

# Accessories

The 664 works with various accessories which may be purchased separately and used to further enhance your field mixing and recording experience.

This section is not intended to be an all-inclusive list of accessories available for use with the 664.



For the latest information available on all Sound Devices products and their accessories, visit our website at:

[www.sounddevices.com](http://www.sounddevices.com)







## Topics in this section include:

- ▶ Electronic Accessories
- ▶ Cables and Connectors
- ▶ Cases
- ▶ Software

## Electronic Accessories


ACCESSORY	PHOTO	DESCRIPTION
CL-12		<p>This optional linear fader controller comes in two models and provides 12 100 mm linear faders, LED metering, and numerous, illuminated dedicated buttons for quick-access to key functionality. With single USB connection to the mixer for both power and control, it enables fast transition between cart- and bag-based workflows.</p> <p>The CL-12 Alaia has the same features as the standard model, plus custom wood side panels and Penny &amp; Giles faders for an enhanced mixing experience.</p> <p>For more information, see <a href="#">CL-12 Linear Fader Controller</a>.</p>
CL-6		<p>This optional input controller attaches to the top or bottom of the 664 and adds six full-sized tactile fader controls, sunlight-viewable LED metering and big, back-lit Record and Stop controls.</p> <p>For more information, see <a href="#">CL-6 Input Controller</a>.</p>

## Cables and Connectors


ACCESSORY	PHOTO	DESCRIPTION
XL-2		A 25-inch TA3-F to XLR-3M cable, used to connect the TA3 auxiliary outputs to third-party devices with XLR-3F inputs. Each package contains two cables.
XL-2F		A 25-inch XLR-3F to TA3-F cable, used to connect mixers and other devices with XLR-3M outputs to the TA3 7-12 inputs on the 688. Also used to attach standard microphone as auxiliary slate mic. Each package contains two cables.
XL-4		Bag of four (4) TA3-F-type connectors.
XL-10		Hirose 10-pin to two-XLR (balanced L/R) and 3.5 mm plug (stereo return A and C) breakout cable; includes in-line 20-foot extension cable. The XL-10 is a high-quality multi-pin breakout and extension cable designed specifically for Sound Devices field production mixers. It provides easy access to the balanced outputs and to unbalanced stereo return A and C input for headphone monitoring.
XL-H		Bare Hirose 4-pin locking DC connector (HR10-7P-4P).
XL-NPH		An NP-type battery cup with 24-inch cable terminated in Hirose 4-pin locking DC connector (HR10-7P-4P).

ACCESSORY	PHOTO	DESCRIPTION
XL-TA25		TA5F to 3.5 mm TRS, 20-inch cable, used to connect a 664 TA5M Link I/O to the MixPre D or 442 Tape Out/Mix Out 3.5 mm jack for mixer linking.
XL-TA35		TA5F to TA3F, 12-inch cable, used to connect a 664 TA5M Link I/O to the 302 or 442 Tape Out/Mix Out TA3M connector for mixer linking.
XL-TA55		TA5F to TA5F, 12-inch cable, used to link the 664 to another 664 or 552 mixer.
XL-WPH3		The XL-WPH3 is an AC-to-DC (in-line) 100-240V power supply unit with 50/60 Hz input, a 12 VDC 3.75 A (45 W) output, and a Hirose 4-pin DC plug. It comes supplied with a 3-pin IEC cord.

## Cases

ACCESSORY	PHOTO	DESCRIPTION
CS-688		This production case, designed by PortaBrace for Sound Devices, may be used for either the 664 or 688 and accessories, such as the CL-6 or the SL-6 (pictured here with the 688 and SL-6). The case has several attached pockets, zippered sides, a removable windowed cover, and is made from durable waterproof nylon, with anti-skid material on the bottom. For more information, see <a href="#">CS-688</a> .
CS-Strap		This medium-duty neck strap with metal hooks was designed by PortaBrace for use with various Sound Devices production cases.

## Software

ACCESSORY	PHOTO	DESCRIPTION
Wave Agent		<p>Sound Devices Wave Agent, a file librarian for computers, provides a comprehensive range of tools for preparing audio files for problem-free passage through complex production workflows.</p> <p>For more a free download, visit: <a href="http://www.waveagent.com">www.waveagent.com</a></p>

# CL-12 Linear Fader Controller

The CL-12 linear fader controller, which comes in two models, is an optional accessory that significantly expands the mixing capability of the 6-Series mixer/recorder line.

It connects via a USB cable, which provides both power and control of the CL-12, plus a 1/4-inch headphone cable to provide both a ground connection to the chassis as well as monitoring from the CL-12. Additional power via a micro USB cable is required when connecting the CL-12 to a 664 or 633.

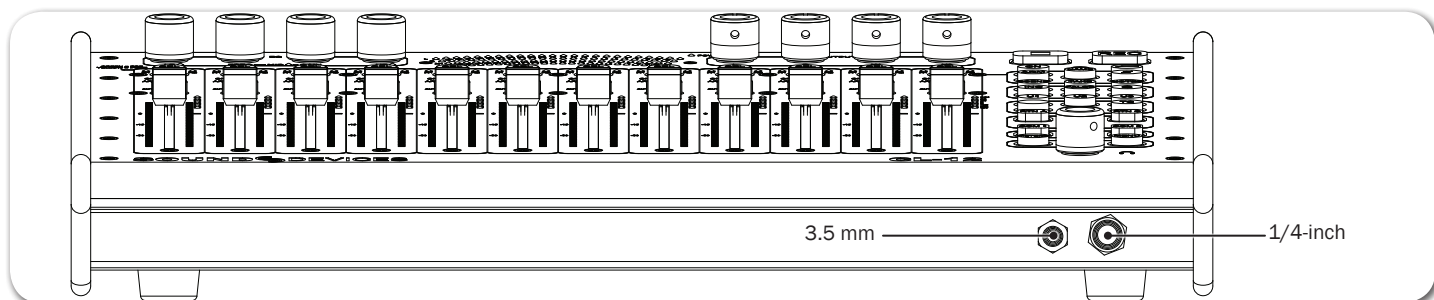
① *Procedures for attaching the CL-12 are provided in the [CL-12 Quick Start Guide](#).*

## Topics in this section include:

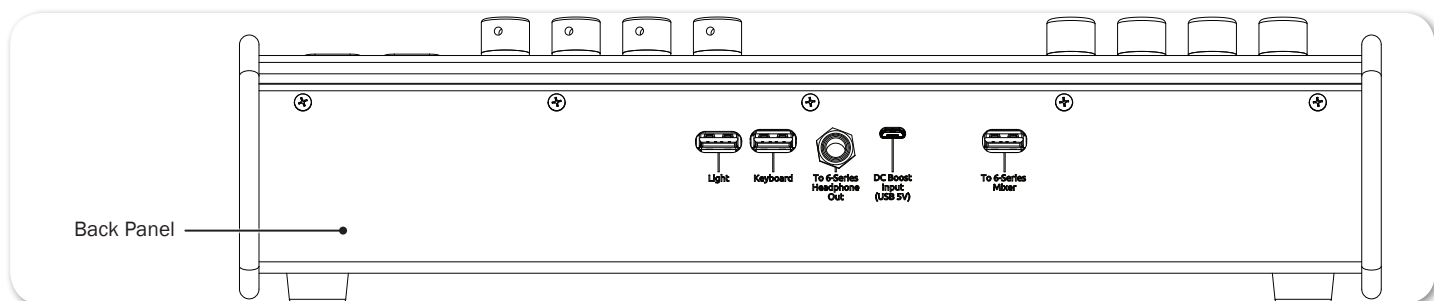
- ▶ Overview of Panels
- ▶ Altered Functionality
- ▶ Selecting One or More Input Channels
- ▶ Activating PFL of an Input
- ▶ Trim Level Adjustment on 6-Series
- ▶ Routing Input Channels
- ▶ Adjusting Output or Track Levels
- ▶ Disabling Output Controls
- ▶ Arming L, R, X1, X2 Tracks
- ▶ Using the 3-Band Equalizer (688 only)
- ▶ Using High-pass Filters
- ▶ Naming Tracks
- ▶ Configuring User Programmable Buttons
- ▶ Adjusting CL-12's LED Brightness
- ▶ Specifications

## Overview of Panels

The front and back panels of the CL-12 provide a number of connection ports for a variety of purposes. The front panel has two headphone outputs, a 1/4-inch and a 3.5 mm TRS jack.

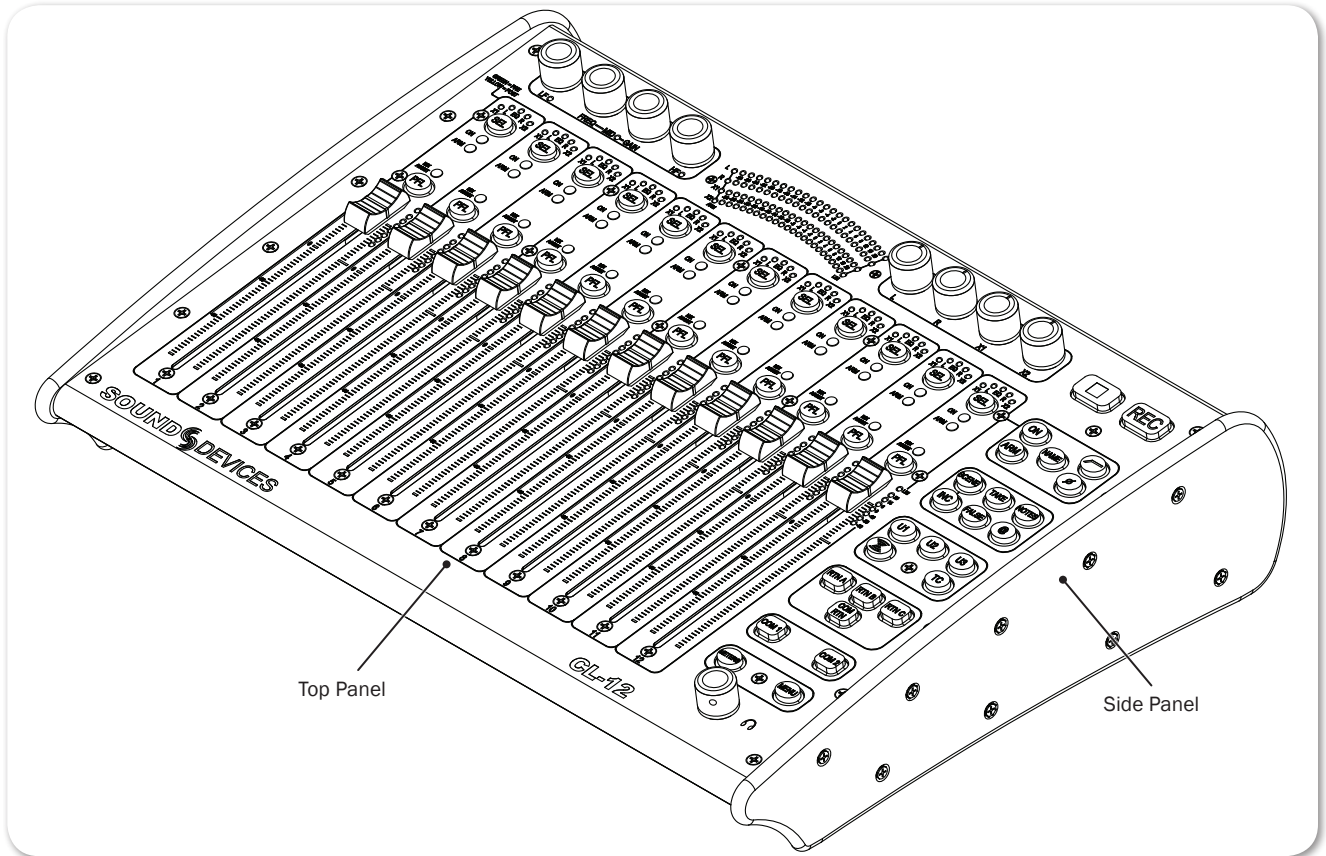


The back panel provides the connections required for attaching the CL-12 to 6-Series mixers, plus ports for other peripherals.



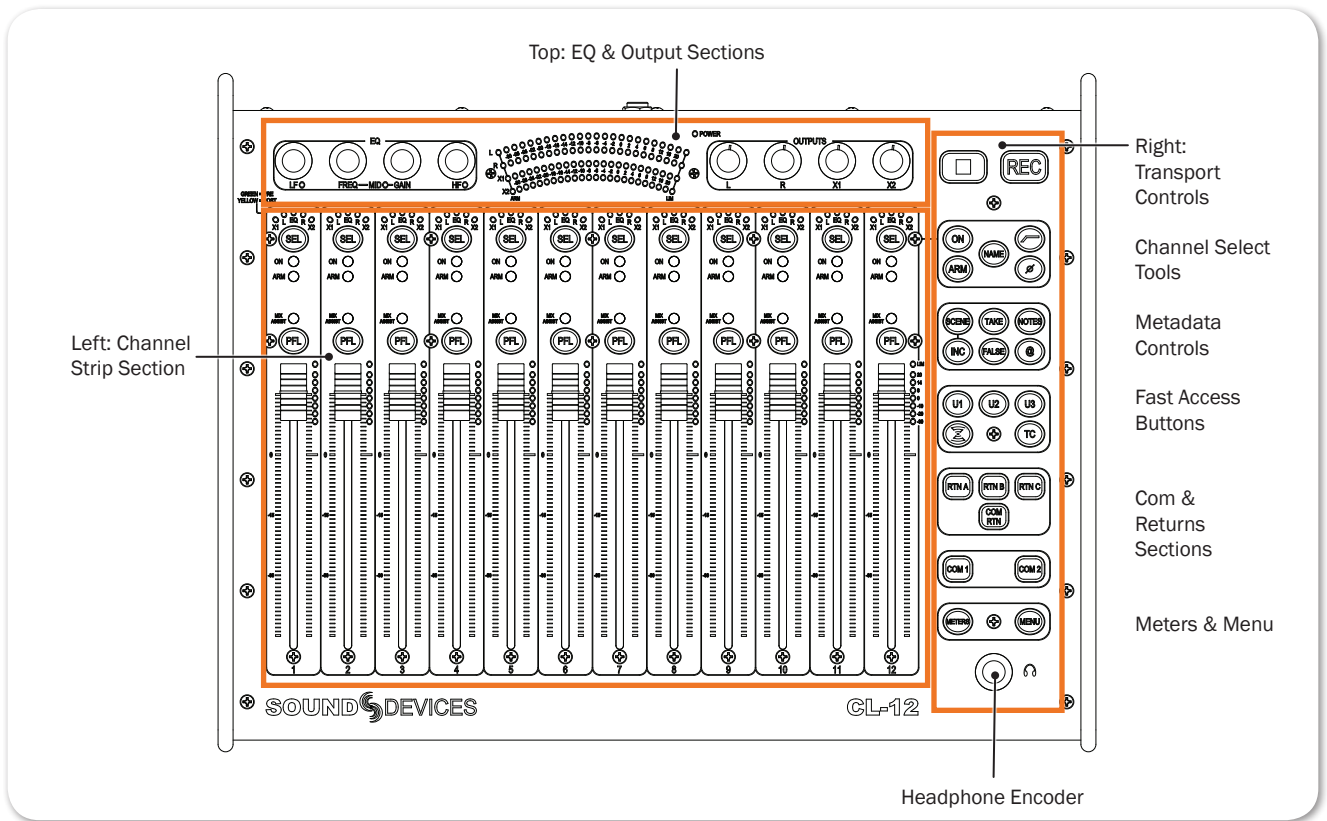
FEATURE	DESCRIPTION
Light	USB A connection for attaching an external USB light source, useful for illuminating the CL-12 surface in low light conditions.
Keyboard	<p>USB A connection for attaching a peripheral USB keyboard, which can be used for control and entering metadata. This port may also be used to connect third-party systems for wireless remote control of 6-Series mixers.</p> <p>① <i>When using an external keyboard, first ensure MENU &gt; System &gt; USB Port is set to USB Host/Keyboard before plugging in the keyboard.</i></p>
Headphone Input	<p>A ¼-inch headphone jack for connecting the CL-12 to the mixer's ¼-inch headphone output, making it possible to monitor audio directly from the front of the CL-12.</p> <p>Use the supplied ¼-inch to ¼-inch cable, which adds a low-resistance ground connection to the CL-12 chassis for extra robustness between the mixer and the CL-12 in the event of static shock.</p>
DC Boost Input	<p>Connect a micro USB power cord (not included with the CL-12) to this port (5V) on the CL-12 is required for connecting a CL-12 to either a 664 or 633.</p> <p>When using a CL-12 with a 688, this port is optional, but recommended for providing additional DC power when necessary, such as for powering a high-current-draw USB keyboard. Connecting additional power to this port will also allow for brighter illumination of the CL-12's buttons and LEDs.</p>
To 6-Series Mixer	<p>Connect this USB port on the CL-12 to the mixer's USB B port by using the supplied USB cable. This connection provides both control and power to the CL-12.</p> <p>① <i>When the CL-12 is connected, any CL-6 attached to the mixer is disabled.</i></p>

The top panel of the CL-12 has an abundance of faders, buttons, LEDs, and controls for an intuitive mixing and control user experience.



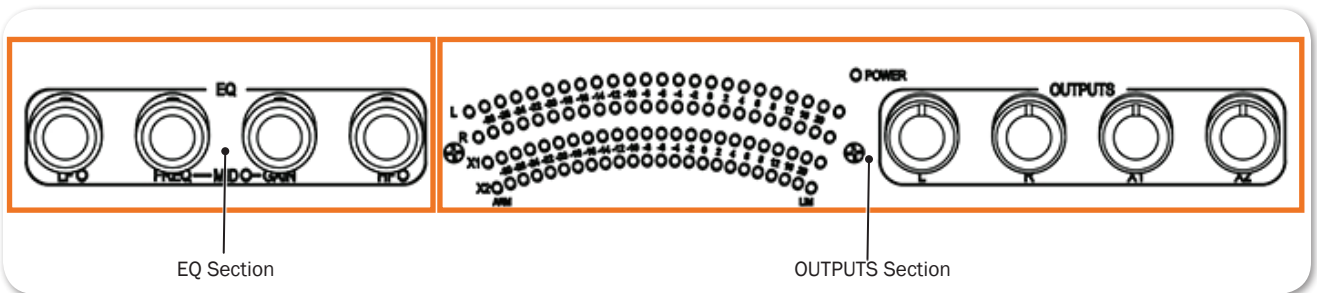
To fully explain each feature of the CL-12's top panel, the mixing surface is divided into three areas:

- Top – comprised of the EQ and OUTPUTS sections
- Left – comprised of the Channel Strip section
- Right – comprised of the Headphone encoder and several sections of buttons for various functions, such as transport control, channel selection, etc.



### Top: EQ & OUTPUTS Sections

The area that spans the top edge of the mixing surface has rotary controls for EQ and Outputs, as well as LED metering and the Power LED.



① *Not all features described here are available with every mixer. For more information, see [CL-12 Comparison Chart](#).*

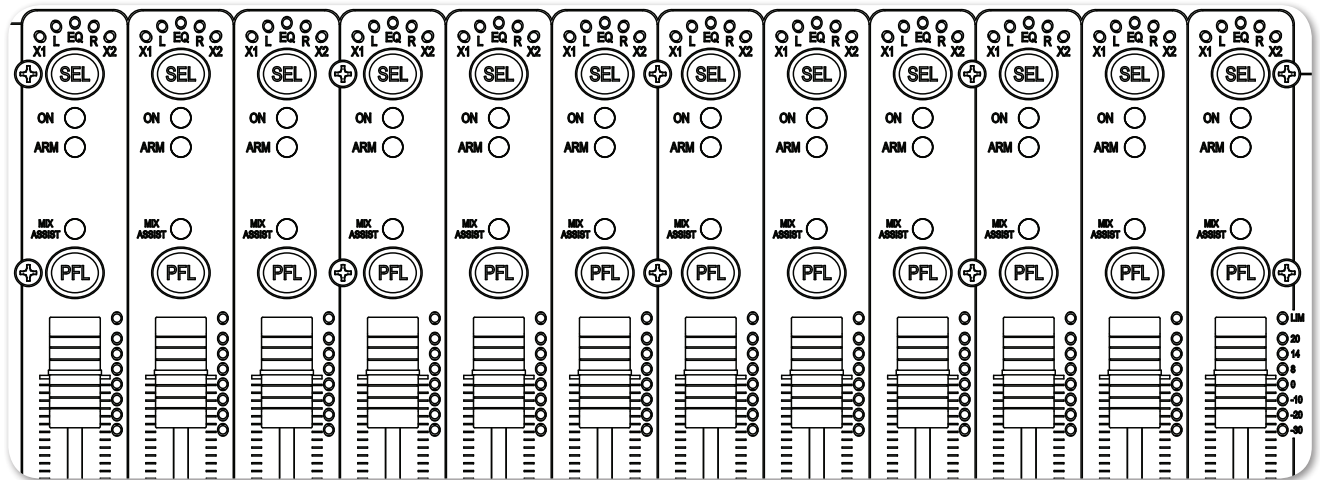
FEATURE	DESCRIPTION
EQ Controls	<p>There are four rotary encoders in the EQ section. These 3-band EQ controls include LF gain, MID frequency/gain, and HF gain. Other EQ parameters, such as Q-factor and filter type are set up from the CL-12 &gt; EQ sub-menu.</p> <p>For more information, see <a href="#">Using the 3-Band Equalizer (688 only)</a>, <a href="#">Bypassing EQ</a> and <a href="#">Accessing the EQ Submenu</a>.</p>



FEATURE	DESCRIPTION
LED Output Meters	Displays 22-segment metering levels, as well as both ARM and LIM (limiter) LEDs for L, R, X1, and X2.  ⓘ <i>LED meters may be configured to display either output or track levels.</i>  For more information, see <a href="#">Configuring Output Meters (688 only)</a> .
Power LED	Illuminates green when the CL-12 is powered on via the USB connection to an attached 6-Series mixer.
Output Controls	There are four rotary controls or “pots” in the OUTPUTS section, which may be used for routing as well as adjusting output or track levels. Press to route or arm; turn to adjust level.  For more information, see <a href="#">Adjusting Output or Track Levels</a> and <a href="#">Arming L, R, X1, X2 Tracks</a> .

### Left: Channel Strip Section

The area that spans the majority of the mixing surface comprises 12 channel strips. Each strip is comprised of 12 linear faders, SEL and PFL buttons, LED indicators and LED meters. The CL-12’s low latency faders allow for responsive level adjustment.



ⓘ *Not all features described here are available with every mixer. For more information, see [CL-12 Comparison Chart](#).*



FEATURE	DESCRIPTION
X1 Routing Indicator	Illuminates when the input channel has been routed to the X1 output. <ul style="list-style-type: none"> <li>• Off = not routed</li> <li>• Green = pre-fade routing</li> <li>• Yellow = post-fade routing</li> </ul>
L Routing Indicator	Illuminates when the input channel has been routed to the left bus. <ul style="list-style-type: none"> <li>• Off = not routed</li> <li>• Yellow = post-fade routing</li> </ul>
EQ LED	Indicates when some form of EQ has been applied to the input channel. Illuminates blue if any LF, MID, or HF EQ band is set to non-zero gain for the selected input.


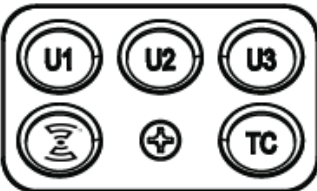
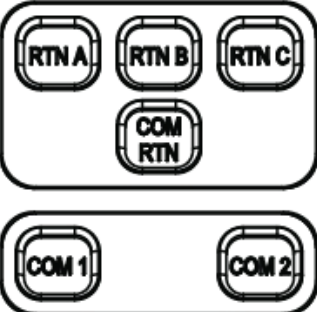
FEATURE	DESCRIPTION
R Routing Indicator	<p>Illuminates when the input channel has been routed to the right bus.</p> <ul style="list-style-type: none"> <li>• Off = not routed</li> <li>• Yellow = post-fade routing</li> </ul>
X2 Routing Indicator	<p>Illuminates when the input channel has been routed to the X2 output.</p> <ul style="list-style-type: none"> <li>• Off = not routed</li> <li>• Green = pre-fade routing</li> <li>• Yellow = post-fade routing</li> </ul>
SEL Button	<p>Selects or deselects an input channel, or multiple input channels for adjustment.</p> <p>Each SEL button illuminates when a channel is selected.</p> <p>While selected, an input channel may be routed to L, R, X1 or X2. It also may be turned on, armed, or named. Additionally, high-pass filtering, phase inversion, or EQ may be applied.</p> <p>For more information, see <a href="#">Selecting One or More Input Channels</a>. See also <a href="#">Setting SEL to follow PFL</a>.</p>
ON Indicator	Illuminates yellow to indicate the input channel is on.
ARM Indicator	Illuminates red to indicate the corresponding isolated track (ISO) is armed for recording.
MIXASSIST Indicator	Illuminates to indicate auto-mixing activity. When the input is open, the LED is green. As the input closes, the LED is turned off.
PFL Buttons (Pre-/Post-Fade Listen)	<p>Activates or deactivates pre- or post-fade listen of inputs 1-12 to the headphone monitor.</p> <p>For more information, see <a href="#">Activating PFL of an Input</a>. See also <a href="#">Setting SEL to follow PFL</a>.</p>
Linear Faders	<p>100 mm low latency linear controls for adjusting the fader levels of inputs 1-12. Ranges from Off, - 80 to +16 dB.</p> <p>Each input's linear fader gain is displayed on the mixer's Input Settings screen. Calibrate linear faders to 0 dB via the mixer's SYSTEM &gt; Fader/Pan Calibration menu.</p>
LED Meters	Displays 7-segment pre- or post-fade metering, plus pre- and post-fade limiter LED indicator for input channels 1-12.


## Right: Buttons and HP Encoder

The area that spans the right side of the mixing surface has transport controls and numerous buttons for quick access to many key features. For convenience, the buttons are grouped in sections according to common functionality.

① *Not all features described here are available with every mixer. For more information, see [CL-12 Comparison Chart](#).*

SECTION	BUTTONS	NAME	DESCRIPTION
Transport Controls		Record	While the Transport Control on the mixer operates normally when the CL-12 is attached, this alternate, backlit Record button provides an additional control for starting a recording.
		Stop	This alternate, backlit Stop button provides an additional control for stopping a recording or playback, or (when stopped) viewing the next take's file name.
Channel Select Tools		① <i>Channel Select tools operate on the currently selected channel(s).</i>	
		ON	Press to toggle a channel on or off. When on, the input's ON LED illuminates yellow.
		ARM	Press to arm or disarm the channel. When armed, the input's ARM LED illuminates red.
		NAME	Press this button to display and edit the currently selected channel's track name. This name is embedded as metadata within the recorded files.  ① <i>This functionality only works when one input is selected. If multiple inputs are selected when the NAME button is pressed, a warning message appears instructing the user to select a single input.</i>
		HPF	Press to toggle on or off high-pass filtering for a selected input channel. For more information, see <a href="#">Using High-pass Filters</a> .
		Phase	Press to toggle the phase of a selected input channels. When inverted, the PHASE button illuminates orange.

SECTION	BUTTONS	NAME	DESCRIPTION
Metadata Controls		<p>① <i>Use the on-screen, virtual keyboard or a USB keyboard plugged into the back panel of the CL-12 to edit metadata.</i></p> <p><i>All edits update the relevant embedded metadata within the file and file name.</i></p>	
		SCENE	While recording, press to display and edit the current scene name. While stopped, press to display and edit the next scene name. Press SCENE again to save and exit.
		TAKE	While recording, press to display and edit the current take's Take number. While stopped, press to display and edit the next take's Take number. Press TAKE again to save and exit, or select Done.
		NOTES	While recording, press to display and edit the current take's Notes. While stopped, press to display and edit the next take's Notes. Press NOTES again to save and exit.
		INC	Increments the scene name according to settings configured via File Storage > Scene Increment Mode.
		FALSE	Moves last take to the False Takes folder and decrements the take number by 1.
		@	Toggles the circle status of the current take, which prepends the "at" symbol (@) to file name and updates the file's metadata to "circled."
Fast Access		U1, U2, U3	User definable buttons. These may be configured to many different functions in the CL-12 sub-menu.
		SuperSlot	Displays the SL-6 Receiver Overview screen, should an SL-6 be connected.
		TC	Displays the Timecode Jam menu.
COM & Return Controls		RTN A, RTN B, RTN C	Press the button corresponding to the A, B, or C return feed to be monitored in the headphones.
		COM RTN	Press to monitor COM return in the headphones.
		COM 1, COM 2	Activates the selected COM (1 or 2)

SECTION	BUTTONS	NAME	DESCRIPTION
Meters & Menu		METERS	Duplicates the functionality of the mixer's METERS button.
		MENU	Duplicates the functionality of the mixer's MENU button.

## Altered Functionality

When the CL-12 is connected to a 6-Series mixer, some mixer functionality is changed. The following table indicates the functionality and which mixers are affected.

FUNCTIONALITY	688	664	633
New CL-12 submenu is enabled	✓	✓	✓
INPUTS > PFL Toggle Mode submenu is disabled	✓	✓	✓
<i>① On the 664, the submenu is called INPUTS &gt; Input Mode.</i>			
Rotary faders (1-6) disabled	✓	✓	✓
Rotary faders (7-12) become trim controls for (7-12)	✓	—	N/A
L, R, X1, X2 adjustment via SELECT encoder is disabled	✓	✓	✓
CL-6 Rotary faders (7-12) disabled	✓	✓	N/A

## Feature Comparison Chart

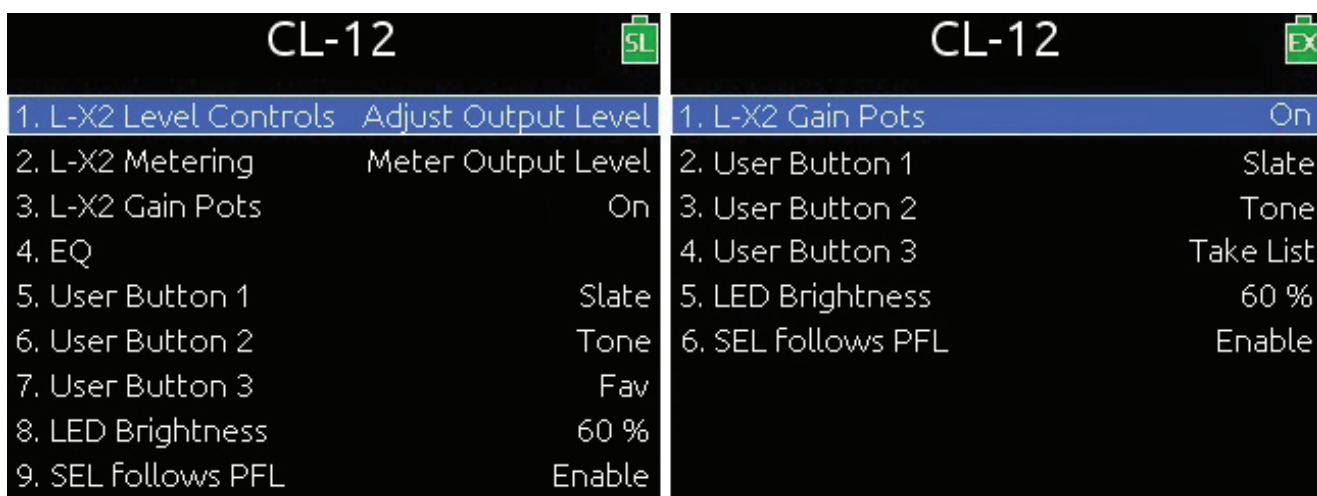
Feature availability is contingent on the model of the mixer to which the CL-12 is connected. The following table outlines the differences between the various 6-Series models.

CL-12 FEATURE	688	664	633
Number of linear faders	12	12	6
DC Boost micro USB power connection	Optional	Required	Required
3-band semi-parametric equalizer	✓	—	—
Auto Mixer Metering and Control	✓	—	—
SuperSlot Control	✓	—	—
COMs	1 & 2	1	—
Returns	A,B,C	A,B,C	A
Slate + Tone (via User Programmable buttons)	✓	✓	✓
SL-6 Routing (via User Programmable buttons)	✓	—	—
LR, X1, X2 Track Level Control & Metering	✓	✓	✓
Physical LR, X1, X2 Output Level Control & Metering	✓	—	—
7-segment PFL Metering + Limiter Activity	✓	✓	✓
Channel On/Off	✓	✓	✓
Headphone Level & Preset	✓	✓	✓
HPF Control	✓	7-12 only	✓

CL-12 FEATURE	688	664	633
Input Phase Control	✓	ch 2,4,6 only	ch 2 only
Input PFL and SEL Controls	✓	✓	✓
Input Routing to LR, X1, and X2	✓	✓	✓
Menu Control	✓	✓	✓
Metadata Control	✓	✓	✓
Track Arming & Naming	✓	✓	✓
Transport Control	✓	✓	✓
USB Peripherals (Light & Keyboard)	✓	✓	✓
User Programmable buttons (U1, U2, U3)	✓	✓	✓

## CL-12 Sub-menu

When the CL-12 is attached to a 6-Series mixer, a new CL-12 sub-menu is available via the Main menu. Options in the menu will vary based on the mixer’s model. For instance, the left image, shown below, is the menu as it appears on a 688. The right image is the menu as it appears on a 664 or 633.



OPTION	DESCRIPTION
L - X2 Level Controls	Configure level controls to control either output or track levels. Since the 664 and 633 only allow for control of track levels, this menu option is not available when a CL-12 is connected to them. For more information, see <a href="#">Adjusting Output or Track Levels</a> .
L - X2 Metering	Configure LED meters to display either output or track levels. Since the 664 and 633 only allow for metering of track levels, this menu option is not available when a CL-12 is connected to them. For more information, see <a href="#">Configuring Output Meters (688 only)</a> .
L - X2 Gain Pots	Enables/disables the L, R, X1 and X2 controls on the CL-12 (OUTPUTS section).
EQ	Displays submenu related to EQ, a feature only available with the 688. For more information, see <a href="#">Accessing the EQ Submenu</a> .
User Button 1	Set function of U1 button.
User Button 2	Set function of U2 button.

OPTION	DESCRIPTION
User Button 3	Set function of U3 button. For more information, see <a href="#">Configuring User Programmable Buttons</a> .
LED Brightness	Set brightness of CL-12 LEDs. For more information, see <a href="#">Adjusting CL-12's LED Brightness</a> .
SEL follows PFL	Enables or disables automatic selection of an input channel when its PFL button is pressed. When enabled, pressing PFL will illuminate both the PFL and SEL button for the chosen input channel. For more information, see <a href="#">Setting SEL to follow PFL</a> .

## Selecting One or More Input Channels

Input channels may be selected individually or as a group for group adjustment. One or more input channels may also be added to any previously selected group. Parameters that can be adjusted when an input channel's SEL button is selected are: ON, ARM, NAME, HPF, PHASE, EQ, and Routing to L, R, X1, X2.

① *NAME and EQ can only be adjusted for a single channel.*

### To select an input channel:

▶ Press the input's SEL button.

① *Press the input's SEL button again to deselect it, or press any other SEL button to change selection.*

### To select multiple input channels, do either of the following:

▶ Simultaneously press multiple SEL buttons.

▶ Press and hold one SEL button down while then pressing one or more SEL buttons for other required inputs.

① *Press any single illuminated SEL button to simultaneously deselect the group.*

### To add more input channels to a selected group:

▶ Press and hold an illuminated SEL button while pressing any additional SEL buttons to add those input channels to the group.

## Activating PFL of an Input

Pre- or post-fade listen may be activated on one input at a time.

### To PFL an input:

- ▶ Press the input's PFL button.

There are two modes of PFL: momentary and latching.

MODES	DESCRIPTION
Momentary	If the PFL button is held for greater than one second, PFL only remains active for as long as the button is held. The mixer's LCD does not change screen.
Latching	If the PFL button is quickly tapped, PFL is "latched" on until the PFL button is tapped again or another is selected. When active, the PFL button illuminates, and the Input Settings screen for the active PFL input is displayed on the mixer's LCD.

### Setting SEL to follow PFL

The CL-12 provides the SEL follows PFL option for automatic selection of an input channel when its PFL button is pressed. Think of SEL follows PFL as a fast, one-touch method for gaining access to PFL, the Input Settings screen, EQ, routing, and channel select tools. This feature may be disabled so that PFL activation and input channel selection are independent.

### To enable or disable SEL follows PFL:

1. Press MENU.
2. Select CL-12 > SEL follows PFL.
3. Select one of two options: Enable and Disable.

## Trim Level Adjustment on 6-Series

For inputs 1 through 6, on either the 688 or the 664, trim is still adjusted via the dedicated rotary Trim controls on the mixer, even when the CL-12 is attached. Likewise, on the 633, for inputs 1 through 3, trim is adjusted via the dedicated rotary Trim controls.

However, trim level adjustment of other inputs varies depending on the different designs of each 6-Series mixer to which the CL-12 is attached. For instance, adjusting trim on input 7 of a 688 is not the same as adjusting trim on input 7 of a 664.

The following sub-sections provide details and procedures for adjusting trim levels on inputs 7-12 on the 688, inputs 7-12 on the 664, and inputs 4-6 on the 633.

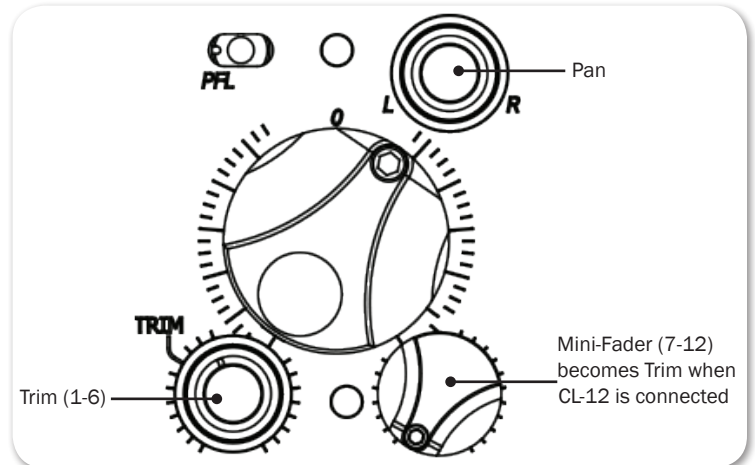


## Adjusting Trim Levels (688 only)

When the CL-12 is attached to the 688, the mini-faders on the 688 become dedicated trim controls for inputs 7-12.

### To adjust the trim level for inputs 7-12:

- ▶ Turn the appropriate mini-fader on the 688. The trim gain is displayed on the mixer's LCD via the Input Settings screen.



## Adjusting Trim Levels (664 only)

When the CL-12 is attached to the 664, the mixer's SELECT encoder may be used to adjust trim for inputs 7-12 via the Input Settings screen.

### To adjust the trim level for inputs 7-12:

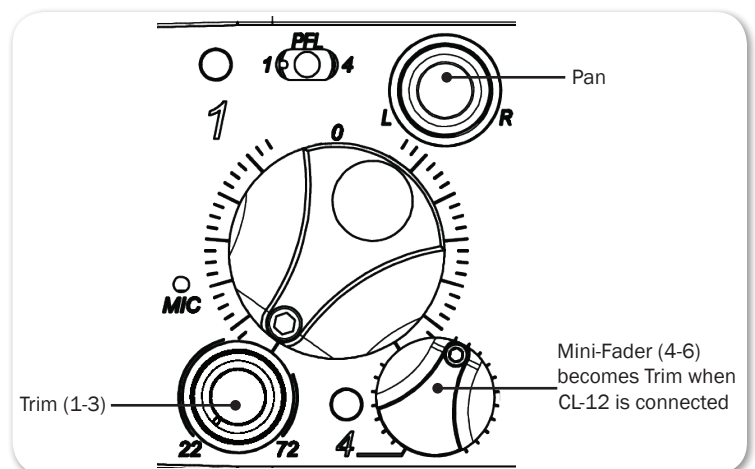
1. Slide the input's PFL switch on the CL-6 to the right to access the Input Settings screen on the mixer's LCD.
2. Turn the SELECT encoder to adjust trim for the input. The trim gain is displayed on the mixer's LCD.

## Adjusting Trim Levels (633 only)

When the CL-12 is attached to the 633, the mini-faders on the 633 become dedicated trim controls for inputs 4-6.

### To adjust the trim level for inputs 4-6:

- ▶ Turn the appropriate mini-fader on the 633. The trim gain is displayed on the mixer's LCD via the Input Settings screen.



## Routing Input Channels

With the CL-12, routing input channels to the left or right mix bus and the X1 or X2 output is quick and easy.

### To route an input channel or multiple input channels:

- Do either of the following:
  - ▶ Press the input channel's SEL button.
  - ▶ Select multiple input channels, using their SEL buttons.
- Press the L, R, X1 or X2 output control to route to L, R, X1 or X2, respectively.

Routing to X1 or X2 can be pre- or post-fade. Press the X1 or X2 output control to cycle through the options: Route Off, Route Pre-fade, Route Post-fade. When routing is pre-fade, the X1 and X2 LEDs illuminate green. When routing is post-fade, the LEDs are yellow.

- ① *Alternatively, you can press and hold an L, R, X1, or X2 control, and then press one or more SEL button(s) for the input channel(s) you want to route to that output.*
- ① *TIP: For continuous pan control, set an input channel's routing to both L and R, then use the Pan control on the 6-Series mixer to smoothly adjust pan. This will ensure that an input's pan position will be retained when disconnecting and reconnecting the CL-12.*

## Adjusting Output or Track Levels

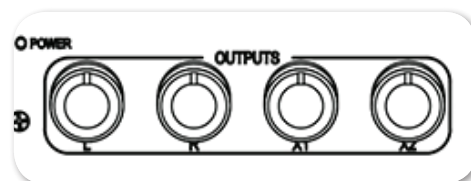
The CL-12 has four rotary controls labeled OUTPUTS that are used for adjusting either output or track levels, based on which mixer is connected to the CL-12 and how the controls are configured.

On the 633 and 664, the CL-12's Output controls are used for adjusting track levels for L, R, X1, and X2.

On the 688, however, the CL-12's Output controls may be configured to adjust either output or track levels for L, R, X1, and X2.

### To configure CL-12 output controls:

- Press MENU to access the 688's Main menu.
- Select CL-12 > L - X2 Level Controls.
- Select one of two options: Adjust Output Level or Adjust Track Level.



### To adjust levels:

- ▶ Turn the Output control corresponding to which level you want to adjust: L, R, X1, or X2. The level value is displayed on the mixer's LCD in the HP field.