff-1)	Enables or disables bypass of the currently selected EQ band, and switches rotary encoders to EQ frequency editing.
s-mute		Enables or disables bypass of the currently edited send, and switches rotary encoders to send level editing.
	SHIFT (eff-2)	Enables or disables bypass of the currently selected EQ band, and switches rotary encoders to EQ Gain editing.

Mode	Modifier	Assignment
pre/post		Switches between Pre and Post
		Fader modes of the currently edited
		send, and switches rotary encoders
		to send level editing. Post mode is
		indicated by a lit LED.
	SHIFT (eff-3)	Enables or disables the bypass of
		the currently selected EQ band, and
		switches rotary encoders to (EQ) Q
		factor editing.
select		Switches the rotary encoders to Pan/
		Surround editing. The parameter is
		chosen with the rotary selector.
	SHIFT (eff-4)	Switches the rotary encoders to

*Note:* In modal dialogs, the Multi buttons generate the computer keyboard character shown on the button face.

#### CM Labs Motormix burn buttons in Logic Pro

These buttons (labeled I to P) have multiple uses depending on the current mode, as indicated by the red LEDs to the left.

*Note:* If a modifier button, such as SHIFT, is shown below a button description, it indicates that the control has an alternate use while the modifier is held down.

Mode	Modifier	Assignment
record		Enables or disables Record Enable state of channel.
	SHIFT (fnctA)	Switches automation mode to Latch
	ALL + SHIFT (fnctA)	Switches automation mode of all channels to Latch.
write		Switches automation mode to Write
	ALL	Switches automation mode of all channels to Write.
	SHIFT (fnctB)	Switches automation mode to Read.
	ALL + SHIFT (fnctA)	Switches automation mode of all channels to Read.
burn		Switches automation mode to Touch
	ALL	Switches automation mode of all channels to Touch.
	SHIFT (fnctC)	Switches automation mode to Off.
	ALL + SHIFT (fnctA)	Switches automation mode of all channels to Off.

*Note:* In modal dialogs, the Burn buttons generate the computer keyboard character shown on the button face.

## CM Labs Motormix Solo and Mute buttons in Logic Pro

These buttons switch the solo and mute state of the displayed channel.

*Note:* In modal dialogs, the SOLO and MUTE buttons generate the computer keyboard character shown on the button face.

### CM Labs Motormix view controls in Logic Pro

The table outlines the view controls and their assignments.

Control	Modifier	Assignment
Left/right buttons		In Effect and Instrument Plug-in Edit modes: shifts the parameter bank.
		In other modes:
		<ul> <li>If BANK LED is off: shifts the fader bank by one channel.</li> </ul>
		<ul> <li>If BANK LED is on: shifts the fader bank by one bank (a group of eight channels).</li> </ul>
	SHIFT	In Effect and Instrument Plug-in Edit modes: shifts the parameter bank by one parameter. In Group Edit mode, the group parameter bank is shifted.
bank		Switches mode of left/right buttons (see above).
	SHIFT	Sets the Select buttons to Channel View.
group		Sets the Select buttons, rotary encoders, and Multi buttons to Group Edit mode.
	SHIFT	Displays channels' group assignments in the LCD. The rotary encoders allow you to change assignments.

## CM Labs Motormix left function buttons in Logic Pro

The table outlines the left function button controls and their assignments.

Control	Modifier	Assignment
AUTO ENBL/mode		Currently unassigned
	SHIFT	Switches rotary encoders to Automation Enable mode.
SUSPEND/create		While held down, the groups are temporarily disabled.
	SHIFT	Creates a new group, and enters Group Edit mode.
PLUG-IN/compare		Switches rotary encoders and Multi buttons to Effect Assign mode. Use the Rotary Select knob to choose the Insert slot you want to edit. In Effect or Instrument Assign mode, i switches to Pan mode. In Effect Edi mode, it switches to Effect Assign mode. In Instrument Edit mode, it switches to Instrument Assign mode.
	SHIFT	Switches the rotary encoders and Multi buttons to Instrument Assign mode.
WINDOW/tools		Switches the Select buttons to Window Select mode.
	SHIFT	Switches the Select buttons to Select Tool mode.
ALL/ALT/FINE		While ALL/ALT/FINE is held down, rotary encoders are in Full mode: rotating counterclockwise sets minimum; rotating clockwise sets maximum value.
	SHIFT	While SHIFT and ALL/ALT/FINE are held down, the rotary encoders are in Fine mode. Parameter changes are made in single unit (or smaller) values.
DEFAULT/bypass		Currently unassigned
	SHIFT	In Instrument Edit mode: switches bypass state of the instrument. In Effect Edit mode: switches bypass state of the effect being edited.
UNDO/save		Performs an Undo step. The LED is lit if there is a Redo step available.

Control	Modifier	Assignment
	SHIFT	Saves the project. The LED is lit
		if the project contains unsaved
		changes.
SHIFT		Switches to Shift mode, where the
		functions indicated by the (inverted)
		labels below the buttons apply.

## CM Labs Motormix right function buttons in Logic Pro

The table outlines the right function button controls and their assignments.

Control	Modifier	Assignment
PLAY/transport		Play key command
	SHIFT	Switches the Select buttons to Transport Section mode.
STOP/locate		Stop key command
	SHIFT	Switches the Select buttons to Locate mode.
FFWD/monitor		Shuttle Forward key command
REWIND/status		Shuttle Rewind key command
	SHIFT	Opens Project Settings Synchronization window.
NEXT/configure		Moves the playhead to the next marker.
LAST/assign		When rotary encoders are displaying send destinations, use of LAST/assign reverts to displaying send levels. Otherwise, moves the playhead to previous marker.
	SHIFT	When rotary encoders are displaying send levels, use of LAST/ assign switches them to display send destinations. When rotary encoders are in Effect Edit mode, use of LAST/assign switches them to Effect Assign mode. When the rotary encoders are in Instrument Edit mode, use of LAST/assign switches them to Instrument Assign Mode.

Control	Modifier	Assignment
ENTER/utility		Identical to the Enter key on computer keyboard
	SHIFT	Opens the Project Settings Automation window.
ESCAPE		When LED is lit, escapes from "special" mode (denoted by flashing LED). At all other times, identical to the Esc key on the computer keyboard.

# Frontier Design TranzPort

## Set up your Frontier Design TranzPort in Logic Pro

Follow the steps below to use your Frontier Design TranzPort control surface with Logic Pro.

Note: Support for the AlphaTrack control surface is available from Frontier Design.

#### Set up your Frontier Design TranzPort device in Logic Pro

- 1. Ensure that the software that shipped with the TranzPort is installed.
- Make sure that the Tranz Bridge (the wireless transmitter) is connected to the computer via USB.

When Logic Pro is opened, it installs the TranzPort automatically, and sets it to native mode.

These sections outline the assignment of Frontier Design TranzPort interface elements to Logic functions.

- Channel strip
- Master controls

## Frontier Design TranzPort LCD display in Logic Pro

The LCD displays the following information:

- Top line left: Name of currently displayed channel
- Top line middle: Volume level of currently displayed channel
- Top line right: Pan position of currently displayed channel
- Bottom line left: Level meter of currently displayed channel
- · Bottom line right: Current playhead position

## TranzPort assignments

## Frontier Design TranzPort channel strip in Logic Pro

The table outlines the channel strip controls and their assignments:

*Note:* A SHIFT (or other modifier) shown below a button description indicates that the button has an alternate use while the modifier is held down.

Control	Modifier	Assignment
<chan< td=""><td></td><td>Shifts the currently displayed channel to the left by one channel.</td></chan<>		Shifts the currently displayed channel to the left by one channel.
	SHIFT	Shifts the currently displayed channel left by eight channels.
CHAN>		Shifts the currently displayed channel right by one channel.
	SHIFT	Shifts the currently displayed channel right by eight channels.
REC		Turns the Record Enable button of the currently displayed channel on or off.
	SHIFT	Disables the Record Enable button of all channels.
SOLO		Enables or disables Solo for the currently displayed channel.
	SHIFT	Disables Solo for all channels.
MUTE		Enables or disables Mute for the currently displayed channel.
	SHIFT	Disables Mute for all channels.
ANY SOLO		Lit if any tracks, channels, or regions are soloed.
JNDO		Undo
	SHIFT	Redo

## Frontier Design TranzPort master controls in Logic Pro

The table outlines the master controls and their assignments:

*Note:* A SHIFT (or other modifier) shown below a button description indicates that the button has an alternate use while the modifier is held down.

Control	Modifier	Assignment
SHIFT		Modifier that alters the function of other controls.
N		Moves playhead to left cycle locator.
	PUNCH	Engages Autopunch mode, and sets punch in locator to playhead position.
	LOOP	Engages Cycle mode, and sets left cycle locator to playhead position.
OUT		Goes to right cycle locator.
	PUNCH	Engages Autopunch mode, and sets punch out locator to playhead position.
	LOOP	Engages Cycle mode, and sets righ cycle locator to playhead position.
PUNCH		Enables or disables Autopunch mode.
LOOP		Enables or disables Cycle mode.
PREV		Moves playhead to previous marke
	SHIFT	Sets locators by previous marker.
ADD		Creates marker at playhead position.
	SHIFT	Deletes marker at playhead positio
NEXT		Moves playhead to next marker.
	SHIFT	Sets locators by next marker.
Jog wheel		Depending on current jog wheel mode:
		<ul> <li>Moves playhead by bars.</li> </ul>
		<ul> <li>Controls audio (and MIDI) scrubbing.</li> </ul>
		Shuttles forward or backward.
	SHIFT	Adjusts volume of the currently displayed channel.

Control	Modifier	Assignment
	LOOP	Sets the left locator to the current playhead position, advances the playhead as usual, then sets the right locator to the playhead position. Further jog wheel use—while holding down LOOP— advances the playhead, and sets the right locator.
		<i>Tip:</i> Rotating the jog wheel counterclockwise, while holding down LOOP, defines a skip cycle range.
	DROP	Sets the punch in locator to the current playhead position, advances the playhead as usual, then sets the punch out locator to the playhead position. Further jog whee use—while holding down DROP— advances the playhead, and sets the punch out locator.
REW		Shuttles backward.
	SHIFT	Goes to last play position.
	PUNCH	Engages Autopunch mode, and sets punch in locator to playhead position.
	LOOP	Engages Cycle mode, and sets left locator to playhead position.
FWD		Shuttles forward.
	PUNCH	Engages Autopunch mode, and sets punch out locator to playhead position.
	LOOP	Engages Cycle mode, and sets righ locator to playhead position.
STOP		Stop
	SHIFT	Switches jog wheel between Move Playhead (by bars), Scrubbing, and Shuttle modes.
PLAY		Play
	SHIFT	Pause
RECORD		Record
	SHIFT	Save
Foot Switch		Punch In/Out

# JLCooper CS-32 MiniDesk

## Set up your JL Cooper CS-32 MiniDesk in Logic Pro

Follow the steps below to use your JLCooper CS-32 MiniDesk control surface with Logic Pro.

Important: JLCooper CS-32 MiniDesk units can be used only with MIDI connections.

#### Add JLCooper CS-32 control surfaces connected via MIDI

To use with Logic Pro:

- 1. Set the CS-32 to Host mode.
- 2. Make sure that your CS-32 units are connected to the computer via MIDI.
- 3. Choose Logic Pro > Control Surfaces > Setup.
- 4. Choose Install from the Setup window's New menu.
- 5. Select the CS-32 from the list in the Install window.
- 6. Click the Scan button.

## CS-32 MiniDesk assignments

# Overview of JLCooper CS-32 MiniDesk assignments in Logic Pro

Assignments of JLCooper CS-32 MiniDesk interface elements to Logic functions are covered in these sections:

- CS-32 MiniDesk display
- CS-32 MiniDesk pots
- CS-32 MiniDesk channel strips
- CS-32 MiniDesk bank button
- CS-32 MiniDesk F keys
- CS-32 MiniDesk cursor controls
- CS-32 MiniDesk transport controls
- · CS-32 MiniDesk jog wheel controls

## JLCooper CS-32 MiniDesk display in Logic Pro

The display shows information on the current mode and parameters being edited.

Display text	Meaning	
	A switching parameter (Solo, Mute, Rec/Rdy) has been disabled.	
AE	Automation Enable setup: Mute buttons 1–6 display/set various automatior parameters.	
AS	Pots (knobs) are in Pan/Send Assignment mode.	
b1—b9	Pots are in Plug-in or Instrument Bank Select mode.	
In	Pots are in Instrument Edit mode.	
Lt	Mute buttons display/set Latch automation mode.	
Mu	Mute has been enabled.	
P1—P9	Pots are in Effect Edit mode.	
PA	Pots are in Pan/Send mode.	
rd	Mute buttons display/set Read automation mode.	
Re	Rec/Rdy has been enabled.	
So	Solo has been enabled.	
Тс	Mute buttons display/set Touch automation mode.	
Wr	Mute buttons display/set Write automation mode.	
Other text	When a channel is selected, the first two characters of its name are briefly displayed.	
Numbers	While editing a numerical value with a fader or pot, the current value is displayed. If there are more than two digits in the value, the last two dig are shown. Plus/minus signs (+/–) are shown if only one digit is displaye	

#### JLCooper CS-32 MiniDesk pots in Logic Pro

Because the CS-32 MiniDesk pots are not motorized, Pickup mode is used if turned on in Control Surfaces preferences. In Pickup mode, the controller must reach (pick up) the current value before the value starts to change. This prevents sudden jumps of parameter values caused by playing back automation.

A pot's current value is indicated by the NULL arrow LEDs.

- The Upper arrow is lit if the pot's value is above the current value.
- The Lower arrow is lit if the pot's value is below the current value.
- Both arrow LEDs are lit when the pot has reached the current value.

The pots can operate in one of three modes, with one sub-mode in each.

- Instrument edit mode: Press F8 to enter Instrument edit mode (display shows "In"). The pots control (software) instrument parameters. Hold down SHIFT (display shows "b1"-"b9") to move between banks (pages) of parameters. (See CS-32 MiniDesk cursor controls.)
- Effect edit mode: Press F9 to enter Effect edit mode (display shows "P1"-"P9"). The
  pots control the parameters of the effect in the currently selected Insert slot. Hold down
  SHIFT (display shows "b1"-"b9") to switch between Insert slots, and move between
  banks (pages) of parameters. (See CS-32 MiniDesk cursor controls.)
- *Pan/Send mode:* Press F7 to enable Pan/Send mode (display shows "PA"). In this mode, the pots control the following channel parameters:

Control	Assignment	
SEND A/P1	Controls Send 1 level of selected channel.	
SEND B/P2	Controls Send 2 level of selected channel.	
PAN/P3	Controls pan of selected channel.	
SEND C/P4	Controls Send 3 level of selected channel.	
SEND D/P5	Controls Send 4 level of selected channel.	
SEND E/P6	Controls Send 5 level of selected channel.	

While SHIFT is held down (display shows "AS"), the pots allow you to perform the following assignments:

Control	Assignment	
SEND A/P1	Assigns Send 1 destination (bus) for selected channel.	
SEND B/P2	Assigns Send 2 destination for selected channel.	
PAN/P3	Assigns input format of selected channel.	
SEND C/P4	Assigns Send 3 destination for selected channel.	
SEND D/P5	Assigns Send 4 destination for selected channel.	
SEND E/P6	Assigns Send 5 destination for selected channel.	

## JLCooper CS-32 MiniDesk channel strips in Logic Pro

The table outlines the channel strip controls and their assignments:

Control	Modifier	Assignment
PAN SELECT/TRACK SELECT		Selects channel strip (destination for the selected track).
SOLO		Enables or disables Solo.
LOCATE		Moves playhead to markers 1 to 32.
	SHIFT	LOCATE 17: Creates a new marker.
		LOCATE 18: Creates a new marker without rounding.
		LOCATE 19: Deletes the marker at the playhead position.
		LOCATE 25: Opens the Marker List.
		LOCATE 26: Opens the Marker Text window.
		LOCATE 28: Sets locators by previous marker.
		LOCATE 29: Sets locators by curren marker.
		LOCATE 30: Sets locators by next marker.
		LOCATE 31: Moves playhead to previous marker.
		LOCATE 32: Moves playhead to next marker.
MUTE		Enables or disables Mute.
	F1	Automation Enable setup (display shows "AE").
		MUTE 1: Enables or disables volume automation.
		MUTE 2: Enables or disables pan automation.
		MUTE 3: Enables or disables mute automation.
		MUTE 4: Enables or disables automation of solo.
		MUTE 5: Enables or disables send (level) automation.
		MUTE 6: Enables or disables automation of plug-in parameters.
	F2	Switches automation mode between Read and Off (display shows "Td").
	F3	Switches automation mode between Touch and Off (display shows "Tc").
	F4	Switches automation mode between Latch and Off (display shows "Lt").

Control	Modifier	Assignment
	F5	Switches automation mode betweer
		Write and Off (display shows "Wr").
ARM		Turns Record Enable button on or
		off.
Faders		Control volume. As the faders
		don't offer feedback, Pickup mode
		is used, as per the pots. See
		the pickup information in CS-
		32 MiniDesk pots.

## JLCooper CS-32 MiniDesk bank button in Logic Pro

The table outlines the bank controls and their assignments:

Control	Assignment
Small red button with green LED	LED off: Black labels of channel strip buttons apply (TRK/LOC/ARM).
	LED on: White labels of channel strip buttons apply (PAN/SOLO/MUTE).

### JLCooper CS-32 MiniDesk F keys in Logic Pro

The table outlines the F key controls and their assignments:

Control	Modifier	Assignment
SHIFT		Modifier for function of other controls. See SHIFT entries in left column.
F1		While held down, MUTE buttons 1–6 enable/disable automation of certain parameters (see MUTE).
	SHIFT	Enables or disables Cycle mode.
F2		While held down, MUTE buttons set automation mode to Read.
	SHIFT	Enables or disables Autopunch mode.
F3		While held down, MUTE buttons set automation mode to Touch.
	SHIFT	Sets left locator by current playhead position.
F4		While held down, MUTE buttons set automation mode to Latch.

Control	Modifier	Assignment
	SHIFT	Sets right locator by current playhead position.
5		While held down, MUTE buttons se automation mode to Write.
	SHIFT	Sets punch in locator by current playhead position.
-6		
	SHIFT	Sets punch out locator by current playhead position.
7		Sets pots to Pan/Send mode (display shows "PA").
	SHIFT	Enables or disables metronome click.
8		Sets pots to Instrument Edit mode (display shows "In").
-9		Sets pots to Effect Edit mode (display shows "P1"-"P9").

#### JLCooper CS-32 MiniDesk cursor controls in Logic Pro

The table outlines the cursor controls and their assignments:

Control	Modifier	Assignment
Up		Zooms out vertically.
	SHIFT	In Effect Edit mode: moves up one Insert slot (unless top slot is selected).
Down		Zooms in vertically.
	SHIFT	In Effect Edit mode: moves down one Insert slot (unless bottom slot).
Left		Zooms out horizontally.
	SHIFT	In Instrument and Effect Edit modes decrements current parameter bank (moves down one bank, or page, of parameters).
Right		Zooms in horizontally.
	SHIFT	In Instrument and Effect Edit modes increments current parameter bank (moves up one bank, or page, of parameters).

### JLCooper CS-32 MiniDesk transport controls in Logic Pro

The table outlines the transport controls and their assignments:

Control	Assignment
RECORD	Record
STOP	Stop
REW	Moves playhead backward by one bar.
PLAY	Play
F FWD	Moves playhead forward by one bar.

### JLCooper CS-32 MiniDesk jog wheel controls in Logic Pro

The table outlines the jog wheel controls and their assignments:

Control	Assignment
Jog wheel	SCRUB off: Moves playhead (in bar increments).
	SCRUB on: Scrubbing of audio (and MIDI) is possible.
	SHUTTLE on: Shuttle mode
SCRUB	Switches jog wheel between Move Playhead (by bars), and Scrubbing modes.
SHUTTLE	Switches jog wheel between Move Playhead (by bars) and Shuttle modes.

# JLCooper FaderMaster 4/100

# Set up your JLCooper FaderMaster 4/100 in Logic Pro

You can combine several FaderMaster 4/100 devices to form one large virtual control surface. The meaning and functionality of the Track buttons, however, are individually switched for each device.

Before using your FaderMaster 4/100 control surface with Logic Pro, make sure your FaderMaster 4/100 (MIDI or USB version) has firmware version 1.03 or later installed. If you have older firmware (see the sticker on the back of the unit), contact JLCooper.

Connect your FaderMaster 4/100 devices to the computer via USB or MIDI. If connected via USB, installation is automatic.

*Note:* USB model only: Install the latest driver software available from the manufacturer. It is possible that the current driver may not work in future macOS updates. In this case, please contact JLCooper or connect your device bi-directionally with your MIDI interface.

#### Install JLCooper FaderMaster 4/100 units connected via MIDI

- 1. Choose Logic Pro > Control Surfaces > Setup.
- 2. Choose Install from the New menu.
- 3. Select FaderMaster 4/100 from the list in the Install window.
- 4. Click the Scan button.

# JLCooper FaderMaster 4/100 assignments in Logic Pro

The table outlines the global controls and their assignments:

Control	Assignment
Select	Switches Track buttons to track selection duties.
Aux	Switches Track buttons to emulate Record Enable buttons.
Solo	Switches Track buttons to emulate Solo buttons.
Mute	Switches Track Buttons to emulate Mute buttons.
Inc	Increases fader bank display to show next four channels.
Dec	Decreases fader bank display to show previous four channels.

The table outlines the channel strip controls and their assignments:

Control	Assignment
Track button	Performs currently selected function (Select, Record Enable, Solo, Mute).
Fader	Controls volume (touch-sensitive and motorized).

# JLCooper MCS3

## Set up your JLCooper MCS3 in Logic Pro

Logic Pro supports USB or MIDI versions of the JLCooper MCS3 control surface. Both USB and MIDI versions are installed automatically when you open Logic Pro. If your MCS3 is not recognized and installed correctly, follow the steps below.

#### Add JLCooper MCS3 control surfaces connected via USB

To use with Logic Pro:

- Ensure that your MCS3 USB device is correctly connected to the computer with a USB cable. Also ensure that the unit is powered.
- 2. Open Logic Pro.

The MCS3 is added to the Control Surfaces Setup window.

#### Add JLCooper MCS3 control surfaces connected via MIDI

To use with Logic Pro:

- 1. Make sure that your MCS3 units are connected to the computer via MIDI.
- 2. Choose Logic Pro > Control Surfaces > Setup.
- 3. Choose Install from the Setup window's New menu.
- 4. Select the MCS3 from the list in the Install window.
- 5. Click the Scan button.

## MCS3 assignments

#### Overview of JLCooper MCS3 assignments in Logic Pro

Assignments of JLCooper MCS3 interface elements to Logic Pro functions are covered in these sections.

- MCS3 F1 to F6 buttons
- MCS3 W1 to W7 buttons
- MCS3 cursor controls
- MCS3 jog wheel and shuttle ring
- MCS3 transport controls

#### JLCooper MCS3 F1 to F6 buttons in Logic Pro

The table outlines the F1 to F6 buttons and their assignments.

Control	Assignment
F1	Switches to Layer 1.
F2	Switches to Layer 2.
F3	Switches to Layer 3.
F4	Unassigned. Can be assigned to different key commands in Layers 1, 2, and 3.
F5	Unassigned. Can be assigned to different key commands in Layers 1, 2, and 3.
F6	Unassigned. Can be assigned to different key commands in Layers 1, 2, and 3.

### JLCooper MCS3 MCS3 W1 to W7 buttons in Logic Pro

The table outlines the W1 to W7 buttons and their assignments.

Control	Assignment
W1	Unassigned. Can be assigned to different keyboard shortcuts in Layers 1, 2, and 3.
W2	Unassigned. Can be assigned to different keyboard shortcuts in Layers 1, 2, and 3.
N3	Unassigned. Can be assigned to different keyboard shortcuts in Layers 1, 2, and 3.
N4	Unassigned. Can be assigned to different keyboard shortcuts in Layers 1, 2, and 3.
W5	Unassigned. Can be assigned to different keyboard shortcuts in Layers 1, 2, and 3.

Control	Assignment
W6	Unassigned. Can be assigned to different keyboard shortcuts in Layers 1, 2, and 3.
W7	Unassigned. Can be assigned to different keyboard shortcuts in Layers 1, 2, and 3.

#### JLCooper MCS3 cursor controls in Logic Pro

The table outlines the cursor controls and their assignments.

Control	Assignment
Up Arrow	Mirrors the behavior of the computer keyboard Up Arrow key.
Down Arrow	Mirrors the behavior of the computer keyboard Down Arrow key.
Left Arrow	Mirrors the behavior of the computer keyboard Left Arrow key.
Right Arrow	Mirrors the behavior of the computer keyboard Right Arrow key.

## JLCooper MCS3 jog wheel and shuttle ring in Logic Pro

The table outlines the jog wheel and shuttle ring controls and their assignments.

Control	Assignment
Jog wheel	Scrubs audio and MIDI.
Shuttle ring	Shuttles the playhead backward when turned to the left. Shuttles the playhead forward when turned to the right.

### JLCooper MCS3 transport controls in Logic Pro

The table outlines the transport controls and their assignments.

Control	Assignment
REW	Moves the playhead backward by one bar.
F FWD	Moves the playhead forward by one bar.
STOP	Stop
PLAY	Play
RECORD	Record. LED is lit when active.

# Korg microKONTROL and KONTROL49

# Set up Korg microKONTROL and KONTROL49 in Logic Pro

Follow the steps below to use your control surface with Logic Pro.

#### Set up your Korg control surface with Logic Pro

- 1. Ensure that your control surfaces are connected to the computer via USB.
- 2. Open Logic Pro.

The devices are scanned for and installed automatically. The microKONTROL/ KONTROL49 is automatically set to native mode; internal Scene settings are ignored.

*Note:* If installation and identification fails, it may be possible that the microKONTROL/ KONTROL49 reaction time is too slow due to USB bus-power issues. In this situation, connect the supplied power adapter, and set the power switch to the DC position.

When you quit Logic Pro (or delete the control surface icon in the Control Surfaces Setup window), the microKONTROL/KONTROL49 is reset to normal (non-native) operation.

## microKONTROL and KONTROL49 assignments

#### microKONTROL and KONTROL49 Pads

#### Overview of Korg microKONTROL and KONTROL49 Pads in Logic Pro

The Pads can operate in one of eight modes, and three overlays. While pressing SCENE, you can select modes for the Pads and channel strips. Releasing SCENE without pressing a Pad does not affect the currently selected Pad or channel views.

Pad	Assignment
1	Switches Pads to Transport mode.
2	Switches Pads to Solo/Mute mode.
3	Switches Pads to Rec/Select mode mode.

Pad	Assignment
4-8	Switches Pads to Enable the User 4–8 modes.
	These modes have unassigned Pads. You can assign them to key commands with the Learn function.
9	Switches channel strips to Pan mode.
10	Switches channel strips to Send mode.
11	Switches channel strips to Automation mode.
12	Switches channel strips to Instrument edit mode.
13	Switches channel strips to Effect edit mode.
14–16	Switches channel strips to User 6-8 mode.
	These modes have unassigned encoders. You can assign them with the Logic Pro Learn function.

#### Korg microKONTROL and KONTROL49 Transport mode in Logic Pro

Pad	Assignment
1	Sets main encoder to Transport mode.
2	Sets main encoder to Scrub mode.
3	Sets main encoder to Shuttle mode.
7	Switches sync between internal and external.
8	Enables or disables metronome click (separately for Playback and Record).
9	Enables or disables Cycle mode.
10	Enables or disables Autopunch mode.
11	Enables or disables Replace mode.
12	Enables or disables Solo.
13	Record
14	Pause
15	Play
16	Stop

This mode is enabled by pressing SCENE and Pad 1.

#### Korg microKONTROL and KONTROL49 Solo/Mute mode in Logic Pro

Pad	Assignment
1–8	Enables or disables Solo for the eight channels being controlled with the eight channel strips.
9–16	Enables or disables Mute for the eight channels being controlled with the eight channel strips.

This mode is enabled by pressing SCENE and Pad 2.

#### Korg microKONTROL and KONTROL49 Rec/Select mode in Logic Pro

This mode is enabled by pressing SCENE and Pad 3.

Pad	Assignment
1–8	Turns the Record Enable button of the eight channels being controlled with the eight channel strips on or off.
9–16	Selects one of the eight channels being controlled with the eight channel strips.

# Use the Korg microKONTROL and KONTROL49 User 4-8 modes in Logic Pro

These modes are enabled by pressing SCENE and Pad 4 to 8.

In these modes, the Pads are unassigned. Use the Learn function: Logic Pro > Control Surfaces > Learn Assignment for [function name] to assign them to key commands, for example.

*Note:* When in Learn mode, if a Pad is pressed and released immediately, the learned assignment does not work as expected.

#### Assign a keyboard shortcut

- 1. In Logic Pro, enable the Learn New Assignment button in the Key Commands window.
- 2. Choose a keyboard shortcut, then press and hold down the Pad, until the Learn New Assignment button switches to the "up" state.

This slightly different approach is due to messages sent by the Korg devices: when the Pad is immediately released, a value range is learned. Holding the Pad until Learn mode disengages results in a fixed value being learned.

#### Korg microKONTROL and KONTROL49 Send mode in Logic Pro

This mode is enabled by pressing SCENE and Pad 10. In Send mode, the channel strip encoders control the send level of the selected send. The Pads remain in the currently selected mode.

• Send Overlay: Press SETTING while the encoders are in Send mode to change the operation of the Pads in Send mode.

Pad	Assignment
1–8	Switches the send bypass state (of the currently selected send) for the eight channel strips.
9–16	Switches the send position (pre/post fader) of the currently selected send, for the eight channel strips.

#### Korg microKONTROL and KONTROL49 Effect edit mode in Logic Pro

This mode is enabled by pressing SCENE and Pad 13. In Effect edit mode, the channel strip encoders control the parameters of the currently selected effect. The Pads remain in the currently selected mode.

• *Effect Edit Overlay:* Press SETTING while the encoders are in Effect Edit mode to change the operation of the Pads in Effect edit mode.

Pad	Assignment
1–8	Switches the effect bypass state (of the currently selected Insert slot) for the eight channel strips.

# Korg microKONTROL and KONTROL49 main controls in Logic Pro

The main LCD shows information on the current mode of the encoders.

Display text	Meaning	
<instrument name=""></instrument>	Encoders edit instrument parameters.	
<plug-in name=""></plug-in>	Encoders edit effect parameters (the currently selected Insert slot number is indicated on the display).	
Automatn	Encoders set the automation mode.	
Ins. x	(SETTING held down) Main encoder chooses the Insert slot number.	
ModePad	Displayed while SCENE button is held down.	
Pan	Encoders control pan.	
Send x	Encoders control send level of send x.	
User 6	Channel Strip User Mode 6. Encoders are initially unassigned.	
Display text	Meaning	
--------------	---	--
User 7	Channel Strip User Mode 7. Encoders are initially unassigned.	
User 8	Channel Strip User Mode 8. Encoders are initially unassigned.	

The LCD backlight is red while recording, and green at other times.

The controls in the main section have the following meaning:

Control	Assignment		
Main encoder	Controls the playhead in one of three modes. (See Pads 1–3 in Transport mode.)		
SETTING	Held down in Send mode:		
	<ul> <li>Main encoder chooses the current send.</li> </ul>		
	<ul> <li>Pads have special meaning—see Send mode.</li> </ul>		
	<ul> <li>LCDs display send destinations.</li> </ul>		
	<ul> <li>Encoders choose send destinations.</li> </ul>		
	Held down in Effect Edit mode:		
	Main encoder chooses the current Insert slot.		
	<ul> <li>Pads have special meaning—see Effect edit mode.</li> </ul>		
	LCDs display effect names for all eight channels.		
MESSAGE	Enables or disables Duplicate Flip mode. When enabled, both the faders and encoders control the parameter displayed in the LCDs.		
SCENE	While held down, Pads switch between Pad functions and channel views. See microKONTROL and KONTROL49 Pads overview.		
EXIT	_		
HEX LOCK	Shifts fader bank to the previous eight channels. (LED is on if previous channels exist.) Shifts fader bank to the previous eight parameters in Effect Edit or Instrument Edit view.		
ENTER	Shifts fader bank to the next eight channels. (LED is on if subsequent channels exist.) Shifts fader bank to the next eight parameters in Effect Edit or Instrument Edit view.		
<	Octave Shift Down		
>	Octave Shift Up		

# Korg microKONTROL and KONTROL49 channel strips in Logic Pro

There are several modes for the encoders, enabled with SCENE and Pad 9–16.

Control	Assignment	
LCD	Shows the parameter controlled by the encoder. The current name/value is displayed for a few seconds when you move an encoder or a fader.	
	When the encoders are in a Mixer view (Pan, Send, Send Setup), the background color indicates the channel automation mode:	
	Green: Off or Read	
	Yellow: Touch or Latch	
	Red: Write	
Encoder	Controls the parameter shown directly above the encoder in the LCD.	
Fader	Controls volume. Because the faders don't offer feedback, Pickup mode is used (if enabled in the Control Surfaces preferences). This means that the fader must reach ("pick up") the current parameter value before the value starts to change.	

# microKONTROL and KONTROL49 external input in Logic Pro

The table outlines the external input controls and their assignments.

Control	Assignment	
Foot Switch	Starts and stops playback.	
Pedal	Controls the master fader.	

# Mackie Baby HUI

# Set up your Mackie Baby HUI in Logic Pro

Baby HUI control surface units do not support automatic scanning. You need to manually add these devices to your setup. When you add a device in this way, you need to specify the MIDI In and Out port parameters.

#### Set up Mackie Baby HUI units

To use the Mackie Baby HUI with Logic Pro:

- 1. Make sure that your Baby HUI units are connected bidirectionally with the computer, using a MIDI interface.
- 2. Choose Logic Pro > Control Surfaces > Setup.
- 3. Choose New > Install in the Setup window.
- 4. Select the Baby HUI in the Install window.
- 5. Click the Add button.
- 6. Select the added device in the Setup window, then assign the MIDI Input and MIDI Out parameters as appropriate.

# **Baby HUI assignments**

#### Overview of Mackie Baby HUI assignments in Logic Pro

Assignments of Mackie Baby HUI interface elements to Logic Pro functions are covered in the following sections.

- Baby HUI channel strips
- · Baby HUI encoder assignment controls
- Baby HUI automation controls
- Baby HUI display controls
- Baby HUI utility controls
- Baby HUI navigation controls
- Baby HUI transport controls

## Mackie Baby HUI channel strips in Logic Pro

The table outlines the channel strip controls and their assignments.

*Note:* If SHIFT is shown below a button description, it indicates that the control has an alternate use while the modifier is held down.

Modifier	Assignment
	Adjusts the parameter selected in the Encoder Assignment section.
	Selects a channel strip.
SHIFT	Turns Record Enable button of selected channel on/off.
	Illuminates when a signal is present in the channel. It also indicates channel selection.
	Enables or disables Solo.
	Enables or disables Mute.
	Adjusts volume.

#### Mackie Baby HUI encoder assignment controls in Logic Pro

The table outlines the encoder assignment controls and their assignments.

Assignment	Assignment	
Assigns pan to rotary encoders.	Assigns pan to rotary encoders.	
Assigns Send 1 level to rotary encoders.		
Assigns Send 2 level to rotary encoders.		
Assigns Send 3 level to rotary encoders.		
Assigns Send 4 level to rotary encoders.		
	Assigns pan to rotary encoders. Assigns Send 1 level to rotary encoders. Assigns Send 2 level to rotary encoders. Assigns Send 3 level to rotary encoders.	

## Mackie Baby HUI automation controls in Logic Pro

The table outlines the automation controls and their assignments.

*Note:* If SHIFT is shown below a button description, it indicates that the control has an alternate use while the modifier is held down.

Control	Modifier	Assignment
BYPASS/OFF		Sets selected channel to Off automation mode.
	SHIFT	Enables or disables playback and recording of level (volume) automation.
READ		Sets selected channel to Read automation mode.
	SHIFT	Enables or disables playback and recording of mute automation.
WRITE		Sets selected channel to Write automation mode.
	SHIFT	Enables or disables playback and recording of pan automation.
тоисн		Sets selected channel to Touch automation mode.
	SHIFT	Enables or disables playback and recording of send level automation.

## Mackie Baby HUI display controls in Logic Pro

The table outlines the display controls and their assignments.

Control	Assignment	
TRANSPORT	Opens or closes the Control bar window.	
MEM-LOC	Opens or closes the Marker List.	
MIXER	Opens or closes the Mixer.	
EDIT	Opens or closes the Tracks window.	

## Mackie Baby HUI Baby HUI utility controls in Logic Pro

The table outlines the utility controls and their assignments.

Control	Assignment	
UNDO	Undoes the last editing step.	
SHIFT	Shifts to alternate use of some buttons.	

### Mackie Baby HUI navigation controls in Logic Pro

The table outlines the navigation controls and their assignments.

*Note:* If SHIFT is shown below a button description, it indicates that the control has an alternate use while the modifier is held down.

Control	Modifier	Assignment
RTZ		Navigates to the left locator.
	SHIFT	Sets the punch in locator (at current playhead position).
END		Navigates to the right locator.
	SHIFT	Sets the punch out locator (at current playhead position).
BANK SELECT Left		Shifts channel strips by one bank to the left.
	SHIFT	Shifts channel strips by one channel to the left.
BANK SELECT Right		Shifts channel strips by one bank to the right.
	SHIFT	Shifts channel strips by one channel to the right.

## Mackie Baby HUI transport controls in Logic Pro

The table outlines the transport controls and their assignments.

Control	Assignment	
REWIND	Shuttles backward.	
FAST FWD	Shuttles forward.	
STOP	Stop	
PLAY	Play	
RECORD	Record	

# Mackie HUI

# Set up your Mackie HUI with Logic Pro

HUI control surface devices don't support automatic scanning. You need to manually add these devices to your setup. When you add a device in this way, you need to assign the MIDI In and Out port parameters.

**Important:** There are a number of control surfaces—not mentioned in this guide—that can emulate the HUI. Such devices are not supported by Apple, nor are they guaranteed to work with Logic Pro in HUI emulation mode.

If the unit emulates a single HUI device, proceed as if using a HUI.

If you experience problems in the DSP Edit display, install the unit as a DM2000. See DM2000 Setup.

If the unit emulates more than one HUI, add the required number of additional devices in the Setup window. If the unit is limited to support of only one HUI DSP Edit section, choose "HUI Channel Strips only" as the model name for these additional units. This ensures that scrolling in the DSP Edit section is limited to four parameters.

If you want to know more about button assignments, refer to HUI assignments overview and the user manual for the device.

#### Set up Mackie HUI devices

To use Mackie HUI devices with Logic Pro:

- Make sure that your HUI devices are connected bidirectionally with the computer, using a MIDI interface.
- 2. Choose Logic Pro > Control Surfaces > Setup.
- 3. Choose New > Install in the Setup window.
- 4. Select HUI in the Install window.
- 5. Click the Add button.
- 6. Select the added device in the Setup window, then set the MIDI In and MIDI Out parameters as appropriate.

# **HUI** assignments

#### Overview of Mackie HUI assignments in Logic Pro

The following sections outline the assignment of Mackie HUI interface elements to Logic functions.

- HUI assign controls
- HUI fader bank buttons
- HUI window controls
- HUI keyboard shortcuts
- HUI channel strips
- HUI DSP controls
- HUI function keys
- HUI global controls
- HUI automation controls
- HUI status/group controls
- HUI editing controls
- HUI time display
- HUI numeric keypad controls
- HUI transport controls
- HUI cursor buttons
- HUI jog wheel
- HUI foot switches

## Mackie HUI assign controls in Logic Pro

The table outlines the controls in the ASSIGN section and their assignments.

Control	Modifier	Assignment
SEND A		Assigns Send 1 level to V-Pots, and Send 1 to 4 levels to DSP V-Pots. While SEND A is held down, the scribble strips show the current
	SHIFT/ADD	Send 1 destination (a bus number). As above, for Send 6
SEND B		As above, for Send 2
	SHIFT/ADD	As above, for Send 7
SEND C		As above, for Send 3

Control	Modifier	Assignment
	SHIFT/ADD	As above, for Send 8
SEND D		As above, for Send 4
SEND E		As above, for Send 5
PAN		Assigns Pan to V-Pots, and the selected (surround) channel strip's pan/surround parameters to DSP V-Pots. You must confirm any changes made with the DSP V-Pots by pressing the corresponding V-Select button.
INPUT		Assigns channel strip input to V-Pots. While held down, the scribble strips show the current channel strip input assignment. The four DSP V-Pots control the following parameters of the selecte channel strip: format, input, output, and automation mode. You must confirm any changes made with the V-Pots or DSP V-Pots by pressing the corresponding V-Select button.
Ουτρυτ		Assigns channel strip output to V-Pots. While held down, the scribble strips show the current channel strip output assignment. The four DSP V-Pots control the following parameters of the selecte channel strip: format, input, output, and automation mode. You must confirm any changes made with the V-Pots or DSP V-Pots by pressing the corresponding V-Select button.
REC/RDY ALL		Disables Record Enable button of a channel strips.
BYPASS		Switches the INSERT buttons between Insert Select and Insert Bypass modes. See the Insert entry in the table on HUI channel strips.
MUTE		Switches the V-Select buttons between Send Position and Send Mute modes.
SHIFT		Enables or disables Flip mode.
SELECT-ASSIGN		Displays the V-Pot assignment as follows: Pan, Snd1 to Snd8, S1As to S8As, In, Out.
SUSPEND		_
DEFAULT		Hold down this button to switch the V-Select buttons between standard operation and setting default values.

Control	Modifier	Assignment
ASSIGN		When V-Pots display a send level,
		the ASSIGN button switches them to
		Send Destination Assignment mode
		(choosing a bus, in other words).
		Press the V-Select to confirm the
		assignment. The DSP V-Pots display
		the assignments of Send slots 1–4
		or Send slots 5–8. Confirm any
		changes by pressing the V-Select
		button or all changes will be lost
		when you leave Send Destination
		Assignment mode, or press the
		Assign button a second time.

# Mackie HUI fader bank buttons in Logic Pro

The table outlines the fader bank controls and their assignments.

Control	<b>Assignment</b> Shifts channel strips by one bank (a group of channel strips or parameters) to the left.	
Bank Left		
Bank Right	Shifts channel strips by one bank to the right.	
Channel Left	Shifts channel strips by one channel (or parameter) to the left.	
Channel Right	Shifts channel strips by one channel to the right.	

# Mackie HUI window controls in Logic Pro

The table outlines the window controls and their assignments.

Control	Assignment	
TRANSPORT	Opens or closes the control bar window.	
EDIT	Opens or closes the Tracks window.	
MIX	Opens or closes the Mixer.	
ALT	Opens or closes the Sample Editor.	
STATUS	Opens or closes the Project Audio Browser.	
MEM-LOC	Opens or closes the Marker List.	

# Mackie HUI keyboard shortcuts in Logic Pro

The table outlines the keyboard shortcut controls and their assignments.

Control	Modifier	Assignment
UNDO		Undoes last editing operation.
	SHIFT/ADD	Redoes last editing operation.
	OPTION/ALL	Opens Undo History window.
SAVE		Saves the project.
	OPTION/ALL	Performs Save As function, allowin you to save the project with a different name.
EDIT MODE		_
EDIT TOOL		Selects the next tool. While held down, numerical buttons select a specific tool.
SHIFT/ADD		Shifts to alternate mode/use for some buttons. See descriptions of other buttons.
OPTION/ALL		While held down, value change mode is set to relative. This switches between a minimum, default, or maximum value for the edited parameter. Also see description of other buttons.
CTRL/CLUTCH		While held down, the Group Clutch is engaged. (All groups are disabled.)
CMD/ALT/FINE		While held down, Value Change mode is set to Fine. All value changes work at maximum resolution. Also see descriptions o other buttons.

# Mackie HUI channel strips in Logic Pro

The table outlines the channel strip controls and their assignments.

Control	Modifier	Assignment
Level meters		Displays momentary and peak levels.
REC/RDY		Activates or deactivates the Record Enable button.
	OPTION/ALL	Disables the Record Enable buttons of all channel strips.
INSERT		<ul> <li>BYPASS button OFF (see Insert Select mode in HUI assign controls): selects channel strip for plug-in selection.</li> </ul>
		<ul> <li>BYPASS button ON: Enables or disables bypass of currently selected Insert slot.</li> </ul>
V-SEL		<ul> <li>PAN button ON: sets Pan parameter to center position if DEFAULT button is on.</li> </ul>
		<ul> <li>Send 1 to 8 selected: edits Send Pre/Post, turns Send Mute on or off, or sets Send Level to default value.</li> </ul>
		<ul> <li>In Send Destination Assignment mode, Channel Strip Input or Channel Strip Output Assignment mode: the V-SEL buttons confirm your selection.</li> </ul>
V-Pot		Adjusts parameter selected in the ASSIGN section.
AUTO		Cycles through automation modes. If you hold down an automation mode button, pressing AUTO sets this mode.
SOLO		Enables or disables the Solo button
	OPTION/ALL	Disables the Solo buttons of all channel strips.
MUTE		Enables or disables the Mute button.
	OPTION/ALL	Disables the Mute buttons of all channel strips.
Scribble strip		Displays the channel strip name or send, input, or output assignment.
SELECT		Selects the channel strip.
	SHIFT/ADD	Sets volume to unity level.

Control	Modifier	Assignment
DEFAULT		Sets volume to unity level.
Fader		Adjusts volume, or duplicates the V-Pot assignment in Flip mode.

# Mackie HUI DSP controls in Logic Pro

The table outlines the DSP controls and their assignments.

Control	Modifier	Assignment
ASSIGN		_
COMPARE		Switches DSP display between "track name/parameter name" and "parameter name/parameter value" modes.
BYPASS		Switches the bypass state of the plug-in being edited.
DSP Select 1 to 4		<ul> <li>Assignment Pan mode:</li> <li>DSP Select 1 resets pan or surround angle.</li> <li>DSP Select 2 resets surround diversity.</li> <li>DSP Select 3 resets surround LFE (level).</li> <li>DSP Select 4 resets the Spread parameter.</li> <li>Assignment Send mode:</li> <li>Activates or deactivates Sends 1 to 4, or mutes 5 to 8.</li> <li>Effect Assign mode:</li> <li>Confirms Insert 1 to 4 or 5 to 8 effect selection, selects this Insert slot, and enters Effect Edit mode, showing the parameters of the chosen effect.</li> <li>Effect Edit mode:</li> <li>Sets parameter to the default value, or turns "switching"</li> </ul>

Control	Modifier	Assignment
DSP V-Pots		Assignment Pan mode:
		<ul> <li>DSP V-Pot 1 controls pan or surround angle.</li> </ul>
		<ul> <li>DSP V-Pot 2 controls surround diversity.</li> </ul>
		<ul> <li>DSP V-Pot 3 controls surround LFE (level).</li> </ul>
		<ul> <li>DSP V-Pot 4 controls the Spread parameter.</li> </ul>
		<ul> <li>Assignment Send mode:</li> </ul>
		<ul> <li>Controls Send 1 to 4, or 5 to 8 Levels.</li> </ul>
		Effect Assign mode:
		<ul> <li>Assigns effects to Insert slots 1 through 4, or 5 to 8.</li> </ul>
		Effect Edit mode:
		<ul> <li>Controls the selected effect parameter.</li> </ul>
INSERT/PARAM		Switches between Effect Assign and Effect Edit modes.
SCROLL		Effect Edit mode: Shifts parameter display by the number of DSP V-Pots in the control surface group
		(usually four).
	CMD/ALT/FINE	Effect Edit mode: Shifts parameter display by one (parameter).

# Mackie HUI function keys in Logic Pro

The table outlines the function keys and their assignments.

Control	Modifier	Assignment
F1		Clears Overload LEDs.
	SHIFT/ADD	Switches to Mixer view, and displays MIDI channel strips.
	CMD/ALT/FINE	Opens or closes Tracks window.
F2		Recalls screenset 2.
	SHIFT/ADD	Switches to Mixer view, and displays input channel strips.
	CMD/ALT/FINE	Opens or closes Mixer.
F3		Recalls screenset 3.
	SHIFT/ADD	Switches to Mixer view, and displays audio channel strips.

Control	Modifier	Assignment
	SHIFT/ADD	Opens or closes Event List.
F4		Recalls screenset 4.
	SHIFT/ADD	Switches to Mixer view, and displays software instrument channel strips.
	CMD/ALT/FINE	Opens or closes Score Editor.
F5		Recalls screenset 5.
	SHIFT/ADD	Switches to Mixer view, and displays aux channel strips.
	CMD/ALT/FINE	Opens or closes Step Editor.
F6		Recalls screenset 6.
	SHIFT/ADD	Switches to Mixer view, and displays bus channel strips.
	CMD/ALT/FINE	Opens or closes Piano Roll Editor.
F7		Switches counter display format between SMPTE and bars/beats/ divisions/ticks.
	SHIFT/ADD	Switches to Mixer view, and displays the master and output channel strips.
	CMD/ALT/FINE	Opens or closes Control bar window.
F8/ESC		Default: exits folder. Go to Marker mode: cancels dialog.
	CMD/ALT/FINE	Opens or closes the Project Audio Browser.
		Browser.

# Mackie HUI global controls in Logic Pro

The table outlines the global controls and their assignments.

Control	Assignment
FADER	Activates or deactivates the recording of volume automation.
PAN	Activates or deactivates the recording of pan automation.
PLUG IN	Activates or deactivates the recording of plug-in parameter automation.
MUTE	Activates or deactivates the recording of mute automation.
SEND	Activates or deactivates the recording of send level automation.
SEND MUTE	_

# Mackie HUI automation controls in Logic Pro

The table outlines the automation controls and their assignments.

Control	Modifier	Assignment
READ		Sets selected channel to Read automation mode. While held down pressing the channel strip AUTO button sets the automation mode to Read.
	OPTION/ALL	Sets all channels to Read automation mode.
LATCH		Sets selected channel to Latch automation mode. While held down press the channel strip AUTO butto to set automation mode to Latch.
	OPTION/ALL	Sets all channels to Latch automation mode.
TRIM		_
тоисн		Sets selected channel to Touch automation mode. While held down press the channel strip AUTO butto to set automation mode to Touch.
	OPTION/ALL	Sets all channels to Touch automation mode.
WRITE		Sets selected channel to Write automation mode. While held down press the channel strip AUTO butto to set automation mode to Write.
	OPTION/ALL	Sets all channels to Write automation mode.
OFF		Sets selected channel to Off automation mode. While held down press the channel strip AUTO butto to set automation mode to Off.
	OPTION/ALL	Sets all channels to Off automation mode.

# Mackie HUI status/group controls in Logic Pro

The table outlines the status/group controls and their assignments.

Control	Modifier	Assignment
AUTO		While held down, the scribble strips display the automation mode of all channels.
MONITOR		_
PHASE—SHIFT		Switches to Single view.
GROUP		<ul> <li>Enters Group Edit mode:</li> <li>The upper line (in the DSP Edit section) displays the number and name of the group being edited.</li> <li>DSP Select buttons 1 to 4 switch between the properties of the group being edited. The group name is shown in the lower line.</li> <li>When the INSERT/PARAM button is off, the DSP Edit V-Pots scroll through the group properties. If the INSERT/PARAM button is on, the DSP EDIT V-Pots select the group that you want to edit.</li> <li>The SELECT buttons enable/ disable group membership of the</li> </ul>
	SHIFT/ADD	channel. Switches to Channel view.
CREATE		Creates a new group and enters Group Edit mode (see above).
	SHIFT/ADD	Switches to Mixer view.
SUSPEND		Activates or deactivates the Group Clutch.
	SHIFT/ADD	Switches to Tracks view.

## Mackie HUI editing controls in Logic Pro

The table outlines the editing controls and their assignments.

Control	Assignment
CAPTURE	-
SEPARATE	-
CUT	Cuts the selection (of regions or events).
СОРҮ	Copies the selection.
PASTE	Pastes the Clipboard contents.
DELETE	Deletes the selection.

### Mackie HUI time display in Logic Pro

The table outlines the time display controls and their assignments.

Assignment
Lit if counter is displaying SMPTE timecode.
Not assigned
Lit if counter is displaying bars/beats/divisions/ticks.
Switches between a SMPTE timecode or bars/beats/divisions/ticks display.
Flashes if any channel is soloed.

### Mackie HUI numeric keypad controls in Logic Pro

The table outlines the numeric keypad controls and their assignments.

Control	Modifier	Assignment
CLR		Deletes current marker.
=		Creates a marker at the current playhead position.
I		Equivalent to (but independent of) computer keyboard / key.
*		Equivalent to (but independent of) computer keyboard * key.
_		Equivalent to (but independent of) computer keyboard – key.

Control	Modifier	Assignment
÷		Equivalent to (but independent of) computer keyboard + key.
0 to 9		<ul> <li>Normal: 1 to 9 recalls markers 1 to 9.</li> </ul>
		<ul> <li>If in Go to Marker dialog: equivalent to (but independent of) computer keyboard keys 0 to 9.</li> </ul>
	SHIFT/ADD	Switches to Mixer view, and displays:
		• 1: MIDI channel strips
		<ul> <li>2: Input channel strips</li> </ul>
		• 3: Audio channel strips
		<ul> <li>4: Software instrument channel strips</li> </ul>
		• 5: Aux channel strips
		<ul> <li>6: Bus channel strips</li> </ul>
		<ul> <li>7: Master and output channel strips</li> </ul>
	EDIT TOOL	Selects tool (if applicable to windo with key focus):
		• 1: Pointer
		• 2: Pencil
		• 3: Eraser
		• 4: Text tool
		<ul> <li>5: Scissors</li> </ul>
		• 6: Glue
		<ul> <li>7: Solo tool</li> </ul>
		8: Mute tool
		<ul> <li>9: Zoom tool</li> </ul>
0		If in Go to Marker dialog: equivalen to computer keyboard 0 key.
		<ul> <li>If not in Go to Marker dialog: enters Go to Marker dialog.</li> </ul>
		<ul> <li>In <i>in</i> Go to Marker dialog: equivalent to computer keyboard Period key.</li> </ul>
ENTER		<ul> <li>If not in Go to Marker dialog: enters folder of selected track.</li> </ul>
		<ul> <li>If in Go to Marker dialog: confirms marker number that you entered.</li> </ul>

# Mackie HUI transport controls in Logic Pro

The table outlines the transport controls and their assignments.

Control	Modifier	Assignment
AUDITION		_
PRE		Sets left locator (at current playhead position).
IN		Sets punch in locator (at current playhead position).
OUT		Sets punch out locator (at current playhead position).
POST		Sets right locator (at current playhead position).
RTZ		Moves playhead to the left locator position.
END		Moves playhead to the right locato position.
ON LINE		Switches between internal and external sync.
LOOP		Enables or disables Cycle mode.
QUICK PUNCH		Enables or disables Autopunch mode.
REWIND		Shuttles backward.
FAST FWD		Shuttles forward.
STOP		Stops playback.
PLAY		Starts playback.
	SHIFT/ADD	Pauses playback (or recording).
RECORD		Record

# Mackie HUI cursor buttons in Logic Pro

The table outlines the cursor controls and their assignments.

Control	Modifier	Assignment
Cursor Up		<ul> <li>Cursor mode: equivalent to computer keyboard Up Arrow key</li> </ul>
		<ul> <li>Zoom mode: zooms in vertically (in the window with key focus).</li> </ul>
	SHIFT/ADD	Zoom mode: individual track zoom (zooms in).
	CMD/ALT/FINE	Page up.
	OPTION/ALL + CMD/ALT/FINE	Scroll to top.
Cursor Down		<ul> <li>Cursor mode: equivalent to computer keyboard Down Arrow key.</li> </ul>
		<ul> <li>Zoom mode: zooms out vertically (in the window with key focus).</li> </ul>
	SHIFT/ADD	Zoom mode: individual track zoom (zooms out).
	CMD/ALT/FINE	Page down.
	OPTION/ALL + CMD/ALT/FINE	Scroll to bottom (of window/list with key focus).
Cursor Left		<ul> <li>Cursor mode: equivalent to computer keyboard Left Arrow key.</li> </ul>
		<ul> <li>Zoom mode: zooms out horizontally (in the window with key focus).</li> </ul>
	SHIFT/ADD	Zoom mode: individual track zoom reset (of tracks of the same type).
	CMD/ALT/FINE	Page left.
	OPTION/ALL + CMD/ALT/FINE	Scroll to left border (of the window with key focus).
Cursor Right		<ul> <li>Cursor mode: equivalent to computer keyboard Right Arrow key.</li> </ul>
		<ul> <li>Zoom mode: zooms in horizontally (in the window with key focus).</li> </ul>
	SHIFT/ADD	Zoom mode: individual track zoom reset (of all tracks, regardless of type).
	CMD/ALT/FINE	Page right.

Control	Modifier	Assignment
	OPTION/ALL + CMD/ALT/FINE	Scroll to right border (of the window with key focus).
MODE		Switches between Cursor and Zoom modes.

# Mackie HUI jog wheel in Logic Pro

The table outlines the jog wheel controls and their assignments.

Control	Assignment
Jog wheel	Default: Move playhead by one bar.
	Scrub button lit: Scrub mode
	Shuttle button lit: Shuttle mode
SCRUB	Activates or deactivates Scrub mode.
SHUTTLE	Activates or deactivates Shuttle mode.

## Mackie HUI foot switches in Logic Pro

The table outlines the foot switch controls and their assignments.

Control	Assignment
Foot Switch 1	Play or Stop
Foot Switch 2	Record On/Off

# Mackie C4

# Set up your Mackie C4 in Logic Pro

A connected and powered Mackie C4 unit will be detected automatically when you open Logic Pro. You can use the C4 in an independent control surface group (with other control surface icons placed above or below the C4 icon), or combined in a group with one or more control surfaces (such as the Mackie Control—place the icon to the right or left of the existing icons).

Although the C4 can be used independently, it is most useful when combined with other control surfaces, particularly the Mackie Control. In this scenario, the C4 adds eight channels in Mixer view. Using the C4 in its own control surface group allows you to edit instruments and effects independently, while performing mixing and other tasks on the Mackie Control or other control surface.

# Mackie C4 V-Pots and V-Select buttons in Logic Pro

The C4 provides 32 V-Pots, laid out in four horizontal rows.

- The top row (row 1) consists of V-Pots 1 to 8.
- Row 2 consists of V-Pots 9 to 16.
- Row 3 consists of V-Pots 17 to 24.
- The bottom row (row 4) consists of V-Pots 25 to 32.

Each V-Pot features an integrated V-Select button, which is activated by pressing the (V-Pot) knob top.

The function or parameter assigned to each V-Pot/V-Select button depends on the current View (see C4 views), and chosen overlay (see C4 Assignment buttons overview).

• V-Pots and V-Selects 1 to 8

When no overlay is active, V-Pots 1 to 8 (the top row) normally perform in the same way as their counterparts on a Mackie Control or Mackie Control XT. See Assignment buttons overview.

V-Pots and V-Selects 9 to 32

These V-Pots have additional functionality in different Views.

In Mixer (multichannel) views, the V-Pots in rows 2, 3, and 4 usually edit the parameter that follows the parameter edited on row 1. For example, in Pan/Surround Mixer view, row 1 edits the pan/surround angle, row 2 edits surround diversity, row 3 edits LFE level, and row 4 edits spread.

In Channel view, all four rows represent a group of 32 editable parameters.

In Effect and Instrument Edit views, the C4 can be split into two groups (8/24, 16/16, or 24/8 parameters). See C4 function buttons.

# Use Mackie C4 views in Logic Pro

The C4 provides a number of views that display a particular parameter type on the V-Pots/ V-Select buttons.

#### **Use Pan/Surround Mixer view**

To use the Mackie C4 with Logic Pro:

1. Hold down the CHAN STRIP button.

The channel strip overlay labels appear on the C4 displays.

2. Press V-Select 18 (labeled Surrnd Mixer).

In Pan/Surround Mixer view:

- Row 1 edits pan/surround parameter 1.
- Row 2 edits pan/surround parameter 2.
- Row 3 edits pan/surround parameter 3.
- Row 4 edits pan/surround parameter 4 (in this order: pan/angle, diversity, LFE, spread, X, Y).

SINGLE Left/Right changes the parameter edited in row 1, thus affecting the parameters shown (and edited) in rows 2 to 4.

#### **Use Pan/Surround Channel view**

To use the Mackie C4 with Logic Pro:

1. Hold down the CHAN STRIP button.

The channel strip overlay labels appear on the C4 displays.

2. Press V-Select 26 (labeled Surrnd).

In Pan/Surround Channel view, row 1 edits all eight surround parameters of a surround channel. If a stereo or mono channel is selected, V-Pot 1 edits the Pan (or Balance) parameter.

#### **Use Channel Strip Mixer view**

To use the Mackie C4 with Logic Pro:

1. Hold down the CHAN STRIP button.

The channel strip overlay labels appear on the C4 displays.

- 2. Press V-Select 17.
- 3. Press the BANK Left/BANK Right or SINGLE Left/SINGLE Right buttons to change the parameter shown, and edited, in row 4.

The parameters shown in rows 1 to 3 are adjusted accordingly.

In Channel Strip Mixer view, the row order is reversed, so that the lowest row edits parameter 1.

V-Pot row 4 (bottom row) edits the currently chosen channel parameter. Row 3 edits channel parameter 2, row 2 edits channel parameter 3, and row 1 (at the top) edits channel parameter 4.

The V-Pots edit the following channel parameters in this order: volume, pan/angle, input format, input assignment, output assignment, automation mode, group, displayed automation parameter.

#### Use EQ Mixer view

To use the Mackie C4 with Logic Pro:

1. Hold down the CHAN STRIP button.

The channel strip overlay labels appear on the C4 displays.

2. Press V-Select 19 (labeled EQ Mixer).

In EQ Mixer view:

- Row 1 sets the selected EQ band bypass state.
- Row 2 edits the selected EQ band frequency.
- Row 3 edits the selected EQ band gain/slope.
- Row 4 edits the selected EQ band Q factor.
- The SLOT UP and SLOT DOWN buttons select the EQ band (if a Channel or Linear Phase EQ is inserted in the selected channel strip).

#### **Use EQ Channel view**

To use the Mackie C4 with Logic Pro:

1. Hold down the CHAN STRIP button.

The channel strip overlay labels appear on the C4 displays.

2. Press V-Select 27 (labeled EQs).

In EQ Channel view:

- Row 1 edits the frequency of all eight bands.
- · Row 2 edits the gain/slope of all eight bands.
- Row 3 edits the Q factor of all eight bands.
- Row 4 sets the bypass state of all eight bands.

If no Channel or Linear Phase EQ is present on the selected channel, a Channel EQ is automatically inserted when you enter EQ Channel view. The TRACK Left and TRACK Right buttons switch to the previous or next channel. If you switch to a channel with no Channel or Linear Phase EQ inserted, the C4 displays show "–", and the corresponding V-Pots do nothing.

#### **Use Send Mixer view**

To use the Mackie C4 with Logic Pro:

1. Hold down the CHAN STRIP button.

The channel strip overlay labels appear on the C4 displays.

2. Press V-Select 20 (labeled Sends Mixer).

In Send Mixer view:

- Row 1 edits the send destination of the selected Send slot (on the selected channel).
- Row 2 edits the send level.
- Row 3 edits the send position (pre/post fader).
- Row 4 mutes/unmutes the send.
- The SLOT UP/SLOT DOWN buttons select the Send slot.
- The TRACK L and TRACK R buttons shift the fader bank (to the left or right) by the number of channel strips in the control surface group.

#### **Use Send Channel view**

To use the Mackie C4 with Logic Pro:

1. Hold down the CHAN STRIP button.

The channel strip overlay labels are shown on the C4 displays.

2. Press V-Select 28 (labeled Sends).

In Send Channel view:

- Row 1 edits the (first) eight send destinations of the selected channel strip.
- Row 2 edits the send level of sends 1 to 8.
- Row 3 edits send positions 1 to 8 (pre/post fader).
- Row 4 mutes/unmutes sends 1 to 8.
- TRACK L and TRACK R switch to the previous or next channel.

#### **Use Effect Assign Mixer view**

To use the Mackie C4 with Logic Pro:

1. Hold down the CHAN STRIP button.

The channel strip overlay labels are shown on the C4 displays.

2. Press V-Select 21 (labeled PlugIn Mixer).

In Effect Assign Mixer view, the C4 displays the first four Insert slots of the eight selected channels.

- Turn a V-Pot to switch between effects. (This action lets you browse through the effects listed in the Effect menu, shown in Logic Pro mixer channels.)
- Press the respective V-Select to insert the chosen effect. This activates Effect Edit view, where you can directly edit effect parameters.
- The SLOT UP/SLOT DOWN buttons switch between Insert slots.
- TRACK L and TRACK R shift the fader bank by the number of channel strips in the control surface group.
- Holding down SHIFT and pressing a V-Select switches the bypass state of the respective Insert slot. Bypassed effects are denoted by an asterisk (\*) that precedes the effect name.

#### **Use Effect Edit view**

To use the Mackie C4 with Logic Pro:

1. Hold down the CHAN STRIP button.

The channel strip overlay labels are shown on the C4 displays.

- 2. Press V-Select 21 (labeled PlugIn Mixer).
- 3. Insert or select an effect. The C4 automatically switches to Effect Edit view.

In Effect Edit view:

- V-Pots 1 to 32 constitute a group of 32 parameters. Splitting is possible (see C4 function buttons).
- The SLOT UP/SLOT DOWN buttons select the Insert slot.
- BANK Left/BANK Right shifts the edited parameters by one page.
  - In Split mode, the SLOT and BANK button behaviors apply to Split Upper.
  - When holding down SHIFT, the SLOT and BANK button behaviors apply to Split Lower.
- SINGLE Left/SINGLE Right shifts the edited parameters by 1.
  - In Split mode, the SINGLE button behaviors apply to Split Upper.
  - When holding down SHIFT, the SINGLE button behaviors apply to Split Lower.

#### **Use Instrument Assign Mixer view**

To use the Mackie C4 with Logic Pro:

1. Hold down the CHAN STRIP button.

The channel strip overlay labels are shown on the C4 displays.

2. Press V-Select 22 (labeled Instru Mixer).

In Instrument Assign Mixer view, the C4 displays the Instrument slots of the selected instrument channels.

- Turn a V-Pot to select an instrument. (This action lets you browse through the software instruments listed in the Instrument Plug-in menu, shown in Logic Pro instrument channels.)
- Press the respective V-Select to insert the chosen instrument. This enters Instrument Edit view, where you can edit instrument parameters.
- The TRACK L and TRACK R buttons shift the fader bank by the number of channel strips in the control surface group.
- Holding down SHIFT and pressing a V-Select switches the bypass state of the respective Instrument slot. An asterisk (\*) precedes the name of bypassed instruments.

#### **Use Instrument Edit view**

To use the Mackie C4 with Logic Pro:

1. Hold down the CHAN STRIP button.

The channel strip overlay labels are shown on the C4 displays.

- 2. Press V-Select 22 (labeled Instru Mixer).
- 3. Insert or select an instrument, which automatically switches the C4 to Instrument Edit view.

In Instrument Edit View:

- V-Pots 1 to 32 constitute a group of 32 parameters. Splitting is possible (see C4 function buttons).
- BANK Left/BANK Right shifts the edited parameters by one page.
  - In Split mode, the BANK button behaviors apply to Split Upper.
  - When holding down SHIFT, the BANK button behaviors apply to Split Lower.
- SINGLE Left/SINGLE Right shifts the edited parameters by 1.
  - In Split mode, the SINGLE button behaviors apply to Split Upper.
  - When holding down SHIFT, the SINGLE button behaviors apply to Split Lower.

#### **Use Cycle View**

To use the Mackie C4 with Logic Pro:

Hold down the CHAN STRIP button, and press V-Select 31.

In Cycle view:

- V-Pot/V-Select 1 (labeled Cycle) shows and edits the current Cycle mode state (off or on).
- V-Select 2 (labeled BySet) matches the cycle area to selections made in the Tracks window (selected audio or MIDI regions).
- V-Pot 3 (labeled Move) moves the current cycle area by a bar with each click of the V-Pot, when turned.
- V-Pot 4 moves the current cycle area by a beat with each click of the V-Pot, when turned.
- The display shows the left and right locators above V-Pots 5 and 7.
- Pressing V-Select 5 picks up (uses) the current playhead position for the left locator.
- Turning V-Pot 5 changes the left locator position by bars.
- Turning V-Pot 6 changes the left locator position by beats (denominator steps).
- Pressing V-Select 7 picks up (uses) the current playhead position for the right locator.
- Turning V-Pot 7 changes the right locator position by bars.
- Turning V-Pot 8 changes the right locator position by beats (denominator steps).

#### **Use Punch View**

To use the Mackie C4 with Logic Pro:

Hold down the CHAN STRIP button, and press V-Select 32.

In Punch view:

- V-Pot/V-Select 1 shows and edits the current Autopunch state (off or on).
- V-Pot 3 (labeled Move) moves the current punch in locator by a bar with each click of the V-Pot, when turned.
- V-Pot 4 moves the current punch in locator by a beat with each click of the V-Pot, when turned.
- The display shows the punch in and punch out locators above V-Pots 5 and 7.
- Pressing V-Select 5 picks up (uses) the current playhead position for the punch in locator.
- Turning V-Pot 5 changes the punch in locator position by bars.
- Turning V-Pot 6 changes the punch in locator position by beats (denominator steps).
- Pressing V-Select 7 picks up (uses) the current playhead position for the punch out locator.
- Turning V-Pot 7 changes the punch out locator position by bars.
- Turning V-Pot 8 changes the punch out locator position by beats (denominator steps).

*Note:* Changing a punch locator position with the C4 automatically activates Autopunch mode.

# Mackie C4 function buttons in Logic Pro

This section outlines the FUNCTION buttons at the lower left of the C4 control surface.

• SPLIT button: Splits the C4 rows as follows: 4/0, 1/3, 2/2, and 3/1. This is known as a *Split Edit*, and allows you to simultaneously edit two separate sections of a plug-in, or even two different plug-ins.

Split Edit is also possible across multiple C4 units. For example, with two C4 devices, pressing the SPLIT button offers the following split modes:

- 1/7 (Split Upper is the top row of the first C4 unit; Split Lower is the bottom three rows of the first unit and all rows of the second C4 unit. LED 1/3 is lit.)
- 2/6 (Split Upper is the top two rows of the first C4 unit; Split Lower is the bottom two rows of the first unit and all rows of second C4 unit. LED 2/1 is on.)
- 3/5 (LED 3/1 is on.)
- 4/4 (All three LEDs are on.)
- 5/3 (All three LEDs are on.)
- 6/2 (All three LEDs are on.)
- 7/1 (All three LEDs are on.)
- *LOCK button:* Turns Track Lock on or off. When LOCK is enabled, selection of a different track in the Tracks window does *not* switch the current track/channel selection on the C4.
- SPOT ERASE button: Unassigned.

# C4 Assignment buttons

#### Overview of Mackie C4 Assignment buttons in Logic Pro

The Assignment buttons switch between "overlay" and normal Views. The parameters assigned to the V-Pots/V-Select buttons change accordingly when an overlay mode is activated.

- MARKER button: Switches between Marker overlay (see C4 Marker overlay) and normal Views (see C4 views).
- TRACK button: Switches between Track overlay (see C4 Track overlay) and normal Views (see C4 views).

You can access alternate Mixer View options by holding down the TRACK button. This displays a further submenu in the lower LCD, allowing you to view particular channel types:

- V-Select 25 switches to MIDI Channel view.
- V-Select 26 switches to Input Channel view.
- V-Select 27 switches to Audio Channel view.
- V-Select 28 switches to Software Instrument Channel view.
- V-Select 29 switches to Auxiliary Channel view.
- V-Select 30 switches to Bus Channel view.

- V-Select 31 switches to Output Channel view.
- V-Select 32 switches to Master Channel view.

Releasing the TRACK button without pressing a V-Select returns you to Mixer view.

• CHAN STRIP button: Switches between Channel Strip overlay (see C4 Channel Strip overlay) and normal Views (see C4 views).

You can access alternate User View options by holding down the CHAN STRIP button, which displays a further submenu in the lower LCD.

- V-Select 9 to 16 switches to one of eight user modes, where you can freely assign parameters to V-Pots or V-Select buttons.
- V-Select 17 switches to Channel Strip Mixer view.
- V-Select 18 switches to Pan/Surround Mixer view.
- V-Select 19 switches to EQ Mixer view.
- V-Select 20 switches to Send Mixer view.
- V-Select 21 switches to Effect Assign Mixer view.
- · V-Select 22 switches to Instrument Select Mixer view.
- V-Select 26 switches to Pan/Surround Channel view.
- V-Select 27 switches to EQ Channel view.
- V-Select 28 switches to Send Channel view.
- V-Select 31 activates the Cycle view.
- V-Select 32 activates the Drop view.
- *FUNCTION button:* Switches between "Function overlay" and normal Views (see C4 views). See C4 Function overlay for details on this mode.

#### Mackie C4 Marker overlay in Logic Pro

The Marker overlay is active when the MARKER button light is on.

- V-Selects 1 to 30 are assigned to markers 1 to 30. The upper LCD line shows the marker name; the lower line displays INSIDE when the playhead falls within marker boundaries.
- V-Select 31 creates a new marker.
- V-Select 32 deletes the current marker.

#### Mackie C4 Track overlay in Logic Pro

The Track overlay is active when the TRACK button light is on.

#### Select a track/channel for Split Upper

To use the Mackie C4 with Logic Pro:

- Press V-Select 1 to 32. When a track/channel is selected for Split Upper, the bottom LCD displays the word UPPER.
- BANK Left/BANK Right shifts the fader bank by the number of channels in the control surface group.
- SINGLE Left/SINGLE Right shifts the fader bank by one channel.

#### Select a track/channel for Split Lower

To use the Mackie C4 with Logic Pro:

- Press V-Select 1 to 32. If a track/channel is selected for Split Lower, the word LOWER is shown in the bottom LCD.
- BANK Left/BANK Right shifts the fader bank by the number of channels in the control surface group.
- SINGLE Left/SINGLE Right shifts the fader bank by one channel.

#### Mackie C4 Channel Strip overlay in Logic Pro

The Channel Strip overlay is active when the CHAN STRIP button light is on.

- V-Pot/V-Select row 1 (V-Pots 1 to 8) edits the frequency and gain of EQ bands 3 to 6 (the parametric bands), provided an EQ effect is inserted in the current channel strip.
- V-Pot/V-Select row 2 (V-Pots 9 to 16) switches to Effect Edit mode for Inserts 1 to 8, provided an effect is inserted in the respective Insert slot. If no effect is inserted, turn the respective V-Pot to select an effect, then press the V-Select, to insert it.
- V-Pot/V-Select row 3 (V-Pots 17 to 24) edits Send 1 to 8 Level, provided the current channel has active sends.
- V-Pot/V-Select 25 switches to Instrument Edit mode, provided the selected channel is routed to an instrument channel, and an instrument plug-in is inserted.
- V-Pot/V-Select 26 edits the channel output destination.
- V-Pot/V-Select 27 sets the automation mode.
- V-Pot/V-Select 28 edits group membership.
- V-Pot/V-Select 29 edits volume.
- V-Pot/V-Select 30 edits pan/surround angle (for surround channels).
- V-Pot/V-Select 31 edits surround diversity.
- V-Pot/V-Select 32 sets the channel input format.

## Mackie C4 Function overlay in Logic Pro

The Function overlay is active when the FUNCTION button light is on. The table below outlines the assignment of C4 controls to Logic Pro functions.

Control	Assignment
1 (display: Inspct)	Enables or disables the Inspector of the window with key focus.
2 (Channel Strip)	Enables or disables the Lists area display in the Tracks window.
2 (Channel Strip)-Option	Enables or disables the Media area display in the Tracks window.
3 (Delay in ms)	Displays delays in milliseconds.
(Ruler: SMPTE)	Shows SMPTE display of ruler.
5 (Global Track)	Displays Global tracks.
δ (Arrang Grid)	Shows or hides the Tracks window grid.

	Assignment
7 (Event Float)	Displays the Event List.
8 (Name/Value)	Switches the display mode between Name and Value (identical to the NAME/VALUE button on the Mackie Control).
9 (Track Autom.)	Enables or disables display of track automation in the Tracks window.
10 (Trk>Rg Autom.)	Performs Move Current Track Automation Data to Region key command. With the OPTION button held down (display: Trk>Ob Au All), the Move A Track Automation Data to Region key command is executed.
11 (Rg>Trk Autom.)	Performs Move Current Region Data to Track Automation function. With the OPTION button held down (display: Ob>Trk Au All), the Move All Region Control Data to Track Automation key command is executed.
12 (Clear Autom.)	Performs Delete Currently Visible Automation Data of Current Track key command. With the OPTION button held down (display: Clear Au All), the Delete All Automation Data of Current Track function is performed.
13 (CIrAll Overld)	Resets the Level Meter Overload displays.
14 (CIrAll RecRdy)	Switches off Record Enable button of all channels.
15 (CIrAll Solo)	Switches off Solo for all channels.
16 (CIrAll Mute)	Switches off Mute for all channels.
17 (Tool: Pointr)	Selects the Pointer tool.
18 (Tool: Pencil)	Selects the Pencil tool.
19 (Tool: Scissr)	Selects the Scissors tool.
20 (Tool: Glue)	Selects the Glue tool.
21 (Tool: Text)	Selects the Text tool.
22 (Tool: Xfade)	Selects the Crossfade tool.
23 (Tool: Marque)	Selects the Marquee tool.
24 (Tool: Autom.)	Selects the Automation Select tool.
V-Pot 25 (WfZoom)	Edits the waveform zoom factor (if the main window has key focus).
V-Pot 26 (V.Zoom)	Edits the vertical zoom factor of the window with key focus.
V-Pot 27 (H.Zoom)	Edits the horizontal zoom factor of the window with key focus.
V-Pot 28 (Move Cycle)	Moves the cycle locators.
V-Pot 29 (Quantz)	Chooses the Quantize value. V-Select 29 performs Quantize Selected Events for the selected regions or events.
V-Pot 30 (Division)	Chooses the division value for clock display.
V-Select 31 (Prev SetEXS)	Performs Next Plug-in Setting or EXS Instrument key command.
V-Select 32 (Next SetEXS)	Performs Previous Plug-in Setting or EXS Instrument key command.

# Mackie C4 modifier buttons in Logic Pro

The four buttons in this area are similar to those found on your computer keyboard (but are independent of the keyboard modifiers). Many Logic Pro functions behave differently when one or more modifier keys are pressed in conjunction with another key or mouse click. This also applies to the C4 control surface.

Here is a generic description of the modifier button functions:

- SHIFT: Switches other buttons to an alternate function.
- *OPTION:* While held down, parameters are set to the minimum, default, or maximum value when edited with a V-Pot.
- CTRL: Disables the Group function.
- *CMD/ALT:* While held down, parameters are edited in Fine (high-resolution) mode when a V-Pot is turned.

# Mackie C4 Parameter, Track, and Slot buttons in Logic Pro

The buttons at the lower right of the C4 are used to access channel strips, channel strip elements, and parameters.

- *BANK Left and BANK Right buttons:* Shifts the parameter display by one page (a group of parameters) in particular views.
- *SINGLE Left and SINGLE Right buttons:* Shifts the parameter display by one parameter in particular views.
- TRACK L and TRACK R buttons: In Mixer view, TRACK L and TRACK R shift the fader bank left or right by the number of channel strips in the control surface group. For example, if you have two C4 units in a control surface group, the view shifts by 16 channels.

Simultaneously pressing TRACK L or TRACK R and OPTION moves to the first or last group of channels in the project (or parameter pages, if in an edit mode). For example, if you are viewing the first 8 channels (of 64) in the fader bank, pressing OPTION and TRACK L or TRACK R will show the last 8 channels in the fader bank (channels 57 to 64).

In Channel view, TRACK L and TRACK R select the previous or next channel.

In Channel view, simultaneously pressing TRACK L or TRACK R and SHIFT moves to the first or last group of channels in the project (or parameter pages, if in an edit mode), but only affects the Split Lower group if Split mode is active.

• SLOT UP and SLOT DOWN buttons: Selects the required EQ, Send, or Insert slot.

# **Novation Launchpad**

# Set up your Novation Launchpad in Logic Pro

You can control many Live Loops functions and mixing parameters in Logic Pro with a Novation Launchpad. You can trigger and stop cells and scenes, mute, solo, and arm tracks, and adjust volume and sends. You can extend Launchpad functionality by adding multiple Launchpad devices to your setup. Logic supports the following Novation Launchpad models:

- Launchpad
- Launchpad S
- Launchpad Mini
- Launchpad Mini MK3
- Launchpad MK2
- Launchpad Pro
- Launchpad X

The following sections apply to all Launchpad models, except as noted.

#### Set up Novation Launchpad

In most cases, when you connect a Launchpad to your Mac, the device is automatically recognized and appears in the Control Surface Setup window. If the Launchpad does not appear there, follow these steps to set it up manually.

- 1. Make sure that your Launchpad is connected to your computer, using a USB MIDI interface.
- 2. Choose Logic Pro > Control Surfaces > Setup.
- 3. Choose New > Install in the Setup window.
- 4. Select your Launchpad model in the Install window.
- 5. Click the Add button.
- 6. Select the added device in the Setup window, then set both the Output and Input Port parameters to the appropriate setting for your device.

Logic Pro sets the Orientation parameter to 90° Right in the Setup window's Device inspector. Using this orientation, you can use the Launchpad with the scene buttons at the bottom, mirroring the position of the scene triggers in Live Loops. This document refers to Launchpad devices set up in this way. You can change the Orientation parameter to 90° Right. The current orientation is indicated by the device icon in the Setup window.

# Novation Launchpad multi-device support in Logic Pro

You can use multiple Launchpads in a single Control Surface Group to extend the number of tracks or scenes, or you can create a new control surface group and use each Novation Launchpad independently.

### Extend scenes or tracks in an existing Control Surface Group

You can extend the existing 64-pad (8x8) grid by increments of eight tracks or eight scenes by simply attaching another Launchpad device. When you connect another Launchpad, its icon appears to the right of the first one in the Setup window at Logic Pro > Control Surfaces. The Live Loops Scene Offset parameter is automatically extended to accommodate the additional Launchpad. The navigation arrows on any Launchpad device shown there control navigation for similar devices in the Control Surface Group.

To change the scene or fader bank offsets, do the following:

- *To extend the number of scenes:* Change the Live Loops Scene Offset parameter. For example, change Live Loops Scene Offset to 8 to show scenes 9 through 16.
- *To extend the number of tracks:* Change the Fader Bank Offset parameter. For example, change Fader Bank Offset to 8 to show tracks 9 through 16.

#### Create a new Control Surface Group

You can also add a Launchpad device to a new Control Surface Group and use each device independently. In the Setup window, arrange the Launchpad icons in separate rows—that is, one above the other. This creates a second control surface group with its own set of parameters (mode, fader bank, scene bank etc.). You can use the second Launchpad independently from the first one.
# Launchpad assignments

## Novation Launchpad buttons overview

In addition to the 64 trigger pads, each Launchpad model has several buttons you can use to perform various other functions. Use the Scene buttons to trigger scenes in Session mode. In Mixer mode, use them to access various mix parameters and perform other functions.

#### Buttons available in all modes

- Navigation arrows:
  - Up Arrow/Down Arrow buttons: Shifts the shown grid up or down by one track.

On the Launchpad Pro, hold the Shift button while using the Up Arrow/Down Arrow buttons to shift the grid up or down by groups of eight.

- Left Arrow/Right Arrow: Shifts the shown grid left or right by one scene.
- Session: Return to Session mode from any other mode. On the Launchpad X and Mini MK3 models, the Session button toggles between Session and Mixer mode.
- *Mixer:* Switches to Mixer mode. On the Launchpad X and Mini MK3 models, use the Session button to switch between Session and Mixer mode. The Launchpad Pro does not have a single dedicated Mixer mode, but rather each mixer function is activated by its own button. See Launchpad Pro mixer buttons.
- User mode buttons: Switches to one or more User modes. The User mode buttons are labeled differently depending on the Launchpad model you are using.
  - User 1, User 2: Launchpad, Launchpad MK2, Launchpad S, and Launchpad Mini
  - User: Launchpad Pro and Launchpad Mini MK3
  - Custom: Launchpad X

#### Scene buttons

In Session mode you use the Scene buttons along the bottom of the Launchpad to trigger scenes in Live Loops. You also use the Scene buttons in Mixer mode to perform different functions. The Scene buttons are labeled slightly different, depending on the Launchpad model you are using. Unless noted otherwise, this document refers to the Scene buttons labeled from left to right as follows:

- Record Arm
- Solo
- Mute
- Stop
- Send B
- Send A
- Pan
- Volume

#### Launchpad Pro function buttons

Use the following buttons on the Launchpad Pro for editing and arrangement in Session mode.

- Shift: Modifier key, used to switch the function of other buttons.
- Click: Press to turn the metronome on and off.
- Undo:
  - · Press to undo the previous command.
  - Press and hold Shift, then press the Undo button to redo the last Undo command.
- Delete:
  - Press to delete selected objects.
  - Press and hold, then tap a pad to delete the cell.
- Quantize:
  - Press to quantize selected regions, cells, or events.
  - Press and hold, then tap a pad to quantize the cell.
- Duplicate:
  - Press to repeat selected regions, cells, or events.
  - Press and hold, then tap a pad to repeat the cell.
- Double:
  - Press to double the length of selected regions, cells or events.
  - Press and hold Shift, then press the Double button to halve the length of selected regions, cells or events.
  - Press and hold, then tap a pad to double the length of the cell.
  - Press and hold Shift and the Double button, then tap a pad to halve the length of the cell.

#### Launchpad Pro mixer buttons

The Launchpad Pro does not have a dedicated Mixer mode but rather several buttons you can use to directly access individual mixing parameters.

- Volume: Enables Volume mode.
- Pan: Enables Pan mode.
- Sends: Enables Sends mode.
- *Record Arm:* Enables the Record Arm page.
- Track Select: Enables the Track Select page.
- Mute: Enables the Mute page.
- Solo: Enables the Solo page.
- Stop Clip: Enables the Stop Clip page.

# Launchpad modes

### Novation Launchpad modes overview

You can access and control different aspects of Logic Pro with a Launchpad device using the following modes:

Session mode: Trigger scenes and cells in Live Loops. Each pad corresponds to a Live Loops cell.

*Mixer mode:* Access basic mixing functions like mute, solo, track arming, volume, pans, and sends.

*User mode:* Use the pads to send MIDI Note messages to play notes and trigger samples with your Launchpad device. See the documentation provided with your Launchpad device for information about User modes and MIDI note assignments.

## Use a Novation Launchpad in Session mode with Logic Pro

In Session mode you can trigger cells and scenes, represented by the 64 pads and scene buttons, and perform basic editing and arranging functions. Tap the navigation arrows to shift the grid left or right, or up and down.

Tap a pad to trigger the cell it represents. Cells in Momentary Play mode play when you press and hold the pad and stop when you let go.

The eight Scene buttons under the pads trigger the scene they represent. The Scene button reflects the state of the cell by flashing, pulsing or changing color.

Control surface bars to the left of the track headers and under the scene triggers in Logic Pro indicate the track and scene range that you control with the Launchpad device. You can change the color of the control surface bars in the Device inspector at Logic Pro > Control Surfaces > Setup.

For all Launchpad devices, an unlit pad indicates an empty cell. However, the color of the pads for different states depend on the model of the Launchpad device:

- Launchpad, Launchpad S, Launchpad Mini:
  - Flashing green: Triggered (about to play) or stopping
  - · Flashing red: Counting in (about to record)
  - Green: Playing
  - Red: Recording
  - Amber: Stopped.
- Launchpad MK2, Launchpad Pro, Launchpad X, Launchpad Mini MK3
  - Flashing green: Triggered (about to play) or stopping
  - Flashing red: Counting in (about to record)
  - Pulsing green: Playing
  - Pulsing red: Recording
  - White: Selected
  - Other color: Color of the cell in Live Loops grid

#### **Enable Session mode**

Press the Session button on the right side of the Launchpad device.

On the Launchpad X and Launchpad Mini MK3 models, the Session button switches the Session and Mixer modes.

#### Select cells

On the Launchpad Pro, press and hold the Session button, then tap one or more pads to select them.

### Use Novation Launchpad in User mode with Logic Pro

In User mode, you can use the pads to send MIDI Note messages, so you can play notes and trigger samples from your Launchpad device while recording to a cell. See the documentation provided with your Launchpad device for information about User modes and MIDI note assignments.

#### **Enable User Mode**

- Launchpad, Launchpad MK2, Launchpad S, and Launchpad Mini: Press either the User 1 or User 2 button.
- Launchpad Mini MK3: Press the Drums, Keys, or User buttons.
- Launchpad Pro Press the User button.
- Launchpad X: Press the Note or Custom buttons.

### Use Novation Launchpad in Mixer mode with Logic Pro

In Mixer mode you can use the pads and the Scene buttons under the pads to change parameters for track record enable, solo, mute, send levels, pan, and track volume. Each pad in a column represents a track. Use the Up Arrow/Down Arrow buttons to shift the grid up or down by one track.

Launchpad, Launchpad S, and Launchpad Mini devices do not support Send, Pan, and Volume modes.

When you change the settings for Record, Solo, Mute, and Stop on the Launchpad Pro, Launchpad X, and Launchpad Mini MK3, the first column of pads switches to a temporary mode that provides access to the parameters for each track. See Change mix parameters on the Launchpad Pro, Launchpad X, and Launchpad Mini MK3.

#### **Enable Mixer mode**

- Launchpad, Launchpad MK2, Launchpad S, and Launchpad Mini: Press the Mixer button.
- Launchpad X and Launchpad Mini MK3: Press the Session button to switch between Session and Mixer mode.

The Launchpad Pro model has dedicated buttons for mix parameters.

#### **Record enable tracks**

When Mixer mode is enabled, the pads in the Record Arm column can have the following states:

- Off: Record enable is not available for that track.
- *Dim red:* The track can be record enabled.
- Flashing red: The audio track is record enabled.
- Bright red: The audio track is recording, or the software instrument track is record enabled.
- Enable Mixer mode, then press a pad in the Record Arm column to turn track record enable on or off.

#### Solo tracks

When Mixer mode is enabled, the pads in the Solo column can have the following states:

- Off: Track soloing is not available for the track.
- Dim yellow: Track soloing is off.
- Bright yellow: Track soloing is on.

Do either of the following:

- Solo for a track: Press a pad in the Solo column to turn soloing on or off.
- Toggle all soloed tracks: Press the Scene button under the Solo column.

#### Mute tracks

When Mixer mode is enabled, the pads in the Mute column can have the following states:

- Off: Track muting is not available.
- Dim blue: Track muting is off.
- Bright blue: Track muting is on.
- Flashing blue: Tracks muted are by soloed tracks.

Do either of the following:

- Mute and unmute a track: Press a pad in the Mute column to turn Mute on or off.
- Unmute all tracks: Press the Scene button under the Mute column.

#### Use the Stop column to stop and start cells

You can use the pads in the Stop column or use the Stop Scene button to start and stop cells in a variety of ways. In Mixer mode, the pads in the Stop column can have the following states:

- Off: No cells on this track are playing.
- Flashing green: A cell on this track is triggered to start playing.
- Pulsing green: A cell on this track is playing.
- Flashing red: A cell on this track is counting in to start recording.
- Red: A cell on this track is recording.

Do any of the following:

*Stop individual cells:* Press a pad in the Stop column to stop the cell playing or recording on that track.

*Start selected cells:* Select one or more cells, then press the Scene button under the Stop column.

*Start a focused scene:* Deselect all cells in the grid, then press the Scene button under the Stop column.

*Record to an empty cell:* Select an empty cell, then press the Scene button under the Stop column.

#### **Change send levels**

You can use Launchpad devices to set send levels to varying degrees, depending on device. When you first enter Mixer mode, the pads for tracks using the first two sends are lit. The brightness of the pads corresponds to the send level. You can quickly set the send levels to 0 dB for each track.

On the Launchpad MK2, Launchpad X, and Launchpad Mini MK3 you can set levels more precisely for the first two sends on each track. The columns Send A and Send B correspond to Send 1 and Send 2 in Logic Pro, respectively.

On the Launchpad Pro you can set levels for Sends 1–8. Instead of using Mixer mode, push the Sends button to jump directly to Send mode.

#### Send mode

In Send mode, the pads are lit in rows representing the send level for each track. The Send level bar is shown from left to right. Pressing a pad changes the send level of the track to the level corresponding to the pressed pad.

*Launchpad MK2, Launchpad Mini MK3, Launchpad X:* If Send 1 is selected, the Send A button is lit. If Send 2 is selected, the Send B button is lit.

Launchpad Pro only: The eight scene buttons correspond to Sends 1–8.

Do any of the following:

- Set the send level to 0 dB: Press Mixer to enter Mixer mode, then press the pad in the Send column (A or B) that represents the track and send levels you want to change.
- Raise or lower the send level:
  - Launchpad MK2, Launchpad X, and Launchpad Mini MK3: In Mixer mode, press the Send A or Send B Scene buttons to enter Send mode.

*Launchpad Pro:* Press the Sends mixer button to enter Send mode, then press the corresponding Scene button for sends 1–8.

- In the row for the corresponding track, move your finger horizontally across the pads to change the send level.
- Press the Mixer button to return to Mixer mode, or press the Session button to return to Session mode.

*Launchpad X and Launchpad Mini MK3:* Press the active Send mode button again to return to Session/Mixer mode, or press the Session button to return to Session mode.

*Launchpad Pro:* Press the Sends mixer button again to exit Send mode and return to Session mode.

Launchpad Pro and Launchpad X only: You can control how fast the send level changes by pressing the pads harder or more lightly. The harder you press, the faster the send level changes.

#### Set track pan position

You can use Launchpad devices to set pan position for each track to varying degrees, depending on device. In Mixer mode, the pads in the Pan column are lit when the pan position is not set to center. The farther the pan position is from the center, the brighter the pads.

On the Launchpad Pro, Launchpad MK2, Launchpad X, and Launchpad Mini MK3 you can set pan positions more precisely from left to right.

Do any of the following:

- Set the pan position to center: Press the Mixer button to enter Mixer mode, then press the pad in the Pan column that represents the track you want to change.
- Set the pan position from left to right:
  - Launchpad MK2, Launchpad X, and Launchpad Mini MK3: In Mixer mode, press the Pan Scene button to enter Pan mode.

Launchpad Pro: Press the Pan button to enter Pan mode.

- In the row for the corresponding track, tap the pads or move your finger horizontally across the pads to change the pan position. Tapping one of the two center-most pads sets the pan position to center.
- Press the Mixer button to exit Pan mode.

Launchpad Pro: Press the Pan button again to exit Pan mode.

*Launchpad X and Launchpad Mini MK3:* Press the Pan Scene button again to return to Mixer mode, or press the Session button to return to Session mode.

#### Set track volume

You can use Launchpad devices to set the volume level for each track to varying degrees, depending on device. In Mixer mode, the brightness of the pads in the Volume column corresponds to the volume level; the brighter the pads, the louder the volume.

Do any of the following:

- Set the volume to 0 dB: Press the Mixer button to enter Mixer mode, then press the pad in the Volume column that represents the track you want to change.
- Raise or lower the volume level:
  - Launchpad MK2, Launchpad X, and Launchpad Mini MK3: In Mixer mode, press the Volume Scene button to enter Volume mode.

Launchpad Pro: Press the Volume button to enter Volume mode.

- In the row for the corresponding track, move your finger horizontally across the pads to change the volume level. Press the leftmost pad to turn the volume all the way down; press the rightmost pad to turn the volume all the way up.
- Press the Mixer button to exit Volume mode.

Launchpad Pro: Press the Volume button again to exit Volume mode.

*Launchpad X and Launchpad Mini MK3:* Press the Volume button again to return to Mixer mode, or press the Session button to return to Session mode.

# Change mix parameters on the Launchpad Pro, Launchpad X, and Launchpad Mini MK3 in Logic Pro

When you access the mixing parameters described below on the Launchpad Pro, Launchpad X, or Launchpad Mini MK3 models, the first column of pads switches to a temporary mode that you can use to change the parameters for each track. Use the Up and Down arrows on the Launchpad to scroll through the tracks. While this temporary mode is active, the rest of the pads continue to function as they do in Session mode.

The following mixing parameters use this function:

- *Record Arm mode:* The first pad column turns the Record Ready state of the track on and off.
- Track Select mode: The first pad column selects the track (Launchpad Pro only).
- *Mute mode:* The first pad column mutes and unmutes the track.
- Solo mode: The first pad solos and unsolos the track.
- Stop Clip mode: The first pad column stops the cell playing on the track.

The Launchpad Pro has individual buttons you can use to access each mix parameter. On the Launchpad X and Launchpad Mini MK3 models, press the Session button to switch between Session and Mixer modes, then use the Scene buttons to access each individual mix parameter. On the Launchpad Pro, the buttons used to access the mix parameters have two modes: Latch and Momentary.

- *Latch:* Press and release the button. Latch mode stays enabled until you press the button again, or you press another button to access another mix parameter.
- *Momentary:* Press and hold the button, then press one or more of the pads to change parameters, Release the Scene or Mixer button to exit Momentary mode.

# **Radikal Technologies SAC-2K**

# Set up your Radikal Technologies SAC-2K in Logic Pro

Make sure that your control surface is connected bidirectionally with the computer, using a MIDI interface.

#### Set up SAC-2K units

- 1. Choose Logic Pro > Control Surfaces > Setup.
- 2. Choose Install from the New menu.
- 3. Select the SAC-2K in the Install window.
- 4. Click the Scan button.

## SAC-2K assignments

# Overview of Radikal Technologies SAC-2K assignments in Logic Pro

This section outlines the assignment of the Radikal Technologies SAC-2K interface elements to Logic Pro functions.

- SAC-2K LCDs and encoders
- SAC-2K channel strips
- SAC-2K Mixer view controls
- SAC-2K software navigation controls
- SAC-2K locator display
- SAC-2K marker controls
- SAC-2K transport controls
- SAC-2K Channel view controls

# Radikal Technologies SAC-2K LCDs and encoders in Logic Pro

The table outlines the LCDs and encoder controls and their assignments:

Control	Assignment	
Left and middle LCDs	Upper row displays the channel number when in a Mixer (multichannel) view. The parameter name is shown when in a (single) Channel view. Lower row shows the parameter value of the corresponding encoder (the one directly below the display). Level meters are shown to the right.	
Right LCD	Upper row displays the name of the parameter being edited with the corresponding encoder (the one below). Lower row displays the paramete value (assigned to the encoder below the display). The Master Output level meter is displayed at the far right.	
Encoders	Edit the corresponding parameter shown in the LCD.	
Encoder push buttons	Parameters with two values (On/Off): Switches between the two values. Parameters that access items (plug-in selection, for example): Confirms preselection. At other times, sets the parameter to its default value.	

## Radikal Technologies SAC-2K channel strips in Logic Pro

The table outlines the channel strip controls and their assignments.

*Note:* A modifier button, such as SHIFT, below a button description indicates that the button has an alternate use while the modifier is held down.

Control	Modifier	Assignment
Mute/Solo		Switches Mute/Solo 1 to 8 buttons between Mute and Solo modes. LED off: Mute/Solo buttons switch Mute state on/off. LED on: Mute/ Solo buttons switch Solo state on/ off. LED flashes: Mute/Solo buttons switch Record Enable state on/off.
	SHIFT	Sets Mute/Solo buttons to Record Enable mode.
Mute/Solo 1 to 8		Mute/Solo LED off: Enables or disables Mute; LED displays Mute state. Mute/Solo LED on: Enables or disables Solo; LED displays Solo state. Mute/Solo LED flashing: Enables or disables Record Enable; LED displays Record Enable (armed disarmed) state.
SELECT 1 to 8 buttons		Selects channel. Exception: In Group mode, these buttons define group membership of the channel.
Master Select button		Switches Flip mode between Off and Duplicate.

Control	Modifier	Assignment
Faders 1 to 8		Controls volume, or duplicates the parameter assigned to the encoder above (if Flip mode is enabled).
Master Fader		Controls the Master Level fader if
		it exists; if not, controls Output 1–2 level.
EQ button		Inserts a Channel EQ in the channe
		if no Channel or Linear Phase EQ is present.

# Radikal Technologies SAC-2K Mixer view controls in Logic Pro

The table outlines the Mixer view controls and their assignments.

*Note:* A modifier button, such as SHIFT, below a button description indicates that the button has an alternate use while the modifier is held down.

Control	Modifier	Assignment
Pan		Switches to Mixer view (multichannel) pan editing.Encoders 9 to 12 edit Pan/Angle, Diversity, LFE, and Spread of selected channe (in Surround mode).
High, HiMid, LowMid, Low		Switches to Mixer view (multichannel) gain editing of a certain EQ band. Encoders 9 to 12 edit Frequency, Gain, Q factor, and On/Off for the selected channel. Pressing and releasing the button chooses a specific EQ band. While held down, you can use Encoder 9 to choose the EQ band that you want to edit (bands 1 to 8). The button's LED is lit when in Mixer view Gain Editing mode (of the selected channel EQ band).
		<ul> <li>Low: Band 3 (first parametric EQ band)</li> <li>LowMid: Band 4 (second</li> </ul>
		parametric EQ band)
		<ul> <li>HiMid: Band 5 (third parametric EQ band)</li> </ul>
		<ul> <li>High: Band 6 (fourth parametric EQ band)</li> </ul>
Snd/Ins		Switches the four Snd/Ins (1 to 4) buttons between Send and Insert modes.
		LED off: Send mode
		LED on: Insert mode

Control	Modifier	Assignment
Snd/Ins 1 to 4		<ul> <li>If in Send mode, switches to Mixer view (multichannel) send level editing of Sends 1 to 4.</li> <li>Encoders 9 to 12 edit Destination Level, Pre/Post, and Mute of the selected channel. You must confirm the send destination by pushing the Encoder 9 button.</li> <li>While held down, use Encoder 9 to select the Send number (1 to 8). The button's LED is lit when in Mixer view Send Level Editing mode (of the selected channel Send slot).</li> </ul>
		<ul> <li>If in Insert mode, switches to Mixer view plug-in selection for Inserts 1 to 4. Plug-in selection is confirmed by pressing the encoder's push button. While held down, use Encoder 9 to choose the Insert slot number (1 to 15). The button's LED is lit when in Plug-in Selection mode (of the corresponding channel Insert slot).</li> </ul>
Audio		Switches to Mixer view, and display audio channels.
	SHIFT	Switches to Mixer view.
MIDI		Switches to Mixer view, and display MIDI channel strips.
	SHIFT	Switches to Tracks window view, and displays the channel strips of a tracks used in the Tracks window.
Input		Switches to Mixer view, and display input channels.
	SHIFT	Switches to Mixer view, and display the master and output channels.
Inst		Switches to Mixer view, and display (software) instrument channels.
	SHIFT	Switches to Mixer view, and display aux channels.
Bus		Switches to Mixer view, and display bus channels.

Control	Modifier	Assignment
Group		<ul> <li>Switches to Group editing mode:</li> <li>Encoder 1 to 10 push buttons edit a group property. (The property is shown in the LCD's lower line.)</li> </ul>
		<ul> <li>Encoder 11 scrolls through group properties.</li> </ul>
		<ul> <li>Encoder 12 selects a group to edit. Its name is displayed in the lower LCD line, above Encoder 12.</li> </ul>
		<ul> <li>Select buttons 1 to 8 activate/ deactivate group membership of the channel.</li> </ul>
1 to 8		Shifts the fader bank (a group of channels or parameters) to the left by one bank.
9 to 16		Shifts the fader bank to the right by one bank.
17 to 24		Shifts the fader bank to the left by one channel.
25 to 32		Shifts the fader bank to the right by one channel.

# Radikal Technologies SAC-2K software navigation controls in Logic Pro

The table outlines the software navigation controls and their assignments:

Control	Assignment	
1	Num LED off: —	
	Num LED on: Equivalent to 1 on computer keyboard.	
2	Num LED off: Equivalent to Left Arrow key on computer keyboard.	
	Num LED on: Equivalent to 2 on computer keyboard.	
3	Num LED off: Equivalent to Up Arrow key on computer keyboard.	
	Num LED on: Equivalent to 3 on computer keyboard.	
4	Num LED off: Equivalent to Right Arrow key on computer keyboard.	
	Num LED on: Equivalent to 4 on computer keyboard.	
5	Num LED off: Performs Undo (of most recent editing operation).	
	Num LED on: Equivalent to 5 on computer keyboard.	
6	Num LED off: —	
	Num LED on: Equivalent to 6 on computer keyboard.	
7	Num LED off: Copies the selection (of regions or events).	
	Num LED on: Equivalent to 7 on computer keyboard.	
8	Num LED off: Equivalent to Down Arrow key on computer keyboard.	
	Num LED on: Equivalent to 8 on computer keyboard.	

Control	Assignment
9	Num LED off: Pastes the Clipboard contents.
	Num LED on: Equivalent to 9 on computer keyboard.
0	Num LED off: Saves the project.
	Num LED on: Equivalent to 0 on computer keyboard.
Num	Switches the numeric buttons between primary and secondary function (see above).
Enter	Equivalent to Enter key on the computer keyboard.

*Note:* All buttons that are equivalents of computer keyboard keys are independent of the computer keys. Either can be reassigned.

## Radikal Technologies SAC-2K locator display in Logic Pro

The locator display shows the current playhead position in bars/beats format, as defined in the project settings. A period separates display segments because the bars/beats format uses (up to) 14 characters in Logic Pro, and the SAC display is limited to 8 digits.

## Radikal Technologies SAC-2K marker controls in Logic Pro

The table outlines the marker controls and their assignments:

*Note:* A modifier button, such as SHIFT, below a button description indicates that the button has an alternate use while the modifier is held down.

Control	Modifier	Assignment
SHIFT		Shifts to secondary function of other buttons.
Scrub		Switches between three jog wheel modes:
		<ul> <li>LED off: Moves playhead by one bar.</li> </ul>
		<ul> <li>LED on: Activates Scrub mode.</li> </ul>
		LED flashes: Activates Shuttle mode.
From		Sets left locator at the current playhead position.
	SHIFT	Moves the playhead to the left locator position.
Store Marker		Creates a marker at the current playhead position.
	SHIFT	Deletes the marker at the current playhead position.
То		Sets right locator at the current playhead position.
	SHIFT	Moves the playhead to the right locator position.

Control	Modifier	Assignment
Recall Marker		Opens the Go to Marker dialog.
	SHIFT	Opens the Marker List.
Jog wheel		Moves the playhead in one of three modes, depending on the state of the Scrub button (see above).

## Radikal Technologies SAC-2K transport controls in Logic Pro

The table outlines the transport controls and their assignments.

*Note:* A modifier button, such as SHIFT, below a button description indicates that the button has an alternate use while the modifier is held down.

Control	Modifier	Assignment
<<		Shuttles backward.
>>		Shuttles forward.
	SHIFT	Goes to next marker.
STOP		Stops playback (or recording).
PLAY		Starts playback.
	SHIFT	Enables or disables Cycle mode.
RECORD		Starts recording (to record-enabled tracks).
	SHIFT	Enables or disables Replace mode.

# Radikal Technologies SAC-2K Channel view controls in Logic Pro

The table outlines the Channel view controls and their assignments:

Control	Assignment
EQs	Enters Channel view EQ Edit mode. Pressing the button repeatedly cycle through all available EQ parameter pages.
Inserts/Sends	Enters Channel view Plug-in Edit mode and edits the effect plug-in inserted into the currently chosen Insert slot (of the selected channel). Pressing the button repeatedly cycles through all available effect plug-in parameter pages.
Dynamics	_
MIDI	_
Instrument	Enters Channel view Instrument Edit mode and edits the instrument plug in inserted into the selected (Instrument) channel. Pressing the button repeatedly cycles through all available instrument plug-in parameter pages.

# Radikal Technologies SAC-2K troubleshooting in Logic Pro

This section may help you to resolve a few common problems.

• Track or channel names are shorter than necessary, and the assignments don't work correctly

The SAC-2K is in an Emulation mode (Logic Control or HUI, for example). To resolve this issue, turn the SAC-2K power off, and then back on.

• The faders don't work, and the locator display shows "00000000"

You have manually switched the SAC-2K to PASSIVE mode. This has the unfortunate side effect of not initializing a number of settings required for proper communication. To resolve this issue, turn the SAC-2K power off, and then back on.

# **Recording Light**

# Set up Recording Light in Logic Pro

The Recording Light control surface plug-in enables you to control an external light or sign, warning visitors not to enter the recording studio before or during recording. Logic Pro sends a MIDI signal to switch on the external device when a track is record-enabled or when recording starts. Logic Pro sends another MIDI signal to switch off the device when tracks are made record-safe or when recording stops.

*Note:* This control surface plug-in requires additional hardware that is not included with Logic Pro.

Recording Light needs to be manually added to your setup.

#### Set up Recording Light

- 1. Choose Logic Pro > Control Surfaces > Setup.
- 2. Choose Install from the New menu.
- 3. Select Recording Light from the list in the Install window.
- 4. Click the Add button.

*Note:* While Recording Light can be added anywhere, it is suggested that you use it in its own control surface group.

## **Recording Light parameters in Logic Pro**

Because Recording Light hardware is not actually a control surface but rather a simple MIDI-controlled display device, all changes to its behavior are made in the Device Parameter area at the left of the Setup window.

### **Recording Light parameters**

- Out Port: Choose the MIDI output port from the pop-up menu.
- Input: Choose the MIDI input port from the pop-up menu.
- *Module:* Shows the name of the control surface plug-in (Recording Light), which cannot be changed.
- *Model:* Shows the model name of the control surface (Recording Light), which cannot be changed.

- *Version:* Shows the firmware version for some control surfaces. Not applicable to Recording Light.
- Color: Not applicable to Recording Light
- *MIDI Status:* Choose the type of MIDI message that is sent to the recording light device. Generally, this will be a "MIDI note on" message, but other data types can be transmitted.
- *MIDI Channel:* Specify the MIDI channel that data is sent on.
- Data 1: Any Record Ready LED: This value determines how the Recording Light device responds to a track being record-enabled in Logic Pro.
- *Data 1: Recording:* This value determines how the Recording Light device responds when the Record button is engaged in Logic Pro.
- *Data 2: On Value:* Choose the value for the MIDI event that is sent to turn on the Recording Light device. Typically this value is 127.

# **Roland SI-24**

## Set up your Roland SI-24 in Logic Pro

The SI-24 can be used as a control surface with all Mac systems that are capable of running Logic Pro.

Important: You will require another device for audio input and output.

#### Use the SI-24 as a control surface

To use the Roland SI-24 with Logic Pro:

- 1. Connect the unit bidirectionally with two free (not used by other devices) MIDI interface ports.
- 2. Choose Logic Pro > Control Surfaces > Setup.
- 3. Choose Install from the New menu.
- 4. Select Roland SI-24 in the Install window.
- 5. Click the Scan button.

Logic Pro scans for, and automatically installs, your control surface.

# SI-24 assignments

### Overview of Roland SI-24 assignments in Logic Pro

These sections outline the assignment of Roland SI-24 interface elements to Logic functions.

- SI-24 Channel strips
- SI-24 Status mode controls
- SI-24 Channel assign controls
- SI-24 Surround/pan controls
- SI-24 Numeric key controls
- SI-24 Transport controls

## Roland SI-24 channel strips in Logic Pro

The table outlines the channel strip controls and their assignments.

*Note:* A modifier button (such as SHIFT) shown below a button description indicates that the button has an alternate use while the modifier is held down.

Control	Modifier	Assignment
EQ ON/OFF 1 to 4		In Pan mode:
		<ul> <li>Switches the bypass state of EC bands 1–4.</li> </ul>
		<ul> <li>Enters EQ/Send mode. If no Channel or Linear Phase EQ is present on the selected channe a Channel EQ is automatically inserted.</li> </ul>
		In EQ/Send mode:
		<ul> <li>Switches the bypass state of EC bands 1–4. The button LED is lit when the EQ is enabled.</li> </ul>
		In Plug-in mode:
		<ul> <li>Switches between Inserts 1–4.</li> <li>A lit button LED indicates the selected Insert slot.</li> </ul>
		<ul> <li>If a plug-in window is open, it updates to reflect the plug-in parameters of the selected Inse slot.</li> </ul>
	SHIFT	In EQ/Send mode: Enables or disables Send 1-4 Mute.
EQ/SEND		Switches Channel views between:
		<ul> <li>EQ/Send Edit mode (LED on).</li> </ul>
		<ul> <li>Pan Edit mode (LED off).</li> </ul>
PLUG-IN		Switches Channel views between:
		<ul> <li>Plug-in Edit mode (LED on).</li> <li>(Plug-in window opens.)</li> </ul>
		<ul> <li>Pan Edit mode (LED off).</li> </ul>
		Plug-in window closes when Plug- Edit mode is exited.
	SHIFT	Switches Channel views between:
		<ul> <li>Instrument Edit mode (LED on). (Instrument window opens.)</li> </ul>
		<ul> <li>Pan Edit mode (LED off).</li> </ul>
		Instrument plug-in window closes when Instrument Edit mode is exited.

Control	Modifier	Assignment
PAN 1 to 12		In Pan Edit mode:
		<ul> <li>Controls channel strip Pan/ Balance (surround angle for channels in surround mode).</li> </ul>
		In EQ/Send mode:
		<ul> <li>1/3/5/7: Control the Gain parameter of EQ bands 1–4.</li> </ul>
		<ul> <li>2/4/6/8: Control the Frequency parameter of EQ bands 1–4.</li> </ul>
		<ul> <li>9-12: Control Send 1-4 levels.</li> </ul>
		In Plug-in Edit mode:
		<ul> <li>1–10: Edits plug-in parameter.</li> </ul>
		<ul> <li>11: Bypasses the plug-in.</li> </ul>
		<ul> <li>12: Shifts plug-in parameter page. (A page is a collection of parameters.)</li> </ul>
		In Instrument mode:
		<ul> <li>1–10: Edits Instrument paramete</li> </ul>
		<ul> <li>11: Bypasses the instrument plug-in.</li> </ul>
		<ul> <li>12: Shifts Instrument parameter page.</li> </ul>
	SHIFT	In EQ/Send mode:
		<ul> <li>2/4/6/8: Control the Q-Factor of EQ bands 1–4.</li> </ul>
		<ul> <li>9-12: Determine Send 1-4 destinations.</li> </ul>
CH SELECT 1 to 12		Selects track/channel.
STATUS 1 to 12		In Automation mode: Switches Automation mode between:
		Off (LED off)
		Read (green)
		<ul> <li>Latch (orange)</li> </ul>
		• Write (red)
		In Record Ready mode: Turns Record Enable on or off. In Solo mode: Enables or disables Solo. In Mute mode: Enables or disables Mute.
		mator
Fader 1 to 12		Controls volume.

## Roland SI-24 status mode controls in Logic Pro

The table outlines the status mode controls and their assignments.

*Note:* A modifier button (such as SHIFT) shown below a button description indicates that the button has an alternate use while the modifier is held down.

Control	Modifier	Assignment
AUTOMIX		Sets STATUS 1 to 12 buttons to Automation mode.
	SHIFT	Sets all tracks to Off, Read, Latch, or Write automation mode. Repeatedly press this button combination to cycle through automation modes.
REC/PLAY		Sets STATUS 1 to 12 buttons to Record Enable mode.
SOLO		Sets STATUS 1 to 12 buttons to Solo mode.
MUTE		Sets STATUS 1 to 12 buttons to Mute mode.

### Roland SI-24 channel assign controls in Logic Pro

The table outlines the channel assign controls and their assignments.

*Note:* A modifier button (such as SHIFT) shown below a button description indicates that the button has an alternate use while the modifier is held down.

Control	Modifier	Assignment
INPUT		Shows the first 12 audio input channel strips.
	SHIFT	Shows the first 12 MIDI channel strips.
ΟυΤΡυΤ		Shows the first 12 output channel strips:
		<ul> <li>1: Output 1-2 (default surround assignment: front)</li> </ul>
		<ul> <li>2: Output 3–4 (default surround assignment: rear)</li> </ul>
		<ul> <li>3: Output 5 (default surround assignment: center)</li> </ul>
		<ul> <li>4: Output 6 (default surround assignment: LFE)</li> </ul>
		• 5: Output 7–8 (digital out)
	SHIFT	Shows the first 12 audio channels.
BUS		Shows the first 12 aux channels.

Control	Modifier	Assignment
	SHIFT	Shows the first 12 instrument
		channels.
Tr 1 to 12		Switches to Tracks view and shows
		the first 12 channels.
Tr 13 to 24		Switches to Tracks view and
		displays channel 13 to 24.

## Roland SI-24 SI-24 surround/pan controls in Logic Pro

The table outlines the surround/pan controls and their assignments.

Control	Assignment	
ON/OFF	Switches selected channel output between:	
	Surround (LED on)	
	• Out 1–2 (LED off)	
	Also shows/hides the Surround Pan window.	
Joystick	Surround X/Y of selected channel.	

## Roland SI-24 numeric key controls in Logic Pro

The table outlines the numeric key controls and their assignments.

*Note:* A modifier button (such as SHIFT) shown below a button description indicates that the button has an alternate use while the modifier is held down.

Control	Modifier	Assignment
SYSTEM		Switches SI-24 to System mode.
		See SI-24 user manual for details.
LOCATE		Switches numeric keys to Locate
		mode.
SHORT CUT		Switches numeric keys to Shortcut
		mode.
SCREEN SET		Switches numeric keys to Screenset
		mode.

Control	Modifier	Assignment
0 to 9		System mode: See SI-24 user manual.
		Locate mode:
		<ul> <li>1 to 9: Moves playhead to marke 1 to 9 positions.</li> </ul>
		<ul> <li>0: Creates marker at playhead position.</li> </ul>
		Shortcut mode:
		<ul> <li>1: Saves project. LED is lit if project has changed since last save.</li> </ul>
		<ul> <li>2: Performs Undo (of last editin operation). LED is on if a Redo i possible.</li> </ul>
		<ul> <li>3: Copies the selection (of regions or events).</li> </ul>
		<ul> <li>4: Pastes the Clipboard content</li> </ul>
		<ul> <li>5: Deletes the selection.</li> </ul>
		<ul> <li>6: Enables or disables Scrub mode. LED is on if Scrub mode enabled.</li> </ul>
		<ul> <li>7: Enables or disables Cycle mode. LED is on if Cycle mode i enabled.</li> </ul>
		<ul> <li>8: Enables or disables Autopunc mode. LED is on if Autopunch mode is enabled.</li> </ul>
		<ul> <li>9: Switches Tracks window to Hyper Draw volume view.</li> </ul>
		<ul> <li>0: Switches Tracks window to Hyper Draw pan view.</li> </ul>
		Screenset mode:
		• 1 to 9: Recall screensets 1 to 9.
		<ul> <li>0: Enables or disables Lock Screenset command.</li> </ul>

Control	Modifier	Assignment
	SHIFT	Locate mode:
		<ul> <li>1 to 9: Moves playhead to marke 10 to 18 positions.</li> </ul>
		<ul> <li>0: Deletes marker at playhead position.</li> </ul>
		Shortcut mode:
		<ul> <li>1: Performs Save As.</li> </ul>
		<ul> <li>2: Performs Redo (reverses last Undo operation).</li> </ul>
		• 3: Cuts selection.
		<ul> <li>4: Pastes the Clipboard content</li> </ul>
		Screenset mode:
		<ul> <li>1: Opens or closes Tracks window.</li> </ul>
		• 2: Opens or closes Mixer.
		<ul> <li>3: Opens or closes Event Editor</li> </ul>
		<ul> <li>4: Opens or closes Score Editor</li> </ul>
		<ul> <li>5: Opens or closes Step Editor.</li> </ul>
		<ul> <li>6: Opens or closes Piano Roll Editor.</li> </ul>
		<ul> <li>7: Opens or closes Control bar window.</li> </ul>
		<ul> <li>8: Opens or closes Project Audi Browser.</li> </ul>
		9: Opens or closes Sample Edite

## Roland SI-24 transport controls in Logic Pro

The table outlines the transport controls and their assignments.

Control	Assignment
PAUSE	Pause
REW	Rewinds playhead in one-bar increments.
F FWD	Advances playhead by one bar.
STOP	Stops playback.
PLAY	Starts playback.
RECORD	Starts recording.
Jog wheel	Scrub mode off: Moves playhead in one-bar increments. Scrub mode on: Scrubs (audio and MIDI).

# Tascam US-2400

# Set up your Tascam US-2400 in Logic Pro

The US-2400 is capable of running in both native and Mackie Control emulation modes. If the unit is set up in Mackie Control emulation mode, and the native support plug-in is installed in the Logic Pro program bundle, Logic Pro detects a US-2400 native control surface *and* a Mackie Control, plus two Extender (XT) units.

To run the US-2400 in Mackie Control mode, remove the US-2400 plug-in from the Logic Pro application bundle. Logic Pro will then detect a Mackie Control plus two Extender (XT) units (the appropriate setup for the US-2400 in Mackie Control emulation mode) when you scan for control surfaces.

The button layout of the Mackie Control differs from that of the Tascam US-2400. When running the Tascam US-2400 in Mackie Control mode, certain controllers are not accessible (the Joystick, for example). Given these restrictions, use of the Tascam US-2400 in Mackie Control mode is not recommended. If you choose to do so, refer to the documentation supplied with the Tascam US-2400 for details.

Follow the steps below to use your Tascam US-2400 with Logic Pro.

#### Set up the Tascam US-2400 for use with Logic Pro

- 1. Make sure that your US-2400 control surfaces are connected to the computer via USB.
- 2. Ensure that the US-2400 is in native mode. Consult your US-2400 manual for more information on this setting.
- 3. Open Logic Pro.

Your control surfaces are scanned for, and installed, automatically.

# US-2400 assignments

### Overview of Tascam US-2400 assignments in Logic Pro

These sections outline the assignment of Tascam US-2400 interface elements to Logic Pro functions.

- US-2400 Channel strips
- US-2400 Encoders
- US-2400 Master channel
- US-2400 Assignments overview
- US-2400 Master section controls

## Tascam US-2400 channel strips in Logic Pro

The table outlines the channel strip controls and their assignments.

*Note:* A modifier button, such as SHIFT, below a control description indicates that the control has an alternate use while the modifier is held down.

Control	Modifier	Assignment
Encoders		CHAN button on: see US-2400 Encoders.
		CHAN button flashing: encoders control Instrument parameters. Also see Instrument Edit view.
		PAN button flashing: encoders control plug-in parameters. Also se Plug-in Edit view.
		Other modes: encoders control the parameters of the active mode.
	F-KEY	<ul> <li>If you are in Instrument Edit view (CHAN button flashing), pressing the F-Key enters the Instrument Assignment view. The encoders are used to choose an instrumen plug-in from the list (of available software instrument plug-ins).</li> </ul>
		<ul> <li>If you are in Plug-in Edit view (PAN button flashing), pressing the F-Key enters the Plug-in Assignment view. The encoders are used to choose an effect plug-in from the list (of available effect plug-ins).</li> </ul>
		<ul> <li>If you are in Send view (AUX button LED flashes) and press th F-Key, the encoders are used to assign the send destination.</li> </ul>
SEL buttons		Selects tracks/channels.

Control	Modifier	Assignment
	SHIFT	In Pan view: sets volume to Unity (0 dB).
		In Send views: switches the Send mode (pre/post).
	F-KEY	Turns the Record Enable button of each channel on or off.
SOLO buttons		Enables or disables Solo.
MUTE buttons		Enables or disables Mute. In Send views with Flip mode enabled: mutes/unmutes the selected Send.
	SHIFT	In Send views: mutes/unmutes the selected Send.
Faders		Controls the volume of each channe (unless Duplicate or Swap Flip mode is active).

## Tascam US-2400 encoders in Logic Pro

In CHAN mode (CHAN button on), the encoders control these parameters on the selected channel:

Control	Assignment	
Encoder 1 (AUX 1)	Controls Send 1 level.	
Encoder 2 (AUX 2)	Controls Send 2 level.	
Encoder 3 (AUX 3)	Controls Send 3 level.	
Encoder 4 (AUX 4)	Controls Send 4 level.	
Encoder 5 (AUX 5)	Controls Send 5 level.	
Encoder 6 (AUX 6)	Controls Send 6 level.	
Encoder 7	Controls Send 7 level.	
Encoder 8	Controls Send 8 level.	
Encoder 11 (GAIN 1)	Controls the Gain parameter of band 3, if a Channel or Linear Phase EQ is inserted.	
Encoder 12 (FREQ 1)	Controls the Frequency parameter of band 3, if a Channel or Linear Phase EQ is inserted.	
Encoder 13 (Q 1)	Controls the Q factor of band 3, if a Channel or Linear Phase is inserted.	
Encoder 14 (GAIN 2)	Controls the Gain parameter of band 4, if a Channel or Linear Phase is inserted.	
Encoder 15 (FREQ 2)	Controls the Frequency parameter of band 4, if a Channel or Linear Phase is inserted.	
Encoder 16 (Q 2)	Controls the Q factor of band 4, if a Channel or Linear Phase EQ is inserted.	

Control	Assignment	
Encoder 17 (GAIN 3)	Controls the Gain parameter of band 5, if a Channel or Linear Phase EQ is inserted.	
Encoder 18 (FREQ 3)	Controls the Frequency parameter of band 5, if a Channel or Linear Phase EQ is inserted.	
Encoder 19 (Q 3)	Controls the Q factor of band 5, if a Channel or Linear Phase EQ is inserted.	
Encoder 20 (GAIN 4)	Controls the Gain parameter of band 6, if a Channel or Linear Phase EQ is inserted.	
Encoder 21 (FREQ 4)	Controls the Frequency parameter of band 6, if a Channel or Linear Phase EQ is inserted.	
Encoder 22 (Q 4)	Controls the Q factor of band 6, if a Channel or Linear Phase EQ is inserted.	
Encoder 24 (PAN)	Controls Panning.	

In CHAN mode, with the SHIFT button held down, the encoders control the following parameters on the selected channel:

Control	Assignment	
Encoder 1 (AUX 1)	Controls Pan/Surround Angle.	
Encoder 2 (AUX 2)	Controls Surround Radius.	
Encoder 3 (AUX 3)	Controls Surround LFE (level).	
Encoder 4 (AUX 4)	Controls Surround Spread.	
Encoder 5 (AUX 5)	Controls Surround X.	
Encoder 6 (AUX 6)	Controls Surround Y.	
Encoder 11 (GAIN 1)	Controls the Slope parameter of band 1, if a Channel or Linear Phase EQ is inserted.	
Encoder 12 (FREQ 1)	Controls the Frequency parameter of band 1, if a Channel or Linear Phase EQ is inserted.	
Encoder 13 (Q 1)	Controls the Q factor of band 1, if a Channel or Linear Phase EQ is inserted.	
Encoder 14 (GAIN 2)	Controls the Gain parameter of band 2, if a Channel or Linear Phase EQ is inserted.	
Encoder 15 (FREQ 2)	Controls the Frequency parameter of band 2, if a Channel or Linear Phase EQ is inserted.	
Encoder 16 (Q 2)	Controls the Q factor of band 2, if a Channel or Linear Phase EQ is inserted.	
Encoder 17 (GAIN 3)	Controls the Gain parameter of band 7, if a Channel or Linear Phase EQ is inserted.	
Encoder 18 (FREQ 3)	Controls the Frequency parameter of band 7, if a Channel or Linear Phase EQ is inserted.	

Control	Assignment		
Encoder 19 (Q 3)	Controls the Q factor of band 7, if a Channel or Linear Phase EQ is inserted.		
Encoder 20 (GAIN 4)	Controls the Slope parameter of band 8, if a Channel or Linear Phase EQ is inserted.		
Encoder 21 (FREQ 4)	Controls the Frequency parameter of band 8, if a Channel or Linear Phase EQ is inserted.		
Encoder 22 (Q 4)	Controls the Q factor of band 8, if a Channel or Linear Phase EQ is inserted.		
Encoder 24 (PAN)	Controls Pan/Balance (of mono or stereo channels).		

# Tascam US-2400 master channel in Logic Pro

The table outlines the master channel strip controls and their assignments.

Control		Assignment
SEL		Selects Master Output channel strip if it exists; if not, Output channel 1–2 is selected.
CLR SOLO		Disables Solo for all tracks/ channels.
	SHIFT	Disables Mute for all tracks/ channels.
	F-KEY	Disables the Record Enable buttons of all tracks/channels.
FLIP		Switches Flip mode between Off (LED off) and Duplicate (LED on). In this mode, the fader of each channel strip mirrors the encoder function.
	SHIFT	Sets Flip mode to Swap (LED flashing). In this mode, the parameters controlled by the fader and encoder are swapped.
	F-KEY	Sets Flip mode to Zero—fader motors are disabled (LED flashing).

## US-2400 encoder assignments

#### Overview of Tascam US-2400 encoder assignments in Logic Pro

The table outlines the standard assignment of the encoders. Also see Instrument Edit view and Plug-in Edit view for information on alternate use of the encoders.

*Note:* A modifier button, such as SHIFT, below a control description indicates that the control has an alternate use while the modifier is held down.

Control	Modifier	Assignment
CHAN		Switches encoders to Channel view (see encoders' legend); CHAN button LED is lit.
	F-KEY	Switches encoders to Instrument Edit view; CHAN button LED flashe See Instrument Edit view for detail:
PAN		Switches encoders to Mixer (multichannel) view of pan controls PAN button LED is lit.
	F-KEY	Switches encoders to Plug-in Edit view; PAN button LED flashes. See Plug-in Edit view for details.
AUX 1		Switches encoders to Mixer view o Send 1 level (for all channels).
	F-KEY	Opens or closes Tracks window.
AUX 2		Switches encoders to Mixer view o Send 2 level.
	F-KEY	Opens or closes Event List.
NUX 3		Switches encoders to Mixer view o Send 3 level.
	F-KEY	Opens or closes Score Editor.
AUX 4		Switches encoders to Mixer view o Send 4 level.
	F-KEY	Opens or closes Project Audio Browser.
AUX 5		Switches encoders to Mixer view o Send 5 level.
	F-KEY	Opens or closes Step Editor.
AUX 6		Switches encoders to Mixer view o Send 6 level.
	F-KEY	Opens or closes Piano Roll Editor.

#### Tascam US-2400 Instrument Edit view in Logic Pro

In Instrument Edit view, some AUX buttons have special assignments.

Control	Assignment	
AUX 1	Scrolls parameter fader bank left by 24 parameters.	
AUX 2	Scrolls parameter fader bank right by 24 parameters.	
AUX 4	Enables or disables Bypass button of the instrument being edited.	

The AUX button LEDs show the currently selected parameter bank. AUX 2 LED is on if parameters 25 to 48 are shown on the encoders.

#### Tascam US-2400 Plug-in Edit view in Logic Pro

In Plug-in Edit view, some AUX buttons have special assignments.

Assignment	
Scrolls parameter fader bank left by 24 parameters.	
Scrolls parameter fader bank right by 24 parameters.	
Increments Insert slot (chooses higher-numbered slot).	
Enables or disables Bypass button of the plug-in being edited.	
Decrements Insert slot (chooses lower-numbered slot).	

The AUX button LEDs show the currently selected Insert slot. For example, AUX 2 LED is on if Insert slot 2 is being edited.

## Tascam US-2400 master section controls in Logic Pro

The table outlines the master section controls and their assignments.

*Note:* A modifier button, such as SHIFT, below a control description indicates that the control has an alternate use while the modifier is held down.

Control	Modifier	Assignment
MTR		Switches encoder LED ring display between two modes:
		<ul> <li>The value of the parameter (LED off)</li> </ul>
		<ul> <li>Level/peak hold meters (LED on</li> </ul>
		In Level Meter mode, the LED below the encoder displays signal overloads (clipping).
F-KEY		Modifier key, used to switch the
		function of other controls (see
		"F-KEY" entries in center column).

Control	Modifier	Assignment
NULL		Sets Surround x/y or Panning of selected channel to center position; LED is on if Surround X (or Panning) is centered.
	F-KEY	Resets overload display for level meters.
Jog wheel		SCRUB off: moves playhead by bars SCRUB on: scrubbing (of audio and MIDI). SCRUB flashing: Shuttle mode.
Joystick		Edits Surround x/y or Panning of selected channel.
SCRUB		Switches jog wheel between Move Playhead by Bars (LED off) and Scrubbing (LED on) modes.
	SHIFT	Sets jog wheel to Shuttle mode (LEI flashes).
BANK –		Shifts fader bank to the left by one bank; LED is lit if the leftmost fader bank has not been reached.
	F-KEY	Shifts fader bank to the left by one channel.
BANK +		Shifts fader bank to the right by one bank; LED is lit if the rightmost fader bank has not been reached.
	F-KEY	Shifts fader bank to the right by one channel.
IN		Sets punch in locator at the current playhead position.
	SHIFT	Moves playhead to left cycle locator position.
	F-KEY	Sets left cycle locator at the current playhead position.
OUT		Sets punch out locator at the current playhead position.
	SHIFT	Moves playhead to right cycle locator position.
	F-KEY	Sets right cycle locator at the current playhead position.
SHIFT		Modifier key, used to switch the function of other controls (see "SHIFT" entries in center column).
REW		Shuttles backward.

Control	Modifier	Assignment
	SHIFT	Identical to (but independent
		of) Left Arrow key on computer
		keyboard.
F FWD		Shuttles forward.
	SHIFT	Identical to (but independent
		of) Right Arrow key on computer
		keyboard.
STOP		Stops playback.
	SHIFT	Identical to (but independent of)
		Down Arrow key on computer
		keyboard.
PLAY		Starts playback.
	SHIFT	Identical to (but independent of) Up
		Arrow key on computer keyboard.
RECORD		Enables or disables recording.

# Yamaha 01V96

# Set up your Yamaha 01V96 in Logic Pro

Follow these steps to use your 01V96 with Logic Pro.

- Make sure that your 01V96 device is connected to the computer via USB.
- Make sure that the latest USB MIDI driver for the device is installed. Visit the manufacturer's website to download the most recent driver version, if necessary.

#### Set up your 01V96 with Logic Pro

- 1. On the 01V96 front panel, do the following:
  - Press the DISPLAY ACCESS [DIO/SETUP] button repeatedly, until the Setup > MIDI/ Host page is visible.
  - Use the cursor buttons to move the first DAW parameter box in the SPECIAL FUNCTIONS section, and rotate the parameter wheel to select USB and 1–2.
  - Press the DISPLAY ACCESS [REMOTE] button repeatedly, until the Setup > Remote page is visible.
  - Rotate the parameter wheel to choose General DAW as the TARGET parameter.
  - Press the LAYER [REMOTE] button.
- 2. In Logic Pro:

When you open Logic Pro, the 01V96 device is installed automatically. You should see two 01V96 icons in the Setup window, aligned horizontally.

# 01V96 assignments

## Overview of Yamaha 01V96 assignments in Logic Pro

These sections outline the assignment of Yamaha 01V96 interface elements to Logic Pro functions.

- 01V96 Display Access controls
- 01V96 Fader Mode controls
- 01V96 LCD controls
- 01V96 Selected Channel control
- 01V96 Data entry controls
- 01V96 Channel strips
- 01V96 Assignable keys

## Yamaha 01V96 Display Access controls in Logic Pro

The table outlines the DISPLAY ACCESS controls and their assignments.

*Note:* A modifier button (such as SHIFT/ADD) below a control description indicates that the control has an alternate use while the modifier is held down. Modifier buttons that need to be assigned manually by the user are shown with an asterisk (\*) that precedes the control name.

Control	Modifier	Assignment
*DAW AUTO STATUS		While held down in Channel Display mode, the display shows the automation mode of the 16 channel strips in the current bank selection.
PAIR/GROUP		Enters Group Edit mode:
		<ul> <li>When a channel strip group is selected, channel strip membership is indicated by a lit SEL button. Use this button to enable/disable the channel strip's group membership.</li> </ul>
		<ul> <li>Virtual encoders 1 to 4 display properties of the currently selected group.</li> </ul>
		<ul> <li>Virtual encoder buttons 1 to 4 enable/disable properties of the currently selected group.</li> </ul>
		<ul> <li>When INSERT/PARAM is set to PARAM, the left and right Tab Scroll buttons scroll through the group properties. When set to INSERT, the buttons scroll through the groups for editing.</li> </ul>
Control	Modifier	Assignment
---------	----------------	---
	*DAW SHIFT/ADD	Switches the Mixer to show all channel strips that correspond to tracks used in the Tracks window, along with their signal flow.
EFFECT		Opens or closes the Sample Editor.

#### Yamaha 01V96 Fader Mode controls in Logic Pro

The table outlines the FADER MODE controls and their assignments.

Control	Modifier	Assignment
AUX 1		In Insert Display mode:
		<ul> <li>Assigns Send 1 level of channel strips to encoders.</li> </ul>
		<ul> <li>Assigns Send 1 level of the selected channel strip to virtual encoders.</li> </ul>
		<ul> <li>Assigns Sends 1 to 4 of the selected channel strip to virtual encoders. Use the ENTER button to switch the bypass state of Sends 1 to 4.</li> </ul>
		In Channel Display mode:
		<ul> <li>Assigns Send 1 level of channel strips to encoders and virtual encoders.</li> </ul>
		<ul> <li>Shows current Send 1 destination assignment, when button is held down.</li> </ul>
	*DAW SHIFT/ADD	Same as AUX 5, but for Send 6.
AUX 2		Same as AUX 1, but for Send 2.
	*DAW SHIFT/ADD	Same as AUX 5, but for Send 7.
AUX 3		Same as AUX 1, but for Send 3.
	*DAW SHIFT/ADD	Same as AUX 5, but for Send 8.
AUX 4		Same as AUX 1, but for Send 4.

Control	Modifier	Assignment
AUX 5		In Insert Display mode:
		<ul> <li>Assigns Send 5 level of channel strips to encoders.</li> </ul>
		<ul> <li>Assigns Send 5 level of the selected channel strip to virtual encoders.</li> </ul>
		<ul> <li>Assigns Sends 5 to 8 of the selected channel strip to virtual encoders. Use the ENTER buttor to switch the bypass state of Sends 5 to 8.</li> </ul>
		In Channel Display mode:
		<ul> <li>Assigns Send 5 level of channel strips to encoders and virtual encoders.</li> </ul>
		<ul> <li>Shows current Send 5 destination assignment, when button is held down.</li> </ul>
AUX 6		Switches SEL buttons and encoder buttons between normal behavior and setting a parameter's default value.
		When the AUX 6 button is held down:
		<ul> <li>Pressing a channel strip's SEL button resets the channel strip's volume level.</li> </ul>
		<ul> <li>Pressing a channel strip's encoder button resets the channel strip's pan/surround value (PAN also needs to be selected in ENCODER MODE section).</li> </ul>
AUX 7		Assigns Pan to encoders; assigns selected channel strip's pan/ surround parameters to virtual encoders.
AUX 8		Determines mode of channel strip SEL buttons:
		<ul> <li>AUX 8 indicator off: SEL button used for channel strip selection.</li> </ul>
		<ul> <li>AUX 8 indicator on: SEL button used for Insert selection.</li> </ul>

### Yamaha 01V96 LCD controls in Logic Pro

The table outlines the LCD controls and their assignments.

*Note:* A modifier button (such as SHIFT/ADD) below a control description indicates that the control has an alternate use while the modifier is held down. Modifier buttons that need to be assigned manually by the user are shown with an asterisk (\*) that precedes the control name.

Control	Modifier	Assignment
Left/Right buttons		Plug-in Edit mode: Shifts the parameter display to show the next/ previous page of parameter controls (usually four) for the selected plug-in.
	*DAW ALT/FINE	Plug-in Edit mode: Shifts the parameter display up/down by one parameter for the selected plug-in.
-1		Clears overload LEDs.
	*DAW SHIFT/ADD	Switches the Mixer to the All view, displaying all channel strips that exist in your project.
	*DAW ALT/FINE	Opens or closes a second Tracks window.
-2		Selects Insert display mode.
-3		Selects Channel display mode.
F4		Selects Meter display mode.

#### 01V96 LCD display modes

#### Yamaha 01V96 Insert display mode in Logic Pro

Press the F2 button to select Insert display mode. In this mode, the LCD displays effect edit parameters. This mode also allows you to switch between different Insert slots, enabling each effect to be edited.

Display	Assignment	
TIME CODE	Active if counter is displaying SMPTE timecode.	
BEATS	Active if counter is displaying bars/beats/divisions/ticks.	
Counter	Displays either SMPTE timecode or bars/beats/divisions/ticks.	
SELECT ASSIGN	Displays the encoder assignment as follows: Pan, Snd1 to Snd8, S1As to S8As, In, Out.	
COMPARE	Switches the display between "track name/parameter name" and "parameter name/parameter value" modes.	
BYPASS	Switches the bypass state of plug-in currently being edited.	
BYPASS	Switches the bypass state of plug-in currently being ed	

Display	Assignment	
INSERT/PARAM Switches between Plug-in Assign and Plug-in Edit mod		
Selecting virtual encoders 1 to 4	Pan Assignment mode:	
(Use cursor keys, and then press	<ul> <li>Parameter control 1 button centers pan or surround angle.</li> </ul>	
ENTER button.)	Parameter control 2 button centers surround diversity.	
	Parameter control 3 button centers surround LFE level.	
	<ul> <li>Parameter control 4 button resets spread.</li> </ul>	
	Send Assignment mode:	
	<ul> <li>Enables or disables Sends 1 to 4 or 5 to 8.</li> </ul>	
	Plug-in Assignment mode:	
	<ul> <li>Confirms the plug-in selection for Insert slots 1 to 4 or 5 to 8, and enters Plug-in Edit mode for the selected Insert slot.</li> </ul>	
	Plug-In Edit mode:	
	• Sets value to default, or switches buttons with two states.	
Moving virtual encoders 1 to 4	Pan Assignment mode:	
(Use cursor keys, and then rotate	<ul> <li>Parameter control 1 edits pan or surround angle.</li> </ul>	
parameter wheel.)	<ul> <li>Parameter control 2 edits surround diversity.</li> </ul>	
	Parameter control 3 edits surround LFE level.	
	<ul> <li>Parameter control 4 edits spread.</li> </ul>	
	Send Assignment mode:	
	<ul> <li>Controls the Send level of Sends 1 to 4 or 5 to 8.</li> </ul>	
	Plug-in Assignment mode:	
	Chooses Insert slot 1 to 4 or 5 to 8.	
	Plug-in Edit mode:	
	Sets value.	

#### Yamaha 01V96 Channel display mode in Logic Pro

Press the F3 button to select Channel display mode.

Control	Assignment
Moving virtual encoders 1 to 4 (Use cursor keys, and then rotate parameter wheel.)	Adjusts parameter selected in the ENCODER MODE and AUX SELECT sections.
Selecting virtual encoders 1 to 4 (Use cursor keys, and then press ENTER button.)	When Send 1 to 8 is selected: edits send pre/post fader position, enables or disables send mute, or sets send level to default value. Send, Input, or Output Assignment mode: confirms selection.

#### Yamaha 01V96 Meter display mode in Logic Pro

Press the F4 button to select Meter display mode.

Control	Assignment	
Level Meters	Display momentary and peak level.	

### Yamaha 01V96 Selected Channel control in Logic Pro

The table outlines the SELECTED CHANNEL control and assignment:

Control	Assignment	
Pan control	Adjusts the pan of the currently selected channel strip.	

#### Yamaha 01V96 data entry controls in Logic Pro

The table outlines the data entry controls and their assignments.

Control	Modifier	Assignment
Parameter wheel		Default: adjusts the value of the currently selected parameter.
	*DAW SHUTTLE	Switches the parameter wheel to Shuttle mode.
	*DAW SCRUB	Switches the parameter wheel to Scrub mode.
[DEC] button		Default: exits folder. In Go to Marker dialog: cancels dialog.
	*DAW ALT/FINE	Opens or closes the Project Audio Browser.
[INC] button		Enters the selected folder.

#### Yamaha 01V96 channel strips in Logic Pro

The table outlines the channel strip controls and their assignments.

*Note:* A modifier button (such as SHIFT/ADD) below a control description indicates that the control has an alternate use while the modifier is held down. Modifier buttons that need to be assigned manually by the user are shown with an asterisk (\*) that precedes the control name.

Control	Modifier	Assignment
SEL		Using *DAW AUTO OFF:
		<ul> <li>FADER MODE [AUX 8] off: selects channel.</li> </ul>
		<ul> <li>FADER MODE [AUX 8] on: selects channel for insert assignment, allowing you to insert effects.</li> </ul>
		Using the *DAW AUTO automation modes (WRITE, TOUCH, LATCH, READ):
		<ul> <li>Cycles through automation modes. Sets the selected mode when an automation mode button is held down.</li> </ul>
	*DAW SHIFT/ADD	Resets the volume level.
SOLO		Enables or disables the Solo button.
	*DAW OPTION/ALL	Disables the Solo button of all channel strips.
ON		Enables or disables the Mute button.
	*DAW OPTION/ALL	Unmutes all channel strips.
Fader		Adjusts volume, or duplicates encoder assignment in Flip mode.

#### Yamaha 01V96 assignable keys in Logic Pro

The assignable keys can be assigned to the functions outlined in the table.

Control	Modifier	Assignment
DAW WIN STATUS		Opens or closes the Project Audio
		Browser.
DAW REC/RDY 1 to 16		Enables or disables the Record
		Enable button of the specified
		channel strip.

Control	Modifier	Assignment
DAW WIN TRANSPORT		Opens or closes the Control bar window.
DAW BANK –		Shifts channel strips by one bank to the left.
DAW BANK +		Shifts channel strips by one bank to the right.
DAW SHIFT/ADD		Enables a second function/use for some buttons.
DAW OPTION/ALL		While held down, Value Change mode is set to Full. Turning the encoder to the right sets the maximum value. Turning it to the left sets the minimum value. The encoder also stops at its default value. See description of other buttons.
DAW GROUP STATUS		<ul> <li>Enters Group Edit mode:</li> <li>When a channel strip group is selected, channel strip membership is indicated by a lit SEL button. Use this button to enable/disable the channel strip' group membership.</li> <li>Virtual encoders 1 to 4 display properties of the currently selected group.</li> <li>Virtual encoder buttons 1 to 4 enable/disable properties of the</li> </ul>
		<ul> <li>currently selected group.</li> <li>When INSERT/PARAM is set to PARAM, the left and right Tab Scroll buttons scroll through the group properties. When set to INSERT, the buttons scroll through the groups for editing.</li> </ul>
	DAW SHIFT/ADD	Switches the Mixer to show all channel strips that correspond to tracks used in the Tracks window, along with their signal flow.
DAW SUSPEND GROUP		Enables or disables the Group Clutch.
	DAW SHIFT/ADD	Switches the Mixer to show all channel strips that correspond to tracks used in the Tracks window, along with their signal flow.
DAW CREATE GROUP		Creates a new group and enters Group Edit mode (see above).

Control	Modifier	Assignment
	DAW SHIFT/ADD	Switches the Mixer to the All view, displaying all channel strips that exist in your project.
		The channel strips on your DM1000 device will also reflect the All Channel Strip view.
DAW WIN MIX/EDIT		Switches between the Tracks window and the Mixer.
DAW CHANNEL –		Shifts channel strips by one channed strip to the left.
DAW CHANNEL +		Shifts channel strips by one channed strip to the right.
DAW CTRL/CLUTCH		While held down, all groups are disabled.
DAW ALT/FINE		While held down, Value Change mode is set to Fine: value changes work at maximum resolution. Also see description of other buttons.
DAW MONI STATUS		-
DAW UNDO		Performs an Undo of the last editin operation.
	DAW SHIFT/ADD	Performs a Redo of the last Undo operation.
	DAW OPTION/ALL	Opens the Undo History window.
DAW SAVE		Saves the project.
	DAW OPTION/ALL	Performs a Save As operation, allowing you to save the project wit a different name.
DAW WIN MEM-LOC		Opens or closes the Marker pane in the Lists area.
DAW EDIT TOOL		Selects the next tool. While held down, numerical buttons select a specific tool.
DAW WIN INSERT		Opens or closes the Sample Editor.
DAW REC/RDY ALL		Disables the Record Enable buttons of all channel strips.
DAW SCRUB		Enables or disables Scrub mode.
DAW SHUTTLE		Enables or disables Shuttle mode.
DAW REW		Shuttles backward.
DAW FF		Shuttles forward.

Control	Modifier	Assignment
	DAW SHIFT/ADD	Pause
DAW REC		Record
DAW PRE		Sets the left locator at current playhead position.
DAW IN		Sets the punch in locator at current playhead position.
DAW OUT		Sets the punch out locator at current playhead position.
DAW POST		Sets the right locator at current playhead position.
DAW RTZ		Moves the playhead to the left locator position.
DAW END		Moves the playhead to the right locator position.
DAW ONLINE		Activates or deactivates internal/ external synchronization.
DAW QUICK PUNCH		Enables or disables Autopunch mode.
DAW AUTO FADER		Enables or disables volume automation playback and recording.
DAW AUTO PAN		Enables or disables pan automation playback and recording.
DAW AUTO PLUGIN		Enables or disables plug-in parameter automation playback and recording.
DAW AUTO MUTE		Enables or disables mute automation playback and recording.
DAW AUTO SEND		Enables or disables send level automation playback and recording.
DAW AUTO WRITE		Sets all channel strips to Write automation mode.
	DAW OPTION/ALL	Sets selected channel strip, or channel strip group, to Touch automation mode. While held down, and with the STEREO channel strip AUTO button enabled, sets automation mode to Touch.
DAW AUTO TOUCH		Sets all channel strips to Touch automation mode.
	DAW OPTION/ALL	Sets selected channel strip, or channel strip group, to Latch automation mode. While held down, and with the STEREO channel strip AUTO button enabled, sets automation mode to Latch.

Control	Modifier	Assignment
DAW AUTO LATCH		Sets all channel strips to Latch automation mode.
	DAW OPTION/ALL	Sets selected channel strip, or channel strip group, to Read automation mode. While held down and with the STEREO channel strip AUTO button enabled, sets automation mode to Read.
DAW AUTO READ		Sets all channel strips to Read automation mode.
	DAW OPTION/ALL	Sets all channel strips to Write automation mode.
DAW AUTO OFF		Sets selected channel strip, or channel strip group, to Off automation mode. While held down and with the STEREO channel strip AUTO button enabled, sets automation mode to Off.
	DAW OPTION/ALL	Sets all channel strips to Off automation mode.
DAW AUTO STATUS		While held down in Channel Display mode, the display shows the automation mode of the 16 channel strips in the current bank selection

# Yamaha 02R96

# Set up your Yamaha 02R96 in Logic Pro

Follow these steps to use your 02R96 with Logic Pro.

- Make sure that your 02R96 device is connected to the computer via USB.
- Make sure that the latest USB MIDI driver for the device is installed. Visit the manufacturer's website to download the most recent driver version, if necessary.

#### Set up your 02R96 with Logic Pro

- 1. On the 02R96 device, do the following:
  - Press the DISPLAY ACCESS [DIO/SETUP] button repeatedly, until the Setup > MIDI/ Host page is visible.
  - Use the cursor buttons to move to the first DAW parameter box in the SPECIAL FUNCTIONS section, and rotate the parameter wheel to select USB and 1–2.
  - Press the DISPLAY ACCESS [DIO/SETUP] button repeatedly, until the Setup > Remote page is visible.
  - Rotate the parameter wheel to choose General DAW as the TARGET parameter.
  - Press the LAYER [REMOTE] button.
- 2. In Logic Pro:

When you open Logic Pro, the 02R96 device is installed automatically. You should see three 02R96 (USB 1–3) icons in the Setup window, aligned horizontally.

# 02R96 assignments

#### Overview of Yamaha 02R96 assignments in Logic Pro

These sections outline the assignment of Yamaha 02R96 interface elements to Logic Pro functions.

- 02R96 Display Access control
- 02R96 Aux Select controls
- 02R96 Encoder and Fader Mode controls
- 02R96 Effect/Plug-in controls
- 02R96 LCD display
- 02R96 assignable keys
- 02R96 channel strips
- 02R96 Machine Control parameters
- 02R96 data entry controls

#### Yamaha 02R96 Display Access control in Logic Pro

The table outlines the DISPLAY ACCESS control assignment:

Control	Assignment
METER	Clears overload LEDs.

#### Yamaha 02R96 Aux Select controls in Logic Pro

The table outlines the AUX SELECT controls and their assignments.

Control	Assignment	
AUX 1	Assigns Send 1 level to encoders, and Send 1 to 4 levels to virtual encoders. While held down, the channel strip display shows the current Send 1 destination assignment.	
AUX 2	Assigns Send 2 level to encoders, and Send 1 to 4 levels to virtual encoders. While held down, the channel strip display shows the current Send 2 destination assignment.	
AUX 3	Assigns Send 3 level to encoders, and Send 1 to 4 levels to virtual encoders. While held down, the channel strip display shows the current Send 3 destination assignment.	
AUX 4	Assigns Send 4 level to encoders, and Send 1 to 4 levels to virtual encoders. While held down, the channel strip display shows the current Send 4 destination assignment.	
AUX 5	Assigns Send 5 level to encoders, and Send 5 to 8 levels to virtual encoders. While held down, the channel strip display shows the current Send 5 destination assignment.	

# Yamaha 02R96 Encoder and Fader Mode controls in Logic Pro

The table outlines the ENCODER MODE and FADER MODE controls and their assignments.

Control	Assignment
PAN	Assigns pan to encoders; assigns selected channel strip's pan/surround parameters to virtual encoders.
AUX	Assigns Send 1 level to encoders, and Send 1 to 4 levels to virtual encoders. While held down, the channel strip display shows the current Send 1 destination assignment.
FADER	Enables or disables Flip mode.
AUX/MTRX	Enables or disables Flip mode.

## Yamaha 02R96 Effect/Plug-in controls in Logic Pro

The table outlines the EFFECT/PLUG-IN controls and their assignments.

Control	Assignment
Display	Opens or closes the Sample Editor.
PLUG-INS	Switches SEL buttons and encoder buttons between normal behavior and setting a parameter's default value.
CHANNEL INSERTS	Determines mode of channel strip SEL buttons:
	<ul> <li>Indicator off: SEL button used for channel strip selection</li> </ul>
	Indicator on: SEL button used for Insert selection
2	Switches the display between "track name/parameter name" and "parameter name/parameter value" modes.
3	Switches the bypass state of plug-in currently being edited.
4	Switches between Plug-in Assign and Plug-in Edit modes.
Parameter Up & Parameter Down	Plug-in Edit mode: shifts the parameter display to show the next/previous page of parameter controls (usually four) for the selected plug-in.
Selecting virtual encoders 1 to 4	Pan Assignment mode:
(Use cursor keys, and then press	<ul> <li>Parameter control 1 button centers pan or surround angle.</li> </ul>
ENTER button.)	Parameter control 2 button centers surround diversity.
	Parameter control 3 button resets surround LFE level.
	<ul> <li>Parameter control 4 button resets spread.</li> </ul>
	Send Assignment mode:
	<ul> <li>Enables or disables Sends 1 to 4 or 5 to 8.</li> </ul>
	Plug-in Assignment mode:
	<ul> <li>Confirms the plug-in selection for Insert slots 1 to 4 or 5 to 8, and enters Plug-in Edit mode for the selected Insert slot.</li> </ul>
	Plug-in Edit mode:
	<ul> <li>Sets value to default, or switches buttons with two states.</li> </ul>

Control	Assignment
Moving virtual encoders 1 to 4	Pan Assignment mode:
(Use cursor keys, and then rotate	<ul> <li>Parameter control 1 edits pan or surround angle.</li> </ul>
parameter wheel.)	Parameter control 2 edits surround diversity.
	<ul> <li>Parameter control 3 edits surround LFE.</li> </ul>
	Parameter control 4 edits spread.
	Send Assignment mode:
	<ul> <li>Controls the Send level of Sends 1 to 4 or 5 to 8.</li> </ul>
	Plug-in Assignment mode:
	Chooses Insert slot 1 to 4 or 5 to 8.
	Plug-in Edit mode:
	Sets value.

#### Yamaha 02R96 LCD display in Logic Pro

The LCD displays different data, depending on the page selected with the F2, F3, and F4 buttons:

- *INSERT ASSIGN/EDIT Display view*: Parameter details, plug-in selection, or plug-in parameters. Press F2 to select this view.
- Channel view: Encoder values and channel strip display. Press F3 to select this view.
- Level meters view: Press F4 to select this view.

The following assignments are available in all three views:

Display	Assignment	
TIME CODE	Active if counter is displaying SMPTE timecode.	
BEATS	Active if counter is displaying bars/beats/divisions/ticks.	
Counter	Displays SMPTE timecode or bars/beats/divisions/ticks.	
SELECT ASSIGN	Displays the Encoder assignment as follows: Pan, Snd1 to Snd8, S1As to S8As, In, Out.	

## Yamaha 02R96 assignable keys in Logic Pro

The table outlines the USER-DEFINED KEY controls and their assignments.

Control	Assignment
Display	While held down, the display shows the automation mode of the channel strips in the current bank selection.
1	Switches between the Tracks window and the Mixer.
2	Enables or disables the Group Clutch.
3	Sets selected channel strip, or channel strip group, to Write automation mode.
4	Sets selected channel strip, or channel strip group, to Touch automation mode.
5	Sets selected channel strip, or channel strip group, to Latch automation mode.
6	Sets selected channel strip, or channel strip group, to Read automation mode.
8	Sets selected channel strip, or channel strip group, to Off automation mode.
9	Shifts channel strips by one bank to the left.
10	Shifts channel strips by one bank to the right.
11	Enables or disables volume automation playback and recording.
12	Enables or disables mute automation playback and recording.
13	Enables or disables pan automation playback and recording.
14	Enables or disables send level automation playback and recording.
6	Enables or disables plug-in parameter automation playback and recordin

## Yamaha 02R96 channel strips in Logic Pro

The table outlines the channel strip controls and their assignments.

Control	Assignment	
Encoder	Adjusts parameter selected in the AUX SELECT section.	
Encoder Select button	Pan selected: sets pan to center position.	
	If EFFECTS/PLUG-INS [PLUG-INS] on Sends 1 to 8 is selected: edits Send Pre/Post, switches Send Mute state, or sets Send Level to default value.	
	Send Assign, Input, or Output: confirms selection.	
AUTO	Cycles through automation modes. When an automation mode button is held down, sets this automation mode.	
SEL	If EFFECTS/PLUG-INS [CHANNEL INSERTS] is off: selects channel.	
	If EFFECTS/PLUG-INS [CHANNEL INSERTS] is on: chooses channel for plug-in selection/insertion.	

Control	Assignment	
SOLO	Enables or disables Solo button.	
ON	Enables or disables Mute button.	
Fader	Adjusts volume, or duplicates Encoder in Flip mode.	

# Yamaha 02R96 Machine Control parameters in Logic Pro

The table outlines the controls in the MACHINE CONTROL section and their assignments.

Control	Assignment	
display	Opens or closes the Marker pane in the Lists area.	
1 to 8	Recalls markers 1 to 8.	
REW	Shuttles backward.	
FF	Shuttles forward.	
STOP	Stop	
PLAY	Play	
REC	Record	

#### Yamaha 02R96 data entry controls in Logic Pro

The table outlines the data entry controls and their assignments.

Control	Assignment	
SCRUB	Enables or disables Scrub mode.	
SHUTTLE	Enables or disables Shuttle mode.	
Parameter Wheel	Default: adjusts the value of the currently selected parameter. Scrub: Scrub mode. Shuttle: Shuttle mode.	
ENTER	Enters selected folder.	
DEC	Exits folder.	
INC	Switches between Cursor and Zoom modes.	
Cursor Up	Cursor mode: equivalent to computer keyboard Up Arrow key. Zoom mode: zooms out vertically.	
Cursor Down	Cursor mode: equivalent to computer keyboard Down Arrow key. Zoom mode: zooms out vertically.	
Cursor Left	Cursor mode: equivalent to computer keyboard Left Arrow key. Zoom mode: zooms out horizontally.	
Cursor Right	Cursor mode: equivalent to computer keyboard Right Arrow key. Zoom mode: zooms in horizontally.	

# Yamaha DM1000

# Set up your Yamaha DM1000 in Logic Pro

Follow these steps to use your DM1000 with Logic Pro.

- Make sure that your DM1000 device is connected to the computer via USB.
- Make sure that the latest USB MIDI driver for the device is installed. Visit the manufacturer's website to download the most recent driver version, if necessary.

#### Set up your DM1000 with Logic Pro

- 1. On the DM1000 device, do the following:
  - Press the DISPLAY ACCESS [SETUP] button repeatedly, until the Setup > MIDI/Host page is visible.
  - Use the cursor buttons to move to the DAW parameter box in the SPECIAL FUNCTIONS section, and rotate the parameter wheel to select USB and 1–3.
  - Press the DISPLAY ACCESS [REMOTE] button, and then press the [F1] button. The Remote 1 page is displayed.
  - Rotate the parameter wheel to choose General DAW as the TARGET parameter.
  - Press the LAYER [REMOTE 1] button.
- 2. In Logic Pro:

When you open Logic Pro, the DM1000 device is installed automatically. You should see two DM1000 icons in the Setup window, aligned horizontally.

# DM1000 assignments

#### Yamaha DM1000 assignments overview in Logic Pro

These sections outline the assignment of Yamaha DM1000 interface elements to Logic Pro functions.

- DM1000 Display Access controls
- DM1000 Aux Select controls
- DM1000 Encoder and Fader Mode controls
- DM1000 LCD controls
- DM1000 LCD display modes
- DM1000 Data entry controls
- DM1000 Channel strips
- DM1000 Stereo channel strip control
- DM1000 Assignable keys

#### Yamaha DM1000 Display Access controls in Logic Pro

The table outlines the DISPLAY ACCESS controls and their assignments.

Control	Modifier	Assignment
Αυτομιχ		When AUTOMIX is held down in Channel Display mode, the display shows the automation mode of the 16 channel strips in the current bank selection.
PAIR/GROUP		Enters Group Edit mode:
		<ul> <li>When a channel strip group is selected, channel strip membership is indicated by a lit SEL button. Use this button to enable/disable the channel strip's group membership.</li> </ul>
		<ul> <li>Virtual encoders 1 to 4 display properties of the currently selected group.</li> </ul>
		<ul> <li>Virtual encoder buttons 1 to 4 enable/disable properties of the currently selected group.</li> </ul>
		<ul> <li>When INSERT/PARAM is set to PARAM, the left and right Tab Scroll buttons scroll through the group properties. When set to INSERT, the buttons scroll through the groups for editing.</li> </ul>

Control	Modifier	Assignment
	*DAW SHIFT/ADD	Switches the Mixer to show all channel strips that correspond to tracks used in the Tracks window, along with their signal flow.
METER		Clears overload LEDs.
	*DAW SHIFT/ADD	Switches the Mixer to the All view, displaying all channel strips that exist in your project.
	*DAW ALT/FINE	Opens or closes a second Tracks window.
EFFECT		Opens or closes the Sample Editor

### Yamaha DM1000 Aux Select controls in Logic Pro

The table outlines the AUX SELECT controls and their assignments.

Control	Modifier	Assignment
AUX 1		In Insert Display mode:
		<ul> <li>Assigns Send 1 level of channel strips to encoders.</li> </ul>
		<ul> <li>Assigns Send 1 level of the selected channel strip to virtual encoders.</li> </ul>
		<ul> <li>Assigns Sends 1 to 4 of the selected channel strip to virtual encoders. Use the ENTER button to switch the bypass state of Sends 1 to 4.</li> </ul>
		In Channel Display mode:
		<ul> <li>Assigns Send 1 level of channel strips to encoders and virtual encoders.</li> </ul>
		<ul> <li>Shows current Send 1 destination assignment, when button is held down.</li> </ul>
	*DAW SHIFT/ADD	Same as AUX 5, but for Send 6
AUX 2		Same as AUX 1, but for Send 2
	*DAW SHIFT/ADD	Same as AUX 5, but for Send 7
AUX 3		Same als AUX 1, but for Send 3
	*DAW SHIFT/ADD	Same as AUX 5, but for Send 8
AUX 4		Same as AUX 1, but for Send 4

Control	Modifier	Assignment
AUX 5		In Insert Display mode:
		<ul> <li>Assigns Send 5 level of channel strips to encoders.</li> </ul>
		<ul> <li>Assigns Send 5 level of the selected channel strip to virtual encoders.</li> </ul>
		<ul> <li>Assigns Sends 5 to 8 of the selected channel strip to virtual encoders. Use the ENTER buttor to switch the bypass state of Sends 5 to 8.</li> </ul>
		In Channel Display mode:
		<ul> <li>Assigns Send 5 level of channel strips to encoders and virtual encoders.</li> </ul>
		<ul> <li>Shows current Send 5 destination assignment, when button is held down.</li> </ul>
AUX 6		Switches SEL buttons and encoder buttons between normal behavior and setting a parameter's default value. When the AUX 6 button is held down:
		<ul> <li>Pressing a channel strip's SEL button resets the channel strip's volume level.</li> </ul>
		<ul> <li>Pressing a channel strip's encoder button resets the channel strip's pan/surround value. (PAN also needs to be selected in the ENCODER MODE section.)</li> </ul>
AUX 8		Determines mode of channel strip SEL buttons when the STEREO section AUTO button is off:
		<ul> <li>AUX 8 indicator off: SEL button used for channel strip selection</li> </ul>
		<ul> <li>AUX 8 indicator on: SEL button used for Insert selection</li> </ul>

# Yamaha DM1000 Encoder and Fader Mode controls in Logic Pro

The table outlines the ENCODER MODE and FADER MODE controls and their assignments.

Control	Assignment		
PAN	<ul> <li>Assigns pan/surround control to encoders.</li> </ul>		
	<ul> <li>In Insert Display mode, assigns pan/surround parameters of the selected channel strip to virtual encoders.</li> </ul>		
	<ul> <li>In Channel Display mode, assigns pan/surround parameters of the 16 channel strips in current bank selection to virtual encoders.</li> </ul>		
AUX	Assigns Send level control to encoders.		
	<ul> <li>In Insert Display mode, assigns Send level parameter of the selected channel strip to virtual encoders.</li> </ul>		
	<ul> <li>In Channel Display mode, assigns Send level parameters of the 16 channel strips in current bank selection to virtual encoders.</li> </ul>		
FADER/AUX	Enables or disables Flip mode.		

#### Yamaha DM1000 LCD controls in Logic Pro

The table outlines the LCD controls and their assignments.

*Note:* A modifier button, such as SHIFT/ADD, shown below a control description indicates that the control has an alternate function while the modifier is held down. Modifier buttons that need to be assigned manually by the user are shown with an asterisk (\*) that precedes the button name.

Control	Modifier	Assignment
Left & Right Tab Scroll buttons		Plug-in Edit mode: shifts the parameter display to show the next/ previous page of parameter controls (usually four) for the selected plug-in.
	*DAW ALT/FINE	Plug-in Edit mode: shifts the parameter display up/down by one parameter for the selected plug-in.

#### DM1000 LCD display modes

#### Overview of DM1000 LCD display modes in Logic Pro

The LCD display contents reflect the page selected with the F2, F3, and F4 buttons.

All display modes show a number of LCD common elements.

- Press the F2 button to select Insert display mode.
- Press the F3 button to select Channel display mode.
- Press the F4 button to select Meter display mode.

#### Yamaha DM1000 LCD common elements in Logic Pro

The following elements are common across all pages in the LCD:

Display	Assignment	
TIME CODE	Active if counter is displaying SMPTE timecode	
BEATS	Active if counter is displaying bars/beats/divisions/ticks	
Counter	Displays either SMPTE timecode or bars/beats/divisions/ticks.	
SELECT ASSIGN	Displays the encoder assignment as follows: Pan, Snd1 to Snd8, S1As t S8As, In, Out.	

#### Yamaha DM1000 Insert display mode in Logic Pro

Press the F2 button to select Insert display mode. In this mode, the LCD displays parameters, allowing you to edit effects. This mode also allows you to switch between different Insert slots, enabling each effect to be edited.

Control	Assignment	
COMPARE	Switches the display between "track name/parameter name" and "parameter name/parameter value" modes.	
BYPASS	Switches the bypass state of plug-in currently being edited.	
INSERT/PARAM	Switches between Plug-in Assign and Plug-in Edit modes.	
Selecting virtual encoders 1 to 4	Pan Assignment mode:	
(Use cursor keys, and then press ENTER button.)	<ul> <li>Parameter control 1 button centers pan or surround angle.</li> </ul>	
ENTER DUITOIL)	<ul> <li>Parameter control 2 button centers surround diversity.</li> </ul>	
	Parameter control 3 button resets surround LFE level.	
	<ul> <li>Parameter control 4 button resets spread.</li> </ul>	
	Send Assignment mode:	
	<ul> <li>Enables or disables Sends 1 to 4 or 5 to 8.</li> </ul>	
	Plug-in Assignment mode:	
	<ul> <li>Confirms the plug-in selection for Insert slots 1 to 4 or 5 to 8, and enters Plug-in Edit mode for the selected Insert slot.</li> </ul>	
	Plug-In Edit mode:	
	Sets value to default, or switches buttons with two states.	
Noving virtual encoders 1 to 4	Pan Assignment mode:	
(Use cursor keys, and then rotate parameter wheel.)	Parameter control 1 edits pan or surround angle.	
parameter wheel.)	Parameter control 2 edits surround diversity.	
	Parameter control 3 edits surround LFE level.	
	Parameter control 4 edits spread.	
	Send Assignment mode:	
	Controls the Send level of Sends 1 to 4 or 5 to 8.	
	Plug-in Assignment mode:	
	Chooses Insert slot 1 to 4 or 5 to 8.	
	Plug-in Edit mode:	
	Sets value.	

#### Yamaha DM1000 Channel display mode in Logic Pro

Press the F3 button to select Channel display mode. In this mode, the parameter controls, such as pan and send level, for channel strips 1 to 16 are displayed.

Control	Assignment
Selecting virtual encoders 1 to 4 (Use cursor keys, and then press	When Send 1 to 8 is selected: edits Send pre/post fader position, enables or disables Send mute, or sets Send level to default value.
ENTER button.)	Send, Input, or Output Assignment mode: confirms selection.
Moving virtual encoders 1 to 4 (Use cursor keys, and then rotate parameter wheel.)	Adjusts parameter selected in the ENCODER MODE and AUX SELECT sections.

#### Yamaha DM1000 Meter display mode in Logic Pro

Press the F4 button to select Meter display mode. In this mode, the level meters for channel strips 1 to 16 are displayed.

Control	Assignment
Level Meters	Display momentary and peak level.

#### Yamaha DM1000 data entry controls in Logic Pro

The table outlines the data entry controls and their assignments.

Control	Modifier	Assignment
Parameter wheel		Default: adjusts the value of the currently selected parameter.
	* DAW SHUTTLE	Switches the parameter wheel to Shuttle mode.
	* DAW SCRUB	Switches the parameter wheel to Scrub mode.
[DEC] button		Default: exits folder.
		In Go to Marker dialog: cancels dialog.
	* DAW ALT/FINE	Opens or closes the Project Audio Browser.
[INC] button		Enters the selected folder.

## Yamaha DM1000 DM1000 channel strips in Logic Pro

The table outlines the channel strip controls and their assignments.

Control	Modifier	Assignment
Encoder		Adjusts parameter selected in the ENCODER MODE and AUX SELECT sections.
Encoder Select button		Pan selected: sets pan to center position.
		Send 1 to 8 selected: edits Send pre/post position, Send mute on or off, or sets Send level to default value.
		Send Assign, Input, or Output selected: confirms selection.
SEL		If AUTO off:
		<ul> <li>AUX 8 off: selects channel strip.</li> </ul>
		<ul> <li>AUX 8 on: selects channel strip for insert assignment.</li> </ul>
		If AUTO on:
		<ul> <li>Cycles through automation modes. With an automation mode button held down, sets this automation mode.</li> </ul>
	*DAW SHIFT/ADD	Resets the volume level.
SOLO		Enables or disables the Solo button
	*DAW OPTION/ALL	Disables Solo button of all channel strips.
ON		Enables or disables the Mute button.
	*DAW OPTION/ALL	Unmutes all channel strips.
Fader		Adjusts volume, or duplicates encoder assignment in Flip mode.

#### Yamaha DM1000 stereo channel strip control in Logic Pro

The table outlines the stereo channel strip control and its assignment:

Control	Assignment
AUTO	Switches channel strip SEL buttons between channel and insert selection duties.

#### Yamaha DM1000 assignable keys in Logic Pro

The assignable keys can be assigned to the functions outlined in the table.

Control	Modifier	Assignment
DAW WIN STATUS		Opens or closes the Project Audio Browser.
DAW REC/RDY 1 to 16		Enables or disables the Record Enable button of the specified channel strip.
DAW WIN TRANSPORT		Opens or closes the Control bar window.
DAW BANK –		Shifts channel strips by one bank to the left.
DAW BANK +		Shifts channel strips by one bank to the right.
DAW SHIFT/ADD		Enables a second function/use for some buttons.
DAW OPTION/ALL		While held down, Value Change mode is set to Full. Turning the encoder to the right sets the maximum value. Turning it to the left sets the minimum value. The encoder also stops at its default value. Also see description of other buttons.

Control	Modifier	Assignment
DAW GROUP STATUS		Enters Group Edit mode:
		<ul> <li>When a channel strip group is selected, channel strip membership is indicated by a lit SEL button. Use this button to enable/disable the channel strip's group membership.</li> </ul>
		<ul> <li>Virtual encoders 1 to 4 display properties of the currently selected group.</li> </ul>
		<ul> <li>Virtual encoder buttons 1 to 4 enable/disable properties of the currently selected group.</li> </ul>
		<ul> <li>When INSERT/PARAM is set to PARAM, the left and right Tab Scroll buttons scroll through the group properties. When set to INSERT, the buttons scroll through the groups for editing.</li> </ul>
	*DAW SHIFT/ADD	Switches the Mixer to show all channel strips that correspond to tracks used in the Tracks window, along with their signal flow.
DAW SUSPEND GRP		Enables or disables the Group Clutch.
	*DAW SHIFT/ADD	Switches the Mixer to show all channel strips that correspond to tracks used in the Tracks window, along with their signal flow.
DAW CREATE GROUP		Creates a new group and enters Group Edit mode (see above).
	*DAW SHIFT/ADD	Switches the Mixer to the All view, displaying all channel strips that exist in your project.
		The channel strips on your DM1000 device will also reflect the All Channel Strip view.
DAW WIN MIX/EDIT		Switches between the Tracks window and the Mixer.
DAW CHANNEL -		Shifts channel strips by one channe strip to the left.
DAW CHANNEL+		Shifts channel strips by one channe strip to the right.
DAW CTRL/CLUTCH		While held down, all groups are disabled.
DAW ALT/FINE		While held down, Value Change mode is set to Fine: value changes work at maximum resolution. Also see description of other buttons.
DAW MONI STATUS		

Control	Modifier	Assignment
DAW UNDO		Performs an Undo of the last editing operation.
	*DAW SHIFT/ADD	Performs a Redo of the last Undo operation.
	*DAW OPTION/ALL	Opens the Undo History window.
DAW SAVE		Saves the project.
	*DAW OPTION/ALL	Performs a Save As operation, allowing you to save the project with a different name.
DAW WIN MEM-LOC		Opens or closes the Marker pane in the Lists area.
DAW EDIT TOOL		Selects the next tool. While held down, numerical buttons select a specific tool.
DAW WIN INSERT		Opens or closes the Sample Editor.
DAW REC/RDY ALL		Disables the Record Enable buttons of all channel strips.
DAW SCRUB		Enables or disables Scrub mode.
DAW SHUTTLE		Enables or disables Shuttle mode.
DAW REW		Shuttles backward.
DAW FF		Shuttles forward.
DAW STOP		Stop
DAW PLAY		Play
	*DAW SHIFT/ADD	Pause
DAW REC		Record
DAW PRE		Sets the left locator at current playhead position.
DAW IN		Sets the punch in locator at current playhead position.
DAW OUT		Sets the punch out locator at current playhead position.
DAW POST		Sets the right locator at current playhead position.
DAW RTZ		Moves the playhead to the left locator position.
DAW END		Moves the playhead to the right locator position.
DAW ONLINE		Activates or deactivates internal/ external synchronization.

Control	Modifier	Assignment
DAW QUICK PUNCH		Enables or disables Autopunch mode.
DAW AUTO FADER		Enables or disables volume automation playback and recording
DAW AUTO PAN		Enables or disables pan automation playback and recording.
DAW AUTO PLUGIN		Enables or disables plug-in parameter automation playback and recording.
DAW AUTO MUTE		Enables or disables mute automation playback and recording
DAW AUTO SEND		Enables or disables send level automation playback and recording
DAW AUTO WRITE		Sets selected channel strip, or channel strip group, to Write automation mode. While held down and with the STEREO channel strip AUTO button enabled, sets automation mode to Write.
	*DAW OPTION/ALL	Sets all channel strips to Write automation mode.
DAW AUTO TOUCH		Sets selected channel strip, or channel strip group, to Touch automation mode. While held down and with the STEREO channel strip AUTO button enabled, sets automation mode to Touch.
	*DAW OPTION/ALL	Sets all channel strips to Touch automation mode.
DAW AUTO LATCH		Sets selected channel strip, or channel strip group, to Latch automation mode. While held down and with the STEREO channel strip AUTO button enabled, sets automation mode to Latch.
	*DAW OPTION/ALL	Sets all channel strips to Latch automation mode.
DAW AUTO READ		Sets selected channel strip, or channel strip group, to Read automation mode. While held down and with the STEREO channel strip AUTO button enabled, sets automation mode to Read.
	*DAW OPTION/ALL	Sets all channel strips to Read
		automation mode.

Control	Modifier	Assignment
DAW AUTO OFF		Sets selected channel strip, or channel strip group, to Off automation mode. While held down and with the STEREO channel strip AUTO button enabled, sets automation mode to Off.
	*DAW OPTION/ALL	Sets all channel strips to Off automation mode.
DAW AUTO STATUS		While held down in Channel Display mode, the display shows the automation mode of the 16 channel strips in the current bank selection

# Yamaha DM2000

# Set up your Yamaha DM2000 in Logic Pro

Follow these steps to use your DM2000 with Logic Pro.

- Make sure that your DM2000 device is connected to the computer via USB.
- Make sure that the latest USB MIDI driver for the device is installed. Visit the manufacturer's website to download the most recent driver version, if necessary.

#### Set up your DM2000 with Logic Pro

- 1. On the DM2000 device, do the following:
  - Press the DISPLAY ACCESS [SETUP] button repeatedly, until the Setup > MIDI/Host page is visible.
  - Use the cursor buttons to move to the first DAW parameter box in the SPECIAL FUNCTIONS section, and rotate the parameter wheel to select USB and 1–3.
  - Press the DISPLAY ACCESS [REMOTE] button, and then press the [F1] button. The Remote 1 page is displayed.
  - Rotate the parameter wheel to choose General DAW as the TARGET parameter.
  - Press the LAYER [REMOTE 1] button.
- 2. In Logic Pro:

When you open Logic Pro, the DM2000 device is installed automatically. You should see three DM2000 icons in the Setup window, aligned horizontally.

# DM2000 assignments

#### Overview of Yamaha DM2000 assignments in Logic Pro

These sections outline the assignment of Yamaha DM2000 interface elements to Logic functions.

- DM2000 Matrix Select controls
- DM2000 Aux Select controls
- DM2000 Encoder and Fader Mode controls
- DM2000 Display Access controls
- DM2000 Effect/Plug-in controls
- DM2000 LCD display
- DM2000 Track Arming controls
- DM2000 Automix controls
- DM2000 Locator controls
- DM2000 Transport and cursor controls
- DM2000 Channel strips
- DM2000 Assignable keys

#### Yamaha DM2000 Matrix Select controls in Logic Pro

The table outlines the MATRIX SELECT controls and their assignments.

Control	Assignment
MATRIX 1	Switches SEL buttons and encoder buttons between normal behavior and setting a parameter's default value. When the AUX 6 button is held down
	<ul> <li>Pressing a channel strip's SEL button resets the channel strip's volume level.</li> </ul>
	<ul> <li>Pressing a channel strip's encoder button resets the channel strip's pan/surround value. (PAN also needs to be selected in the ENCODER MODE section.)</li> </ul>
MATRIX 2	Switches the encoder buttons between Send Position and Send Mute mode.
MATRIX 4	If ENCODER MODE [ASSIGN 4] is on, switches the channel strip SEL buttons between Insert Select (indicator off) and Insert Bypass (indicator on) modes.

## Yamaha DM2000 Aux Select controls in Logic Pro

The table outlines the AUX SELECT controls and their assignments.

Control	Modifier	Assignment
AUX 1		In Insert Display mode:
		<ul> <li>Assigns Send 1 level of channel strips to encoders.</li> </ul>
		<ul> <li>Assigns Send 1 level of the selected channel strip to virtual encoders.</li> </ul>
		<ul> <li>Assigns Sends 1 to 4 of the selected channel strip to virtual encoders. Use the ENTER buttor to switch the bypass state of Sends 1 to 4.</li> </ul>
		In Channel Display mode:
		<ul> <li>Assigns Send 1 level of channel strips to encoders and virtual encoders.</li> </ul>
		Shows current Send 1 destination assignment, when button is held down.
	*USER 4	Same as AUX 5, but for Send 6
AUX 2		Same as AUX 1, but for Send 2
	*USER 4	Same as AUX 5, but for Send 7
AUX 3		Same as AUX 1, but for Send 3
	*USER 4	Same as AUX 5, but for Send 8
AUX 4		Same as AUX 1, but for Send 4
AUX 5		In Insert Display mode:
		<ul> <li>Assigns Send 5 level of channel strips to encoders.</li> </ul>
		<ul> <li>Assigns Send 5 level of the selected channel strip to virtual encoders.</li> </ul>
		<ul> <li>Assigns Sends 5 to 8 of the selected channel strip to virtual encoders. Use the ENTER buttor to switch the bypass state of Sends 5 to 8.</li> </ul>
		In Channel Display mode:
		<ul> <li>Assigns Send 5 level of channel strips to encoders and virtual encoders.</li> </ul>
		Shows current Send 5 destination assignment, when button is held down.

# Yamaha DM2000 Encoder and Fader Mode controls in Logic Pro

The table outlines the ENCODER MODE and FADER MODE controls and their assignments.

Control	Assignment	
PAN	Assigns pan/surround control to encoders.	
	<ul> <li>In Insert Display mode, assigns pan/surround parameters of the selected channel strip to virtual encoders.</li> </ul>	
	<ul> <li>In Channel Display mode, assigns pan/surround parameters of the 16 channel strips in current bank selection to virtual encoders.</li> </ul>	
AUX/MTRX	Assigns Send level control to encoders.	
	<ul> <li>In Insert Display mode, assigns Send level parameter of the selected channel strip to virtual encoders.</li> </ul>	
	<ul> <li>In Channel Display mode, assigns Send level parameters of the 16 channel strips in current bank selection to virtual encoders.</li> </ul>	
ASSIGN 1	Assigns channel strip input assignment to encoders. While held down, the channel strip display shows the current channel strip input assignment.	
ASSIGN 2	Assigns channel strip output assignment to encoders. While held down, the channel strip display shows the current channel strip output assignment.	
ASSIGN 3	When encoders display a Send level, switches them to Send Destination assignment mode. Press the encoder button (or ASSIGN 3 again) to confirm the assignment.	
ASSIGN 4	Determines mode of channel strip SEL buttons:	
	<ul> <li>Indicator off: SEL button used for channel strip selection</li> </ul>	
	<ul> <li>Indicator on: SEL button used for insert selection or insert bypass, depending on MATRIX SELECT [MATRIX 4]</li> </ul>	
FADER	Enables or disables Flip mode.	
AUX/MTRX	Enables or disables Flip mode.	

#### Yamaha DM2000 Display Access controls in Logic Pro

The table outlines the DISPLAY ACCESS controls and their assignments.

Control	Modifier	Assignment
METER		Clears overload LEDs.
	*USER 4	Switches the Mixer to the All view, displaying all channel strips that exist in your project.
	*USER 13	Opens or closes a second Tracks window.

### Yamaha DM2000 Effect/Plug-in controls in Logic Pro

The table outlines the EFFECT/PLUG-IN controls and their assignments.

Control	Modifier	Assignment
Display		Opens or closes the Sample Editor.
6		Switches display between "track name/parameter name" and "parameter name/parameter value" modes.
7		Switches the bypass state of Insert slot that is currently being edited.
8		Switches between Plug-in Assignment and Plug-in Edit modes
Parameter Up & Parameter Down		Plug-in Edit mode: shifts the parameter display to show the next/ previous page of parameter controls (usually four) for the selected plug-in.
	*USER 13	Plug-in Edit mode: shifts the parameter display up/down by one parameter for the selected plug-in.
Selecting virtual encoders 1 to 4		Pan Assignment mode:
(Use cursor keys, and then press ENTER button.)		<ul> <li>Parameter control 1 button centers pan or surround angle.</li> </ul>
		<ul> <li>Parameter control 2 button centers surround diversity.</li> </ul>
		<ul> <li>Parameter control 3 button resets surround LFE level.</li> </ul>
		<ul> <li>Parameter control 4 button resets spread.</li> </ul>
		Send Assignment mode:
		<ul> <li>Enables or disables Sends 1 to 4 or 5 to 8.</li> </ul>
		<ul> <li>Plug-in Assignment mode:</li> <li>Confirms the plug-in selection for Insert slots 1 to 4 or 5 to 8, and enters Plug-in Edit mode for the selected Insert slot.</li> </ul>
		Plug-In Edit mode:
		<ul> <li>Sets value to default, or switches buttons with two states.</li> </ul>

Control	Modifier	Assignment
Moving virtual encoders 1 to 4		Pan Assignment mode:
(Use cursor keys, and then rotate parameter wheel.)		<ul> <li>Parameter control 1 edits pan or surround angle.</li> </ul>
		<ul> <li>Parameter control 2 edits surround diversity.</li> </ul>
		<ul> <li>Parameter control 3 edits surround LFE level.</li> </ul>
		<ul> <li>Parameter control 4 edits spread</li> </ul>
		Send Assignment mode:
		<ul> <li>Controls the Send level of Sends 1 to 4 or 5 to 8.</li> </ul>
		Plug-in Assignment mode:
		Chooses Insert slot 1 to 4 or 5 to 8.
		Plug-in Edit mode:
		<ul> <li>Sets value.</li> </ul>

## Yamaha DM2000 LCD display in Logic Pro

The table outlines the LCD assignments.

Display	Assignment	
TIME CODE	Active if counter is displaying SMPTE timecode.	
BEATS	Active if counter is displaying bars/beats/divisions/ticks.	
Counter	Displays SMPTE timecode or bars/beats/divisions/ticks.	
SELECT ASSIGN	Displays the encoder assignment as follows: Pan, Snd1 to Snd8, S1As S8As, In, Out.	

#### Yamaha DM2000 Track Arming controls in Logic Pro

The table outlines the TRACK ARMING controls and their assignments.

Control	Modifier	Assignment
1 to 24		Enables or disables the Record
1 to 24		
		Enable button of the specified
		channel strip.
	*USER 5	Disables the Record Enable buttons
		of all channel strips.
MASTER		Disables the Record Enable buttons
		of all channel strips.

## Yamaha DM2000 Automix controls in Logic Pro

The table outlines the AUTOMIX controls and their assignments.

Control	Modifier	Assignment
DISPLAY		When DISPLAY is held down in Channel Display mode, the display shows the automation mode of the channel strips in the current bank selection.
REC		Sets selected channel strip, or channel strip group, to Write automation mode. While held down and with the STEREO channel strip AUTO button enabled, sets automation mode to Write.
	*USER 5	Sets all channel strips to Write automation mode.
ABORT/UNDO		Sets selected channel strip, or channel strip group, to Touch automation mode. While held down and with the STEREO channel strip AUTO button enabled, sets automation mode to Touch.
	*USER 5	Sets all channel strips to Touch automation mode.
AUTOREC		Sets selected channel strip, or channel strip group, to Latch automation mode. While held down and with the STEREO channel strip AUTO button enabled, sets automation mode to Latch.
	*USER 5	Sets all channel strips to Latch automation mode.
RETURN		Sets selected channel strip, or channel strip group, to Read automation mode. While held down and with the STEREO channel strip AUTO button enabled, sets automation mode to Read.
	*USER 5	Sets all channel strips to Read automation mode.
TOUCH SENSE		Sets selected channel strip, or channel strip group, to Off automation mode. While held down and with the STEREO channel strip AUTO button enabled, sets automation mode to Off.

Modifier	Assignment
*USER 5	Sets all channel strips to Off automation mode.
	Enables or disables volume automation playback and recording
	Enables or disables pan automation playback and recording.
	Enables or disables plug-in parameter automation playback and recording.
	Enables or disables mute automation playback and recording.
	Enables or disables send level automation playback and recording

#### Yamaha DM2000 Locator controls in Logic Pro

The table outlines the LOCATOR controls and their assignments.

Control Modifi	er Assignment
DISPLAY	Opens or closes the Marker pane in the Lists area.
1 to 8	Recalls markers 1 to 8.
*USER	4 Switches the Mixer to the All view, displaying all channel strips that exist in your project.
DISPLA	Y HISTORY [FORWARD] Selects tool:
	1: Arrow
	2: Pencil
	3: Eraser
	4: Text tool
	5: Scissors
	6: Glue tool
	7: Solo tool
	8: Mute tool
PRE	Sets the left locator at current playhead position.
IN	Sets the punch in locator at current playhead position.
OUT	Sets the punch out locator at current playhead position.

Control	Modifier	Assignment
POST		Sets the right locator at current playhead position.
RETURN TO ZERO		Moves the playhead to the left locator position.
END		Moves the playhead to the right locator position.
ONLINE		Activates or deactivates internal/ external synchronization.
QUICK PUNCH		Enables or disables Autopunch mode.

#### Yamaha DM2000 transport and cursor controls in Logic Pro

The table outlines the transport and cursor controls and their assignments.

Shuttles backward. Shuttles forward. Stop Play Pause Record
Stop Play Pause
Play Pause
Pause
Record
Selects the next tool. While held down, numerical buttons select a specific tool.
Enables or disables Scrub mode.
Enables or disables Shuttle mode.
Default: adjusts the value of the currently selected parameter.
Switches the parameter wheel to Shuttle mode.
Switches the parameter wheel to Scrub mode.
Default: exits folder. In Go to Marker

Control	Modifier	Assignment
	*USER 13	Opens or closes the Project Audio Browser.
INC button		Switches between Cursor and Zoom mode.
Cursor Up		Cursor mode: equivalent to computer keyboard Up Arrow key.
		Zoom mode: zooms out vertically.
	*USER 4	Zoom mode: individual track zoom in.
	*USER 13	Page Up.
	*USER 5 + *USER 13	Scroll to top.
Cursor Down		Cursor mode: equivalent to computer keyboard Down Arrow key
		Zoom mode: zooms out vertically.
	*USER 4	Zoom mode: individual track zoom out.
	*USER 13	Page Down.
	*USER 5 + *USER 13	Scroll to bottom.
Cursor Left		Cursor mode: equivalent to computer keyboard Left Arrow key.
		Zoom mode: zooms out horizontally
	*USER 4	Zoom mode: individual track zoom reset for tracks of the same type.
	*USER 13	Page Left.
	*USER 5 + *USER 13	Scroll to left border.
Cursor Right		Cursor mode: equivalent to computer keyboard Right Arrow key
		Zoom mode: zooms in horizontally.
	*USER 4	Zoom mode: individual track zoom reset of all tracks.
	*USER 13	Page Right.
	*USER 5 + *USER 13	Scroll to right border (of window with key focus).
ENTER		Enters the selected folder.

## Yamaha DM2000 channel strips in Logic Pro

The table outlines the channel strip controls and their assignments.

Control	Modifier	Assignment
Encoder		Adjusts parameter selected in the ENCODER MODE and AUX SELECT sections.
Encoder Select button		Pan selected: sets pan to center position.
		If MATRIX 1 on Send 1 to 8 is selected: edits Send pre/post position, Send mute on or off, or sets Send level to default value.
		Send Assign, Input, or Output selected: confirms selection.
AUTO		Cycles through automation modes.
		With an automation mode button held down, sets this automation mode.
SEL		If ENCODER MODE [ASSIGN 4] off: selects channel strip.
		If ENCODER MODE [ASSIGN 4] on:
		<ul> <li>BYPASS off: selects channel strip for plug-in selection.</li> </ul>
		<ul> <li>BYPASS on: switches bypass state of currently selected Insert slot.</li> </ul>
	*USER 4	Resets the volume level.
MATRIX SELECT 1		Resets the volume level.
SOLO		Enables or disables the Solo button.
	*USER 5	Disables Solo button of all channel strips.
ON		Enables or disables the Mute button.
	*USER 5	Unmutes all channel strips.
Channel strip display		Displays channel strip name, or send, input, or output assignment.
Fader		Adjusts volume, or duplicates encoder assignment in Flip mode.

## Yamaha DM2000 assignable keys in Logic Pro

The table outlines the USER-DEFINED KEY controls and their assignments.

Control	Modifier	Assignment
DISPLAY		Opens or closes the Project Audio Browser.
1		Opens or closes the Control bar window.
2		Shifts channel strips by one bank to the left.
3		Shifts channel strips by one bank to the right.
4		Shifts to second function/use of some buttons. (See descriptions of other buttons.)
5		While held down, Value Change mode is set to Full. Turning the encoder to the right sets the maximum value. Turning it to the left sets the minimum value. The encoder also stops at its default value. Also see description of other buttons.
6		Enters Group Edit mode:
		<ul> <li>When a channel strip group is selected, channel strip membership is indicated by a lit SEL button. Use this button to enable/disable channel strip's group membership.</li> </ul>
		<ul> <li>Virtual encoders 1 to 4 display properties of the currently selected group.</li> </ul>
		<ul> <li>Virtual encoder buttons 1 to 4 enable/disable properties of the currently selected group.</li> </ul>
		• When INSERT/PARAM is set to PARAM, the left and right Tab Scroll buttons scroll through the group properties. When set to INSERT, the buttons scroll through the groups for editing.
	*USER 4	Switches the Mixer to show all channel strips that correspond to tracks used in the Tracks window, along with their signal flow.
7		Enables or disables the Group

Control	Modifier	Assignment
	*USER 4	Switches the Mixer to show all channel strips that correspond to tracks used in the Tracks window, along with their signal flow.
8		Creates a new group and enters Group Edit mode (see above).
	*USER 4	Switches Mixer to All view, displaying all channel strips that exist in your project.
		The DM2000 channel strips will also reflect the All Channel Strip view.
9		Switches between the Tracks window and the Mixer.
10		Shifts channel strips by one channe strip to the left.
11		Shifts channel strips by one channe strip to the right.
12		While held down, all groups are disabled.
13		While held down, Value Change mode is set to Fine: value changes work at maximum resolution. Also see descriptions of other buttons.
14		_
15		Performs an Undo of the last editing operation.
	*USER 4	Performs a Redo of the last Undo operation.
	*USER 5	Opens the Undo History window.
16		Saves the project.
	*USER 5	Performs Save As operation, allowing you to save the project wit a different name.

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