**Digital input/output connections**

Use the 2TR OUT DIGITAL jack to send the M7CL’s internal signals to an external digital audio device. When the M7CL is in the default state, the output signal of the STEREO channel is patched to the 2TR OUT DIGITAL jack, and can be used to record the main mix onto a CD recorder or other device.

By installing separately sold mini-YGDAI I/O cards in slots 1–3, you can add input/output jacks to the M7CL or connect HDR (Hard Disk Recorder) or speaker processor units.

For the types of I/O cards that can be used, refer to the appendix (→ p. 267).

Refer to the Yamaha professional audio website for the most recent information on I/O cards.


**NOTE**

- In order to send and receive digital audio signals via the 2TR OUT DIGITAL jack or slots 1–3, the word clock of both devices must be synchronized (→ p. 208).
Installing an option card

Before you install I/O cards in slots 1–3, you must check the Yamaha website to determine whether the card is compatible with the M7CL, and to verify the total number of Yamaha or third-party cards that can be installed in combination with that card.


To install an optional mini-YGDAI card, proceed as follows.

1. **Make sure that the power is turned off.**
2. **Loosen the screws that hold the slot cover in place, and remove the slot cover.**
   Keep the removed slot cover in a safe place.
3. **Align the edges of the card with the guard rails inside the slot, and insert the card into the slot.**
   Push the card all the way into the slot so that the connector at the end of the card is correctly inserted into the connector inside the slot.
4. **Use the screws included with the card to fasten the card in place.**
   Malfunctions or incorrect operation may occur if the card is not fastened.

**CAUTION**

- Before connecting a separately sold mini-YGDAI I/O card to the M7CL, you must turn off the power switch of the M7CL and the PC800W power supply. Failure to observe this will cause malfunctions or electric shock.
Setting up to use the M7CL

This section explains the setup required when starting up the M7CL for the first time. We will also discuss basic operations for sending an input channel signal out from the STEREO bus so that you can check the connections.

**Restoring the current scene to the default state**

Turn on the power of the M7CL, and recall (load) the default setting scene (scene number 000).

1 **Turn on the power of the M7CL.**

When you turn on the power of the M7CL, you should first power-on the M7CL, and then power-on your power amp and monitor system. (When turning the power off, follow the opposite order.)

2 **Use the top panel SCENE MEMORY [▲]/[▼] keys to make scene number “000” appear in the SCENE field in the function access area of the display.**

3 **Press the top panel SCENE MEMORY [RECALL] key.**

Scene number “000” will be loaded, and the mix parameters will return to the default state.

**NOTE**

In the procedure described here, you are asked to recall this default setting scene so that the remaining step in this chapter can be performed appropriately. In actual operation, there is no need to recall the default setting scene each time.

**Word clock connections and settings**

“Word clock” refers to the clock data that provides the basis of timing for digital audio signal processing. If you connect external equipment such as a DAW system or HDR (Hard Disk Recorder) to a digital I/O card installed in slot 1–3, this equipment must be synchronized to the same word clock as the M7CL in order for digital audio signals to be transferred between the M7CL and the external equipment. To do so, set one device as the word clock master (transmitting device), and the other devices as the slaves (receiving devices) so that the slaves will synchronize to the word clock master.

There are two ways in which the M7CL can operate as a word clock slave that is synchronized to an externally-supplied word clock; the M7CL can use the clock data included in the digital audio signal being input from a digital I/O card, or it can use a separate word clock signal supplied to the rear panel WORD CLOCK IN jack.

1. **Digital audio signal**
   - Clock data
     - SLOT 1–3
     - HDR or other digital audio device (word clock master)

2. **Clock data**
   - Digital audio signal
     - WORD CLOCK IN jack
     - SLOT 1–3
     - Digital MTR or other digital audio device (word clock master)

   In either case, you must use the following procedure to specify the word clock source that the M7CL will use.

**HINT**

- The procedure below is not necessary if you are using the M7CL as the word clock master, or if the M7CL is not digitally connected to an external device.
In the function access area, press the SETUP button to access the SETUP screen. In the SETUP screen you can make settings that apply to the entire M7CL.

1. In the SETUP screen, press the SYSTEM SETUP field at the center of the window, press the WORD CLOCK/SLOT SETUP button to open the WORD CLOCK/SLOT SETUP popup window.

2. In the SYSTEM SETUP field at the center of the window, press the WORD CLOCK/SLOT SETUP button to open the WORD CLOCK/SLOT SETUP popup window.

3. In the WORD CLOCK SELECT field, select the clock source.
   In the WORD CLOCK SELECT field, use the buttons to select the clock source you want to use as the word clock master.
   - When using clock data from a digital audio signal as the clock source
     Press a valid two-channel button for the corresponding slot.
   - When using word clock data from the WORD CLOCK IN jack as the clock source
     Press the WORD CLOCK IN button.
   If the M7CL is operating correctly with the new clock, the symbol immediately above the corresponding button will turn light blue.

   HINT
   - The clock data of the digital audio signal supplied via a digital I/O card in slots 1–3 can be selected in two-channel units.
   - For details on word clock, refer to “Word Clock and Slot settings” (→ p. 208).

4. To close the WORD CLOCK/SLOT SETUP popup window, press the “×” symbol located in the upper right.
   You will return to the SETUP screen.

5. To close the SETUP screen, press the SETUP button in the function access area.

Making HA (Head Amp) gain settings

Here’s how to adjust the gain of the HA (Head Amp) for each input channel to which a mic or instrument is connected.

On the M7CL, channel parameters can be controlled using either the SELECTED CHANNEL section to make settings for a single channel, or using the Centralogic section to make settings for up to eight channels. Use the method that’s appropriate for your situation.

- Using the SELECTED CHANNEL section (settings for one channel)
  With this method, you select the input channel whose settings you want to adjust, and use the encoders of the SELECTED CHANNEL section to adjust the settings for that channel.

1. Make sure that a mic or instrument is connected to an INPUT jack (→ p. 39).

2. In the top panel INPUT section, press the [SEL] key for the channel corresponding to the INPUT jack you want to control.
   In the state immediately after scene 000 is recalled, the input signals from INPUT jacks 1–32 (1–48) are being sent to INPUT channels 1–32 (1–48) respectively, and can be controlled by corresponding channel strip.
For example if you want to make head amp settings for INPUT jack 7, press the [SEL] key of the channel strip for INPUT channel 7.

1. **[SEL] key**
2. **Level meter**

When you press the [SEL] key, the key LED will light. The lit LED indicates that this channel is selected for operations. The level meter of that channel strip will indicate the input level for that channel.

3. **In the SELECTED CHANNEL section located at the left of the touch screen, press any of the encoders.**

The SELECTED CHANNEL section provides focused control of the currently selected channel (i.e., the channel whose [SEL] key is lit).

[SELECTED CHANNEL VIEW screen]

1. **HA field**

The SELECTED CHANNEL VIEW screen shows most of the parameters of the channel currently selected by its [SEL] key.

*In actuality, you can use the encoders of the SELECTED CHANNEL section to operate the channel selected by its [SEL] key even without displaying the SELECTED CHANNEL VIEW screen. (In this case, a popup window will appear to show the value of the parameter you’re operating.)*
4 While performing on the mic or instrument, turn the [HA] encoder of the SELECTED CHANNEL section to adjust the gain of the currently selected channel.
   Adjust the level as high as possible without allowing the OVER segment of the channel strip level meter to light when the mic or instrument is being played loudly.
   When you turn the [HA] encoder in the SELECTED CHANNEL section, the knob in the HA field of the SELECTED CHANNEL VIEW screen will move in tandem with the encoder.

   - The PAD will be internally switched on or off when the HA gain is adjusted between -14 dB and -13 dB. Keep in mind that noise may be generated if there is a difference between the Hot and Cold output impedance of the external device connected to the INPUT connector when using phantom power.
   - If the level meter does not show any movement even if you have raised the [HA] encoder, it is possible that the INPUT channel selected by its [SEL] key does not match the INPUT jack to which your mic or instrument is connected. Make sure that the connections and the selection of the [SEL] key are correct. If necessary, recall scene number 000 once again.

5 Press the [SEL] key of another input channel, and adjust the head amp gain in the same way.
   When you press a [SEL] key to select another channel, the channel shown in the SELECTED CHANNEL VIEW screen will change accordingly.

   - In the SELECTED CHANNEL VIEW screen you can also switch the head amp’s phantom power on/off, and switch the phase between normal and reverse. To do this, press the HA/PHASE field to access the popup window. (For details on the procedure → p. 55).

Using the Centralogic section (settings for eight channels)
   Use the Centralogic section and the OVERVIEW screen to make head amp settings for up to eight channels. This method is convenient when you want to adjust the same parameter for multiple channels at once.

1 Connect a mic or instrument to an INPUT jack. (For details on making connections → p. 39).

2 Press a navigation key in the NAVIGATION KEYS section so that the input channels you want to control are assigned to the Centralogic section.

   - You can rapidly switch from the SELECTED CHANNEL VIEW screen to the OVERVIEW screen by pressing one of the multifunction encoders in the Centralogic section.
For example, the following illustration shows the OVERVIEW screen for INPUT channels 1–8. The knobs of the HA/PHASE field indicate the amount of HA gain for each channel.

1 HA/PHASE field

3 Press a knob in the HA/PHASE field of the screen to select it.
   When you press a knob shown in the OVERVIEW screen, a bold frame is displayed around the horizontal row of knobs of the same type. This frame indicates the you can use the multifunction encoders of the Centralogic section to operate the corresponding knobs.

4 While performing on the mic or instrument, use the Centralogic section’s multifunction encoders 1–8 to adjust the HA gain of each channel.
   Adjust the level as high as possible without allowing the OVER segment of the channel level meter in the Centralogic section to light when the mic or instrument is being played at its loudest volume.
   The input level is also shown by the level meter of the corresponding INPUT section or ST IN section.

   • The PAD will be internally switched on or off when the HA gain is adjusted between -14 dB and -13 dB. Keep in mind that noise may be generated if there is a difference between the Hot and Cold output impedance of the external device connected to the INPUT connector when using phantom power.

   • In the OVERVIEW screen you can also switch the head amp’s phantom power on/off, and switch the phase between normal and reverse. To do so, press the selected knob in the HA/PHASE field once again to access the popup window. (For details → p. 55).

5 Use the navigation keys to switch the eight channels controlled by the Centralogic section, and adjust the gain for other input channels in the same way.

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### Sending an input channel signal to the STEREO bus

This section explains how to adjust the gain to set the level of the signal sent from an input channel to the STEREO bus, and adjust the pan/balance so that the signal can be monitored from external speakers connected to the STEREO channel. The following procedure lets you check whether the connections from the mic or instrument to the main speakers are appropriate.

In this case as well, you can either use the SELECTED CHANNEL section to make settings for one channel at a time, or use the Centralogic section to make settings for up to eight channels at a time.

#### ● Using the SELECTED CHANNEL section (settings for one channel)

1 Press the [SEL] key of the input channel you want to control.

2 Press one of the encoders in the SELECTED CHANNEL section.
   The SELECTED CHANNEL VIEW screen for the selected channel will appear.

3 In the To ST PAN/BALANCE field of the SELECTED CHANNEL VIEW screen, make sure that the ST button is on (white characters on a pink background).
   In the TO ST PAN/BALANCE field you can use the ST/MONO button to switch the signal sent from the input channel to the STEREO/MONO buses on/off.
   The knob in this field indicates the pan/balance of the signal sent to the STEREO bus.
   If the ST button is off (black characters on blue background), press the button to switch it on.

4 Verify that in the top panel, the [ON] of the corresponding input channel is on.
   The [ON] turns the corresponding channel on or off. If the [ON] key is off (LED dark), press the key to turn it on (LED lit).
5 In the STEREO/MONO MASTER section, make sure that the [ON] key of the STEREO channel is on, and raise the STEREO channel fader to 0 dB.

6 Raise the fader of the currently selected input channel to an appropriate volume. In this state, you should now hear sound from the speaker system that is patched to the STEREO channel. If you don’t hear sound, check whether the LR meters are moving in the METER field of the function access area.

[STEREO/MONO MASTER section]

1 STEREO channel [ON] key
2 STEREO channel fader

7 To adjust the pan/balance of the signal sent from the input channel to the STEREO bus, turn the [PAN] encoder of the SELECTED CHANNEL section.

8 Press the [SEL] key of another input channel, and adjust the pan/balance in the same way.

- Using the Centralogic section (settings for eight channels)

Here’s how to use the Centralogic section and OVERVIEW screen to adjust the input level and pan/balance sent to the STEREO bus for up to eight signals at a time.

1 Press a navigation key in the NAVIGATION KEYS section so that the input channels you want to control are assigned to the Centralogic section.

2 Make sure that in the TO STEREO/MONO field of the screen, the ST symbol of each channel is on (white characters on pink background). The selected eight channels are shown in the OVERVIEW screen.

- If the LR meters are moving
  It may be that the STEREO channel is not correctly patched to the output jacks that are connected to your speaker system. Check the output port patching (→ p. 95).

- If the LR meters are not moving
  It may be that the INPUT channel [ON] key is off. Check the status of the [ON] key (→ p. 16).
3 In the Centralogic section, verify that the [ON] of the corresponding input channel is on.

4 In the STEREO/MONO MASTER section, make sure that the [ON] key of the STEREO channel is on, and raise the STEREO channel fader to 0 dB.

5 In the Centralogic section, raise the fader of the corresponding input channel to an appropriate volume.
   In this state, you should now hear sound from the speaker system that is patched to the STEREO channel.
   - You can also adjust the input level using the faders of the INPUT section or ST IN section instead of the faders of the Centralogic section.

If you don’t hear sound, check whether the LR meters are moving in the METER field of the function access area.

- If the LR meters are moving
   It may be that the STEREO channel is not correctly patched to the output jacks that are connected to your speaker system. Check the output port patching (→ p. 95).

- If the LR meters are not moving
   It may be that the INPUT channel [ON] key is off. Check the status of the [ON] key (→ p. 16).
   - The signal being output from the STEREO channel can also be monitored using headphones connected to the PHONES OUT jack located below the front pad (→ p. 142).

6 To adjust the pan/balance of the signal sent from each input channel to the STEREO bus, press a knob in the TO STEREO/MONO field of the screen to select it, and turn the multifunction encoders of the Centralogic section.
   When you turn a multifunction encoder, the knob in the TO STEREO/MONO field of the OVERVIEW screen will also turn.

7 Use the navigation keys to switch the eight channels controlled by the Centralogic section, and make adjustments for other input channels in the same way.
This chapter explains operations for input channels (INPUT channels and ST IN channels).

### Signal flow for input channels

The input channels are the section that processes the signals received from the rear panel input jacks or slots 1–3, and sends them to the STEREO bus, MONO bus, MIX buses, and MATRIX buses. There are two types of input channel, as follows.

#### INPUT channels 1–32 (1–48)

These channels are used to process monaural signals. When the M7CL is in the default state, the input signals from INPUT jacks 1–32 (1–48) are assigned to these channels.

#### ST IN channels 1–4

These channels are used to process stereo signals. When the M7CL is in the default state, the signals from EFFECT RETURN 1–4 (L/R) are assigned to these channels.
Signal flow for input channels

- **INPUT PATCH**
  This assigns an input signal to the input channel.

- **ø (Phase)**
  Switches the phase of the input signal.

- **HPF (High Pass Filter)**
  This is a high pass filter that cuts the region below the specified frequency.

- **ATT (Attenuator)**
  Attenuates/boosts the level of the input signal.

- **4 BAND EQ (4 band equalizer)**
  A parametric EQ with four bands; HIGH, HIGH MID, LOW MID, and LOW.

- **DYNAMICS 1**
  This is a dynamics processor that can be used for gating, ducking, expander, or compressor.

- **DYNAMICS 2**
  This is a dynamics processor that can be used as a compressor, compander, or de-esser.

- **LEVEL/DCA 1–8**
  Adjusts the input level of the channel.

- **ON (On/off)**
  Turns the input channel on/off. If off, that channel is muted.

- **PAN**
  This adjusts the panning of the signal sent from the INPUT channel to the STEREO bus. If necessary, this pan setting can also be applied to signals sent to two paired MIX/MATRIX buses.

- **BALANCE**
  On ST IN channels, the BALANCE parameter is used instead of PAN. The BALANCE parameter adjusts the volume balance of the left/right signals sent from the ST IN channel to the STEREO bus. If necessary, you can turn on PAN LINK in the BUS SETUP popup window so that the setting of this parameter will also be applied to the signal sent to two MIX or MATRIX buses that are set to stereo.

- **LCR (Left/Center/Right)**
  This sends the signal of the input channel as a three-channel output (the MONO (C) channel and the L/R channels) to the STEREO bus / MONO bus.

- **MIX ON/OFF (MIX send on/off)**
  This is an on/off switch for the signal sent from the input channel to MIX buses 1–16.

- **MIX LEVEL 1–16 (MIX send level 1–16)**
  This adjusts the send level of the signal sent from the input channel to VARI type MIX buses 1–16. As the position from which the signal is sent to the MIX bus, you can choose from the following; immediately before ATT, pre-fader, or post-fader.

- **MATRIX ON/OFF (MATRIX send on/off)**
  This is an on/off switch for the signal sent from the input channel to MATRIX buses 1–8.

- **MATRIX LEVEL 1–8 (MATRIX send levels 1–8)**
  Adjusts the send level of the signal sent from the input channel to MATRIX buses 1–8. As the position from which the signal is sent to the MATRIX bus, you can choose from the following; immediately before ATT, pre-fader, or post-fader.

- **INSERT (INPUT channels only)**
  You can patch the desired output/input ports to insert an external device such as an effect processor. As the position of the insert-out/insert-in point, you can choose either immediately before ATT or pre-fader.

- **DIRECT OUT (INPUT channels only)**
  This can be patched to any output port, and the input signal sent directly from that output port. As the position of the direct output, you can choose immediately before HPF, immediately before ATT, or immediately before fader.

- **METER**
  This meters the level of the input channel. You can switch the position at which the level is detected.
Specifying the channel name and icon

On the M7CL, the name and icon shown in the screen can be specified for each input channel. Here we will explain how to specify the channel name and icon.

1 Use the navigation keys to access the OVERVIEW screen containing the input channel whose channel name / icon you want to assign.

2 Access the PATCH/NAME popup window by pressing the channel number / channel name field of the channel whose channel name / icon you want to assign.

3 To select the icon for that channel, press the icon button.
   The lower part of the popup window will change as follows.

   1 Icon select buttons
   These buttons select the icon used for this channel.

   2 Sample name select buttons
   These buttons select a sample name associated with the currently selected icon. When you press a button, that sample name will be input to the channel name field.

4 Use the icon select buttons to select the icon you want to use for that channel.
   The selected icon is shown in the icon button in the upper part of the window.

5 If necessary, use the sample name select buttons to select a sample name.
   The sample name you selected will be input to the channel name field in the upper part of the window.

   • You can add or edit characters in the channel name field even after you’ve entered the sample name. If you want to assign consecutively numbered channel names such as “Vocal1” and “Vocal2,” this can be easily done by entering the sample name and then adding a number.
6 If you want to enter a channel name directly (or edit the sample name that was entered), press the channel name field in the upper part of the window.

The keyboard window will appear in the lower part of the window, allowing you to enter or edit the characters. For details on how to use the keyboard window, refer to p. 30.

7 Use the [SEL] keys to switch input channels, and specify the icon or channel name for other channels in the same way.

When the PATCH/NAME popup window is shown, you can use the [SEL] keys to switch the channel being edited.

8 When you’re finished with your input, press the “×” symbol in the upper right of the window.

HINT

• You can press the TAB button to switch to the next channel.

You can press the ENTER button to close the popup window in the same way as using the “×” symbol.
This section explains how to make HA (Head Amp) related settings (phantom power on/off, gain, phase) for each input channel.

1. If you only want to adjust the HA gain, you can do so by using the HA encoder of the SELECTED CHANNEL section. (p. 17)

2. If you want to edit detailed parameters such as phantom power on/off or phase, use the navigation keys to access the OVERVIEW screen that includes the input channel whose HA you want to edit.

3. Press the HA/PHASE field of the channel whose HA you want to adjust; the HA/PATCH popup window will appear.

   This popup window can be viewed in three types of view (1 ch, 8 ch, ALL), and you can use the tabs at the bottom of the screen to switch between these types. These windows include the following items.

   [HA/PATCH popup window (1 ch)]

   Here you can make HA-related settings for the currently selected channel.

   ① Icon / Channel number / Channel name
   This shows the icon, channel number, and channel name for that channel.

   ② +48V button
   This switches the phantom power on (red) or off (black) for the head amp assigned to this channel.

   ③ GAIN knob
   This indicates the gain of the head amp assigned to this channel. To adjust this value, operate multifunction encoder 3. The level meter located at the immediate right of the knob indicates the input level for the corresponding port.

   ④ ø (Phase) button
   This switches the head amp assigned to the channel between normal phase (black) and reverse phase (orange).

   ⑤ INPUT PORT popup button
   This shows the input port assigned to this channel. You can press this button to access the INPUT PORT SELECT popup window, where you can select the input port for each channel.

   ⑥ Icon / Channel Name button
   This shows the number, icon, and channel name for that channel. You can press this button to access the PATCH / NAME popup window, where you can edit the input port patching and specify the channel name.

   • If you’ve turned off the phantom power master setting in the SETUP screen SYSTEM SETUP field, phantom power will not be supplied even if the +48V button is turned on for each channel.

   • If you don’t need phantom power, be sure to turn this button off.

   • Before you turn phantom power on, make sure that no device other than a condenser mic is connected to that jack. Otherwise, you risk damaging your external equipment.

   • To protect your speaker system, leave the power amps (powered speakers) turned off when switching the phantom power on/off. We also recommend that you set all output level faders to the minimum position. Otherwise, high-volume output may damage your hearing or equipment.
Making HA (Head Amp) settings

[HA/PATCH popup window (8 ch)]
Here you can make HA-related settings for a group of eight channels.

1. **Channel select button**
   This shows the icon, channel number, and channel name for the channel. When you press this button, that channel will be selected for operations, and the corresponding [SEL] key will light.

2. **INPUT PATCH button**
   This indicates the currently selected input port. You can press this button to access the INPUT PORT SELECT popup window, where you can select the input port for each channel.

3. **+48V button**
   This switches the phantom power on (red) or off (black) for the head amp assigned to this channel.

4. **GAIN knob**
   This indicates the gain of the head amp assigned to this channel. Use multifunction encoders 1–8 to adjust the value. The level meter located at the immediate right of the knob indicates the presence or absence of a signal for the corresponding port.

5. **ø (Phase)**
   This switches the head amp assigned to the channel between normal phase (black) and reverse phase (orange).

[HA/PATCH popup window (ALL)]
This window shows the head amp settings of all input channels. Here you can also adjust the head amp gain in groups of the selected eight channels.

1. **Channel select button**
   This indicates the channel number, the icon selected for that channel, and the channel name. When you press this button, that channel will be selected for operations, and the corresponding [SEL] key will light.

2. **GAIN knob**
   This indicates the gain of the head amp assigned to the channel. To adjust the value, press the knob to select it, and operate multifunction encoders 1–8. The indicator located at the immediate right of the knob indicates the presence or absence of a signal for the corresponding port.

3. **+48V**
   This indicates the phantom power on (red) or off (black) status for the head amp assigned to the channel.

4. **ø (Phase)**
   This indicates either normal phase (black) or reverse phase (orange) for the head amp assigned to the channel.

4. **Access either the 1 ch or 8 ch HA/PATCH popup window.**

5. **Use the on-screen buttons or the multifunction encoders to edit the head amp gain, phase, and phantom power on/off settings.**

   - The PAD will be internally switched on or off when the HA gain is adjusted between -14 dB and -13 dB. Keep in mind that noise may be generated if there is a difference between the Hot and Cold output impedance of the external device connected to the INPUT connector when using phantom power.
   - The GAIN knob, +48V button, and ø button are valid only for channels whose assigned input port is an INPUT jack, ST IN jack, or a slot that is connected to an external head amp device (e.g., Yamaha AD8HR). (For details on connecting external head amp devices → p. 177).

6. **Perform the same operations for other input channels as desired.**
   If you are viewing the 1 ch HA/PATCH popup window, you can also use the [SEL] keys to switch the channel for editing.
   If you are viewing the 8 ch HA/PATCH popup window, you can use the navigation keys to switch the channels being controlled in groups of eight channels.

7. **When you’re finished editing, press the “×” symbol in the upper right of the window.**
Sending the signal from an input channel to the STEREO/MONO buses

This section explains how to send the signal of an input channel to the STEREO bus or MONO bus. The STEREO bus and MONO bus are used mainly to send signals to the main speakers. There are two ways to send signals to the STEREO bus or MONO bus; ST/MONO mode and LCR mode. You can select the mode individually for each channel. These modes differ in the following ways.

**ST/MONO mode**

This mode sends the signal from the input channel to the STEREO bus and to the MONO bus independently.

- The signal sent from the input channel to the STEREO bus and to the MONO bus can be switched on/off individually.
- The panning of the signal sent from an INPUT channel to the STEREO bus L/R is controlled by the TO ST PAN knob. (The signal sent to the MONO bus is not affected by this knob.)
- The left/right volume balance of the signal sent from the input channel to the STEREO bus is controlled by this knob. (The signal sent to the MONO bus is not affected by this knob.)

**LCR mode**

This mode sends the signal of the input channel to a total of three buses (STEREO (L/R) and MONO (C)) together.

- The signal sent from the input channel to the STEREO bus and MONO bus will be switched on/off as a whole.
- The CSR (Center Side Ratio) knob specifies the level ratio between the signal sent from the input channel to the STEREO (L/R) bus and to the MONO (C) bus.
- The TO ST PAN knob / BALANCE knob specifies the level of the signal sent from the input channel to the STEREO (L/R) bus and MONO (C) bus.

**HINT**

- If you want to monitor the signal of the STEREO bus or MONO bus through headphones etc., you should press the MONITOR button in the function access area to select “LCR” as the monitor source before you continue with the following procedure (→ p. 142).

1. Make sure that an input source is connected to the input channel you’re adjusting, and set the phantom power supply, gain, and phase of the head amp to obtain the optimum input signal (→ p. 55).

2. Use the navigation keys to access the OVERVIEW screen that includes the input channel you want to send to the STEREO/MONO bus.

3. In the STEREO/MONO field, press a knob to select the channel you want to adjust, and then press the knob once again to access the TO STEREO/MONO popup window.

   In the TO STEREO/MONO popup window you can control the signal that is sent from the input channel to the STEREO/MONO bus. You can view this popup window as two types, 8ch and ALL; use the tabs below the window to switch between them. These windows include the following items.

   **[TO STEREO/MONO popup window (8 ch)]**

   Here you can control the on/off and pan/balance settings of the signal sent from input channels to the STEREO (L/R) bus and MONO (C) bus, in groups of eight channels.
**Sending the signal from an input channel to the STEREO/MONO buses**

1. **Channel select button**
   This shows the icon, channel number, and channel name for the channel. When you press this button, that channel will be selected for operations, and the corresponding [SEL] key will light.

2. **MODE button**
   This button selects either ST/MONO mode or LCR mode as the way in which the signal will be sent to the STEREO bus or MONO bus. This mode can be specified individually for each channel. The two modes will alternate each time you press the button. An indicator (ST/MONO or LCR) immediately above the button will light to indicate the currently selected mode.

3. **STEREO/MONO buttons**
   These buttons are individual on/off switches for the signal that is sent from each channel to the STEREO bus / MONO bus when the MONO button is set to ST/MONO mode.

4. **TO ST PAN/TO ST BALANCE knob**
   For INPUT channels, this acts as the PAN knob that adjusts the left/right panning of the signal sent to the STEREO bus. For ST IN channels, this acts as the BALANCE knob that adjusts the volume of the left and right signals sent to the STEREO bus. To adjust the value, press the knob to select it, and operate the corresponding multifunction encoder.

   If the MODE button is set to LCR mode, the following button and knob are displayed instead of the STEREO/MONO button (3).

5. **LCR button**
   This button is an overall on/off switch for the signals sent from the channel to the STEREO bus and MONO bus. If this button is off, no signals will be sent from the corresponding input channel to the STEREO bus or MONO bus.

6. **CSR knob**
   This knob adjusts the relative level of the signals sent from the channel to the STEREO (L/R) bus and to the MONO (C) bus, in a range of 0–100%. To adjust the value, press the knob to select it, and operate the corresponding multifunction encoder.

[TO STEREO/MONO popup window (ALL)]

   The screen shows the status of the signals sent from all input channels to the STEREO bus / MIX bus. Here you can also adjust the pan or balance in groups of the selected eight channels.

1. **Channel select button**
   This indicates the channel number, the icon selected for that channel, and the channel name. When you press this button, that channel will be selected for operations, and the corresponding [SEL] key will light.

2. **TO ST PAN/TO ST BALANCE knob**
   For INPUT channels, this acts as the PAN knob that adjusts the left/right panning of the signal sent to the STEREO bus. For ST IN channels, this acts as the BALANCE knob that adjusts the volume of the left and right signals sent to the STEREO bus.

   To adjust the value, press the knob to select it, and operate the corresponding multifunction encoder.

   If the signal reaches the overload point at any meter detection point in that channel, the indicator at the right of the knob will light.

3. **ST/MONO indicator**
   If a channel is set to ST/MONO mode, this individually indicates the on/off status of the signal sent from the channel to the STEREO bus / MONO bus.

   If a channel is set to LCR mode, the LCR indicator is displayed in this location. The LCR indicator indicates the on/off status of all signals sent from that channel to the STEREO bus and MONO bus.

4. **Access the eight-channel TO STEREO/MONO popup window.**

5. **Use the MODE button to select either ST/MONO mode or LCR mode for each channel.**

6. **In the STEREO / MONO MASTER section of the top panel, make sure that the [ON] key of the STEREO channel / MONO channel is turned on, and raise the fader to an appropriate position.**
7 In the INPUT section or ST IN section of the top panel, make sure that the [ON] key is turned on for the input channel you want to control, and raise the fader to an appropriate position.

The subsequent steps will differ depending on whether ST/MONO mode or LCR mode was selected for the channel in step 5.

- Channels for which ST/MONO mode is selected

8 In the TO STEREO/MONO popup window, use the STEREO/MONO button to turn the signal sent from the input channel to the STEREO bus / MONO bus on or off.

For a channel that is set to ST/MONO mode, the signals sent to the STEREO bus and to the MONO bus can be switched on/off individually.

9 In the TO STEREO/MONO popup window, use the TO ST PAN knob to set the panning of the signal sent from the input channel to the STEREO bus.

- Channels for which LCR mode is selected

8 In the TO STEREO/MONO popup window, use the LCR button to turn the signals sent from the input channel to the STEREO bus / MONO bus on or off together.

For a channel that is set to LCR mode, the signals sent to the STEREO bus and to the MONO bus are switched on/off together.

9 In the TO STEREO/MONO popup window, use the CSR knob to adjust the level difference between the signals sent from that channel to the STEREO (L/R) bus and to the MONO (C) bus.

10 In the TO STEREO/MONO popup window, use the TO ST PAN knob to set the panning of the signal sent from the input channel to the STEREO bus and MONO (C) bus.

If the CSR knob is set to 0%, operating the TO ST PAN knob of an INPUT channel will change the level of the signals sent to the STEREO (L/R) bus and MONO (C) bus as shown in the following diagram. In this case, the TO ST PAN knob operates as a conventional PAN knob, and no signal is sent to the MONO (C) bus.

Operating the TO ST BALANCE knob of a ST IN channel will change the level of the signals sent from the ST IN L/R channels to the STEREO (L/R) bus and MONO (C) bus as shown in the following diagram. In this case, the TO ST PAN knob operates as a conventional BALANCE knob, and no signal is sent to the MONO (C) bus.

If the CSR knob is set to 100%, operating the INPUT TO ST PAN knob will change the level of the signals sent to the STEREO (L/R) bus and MONO (C) bus as shown in the following diagram.
Operating the TO ST BALANCE knob of a ST IN channel will change the level of the signals sent from the ST IN L/R channels to the STEREO (L/R) bus and MONO (C) bus as shown in the following diagram.
Sending the signal from an input channel to a MIX bus

This section explains how to send the signal from an input channel to MIX buses 1–16. MIX buses are used mainly for the purpose of sending signals to foldback speakers on stage, or to effect processors. You can send a signal from an input channel to a MIX bus in the following three ways.

■ Using the SELECTED CHANNEL section

In this method, you use the encoders of the SELECTED CHANNEL section to adjust the send levels to the MIX buses. When using this method, the signals sent from a specific input channel to all MIX buses can be adjusted simultaneously.

■ Using the Centralogic section

In this method, you use the multifunction encoders of the Centralogic section to adjust the send levels to the MIX buses. When using this method, the signals sent from eight consecutive input channels to a specific MIX bus can be adjusted simultaneously.

■ Using the faders of the top panel

In this method, you switch the M7CL to SENDS ON FADER mode, and use the faders of the top panel to adjust the send levels to the MIX buses. When using this method, the signals sent from all input channels to a specific MIX bus can be adjusted simultaneously.

Using the SELECTED CHANNEL section

Here’s how you can use the encoders of the SELECTED CHANNEL section to adjust the send levels of the signals sent from a specific input channel to all MIX buses.

1 Make sure that an output port is assigned to each MIX bus to which you want to send signals, and that your monitor system or external effect processor etc. is connected to the corresponding output port.

For details on assigning an output port to a MIX bus refer to p. 95. For details on connecting an external device, refer to p. 39.

2 Use the [SEL] keys of the top panel to select the input channel that will send signals to the MIX buses.

3 Press any one of the encoders of the SELECTED CHANNEL section to access the SELECTED CHANNEL VIEW screen.

The SELECTED CHANNEL VIEW screen will show all the mix parameters of the corresponding input channel. Adjustments of send levels to the MIX/MATRIX buses is done in the TO MIX/TO MATRIX field of this screen.

TO MIX/TO MATRIX field

In this field you can switch the on/off status and adjust the level of the signal sent from the input channel to the MIX buses / MATRIX buses.

TO MIX/TO MATRIX buttons

These buttons select the send destination that is controlled by the TO MIX/TO MATRIX field. If the TO MIX button is on, you are controlling the signals sent to the MIX buses.

TO MIX SEND LEVEL knob

Adjusts the send level of the signal sent from the input channel to MIX bus. To adjust the send levels, use the encoders of the SELECTED CHANNEL section.

If the send-destination MIX bus is set to stereo, the left knob of the two adjacent knobs will operate as a PAN knob (for a ST IN channel, the BALANCE knob). If the TO MIX SEND ON/OFF button (4) is off, the knob will be dimmed.
Sending the signal from an input channel to a MIX bus

4 TO MIX SEND ON/OFF button

This is an on/off switch for the signal sent from the input channel to MIX bus.

An indication of “PRE” in black characters on a white background is shown above these buttons only if PRE (pre-fader) is selected as the position from which the signal is sent from the input channel. This indication is not shown for POST (post-fader). (For details on how to switch between PRE and POST → p. 64).

- If PRE is selected as the send position to a MIX bus, you will further be able to select either PRE EQ (immediately before the attenuator) or PRE FADER (immediately before the fader) for each MIX bus (→ p. 212).

4 In the TO MIX/TO MATRIX field in the screen, make sure that the TO MIX button is turned on.

When the TO MIX button is on, the TO MIX/TO MATRIX field shows the knobs and buttons for MIX buses 1–16. If this button is off, press the button to turn it on.

MIX buses can be either a FIXED type whose send level is fixed, or a VARI type whose send level is variable. You can switch between FIXED and VARI types for each two adjacent odd-numbered/even-numbered MIX buses (for the procedure → p. 212).

If the send-destination MIX bus is a FIXED type, a O symbol is displayed instead of the TO MIX SEND LEVEL knob. In this case you won’t be able to adjust the send level.

If the send-destination MIX bus is a VARI type, the TO MIX SEND LEVEL knob is displayed in the same color as the corresponding encoder of the SELECTED CHANNEL section. In this case, you can use the corresponding encoder of the SELECTED CHANNEL section to adjust the send level.

If necessary, you can specify two adjacent odd-numbered/even-numbered MIX buses as a stereo bus and link the main parameters (→ p. 212).

If the send-destination MIX bus is assigned as stereo, the left knob of the two adjacent TO MIX SEND LEVEL knobs will operate as the TO MIX PAN knob (for a ST IN channel, it will operate as the TO MIX BALANCE knob).

5 Make sure that the TO MIX SEND ON/OFF button is turned on for the send-destination MIX bus.

If this button is off, press the button in the screen to turn it on.

6 In the SELECTED CHANNEL section, use the MIX SEND LEVEL knobs to adjust the send levels to the MIX buses.

- If you want to monitor the signal being sent to a specific MIX bus, use the navigation keys to access the corresponding MIX channel, and press the appropriate [CUE] key in the Centralogic section.

7 You can use the top panel [SEL] keys to switch input channels and control the send level to all MIX buses in the same way.
Using the Centralogic section

Here’s how you can use the multifunction encoders of the Centralogic section to adjust the send level of the signals sent from eight consecutive input channels to a specific MIX bus.

1. Make sure that an output port is assigned to each MIX bus to which you want to send signals, and that your monitor system or external effect etc. is connected to the corresponding output port.

   For details on assigning an output port to a MIX bus refer to p. 95. For details on connecting an external device, refer to p. 39.

2. Use the navigation keys to access the OVERVIEW screen that includes the input channel you want to control.

   In the OVERVIEW screen, you can use the TO MIX/TO MATRIX field to adjust the send levels to the MIX/MATRIX bus.

   **TO MIX/TO MATRIX field**

   In this field you can switch the on/off status and adjust the level of the signal sent from the input channel to the MIX buses / MATRIX buses. Use the TO MIX/TO MATRIX buttons of the SELECTED CHANNEL VIEW screen to switch the type of send destination shown in this field (→ p. 82).

   **TO MIX SEND LEVEL knob**

   This screen shows the send level of the signals sent from the input channels to the MIX bus. These knobs are shown only when the send-destination MIX bus is a VARI type.

   To adjust the send level, press the appropriate knob to select it, and operate multifunction encoders 1–8. If the send-destination MIX bus is set to stereo, the left knob of the two adjacent knobs will operate as a PAN knob (for a ST IN channel, the BALANCE knob). If the TO MIX SEND ON/OFF button is off, the knob will be dimmed.

   **TO MIX SEND ON/OFF button**

   These are on/off switches for the signal sent from the input channels to the MIX bus. These buttons are shown only when the send-destination MIX bus is a FIXED type.

3. Press the TO MIX SEND LEVEL knob for the desired send-destination MIX bus.

   A bold frame will appear around all TO MIX SEND LEVEL knobs for that MIX bus.

4. Use multifunction encoders 1–8 to adjust the send level of the signals sent from the up to eight input channels to the selected MIX bus.

   If necessary, you can use the navigation keys to switch the input channels that are assigned to the Centralogic section, and adjust the send levels from other input channels to the selected MIX bus.

   **Hint**

   If you want to monitor the signal being sent to a specific MIX bus, use the navigation keys to access the corresponding MIX channel in the Centralogic section, and press the [CUE] key for that MIX channel.

5. If you want to make detailed settings for MIX sends, press the TO MIX SEND LEVEL knob inside the bold frame once again.

   When you press the currently selected TO MIX SEND LEVEL knob once again, the MIX SEND popup window will appear. The window includes the following items.

   **SEND TO**

   This indicates the number, channel name, and icon of the MIX bus that is currently selected as the send-destination for signals.

   **←→ buttons**

   Use these buttons to switch between send-destination buses. You can switch consecutively through MIX buses 1–16 and MATRIX buses 1–8.

   **Channel select button**

   This indicates the channel number, the icon selected for that channel, and the channel name. When you press this button, that channel will be selected for operations, and the corresponding [SEL] key will light.
Sending the signal from an input channel to a MIX bus

4 PRE button
This button switches the position at which the signal is sent from the input channel to a VARI type MIX bus. The signal is sent from the post-fader position when this button is off, and from the pre-fader position when this button is on.

5 TO MIX SEND ON/OFF button
These are on/off switches for the signal sent from the input channels to the MIX bus.

6 TO MIX SEND LEVEL knob
This screen shows the send level of the signal sent from the input channels to the MIX bus. To adjust the level, operate multifunction encoders 1–8.

If the send-destination MIX bus is set to stereo, the TO MIX PAN knob (for a ST IN channel, the TO MIX BALANCE knob) and TO MIX SEND LEVEL knob are shown in this location.

7 ALL PRE button
This button selects PRE as the position from which signals are sent from all input channels to VARI-type MIX buses.

8 ALL POST button
This button selects POST as the position from which signals are sent from all input channels to VARI-type MIX buses.

6 Use the TO MIX SEND ON/OFF buttons to switch the signals sent from the input channels to the currently selected MIX bus on/off.

7 If necessary, use the PRE buttons to select the location of the signal that is sent from each input channel to a VARI type MIX bus.

- If the PRE button is on, you can also select PRE EQ (immediately before the attenuator) or PRE FADER (immediately before the fader) for each MIX bus. This setting is made in the BUS SETUP popup window (→ p. 212).
- The PRE button is not shown for FIXED type MIX buses.

8 Repeat steps 3–6 to adjust the send level for other MIX buses in the same way.

Using the faders (SENGDS ON FADER mode)

Here’s how you can use the faders of the top panel to adjust the signal that is sent from all input channels to a specific MIX bus.

1 Make sure that an output port is assigned to each MIX bus to which you want to send signals, and that your monitor system or external effect etc. is connected to the corresponding output port.

For details on assigning an output port to a MIX bus refer to p. 95. For details on connecting an external device, refer to p. 39.

2 In the function access area, press the SENDS ON FADER button.

The M7CL will switch to SENDS ON FADER mode. The most recently selected group of MIX buses will be assigned to the Centralogic section. The faders of the INPUT section and ST IN section will move to the send level values of each channel for the currently selected MIX bus.

In SENDS ON FADER mode, the function access area in the display will show buttons for selecting the send-destination MIX bus.

3 Use the MIX bus selection buttons in the function access area to select the send-destination MIX bus.

- You can also select a MIX bus by using the navigation keys and the [SEL] keys of the Centralogic section.
- If you once again press the MIX button selection button that is currently selected, cue monitoring will be turned on for the corresponding MIX channel. This method is convenient when you want to monitor the signal that is being sent to the selected MIX bus.
4 Use the faders of the top panel INPUT section or ST IN section to adjust the send level from the input channels to the selected MIX bus.

**HINT**

- You can assign the SENDS ON FADER function to a user-defined key. This lets you quickly switch to SENDS ON FADER mode for a specific MIX bus, and quickly switch back again.

5 Repeat steps 3–4 to adjust the send level for other MIX buses in the same way.

6 When you’re finished adjusting the MIX send levels, press the “×” symbol in the function access area.

The function access area display will return to its prior state, and the M7CL will exit SENDS ON FADER mode and return to normal mode.
Sending the signal from an input channel to the MATRIX buses

This section explains how to send the signal from an input channel to MATRIX buses 1–8. The MATRIX buses are used to produce a mix that is independent of the STEREO bus or MIX buses, mainly for sending to a master recorder or to the monitor system for the musicians. You can send a signal from an input channel to the MATRIX buses in the following two ways.

■ Using the SELECTED CHANNEL section

In this method, you use the encoders of the SELECTED CHANNEL section to adjust the send levels to the MATRIX buses. When using this method, the signals sent from a specific input channel to all MATRIX buses can be adjusted simultaneously.

■ Using the Centralogic section

In this method, you use the multifunction encoders of the Centralogic section to adjust the send levels to the MATRIX buses. When using this method, the signals sent from eight consecutive input channels to a specific MATRIX bus can be adjusted simultaneously.

Using the SELECTED CHANNEL section

Here’s how you can use the encoders of the SELECTED CHANNEL section to adjust the send levels of the signals sent from a specific input channel to all MATRIX buses.

1 Make sure that an output port is assigned to the MATRIX bus to which you want to send signals, and that your external device is connected to the corresponding output port.
   For details on assigning an output port to a MATRIX bus refer to p. 95. For details on connecting an external device, refer to p. 39.

2 Use the (SEL) keys of the top panel to select the input channel that will send signals to the MATRIX buses.

3 Press any one of the encoders of the SELECTED CHANNEL section to access the SELECTED CHANNEL VIEW screen. Adjustments of send levels from the input channel to the MIX buses / MATRIX buses is done in the TO MIX/TO MATRIX field of this screen.

1 TO MIX/TO MATRIX field
   In this field you can switch the on/off status and adjust the level of the signal sent from the input channel to the MIX buses / MATRIX buses.

2 TO MIX/TO MATRIX buttons
   These buttons select the send destination that is controlled by the TO MIX/TO MATRIX field. If the TO MATRIX button is on, you can control the signal sent to the MATRIX bus.

3 TO MATRIX SEND LEVEL knob
   Adjusts the send level of the signal sent from the input channel to MATRIX bus. To adjust the send levels, use the encoders of the SELECTED CHANNEL section.
   If the send-destination MATRIX bus is set to stereo, the left knob of the two adjacent knobs will operate as a PAN knob (for a ST IN channel, the BALANCE knob).

4 TO MATRIX SEND ON/OFF button
   This is an on/off switch for the signal sent from the input channel to MATRIX bus.
   An indication of “PRE” in black characters on a white background is shown above these buttons only if PRE (pre-fader) is selected as the position from which the signal is sent from the input channel. This indication is not shown for POST (post-fader). (For details on how to switch between PRE and POST → p. 77).

4 In the TO MIX/TO MATRIX field in the screen, make sure that the TO MATRIX button is turned on.
   When the TO MATRIX button is on, the TO MIX/TO MATRIX field shows the knobs and buttons for MATRIX buses 1–8. If this button is off, press the button to turn it on.

   If necessary, you can specify two adjacent odd-numbered/even-numbered MATRIX buses as a stereo bus and link the main parameters (→ p. 212).
If the send-destination MATRIX bus is assigned as stereo, the left knob of the two adjacent TO MATRIX SEND LEVEL knobs will operate as the TO MATRIX PAN knob (for a ST IN channel, it will operate as the TO MATRIX BALANCE knob).

For an INPUT channel, the right knob will adjust the common send level to the two MATRIX buses, and the left knob will adjust the panning between the two MATRIX buses. Turning the left TO MATRIX SEND LEVEL knob toward the left will increase the amount of signal sent to the odd-numbered MATRIX bus, and turning it toward the right will increase the amount sent to the even-numbered MATRIX bus.

For a ST IN channel, the right knob adjusts the common send level for the two MATRIX buses, and the left knob adjusts the volume balance of the left and right signals sent to the two MATRIX buses. Turning the left TO MATRIX SEND LEVEL knob toward the left will increase the amount of signal sent from the L-channel to the odd-numbered MATRIX bus, and turning it toward the right will increase the amount sent from the R-channel to the even-numbered MATRIX bus.

### Using the Centralogic section

Here’s how you can use the multifunction encoders of the Centralogic section to adjust the send level of the signals sent from eight consecutive input channels to a specific MATRIX bus.

1. **Make sure that an output port is assigned to each MATRIX bus to which you want to send signals, and that your monitor system or external effect etc. is connected to the corresponding output port.**

   For details on assigning an output port to a MATRIX bus refer to p. 95. For details on connecting an external device, refer to p. 39.

2. **Use the navigation keys to access the OVERVIEW screen that includes the input channel you want to control.**

   In the OVERVIEW screen, you can use the TO MIX/TO MATRIX field to adjust the send levels to the MIX/MATRIX bus.

   ![Screen shot](image)

   1. **TO MIX/TO MATRIX field**
      
      In this field you can switch the on/off status and adjust the level of the signal sent from the input channel to the MIX buses / MATRIX buses. Use the TO MIX/TO MATRIX buttons of the SELECTED CHANNEL VIEW screen to switch the type of send destination shown in this field (* p. 82).

   2. **TO MATRIX SEND LEVEL knob**
      
      This screen shows the send level of the signal sent from the input channels to the MATRIX bus. To adjust the send level, press the appropriate knob to select it, and operate multifunction encoders 1–8. If the send-destination MATRIX bus is set to stereo, the left one of the two adjacent knobs will be linked as the TO MATRIX PAN knob.

3. **Press the TO MATRIX SEND LEVEL knob for the desired send-destination MATRIX bus.**

   A bold frame will appear around all TO MATRIX SEND LEVEL knobs for that MATRIX bus.

5. **Make sure that the TO MATRIX SEND ON/OFF button is turned on for the send-destination MATRIX bus.**

   If this button is off, press the button in the screen to turn it on.

6. **In the SELECTED CHANNEL section, use the MATRIX SEND LEVEL knobs to adjust the send levels to the MATRIX buses.**

   ![Screen shot](image)

   **HINT**

   - If you want to monitor the signal being sent to a specific MATRIX channel, and press the appropriate [CUE] key in the Centralogic section.

7. **You can use the top panel [SEL] keys to switch input channels and control the send level to the MATRIX buses in the same way.**
4 Use multifunction encoders 1–8 to adjust the send level of the signals sent from the up to eight input channels to the selected MATRIX bus.

If necessary, you can use the navigation keys to switch the input channels that are assigned to the Centralogic section, and adjust the send levels from other input channels to the selected MATRIX bus.

5 If you want to make detailed settings for MATRIX sends, press the TO MATRIX SEND LEVEL knob inside the bold frame once again.

When you press the currently selected TO MATRIX SEND LEVEL knob once again, the MATRIX SEND popup window will appear. The window includes the following items.

1 SEND TO
This indicates the number, channel name, and icon of the MATRIX bus that is currently selected as the send-destination for signals.

2 ←→ buttons
Use these buttons to switch between send-destination buses. You can switch consecutively through MIX buses 1–16 and MATRIX buses 1–8.

3 Channel select button
This indicates the channel number, the icon selected for that channel, and the channel name. When you press this button, that channel will be selected for operations, and the corresponding [SEL] key will light.

4 PRE button
This button selects the location from which the signal of the input channel will be sent to the MATRIX bus. The signal will be sent from POST (Immediately after the [ON] key) if this button is off. The signal will be sent from the PRE EQ (Immediately before the attenuator) or PRE FADER (Immediately before the fader) as specified in the BUS SETUP popup window if this button is on.

5 TO MATRIX SEND ON/OFF button
These are on/off switches for the signal sent from the input channels to the MATRIX bus.

6 TO MATRIX SEND LEVEL knob
This screen shows the send level of the signal sent from the input channels to the MATRIX bus. To adjust the level, operate multifunction encoders 1–8.

If the send-destination MATRIX bus is set to stereo, the TO MATRIX PAN knob (for a ST IN channel, the TO MATRIX BALANCE knob) and TO MATRIX SEND LEVEL knob are shown in this location.

7 ALL PRE button
This button selects PRE as the position from which signals are sent from all input channels to VARI-type MIX buses.

8 ALL POST button
This button selects POST as the position from which signals are sent from all input channels to VARI-type MIX buses.

6 Use the TO MATRIX SEND ON/OFF buttons to switch the signals sent from the input channels to the currently selected MATRIX bus on/off.

7 If necessary, use the PRE buttons to select the location of the signal that is sent from each input channel to a VARI type MATRIX bus.

8 Repeat steps 3–6 to adjust the send level for other MATRIX buses in the same way.

• If you want to monitor the signal being sent to a specific MATRIX bus, use the navigation keys to access the corresponding MATRIX channel in the Centralogic section, and press the [CUE] key for that MATRIX channel.
Output channel operations

This chapter explains operations for output channels (MIX channels, MATRIX channels, STEREO channel, MONO channel).

Signal flow for output channels

The output channel section takes the signals sent from the input channels to the various buses, processes them with EQ and dynamics, and sends them to output ports or other buses. The following types of output channel are provided.

MIX channels 1–16

These channels process the signals sent from input channels to MIX buses, and output them to the corresponding output port, MATRIX bus, STEREO bus, or MONO (C) bus. When the M7CL is in the default state, the following output ports are assigned.

| MIX channels 1–12 | OMNI OUT jacks 1–12 |
| MIX channels 1–8 | Slot 1 output channels 1–8, 9–16 |
| MIX channels 9–16 | Slot 2 output channels 1–8, 9–16 |

STEREO channel / MONO (C) channel

Each of these channels process the signal sent from the input channels to the STEREO bus or MONO (C) bus, and send it to the corresponding output port or MATRIX bus. If input channels are in LCR mode, the STEREO (L/R) channels and the MONO (C) channel can be used together as a set of three output channels. When the M7CL is in the default state, the following output ports are assigned.

STEREO channel (L/R) | OMNI OUT jacks 15/16, 2TR OUT DIGITAL jack (L/R)
These channels process the signals sent from MIX channels and STEREO/MONO channels to MATRIX buses, and send them to the corresponding output ports. When the M7CL is in the default state, the following output ports are assigned.

- **ATT (Attenuator)**
  Attenuates/boosts the level of the signal.

- **4 BAND EQ (4 band equalizer)**
  A parametric EQ with four bands; HIGH, HIGH MID, LOW MID, and LOW.

- **DYNAMICS 1**
  This is a dynamics processor that can be used as a compressor, compander, or expander.

- **LEVEL**
  This adjusts the output level of the channel.

- **BALANCE (STEREO channel only)**
  Adjusts the left/right volume balance of the STEREO (L/R) channel.

- **ON (On/off)**
  Turns the output channel on/off. If off, that channel is muted.

- **MATRIX ON/OFF (MATRIX send on/off)**
  This is an on/off switch for the signal sent from the MIX channels, STEREO (L/R) channel, or MONO (C) channel to each MATRIX bus 1–8.

- **MATRIX 1-8 (MATRIX send levels 1–8)**
  This adjusts the send level of the signal sent from the MIX channels, STEREO (L/R) channel, or MONO (C) channel to each MATRIX bus 1–8. As the position from which the signal is sent to the MATRIX bus, you can choose either immediately before the four-band EQ, immediately before the fader, or immediately after the [ON] key.

If the send-destination MATRIX bus is set to stereo, you can use the PAN knob to adjust the panning between the two MATRIX buses. If the send-source is a stereo MIX channel or the STEREO channel, use the BALANCE knob to adjust the volume balance of the left and right channels sent to the two MATRIX buses.

- **INSERT**
  You can patch the desired output/input ports to insert an external device such as an effect processor. You can switch the insert-out and insert-in locations.

- **METER**
  This meters the level of the output channel. You can switch the position at which the level is detected.

- **KEY IN (MIX channels 13–16 only)**
  You can send the output signals of MIX channels 13–16 to dynamics processors and use them as key-in signals to control the dynamics.

- **RACK IN PATCH**
  This patches the output signal of a MIX channel to an input of the rack.

- **OUTPUT PATCH**
  This assigns an output port to an output channel.

- **MONITOR SELECT**
  This selects the output signal of an output channel as a monitor source.
Specifying the channel name and icon

This section explains how to specify the name and icon that will be displayed in the screen for each output channel.

1. **Use the navigation keys to access the OVERVIEW screen that includes the output channel whose channel name and icon you want to specify.**

2. **Access the PATCH/NAME popup window by pressing the channel number / channel name field of the channel whose channel name / icon you want to assign.**

   - **Channel number / Channel name field**

3. **To select the icon for the channel, press the icon button.**
   The lower part of the popup window will change as follows.

   - **Icon select buttons**
     These buttons select the icon used for this channel.
   - **Sample name select buttons**
     These buttons select a sample name associated with the currently selected icon. When you press a button, that sample name will be input to the channel name field.

4. **Use the icon select buttons to select the icon you want to use for that channel.**
   The selected icon is shown in the icon button in the upper part of the window.

5. **If necessary, use the sample name select buttons to select a sample name.**
   The sample name you selected will be input to the channel name field in the upper part of the window.

---

**Specifying the channel name and icon**

The popup window includes the following items.

- **Icon button**
  This indicates the icon selected for that channel. When you press this button, a screen will appear in which you can select an icon or sample name.

- **Channel name input box**
  This indicates the name assigned to that channel. When you press this field, a keyboard window allowing you to assign a name will appear.

- **Output port button**
  This indicates the currently selected output port. If you press this button when selecting an icon or changing the channel name, you will return to the output port select screen.

- **Tabs**
  These tabs select the items shown in the lower part of the screen.

**Hint**

- You can add or edit characters in the channel name field even after you’ve entered the sample name. If you want to assign consecutively numbered channel names such as “Chorus 1” and “Chorus 2,” this can be easily done by entering the sample name and then adding a number.
If you want to enter a channel name directly (or edit the sample name that was entered), press the channel name field in the upper part of the window.

The keyboard window will appear in the lower part of the window, allowing you to enter or edit the characters. For details on how to use the keyboard window, refer to p. 30.

Use the [SEL] keys of the Centralogic section to switch output channels, and specify the icon or channel name for other channels in the same way.

When the PATCH / NAME popup window is shown, you can use the [SEL] keys of the Centralogic section to switch channels within the currently selected eight channels.

If you want to operate output channels other than those in the currently selected eight channels, use the navigation keys → Centralogic section [SEL] keys to select the desired channel.

When you're finished with your input, press the “×” symbol in the upper right of the window.

---

Sending signals from MIX channels to the STEREO/MONO bus

This section explains how to send the signal of a MIX channel to the STEREO bus or MONO bus.

There are two ways to send signals from a MIX channel to the STEREO bus or MONO bus; ST/MONO mode and LCR mode. You can select the mode individually for each channel. These modes differ in the following ways.

#### ST/MONO mode

This mode sends the signal from the MIX channel to the STEREO bus and to the MONO bus independently.

- The signal sent from the MIX channel to the STEREO bus and to the MONO bus can be switched on/off individually.
- The panning of the signal sent from a monaural MIX channel to the STEREO bus L/R is controlled by the TO ST PAN knob. (The signal sent to the MONO bus is not affected by this knob.)
- The left/right volume balance of the signal sent from a stereo MIX channel to the STEREO bus is controlled by the BALANCE knob. (The signal sent to the MONO bus is not affected by this knob.)

#### LCR mode

This mode sends the signal of the MIX channel to a total of three buses (STEREO (L/R) and MONO (C)) together.

- The signal sent from the MIX channel to the STEREO (L/R) bus and to the MONO (C) bus will be switched on/off as a whole.
- The CSR (Center Side Ratio) knob specifies the level ratio between the signal sent from the MIX channel to the STEREO (L/R) bus and to the MONO (C) bus.
- The TO ST PAN knob / BALANCE knob specifies the level of the signal sent from the MIX channel to the STEREO (L/R) bus and MONO (C) bus.

---

**HINT**

- If you want to monitor the signal of the STEREO bus or MONO bus through headphones etc., you should press the MONITOR button in the function access area to select “LCR” as the monitor source before you continue with the following procedure (→ p. 142).
1 Use the navigation keys to access the OVERVIEW screen that includes the MIX channel you want to send to the STEREO/MONO bus.

[STEREO/MONO field]

2 In the STEREO/MONO field, press a knob to select the MIX channel you want to adjust, and then press the knob once again to access the TO STEREO/MONO popup window.

In the TO STEREO/MONO popup window you can control the signal that is sent from the MIX channel to the STEREO/MONO bus. You can view this popup window as two types, 8ch and ALL; use the tabs below the window to switch between them. These windows include the following items.

[TO STEREO/MONO popup window (8 ch)]

Here you can control the on/off and pan/balance settings of the signal sent from MIX channels to the STEREO (L/R) bus and MONO (C) bus, in groups of eight channels.

- **Channel select button**
  This shows the icon, channel number, and channel name for the channel. When you press this button, that channel will be selected for operations, and the corresponding [SEL] key of the Centralogic section will light.

- **MODE button**
  This button selects either ST/MONO mode or LCR mode as the way in which the signal will be sent to the STEREO bus or MONO bus. This mode can be specified individually for each channel. The two modes will alternate each time you press the button. An indicator (ST/MONO or LCR) immediately above the button will light to indicate the currently selected mode.

3 **STEREO/MONO buttons**
These buttons are individual on/off switches for the signal that is sent from each channel to the STEREO bus / MONO bus when the MONO button is set to ST/MONO mode.

4 **TO ST PAN/BALANCE knob**
For monaural MIX channels, this acts as the PAN knob that adjusts the left/right panning of the signal sent to the STEREO bus.
For stereo MIX channels, this acts as the BALANCE knob that adjusts the volume. To adjust the value, press the knob to select it, and operate the corresponding multifunction encoder.
If the MODE button is set to LCR mode, the following button and knob are displayed instead of the STEREO/MONO button (3).

5 **LCR button**
This button is an overall on/off switch for the signals sent from the MIX channel to the STEREO (L/R) bus and MONO (C) bus. If this button is off, no signals will be sent from the corresponding MIX channel to the STEREO bus or MONO bus.

6 **CSR (Center Side Ratio) knob**
This knob adjusts the relative level of the signals sent from the channel to the STEREO (L/R) bus and to the MONO (C) bus, in a range of 0–100%. To adjust the value, press the knob to select it, and operate the corresponding multifunction encoder.

[TO STEREO/MONO popup window (ALL)]

This shows the status of the signals sent from all MIX channels to the STEREO bus / MONO bus, and adjusts the pan or balance for the eight selected channels.
For MATRIX channels and STEREO/MONO channels, only the channel number, icon, and channel name are shown.

1 3 5

4 2
Channel select button
This indicates the channel number, the icon selected for that channel, and the channel name. When you press this button, that channel will be selected for operations, and the corresponding [SEL] key will light.

TO ST PAN/BALANCE knob
For monaural MIX channels, this acts as the PAN knob that adjusts the left/right panning of the signal sent to the STEREO bus. For stereo MIX channels, this acts as the BALANCE knob that adjusts the volume.

To adjust the value, press the knob to select it, and operate the corresponding multifunction encoder.

If the signal reaches the overload point at any meter detection point in that channel, the indicator at the right of the knob will light.

ST/MONO indicator
If a MIX channel is set to ST/MONO mode, this individually indicates the on/off status of the signal sent from the channel to the STEREO bus / MONO bus. If a channel is set to LCR mode, the LCR indicator is displayed in this location. The LCR indicator indicates the on/off status of all signals sent from that channel to the STEREO bus and MONO bus.

Access the eight-channel TO STEREO/ MONO popup window.

Use the MODE button to select either ST/ MONO mode or LCR mode for each channel.

In the STEREO / MONO MASTER section of the top panel, make sure that the [ON] key of the STEREO channel / MONO channel is turned on, and raise the fader to an appropriate position.

Press the [MIX 1-8] key or [MIX 9-16] key so that the MIX channels you want to control are recalled to the Centralogic section.

Make sure that the [ON] key of that channel is on, and use the fader in the Centralogic section to raise the master level of the MIX channel to an appropriate position.

The subsequent steps will differ depending on whether ST/MONO mode or LCR mode was selected for the channel in step 5.

- Channels for which ST/MONO mode is selected

In the TO STEREO/MONO popup window, use the STEREO/MONO button to turn the signal sent from the MIX channel to the STEREO bus / MONO bus on or off.

For a channel that is set to ST/MONO mode, the signals sent to the STEREO bus and to the MONO bus can be switched on/off individually.

In the TO STEREO/MONO popup window, press the TO ST PAN knob to select it, and use multifunction encoders 1–8 to adjust the pan of the signal sent from the MIX channels to the STEREO bus.

- Channels for which LCR mode is selected

Make sure that the LCR button is turned on in the TO STEREO/MONO popup window. Channels for which the LCR button is off will not send any signal to the STEREO bus or MONO bus.

In the TO STEREO/MONO popup window, press the CSR knob to select it, and use multifunction encoders 1–8 to adjust the level difference between the signals sent from that channel to the STEREO (L/R) bus and to the MONO (C) bus.

The CSR knob settings are the same as for input channels. (For details, refer to → p. 59)

In the TO STEREO/MONO popup window, press the TO ST PAN knob to select it, and use multifunction encoders 1–8 to adjust the panning of the signals sent from the MIX channel to the STEREO (L/R) bus and the balance of the signals sent to the MONO (C) bus and STEREO (L/R) bus.

Refer to page 59 for details on how the signal level sent from an LCR mode MIX channel to each bus will change according to the operation of the TO ST PAN knob.
Sending signals from MIX channels and STEREO/MONO channels to MATRIX buses

This section explains how to send the signal from a MIX or STEREO/MONO channel to MATRIX buses 1–8. You can do this in either of the following two ways.

■ Using the SELECTED CHANNEL section

In this method, you use the encoders of the SELECTED CHANNEL section to adjust the send levels to the MATRIX buses. This method allows you to simultaneously control the signals sent from a specific MIX, STEREO (L/R), or MONO (C) channel to all MATRIX buses.

■ Using the Centralogic section

In this method, you use the multifunction encoders of the Centralogic section to adjust the send levels to the MATRIX buses. This method allows you to simultaneously control the signals sent from up to eight MIX, STEREO (L/R), or MONO (C) channels to a specific MATRIX bus.

Using the SELECTED CHANNEL section

Use the encoders of the SELECTED CHANNEL section to adjust the send level of the signals sent from the desired MIX, STEREO (L/R) or MONO (C) channel to all MATRIX buses.

1 Make sure that an output port is assigned to the MATRIX bus to which you want to send signals, and that an external device is connected.

For details on assigning an output port to a MATRIX bus refer to p. 95. For details on connecting an external device, refer to p. 39.

2 Using the navigation keys, assign the desired MIX channels 1–8 or 9–16 or the STEREO/MONO channels to the Centralogic section.

3 Use the [SEL] keys of the Centralogic section to select the input channel that will send signals to the MATRIX buses.

The STEREO/MONO channels can also be selected directly by using the [SEL] keys of the STEREO/MONO MASTER section.

4 Press any one of the encoders of the SELECTED CHANNEL section to access the SELECTED CHANNEL VIEW screen.

The SELECTED CHANNEL VIEW screen will show all the mix parameters of the corresponding channel. Adjustments of send levels to the MATRIX buses is done in the TO MATRIX field of this screen.

TO MATRIX field

In this field you can switch the on/off status and adjust the level of the signal sent from that channel to the MATRIX buses.

TO MATRIX SEND LEVEL knob

This adjusts the send level of the signal sent from that channel to the MATRIX buses. To adjust the send levels, use the encoders of the SELECTED CHANNEL section.

If the send-destination MATRIX bus is set to stereo, the left knob of the two adjacent knobs will operate as a PAN knob (for the STEREO channel or a stereo MIX channel, the BALANCE knob). If the TO MATRIX SEND ON/OFF button is off, the knob will be dimmed.

TO MATRIX SEND ON/OFF button

Functions as an on/off switch for the signal sent from that channel to the MATRIX bus.

An indication of “PRE” in black characters on a white background is shown above these buttons only if the signal send position is PRE (pre-fader). This indication is not shown for POST (post-fader). (For details on how to switch between PRE and POST → p. 77).
5 Make sure that the TO MATRIX SEND ON/OFF button is turned on for the send-destination MATRIX bus.

If this button is off, press the button in the screen to turn it on.

6 In the SELECTED CHANNEL section, use the MIX/MATRIX SEND LEVEL knobs to adjust the send levels to the MATRIX buses.

7 Use the navigation keys and the [SEL] keys of the Centralogic section to switch channels, and adjust the send level from other channels to the MATRIX buses in the same way.

**Using the Centralogic section**

This method lets you use the multifunction encoders to simultaneously adjust the send levels from the eight channels selected in the Centralogic section to the desired MATRIX bus.

1 **Make sure that an output port is assigned to the MATRIX bus to which you want to send signals, and that your external device is connected to the corresponding output port.**

For details on assigning an output port to a MATRIX bus refer to p. 95. For details on connecting an external device, refer to p. 39.

2 **Use the navigation keys to access the OVERVIEW screen that includes the channel (MIX channels 1–8, 9–16, or STEREO/MONO channels) that you want to control.**

In the OVERVIEW screen, you can use the TO MATRIX field to adjust the send levels to the MATRIX bus.

3 **Press the TO MATRIX SEND LEVEL knob for the desired send-destination MATRIX bus.**

A bold frame will appear around all TO MATRIX SEND LEVEL knobs for that MATRIX bus.
4 Use multifunction encoders 1–8 to adjust the send level of the signals sent from up to eight MIX channels or the STEREO/MONO channels to the selected MATRIX bus.

If necessary, you can use the navigation keys and the [SEL] keys of the Centralogic section to switch the send-destination channel.

**HINT**

- If you want to monitor the signal being sent to a specific MATRIX bus, use the navigation keys to access the corresponding MATRIX channel in the Centralogic section, and press the [CUE] key for that MATRIX channel.

5 If you want to make detailed settings for MATRIX sends, press the TO MATRIX SEND LEVEL knob inside the bold frame once again.

When you press the currently selected TO MATRIX SEND LEVEL knob once again, the MATRIX SEND popup window will appear. The window includes the following items.

- **SEND TO**
  This indicates the number, channel name, and icon of the MATRIX bus that is currently selected as the send-destination for signals.

- **←/→ buttons**
  Use these buttons to switch between send-destination MATRIX buses.

- **Channel select button**
  This indicates the channel number, the icon selected for that channel, and the channel name. When you press this button, that channel will be selected for operations, and the corresponding [SEL] key will light.

- **PRE button**
  This button selects the location from which the signal of the MIX or STEREO/MONO channel will be sent to the MATRIX bus. The signal is sent from the post-fader position when this button is off, and from the pre-fader position when this button is on.

- **TO MATRIX SEND ON/OFF button**
  This is an on/off switch for the signal sent from the MIX or STEREO/MONO channel to the MATRIX bus.

- **TO MATRIX SEND LEVEL knob**
  This adjusts the send level of the signal sent from the MIX or STEREO/MONO channel to the MATRIX bus. To adjust the level, operate multifunction encoders 1–8.

  If the send-destination MATRIX bus is set to stereo, the TO MATRIX PAN knob (for a stereo MIX channel or the STEREO channel), the TO MATRIX BALANCE knob, and TO MATRIX SEND LEVEL knob are shown in this location.

- **ALL PRE button**
  This button sets PRE as the position from which the signal is sent from all channels to the MATRIX bus.

- **ALL POST button**
  This button sets POST as the position from which the signal is sent from all channels to the MATRIX bus.

6 Use the TO MATRIX SEND ON/OFF buttons to switch the signals sent from the MIX and STEREO/MONO channels to the currently selected MATRIX bus on/off.

7 If necessary, you can use the PRE button to select the location from which the signal is sent from each channel to the MATRIX bus.

8 Repeat steps 3–6 to adjust the send level for other MATRIX buses in the same way.

• If you want to monitor the signal being sent to a specific MATRIX bus, use the navigation keys to access the corresponding MATRIX channel in the Centralogic section, and press the [CUE] key for that MATRIX channel.
This chapter explains how you can use the SELECTED CHANNEL section and the SELECTED CHANNEL VIEW screen to control the selected channel.

**About the SELECTED CHANNEL section**

The SELECTED CHANNEL section located at the left of the display corresponds to a mixer module of a conventional analog mixer, and allows you to manually adjust all the major parameters of the currently selected channel. Operations in this section will affect the channel that was most recently selected by its [SEL] key. For a ST IN channel or STEREO channel, either the L or the R channel is selected, and the major parameters are linked.

You can use the encoders on the panel to control mix parameters such as head amp gain, HPF/EQ settings, the threshold setting of the dynamics processors, pan/balance settings, and send levels to the MIX/MATRIX buses.
When you press one of the encoders in the SELECTED CHANNEL section, the SELECTED CHANNEL VIEW screen will appear in the touch screen. The SELECTED CHANNEL VIEW screen shows most of the parameters of the channel currently selected by its [SEL] key. This screen lets you check the settings being controlled by the encoders of the SELECTED CHANNEL section.

The SELECTED CHANNEL VIEW screen contains the following items.

1. **TO MIX/TO MATRIX field**
   - When an input channel is selected
     - Here you can switch the on/off status of the signals sent from that channel to each MIX bus and MATRIX bus, and view the send levels. By switching between the TO MIX and TO MATRIX buttons you can switch the buses that are shown in the SELECTED CHANNEL VIEW screen or OVERVIEW screen.
   - When a MIX, STEREO, or MONO channel is selected
     - Here you can switch the on/off status of the signals sent from that channel to each MATRIX bus, and view the send levels.
   - When a MATRIX channel is selected
     - Here you can switch the on/off status of the signals sent from each channel to that MATRIX bus, and view the send levels.

2. **HA field (input channels only)**
   - This field shows the input port patched to the input channel, the head amp gain, the phantom power on/off status, the phase setting, and the input level OVER indicator.

3. **PATCH field (output channels only)**
   - For output channels, the PATCH field is shown in the (2) area. This field indicates the output port that is patched to the output channel. If two or more output ports are patched, only will be shown as a representative.

4. **TO ST PAN/BALANCE field**
   - When an INPUT channel or monaural MIX channel is selected
     - This functions as an on/off switch for the signal sent from that channel to the STEREO/MONO bus. The panning of the signal sent to the STEREO bus is also shown.
   - When a ST IN channel or a stereo MIX channel is selected
     - This functions as an on/off switch for the signal sent from that channel to the STEREO/MONO bus. This also shows the balance of the left/right signals sent from that channel to the STEREO bus.
   - When a stereo MATRIX channel is selected
     - This shows the balance of the left/right signals sent from the MATRIX channel.
   - When a STEREO channel is selected
     - This shows the balance of the left/right signals sent from the STEREO channel.

5. **DYNAMICS 1 field**

6. **DYNAMICS 2 field (input channels only)**
   - This shows the Dynamics 1/2 parameters. This also accesses a popup window where you can edit detailed dynamics parameters that cannot be edited in the SELECTED CHANNEL section.

7. **HPF field (input channels only)**
   - These controls switch the HPF (high-pass filter) on/off, and adjust its cutoff frequency.

8. **EQ field**
   - Here you can switch the four-band EQ on/off, and view its parameters.
Operations in the SELECTED CHANNEL section

This section explains how you can use the SELECTED CHANNEL section to control all of the parameters for a specific channel.

1. **Use a [SEL] key to select the channel you want to control.**

The SELECTED CHANNEL section controls the channel that was last selected by its [SEL] key.

To select an INPUT, ST IN, STEREO, or MONO channel, press the appropriate [SEL] key in the INPUT section, ST IN section, or STEREO/MONO MASTER section of the top panel.

To select a MIX or MATRIX channel, use the navigation keys to recall the desired channel to the Centralogic section, and then press the [SEL] key for the desired channel.

The number and name of the currently selected channel is shown in the channel select field located in the function access area of the touch screen.

2. **Press any one of the knobs in the SELECTED CHANNEL section.**

When you press a knob in the SELECTED CHANNEL section, the SELECTED CHANNEL VIEW screen for the currently selected channel will appear. If you leave this screen displayed, you will always be able to view the settings in the screen while operating an encoder of the SELECTED CHANNEL section.

3. **Use the encoders of the SELECTED CHANNEL section and the buttons in the SELECTED CHANNEL VIEW screen to edit the parameters of the selected channel.**

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**EQ graph field**

This shows the response of the EQ/HPF.

**INSERT field (INPUT, MIX, MATRIX, STEREO, and MONO channels only)**

The signal route for insertion in the channel can be switched on/off here.

**DIRECT OUT field (INPUT channels only)**

This is an on/off switch for the signal that is directly output from the channel. The output level is also shown here.

**RECALL SAFE field**

Switches the Recall Safe status on/off for that channel. If only some of the channel parameters are set to Recall Safe, the PARTIAL indicator will light.

**FADER field**

Here you can view the input/output level of the channel, and switch it on/off.

**DCA field (input channels only)**

Here you can select the DCA group to which that channel is assigned.

**MUTE field**

Here you can select the mute group to which that channel is assigned.

---

**HINT**

- In addition, you can make settings in the PREFERENCE screen so that you can access detailed parameters that cannot be edited in the SELECTED CHANNEL section. (For details, refer to p. 198).

Even if a different screen is selected, the knobs of the SELECTED CHANNEL section always affect the currently selected channel. In this case, a window indicating the value of that parameter will appear in the screen when you operate a knob.
Operations in the SELECTED CHANNEL section

- **Adjusting the send level to a MIX bus or MATRIX bus**
  Use the TO MIX/TO MATRIX field when you want to send the signal from an INPUT/ST IN channel to a MIX bus, or from an INPUT, ST IN, MIX, or STEREO channel to a MATRIX bus.

1. **TO MIX/TO MATRIX buttons (Input channels only)**
   These buttons select the buses that will be controlled. This field will show the MIX buses if the TO MIX button is on, or the MATRIX buses if the TO MATRIX button is on.

2. **TO MIX/TO MATRIX SEND LEVEL knobs**
   These knobs indicate the send level of the signal sent from that input channel to each MIX bus or MATRIX bus. To adjust the values, use the corresponding [MIX/MATRIX] encoder of the SELECTED CHANNEL section.

   If the send-destination MIX bus / MATRIX bus is set to stereo, the left knob of the two adjacent knobs will operate as a PAN knob. (For a ST IN channel, a stereo MIX channel, or STEREO channel, it will operate as the BALANCE knob.) When you press this knob, the corresponding MIX/MATRIX SEND popup window will appear.

3. **TO MIX/TO MATRIX SEND ON/OFF button**
   These are on/off switches for the signal sent from the channel to each MIX bus / MATRIX bus.

   If the send-destination MIX bus is a FIXED type, this knob will not appear; only the TO MIX SEND ON/OFF button (3) will be shown.

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Subsequent operations will differ depending on the parameters you want to adjust.

To adjust the send level to MIX buses or MATRIX buses, first use the TO MIX / TO MATRIX buttons to select the buses to which you want to send the signal (only for input channels).

Next, use the corresponding [MIX/MATRIX] encoders of the SELECTED CHANNEL section (color-coded in the screen) to adjust the send levels of the signal sent to each bus.

If desired, you can use the TO MIX/TO MATRIX SEND ON/OFF buttons to switch the signal sent to each bus on/off. Above each of these buttons is shown the position from which the signal is sent from the current channel. (For details on changing the send position → p. 64).

- **Adjusting the send level from the MIX channels to a specific MATRIX bus**
  To adjust the send level from the MIX channels to a specific MATRIX bus, first select the send-destination MATRIX channel, and then access the SELECTED CHANNEL VIEW screen. If you have selected a MATRIX channel, the FROM MIX field is shown at the left edge of the SELECTED CHANNEL VIEW screen. This field includes the following items.

1. **TO MATRIX SEND LEVEL knobs**
   These adjust the send level of the signal sent from each MIX channel to the selected MATRIX bus.

2. **TO MATRIX SEND ON/OFF buttons**
   These are on/off switches for the signal sent from each MIX channel to the MATRIX bus.

   To adjust the send level to a MATRIX bus, turn the corresponding [MIX/MATRIX] encoder in the SELECTED CHANNEL section (they are color-coded as in the screen).

   If desired, you can use the TO MATRIX SEND ON/OFF buttons to switch the signal sent from each MIX channel to the MATRIX bus on/off. Above each of these buttons is shown the position from which the signal is sent from the MIX channel. (For details on changing the send position → p. 77).
● Making HA settings (input channels only)
To control the head amp (HA) assigned to an INPUT/ST IN channel, you will use the [HA] encoder of the SELECTED CHANNEL section and the HA field of the SELECTED CHANNEL VIEW screen. The HA field includes the following items.

1. **GAIN knob**
   This indicates the gain of the head amp assigned to the channel. To adjust the value, use the [HA] encoder of the SELECTED CHANNEL section.

2. **INPUT PORT popup button**
   This shows the input port assigned to this channel. It also accesses a popup window in which you can select the input port.

3. **+48V**
   This indicates the phantom power on (red) or off (black) status for the head amp assigned to the channel.

4. **ø (Phase)**
   This indicates either normal phase (black) or reverse phase (orange) for the input assigned to the channel.

5. **OVER indicator**
   This will light when the input signal from the HA reaches the overload point.

To adjust the head amp gain, use the [HA] encoder of the SELECTED CHANNEL section.

In the screen, the indicator at the upper right of the HA knob shows the presence or absence of a signal at the patched input port, and also indicates whether an overload has occurred.

When you press the GAIN knob in the screen, the HA/PATCH popup window (1 ch) will appear, allowing you to make settings for the head amp. (For details on the popup window → p. 55).

When you press the INPUT PORT button, the PATCH/NAME popup window will appear, allowing you to select the input port for each channel. (For details on the popup window → p. 98).

**NOTE**
- The PAD will be internally switched on or off when the HA gain is adjusted between -14 dB and -13 dB. Keep in mind that noise may be generated if there is a difference between the Hot and Cold output impedance of the external device connected to the INPUT connector when using phantom power.

---

● Setting the pan/balance
To adjust the pan/balance of the signal sent from that channel to the STEREO bus, use the [PAN] encoder of the SELECTED CHANNEL section and the TO ST PAN/BALANCE field of the SELECTED CHANNEL VIEW screen. The TO ST PAN/BALANCE field includes the following items.

1. **PAN/BALANCE knob**
   The following parameter will change, according to the channel that is selected.

<table>
<thead>
<tr>
<th>Channel Type</th>
<th>TO STEREO PAN/BALANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>INPUT channel</td>
<td>TO STEREO PAN</td>
</tr>
<tr>
<td>ST IN channel</td>
<td>TO STEREO BALANCE</td>
</tr>
<tr>
<td>MIX (MONO:2) channel</td>
<td>TO STEREO PAN</td>
</tr>
<tr>
<td>MIX (STEREO) channel</td>
<td>MIX BALANCE</td>
</tr>
<tr>
<td>MATRIX (MONO:2) channel</td>
<td>Not displayed</td>
</tr>
<tr>
<td>MATRIX (STEREO) channel</td>
<td>MATRIX BALANCE</td>
</tr>
<tr>
<td>STEREO channel</td>
<td>STEREO BALANCE</td>
</tr>
<tr>
<td>MONO channel</td>
<td>Not displayed</td>
</tr>
</tbody>
</table>

2. **ST/MONO button**
   (INPUT, ST IN, and MIX channels only)
   This switches the on/off status of the signal sent from that channel to the STEREO (L/R) bus and MONO (C) bus.

3. **LCR button**
   (INPUT, ST IN, MIX channels only)
   If an INPUT, ST IN, or MIX channel is set to LCR mode, the LCR button is displayed in location (2). The LCR button is an overall on/off switch for the signals sent from the channel to the STEREO bus and MONO bus.

To adjust the pan/balance of each channel, use the ST/MONO button or LCR button to select the send-destination bus, and operate the [PAN] encoder of the SELECTED CHANNEL section.
Operations in the SELECTED CHANNEL section

● Changing the output patching (output channels only)
To change the output patching of an output channel in the SELECTED CHANNEL VIEW screen, use the popup button in the PATCH field.

When you press the popup button, the PATCH/NAME popup window will appear, allowing you to select the output port and specify the channel name and icon. (For details on the popup window → p. 98).

● Making dynamics settings
To edit the dynamics for the currently selected channel, use the DYNAMICS 1/DYNAMICS 2 field of the SELECTED CHANNEL VIEW screen or the [DYNAMICS 1]/[DYNAMICS 2] encoders of the SELECTED CHANNEL section.

The DYNAMICS 1/DYNAMICS 2 field of the SELECTED CHANNEL VIEW screen contains the following items.

1. THRESHOLD knob
   This indicates the setting of the THRESHOLD parameter of a gate or compressor. To edit the setting, use the [DYNAMICS 1]/[DYNAMICS 2] encoders of the SELECTED CHANNEL section.

2. OVER indicator
   This will light if the output level of the dynamics reaches the overload point.

3. Level meter
   This displays a bar graph indication of the signal level being input to the dynamics (on=green, off=gray) and the amount of gain reduction (orange). The THRESHOLD setting is shown numerically and as a vertical line.

4. DYNAMICS ON/OFF buttons
   These buttons turn dynamics processors 1/2 on/off.

5. Parameter knobs
   These knobs indicate the values of parameters other than THRESHOLD.

To edit the dynamics settings, switch the DYNAMICS ON/OFF button on, and use the [DYNAMICS 1]/[DYNAMICS 2] encoders of the SELECTED CHANNEL section to adjust the THRESHOLD parameter.

If you want to edit parameters other than THRESHOLD, or to recall existing data from the library, press any location within the field to access the DYNAMICS 1/DYNAMICS 2 popup window. (For details on the popup window → p. 108).

● Making HPF/EQ settings
To edit the HPF of the currently selected channel, use the HPF field of the SELECTED CHANNEL VIEW screen or the [HPF] encoder of the SELECTED CHANNEL section (input channels only).

The HPF field of the SELECTED CHANNEL VIEW screen contains the following items.

1. FREQUENCY knob
   Indicates the cutoff frequency of the HPF.

2. HPF ON/OFF button
   Switches the HPF on/off.

To edit the HPF, turn the HPF ON/OFF on, and use the [HPF] encoder of the SELECTED CHANNEL section to adjust the cutoff frequency.

To edit the EQ of the currently selected channel, use the EQ field of the SELECTED CHANNEL VIEW function or the EQ [Q], EQ [FREQUENCY], and EQ [GAIN] encoders of the SELECTED CHANNEL section. The EQ field of the SELECTED CHANNEL VIEW screen contains the following items.

1. Q/FREQUENCY/GAIN knobs
   These knobs indicate the Q, FREQUENCY (center frequency), and GAIN (amount of boost/cut) for each band (LOW, LOW-MID, HIGH-MID, and HIGH).
Operations in the SELECTED CHANNEL section

2 OVER indicator
This will light when the post-EQ signal reaches the overload point.

3 EQ ON/OFF button
Switches the EQ on/off.

To edit the EQ, switch the EQ ON/OFF button on, and use the EQ [Q], EQ [FREQUENCY], and EQ [GAIN] knobs of the SELECTED CHANNEL section to adjust the cue, center frequency, and the amount of boost/cut.

If you want to edit more detailed parameters, or recall existing settings from the library, press any EQ or HPF knob or a location within the EQ graph field to access the EQ popup window. (For details on the popup window → p. 105).

NOTE
- The type of the LOW band EQ or HIGH band EQ cannot be switched in the SELECTED CHANNEL VIEW screen. If necessary, you can access the EQ popup window and switch the EQ type.
- If the HIGH band EQ type is already set to Low Pass Filter, the HIGH band Q knob will not be displayed, and the GAIN knob will function as an on/off switch for the Low Pass Filter.

Making insert settings (INPUT, MIX, MATRIX, STEREO, and MONO channels only)
Use the INSERT field to make insert-related settings for an input channel in the SELECTED CHANNEL VIEW screen. This field includes the following items.

1 INSERT popup button
When you press this button, the INSERT/DIRECT OUT popup window will appear, allowing you to make settings for insert and direct output.

2 IN indicator
This indicates the presence or absence of a signal at the input port patched to INSERT IN.

3 INSERT ON/OFF button
Switches the insert on/off.

To make insert settings in the SELECTED CHANNEL VIEW screen, press the INSERT popup button to access the INSERT/DIRECT OUT popup window (1 ch), and assign an output port and input port to the insert-out and insert-in (→ p. 102). When you’ve assigned the ports, press the INSERT ON/OFF button to turn it on.

Making direct output settings (INPUT channels only)
Use the DIRECT OUT field to make direct-output related settings for an input channel in the SELECTED CHANNEL VIEW screen. This field includes the following items.

1 DIRECT OUT popup button
When you press this button, the INSERT/DIRECT OUT popup window will appear, allowing you to make settings for insert and direct output.

2 DIRECT OUT LEVEL indicator
This indicates the currently specified DIRECT OUT LEVEL value.

3 DIRECT OUT ON/OFF button
Turns the direct output on/off.

To make direct output settings in the SELECTED CHANNEL VIEW screen, press the DIRECT OUT popup button to access the INSERT/DIRECT OUT popup window (1 ch), and assign an output port to the direct out (→ p. 102). Press the DIRECT OUT ON/OFF button to turn it on, and use the DIRECT OUT LEVEL knob to adjust the output level.

Setting a channel to Recall Safe
Use the RECALL SAFE field to specify Recall Safe for the channel that is currently selected in the SELECTED CHANNEL VIEW screen. This field includes the following items.

1 RECALL SAFE popup button
This opens the RECALL SAFE MODE popup window, where you can make settings related to Recall Safe.

2 PARTIAL indicator
This will light if only some of the parameters of that channel are set to Recall Safe.

3 RECALL SAFE ON/OFF button
Switches the Recall Safe status on/off for the channel.

To set the channel to Recall Safe mode, press the RECALL SAFE ON/OFF button to turn it on. If you want to specify Recall Safe only for specific parameters, press the RECALL SAFE popup window to open the RECALL SAFE MODE popup window, and then select the parameters for which you want to specify Recall Safe. (For details on the popup window → p. 136).
Operations in the SELECTED CHANNEL section

● Turning a channel on/off
Use the FADER field to switch the channel on/off in the SELECTED CHANNEL VIEW screen. This field includes the following items.

1. **FADER**
   
   This indicates the input/output level of the channel. This is linked with the fader on the top panel.

2. **Σ CLIP indicator**
   
   This indicator will light if an overload occurs at even one of the level detection points in that channel.

3. **Input/output level**
   
   This indicates the current setting of fader.

4. **CH ON/OFF button**
   
   This button switches the channel on/off. This is linked with the [ON] button of the top panel.

When you press the CH ON/OFF button in the FADER field, that channel will be switched on/off and the top panel [ON] key will operate in tandem with this.

● Assigning a channel to a DCA group (input channels only)
Use the DCA field of the SELECTED CHANNEL VIEW screen to assign a channel to a DCA group. This field includes the following items.

1. **DCA popup button**
   
   This accesses the DCA/MUTE GROUP ASSIGN MODE popup window, where you can select the channels that will be assigned to each DCA group or mute group.

2. **DCA buttons 1–8**
   
   These buttons select the DCA group(s) to which this channel is assigned.

To assign the channel to a DCA group, turn on the desired DCA button 1–8 (multiple selections are allowed). To check the channels that are assigned to each DCA group, press the DCA popup button to open the DCA/MUTE GROUP ASSIGN MODE popup window. (For details on the popup window → p. 114).

● Assigning a channel to a mute group
Use the MUTE field of the SELECTED CHANNEL VIEW screen to assign a channel to a mute group. This field includes the following items.

1. **MUTE popup button**
   
   This accesses the DCA/MUTE GROUP ASSIGN MODE popup window, where you can select the channels that will be assigned to each DCA group or mute group.

2. **MUTE SAFE indicator**
   
   This will light if this channel is set to Mute Safe. You can make Mute Safe settings in the DCA/MUTE GROUP ASSIGN MODE popup window.

3. **MUTE buttons 1–8**
   
   These buttons select the mute group(s) to which this channel is assigned.

To assign the channel to a mute group, turn on the desired mute button 1–8 (multiple selections are allowed). To check the channels that are assigned to each mute group, press the MUTE popup button to open the DCA/MUTE GROUP ASSIGN MODE popup window. (For details on the popup window → p. 114).
This chapter explains how you can use the Centralogic section and the OVERVIEW screen to control up to eight channels at once.

### About the Centralogic section

The Centralogic section located below the touch screen lets you recall and simultaneously control a set of up to eight input channels, output channels, or DCA groups. Use the navigation keys of the NAVIGATION KEYS section to select the channels that will be controlled.

When you press one of the navigation keys in the NAVIGATION KEYS section, the channels / DCA groups corresponding to that key will be assigned to the Centralogic section, and can be controlled using the faders, [ON] keys, and [CUE] keys of the Centralogic section.
About the OVERVIEW screen

The OVERVIEW screen simultaneously shows the main parameters for the (up to) eight channels currently assigned to the Centralogic section. When you use the navigation keys to select the eight channels that will be assigned to the Centralogic section, the touch screen will display the OVERVIEW screen for those channels. (The [DCA] key is an exception to this.)

When you press one of the knobs in the OVERVIEW screen, the same type of knob for each channel will be enclosed by a heavy frame.

This heavy frame indicates that the parameter corresponding to those knobs can be edited. In this state, you can operate multifunction encoders 1–8 to edit the parameter values of the corresponding channels. There is no OVERVIEW screen for the DCA group. This means that if you press the [DCA] key to assign the DCA groups to the Centralogic section, the OVERVIEW screen will continue to show the eight channels that had previously been displayed. In this case, the Centralogic section faders and [ON] keys will control DCA group operations, and the multifunction encoders and [SEL]/[CUE] keys will control the up to eight channels shown in the OVERVIEW screen.

The OVERVIEW screen contains the following items.

1. **Channel number / Channel name field**
   This shows the number, name, and icon for the up to eight channels selected for control in the OVERVIEW screen.

2. **HA/PHASE field (input channels only)**
   For input channels that have a rear panel input jack or external head amp device (e.g., Yamaha AD8HR) patched to them, the head amp settings (gain setting, phantom power on/off, phase setting) are displayed here. For input channels that have another input port or rack output (internal effect or GEQ) patched to them, information on the input source (port/rack name and number, card name and effect module name, phase setting) will be displayed.

   If an output channel is selected, the area will change as follows.

3. **OUTPUT PORT field (output channels only)**
   This shows the name and number of the output port patched to each channel.

   - If two or more output ports are patched, a "+" symbol is shown after the name of one of the output ports.

4. **INSERT/DIRECT OUT field**
   - When an input channel is selected
     This displays the insert or direct output on/off status of each channel.
   - When an output channel is selected
     This displays the insert on/off status of each channel.
About the OVERVIEW screen

**EQ field**
This is a graph that shows the approximate EQ response for each channel.

**DYNAMICS 1 field**
**DYNAMICS 2 field (input channels only)**
For each channel, this shows the name of the type selected for Dynamics 1, the input level, gain reduction amount, and threshold. If GATE is selected as the dynamics type, a three-step indicator shows the presence or absence of a signal, and the open/closed status of the gate.

**TO MIX/TO MATRIX field**
This shows the send level of the signal sent from each channel to the MIX buses / MATRIX buses. (If the send-destinations are MATRIX buses, an indication of “TO MATRIX” is shown at the bottom of the field.) To adjust the send level for each bus, press the corresponding knob to select it, and operate multifunction encoders 1–8.

- If input channels are shown, you can use the TO MIX / TO MATRIX button in the SELECTED CHANNEL VIEW screen to change the send-destination shown in this field.
- You can also assign the SEND ENCODER MODE function to a user-defined key, and use it to change the send-destination in the same way.

If MATRIX channels are selected, the **area** will change as follows.

**FROM MIX field**
This shows the send level of the signals sent from MIX channels 1–16 to each MATRIX bus. To adjust the send level for each bus, press the corresponding knob to select it, and operate multifunction encoders 1–8.

**TO STEREO/MONO field**
This shows the on/off status of the signal sent from each channel to the STEREO bus and MONO bus, and the panning of the signal sent to the STEREO bus (or the left/right volume balance if the send-source is stereo). To adjust the value, press the knob to select it, and operate multifunction encoders 1–8.

**DCA/MUTE GROUP field**
This shows the DCA group (input channels only) and mute group to which each channel belongs.

**Channel number / Channel name field**
This shows the number, channel name, and icon for the up to eight channels that are currently selected for operation in the Centralogic section (except for the multifunction encoders).

Area ① shows the channels that can be controlled by the OVERVIEW screen, multifunction encoders, [SEL] keys, and [CUE] keys. Area ② shows the channels or DCA groups that can be controlled by the Centralogic section’s faders and [ON] keys.

For example if you assign DCA groups to the Centralogic section, the OVERVIEW screen will continue showing the eight channels that had been displayed until then, and in this case the channels or DCA groups shown in areas ① and ② will be different.

On the M7CL, you can leave the channels/groups assigned to the Centralogic section fixed, and switch only the eight-channel groups displayed in the OVERVIEW screen (→ p. 94), and the content shown in ① and ② will differ in this case as well.

**Area** shows the channels that can be controlled by the OVERVIEW screen, multifunction encoders, [SEL] keys, and [CUE] keys. **Area** shows the channels or DCA groups that can be controlled by the Centralogic section’s faders and [ON] keys.

- If input channels are shown, you can use the TO MIX / TO MATRIX button in the SELECTED CHANNEL VIEW screen to change the send-destination shown in this field.
- You can also assign the SEND ENCODER MODE function to a user-defined key, and use it to change the send-destination in the same way.
Operations in the Centralogic section

This section explains how you can use the Centralogic section and the OVERVIEW screen to simultaneously control the parameters of up to eight channels.

1. **Use the navigation keys of the NAVIGATION KEYS section to select the channels or DCA groups that you want to control.**
   When you press a navigation key, the LED of that key will light. The touch screen will show the OVERVIEW screen, and the parameters of the up to eight channels you selected will appear.

   - When the SELECTED CHANNEL VIEW screen is displayed, you can switch to the OVERVIEW screen by pressing any of the multifunction encoders 1–8. This is convenient when you want to quickly switch to the OVERVIEW screen while leaving the same channels or DCA groups selected for control.

2. **Use the faders and [ON] keys of the Centralogic section to adjust the level of the (up to) eight selected channels and switch them on/off.**

   - The bottom line of the OVERVIEW screen shows the channels or DCA groups that can be controlled by the faders and [ON] keys of the Centralogic section.
   - The top line of the OVERVIEW screen shows the channels that can be controlled by the [CUE] keys and multifunction encoders 1–8 of the Centralogic section.

3. **Use the fields in the OVERVIEW screen and the multifunction encoders and [CUE] keys to adjust the parameters for the (up to) eight channels.**

   - Subsequent operations will differ depending on the parameters you want to adjust.

   - **Specifying the channel name and icon**
     In the OVERVIEW screen you can use the channel number and channel name fields to specify the name and icon for each channel. This field includes the following items.

     - **Channel number**
       The number of that channel or DCA group.
     - **Channel name**
     - **Icon**
       These show the name and icon selected for that channel or DCA group.

     If you want to change the name or icon, press the field to access the PATCH/NAME popup window. (For details on the popup window → p. 53).

   - **Making HA settings (input channels only)**
     For input channels to which a rear panel input jack or an external head amp device (e.g., Yamaha AD8HR) is patched, you can use the HA/PHASE field of the OVERVIEW screen to control the head amp. The HA/PHASE field includes the following items.

     - **GAIN knob**
       This indicates the gain of the head amp assigned to the channel. To adjust the value, press the knob to select it, and operate multifunction encoders 1–8.
     - **+48V**
       This indicates the phantom power on (red) or off (black) status for the head amp assigned to the channel.
     - **ø (Phase)**
       This indicates either normal phase (black) or reverse phase (orange) for the head amp assigned to the channel.

   - **NOTE**
     - The PAD will be internally switched on or off when the HA gain is adjusted between -14 dB and -13 dB. Keep in mind that noise may be generated if there is a difference between the Hot and Cold output impedance of the external device connected to the INPUT connector when using phantom power.
If the channel is patched to an input port that has no head amp, or to the rack (internal effect or GEQ), the port name, number, and phase are shown.

If you want to switch the phantom power on/off, switch the phase between normal/reverse, or change the input port patching for each channel, press the HA/PHASE field (if the GAIN knob is displayed, press the knob to select it and then press the knob once again) to access the HA/ PATCH popup window. (For details on the popup window → p. 55).

● Changing the output patching (output channels only)
From the OVERVIEW screen, you can change the output port that’s patched to an output channel by pressing the OVERVIEW screen’s OUTPUT PORT field to access the PATCH/NAME popup window. (For details on the popup window → p. 53).

● Making settings for Insert (other than ST IN channels / monitor) or Direct Output (INPUT channels only)
In the OVERVIEW screen, you can use the INSERT / DIRECT OUT field to make settings related to Insert and Direct Output. This field includes the following items.

1. INS
This indicates the insert on/off status.

2. D.OUT (INPUT channels only)
This indicates the direct output on/off status.

To make details settings for Insert or Direct Output, press the INSERT/DIRECT OUT field to access the INSERT/ DIRECT OUT popup window (8 ch). (For details on the popup window → p. 100).

● Making ATT/HPF/EQ settings
In the OVERVIEW screen, you can use the EQ graph field to make settings for the ATT (attenuation), HPF (high pass filter), and EQ of each channel.

When you press the EQ graph field, the ATT/HPF/EQ popup window (1 ch) will appear. In this window you can use the on-screen buttons and the multifunction encoders to control all of the ATT/HPF/EQ parameters. (For details on the popup window → p. 105).

● Making Dynamics 1/2 settings
In the OVERVIEW screen, you can use the DYNAMICS 1/ DYNAMICS 2 fields to make Dynamics 1/2 settings for each channel. These fields include the following items.

1. Input level meter
This green bar graph shows the level of the signal after it has passed through dynamics processing.

2. GR meter
This orange bar graph indicates the amount of gain reduction produced by the dynamics processor.

3. Threshold
The vertical line indicates the currently-specified threshold value and its approximate position in the GR meter.

Only if GATE is selected as the type, the areas will change as follows.

4. GR meter
This indicator shows the operating status of the gate. The following segments will light according to the presence or absence of signal passing through the gate, and according to the open/closed status of the gate.

   • Red........... This will light if no signal is passing through Dynamics 1/2 (gain reduction amount = 30 dB or more).
   • Yellow ...... This will light if the signal is passing through Dynamics 1/2 and the gate is even slightly closed (gain reduction amount = less than 30 dB).
   • Green....... This will light if the signal is passing through Dynamics 1/2 and the gate is open (gain reduction amount = 0 dB).

If you want to control Dynamics from the OVERVIEW screen, press the DYNAMICS 1/2 field to open the DYNAMICS 1 / DYNAMICS 2 popup window (1 ch). (For details on the popup window → p. 108).
Operations in the Centralogic section

● Adjusting the send levels from a channel to all MIX buses / MATRIX buses
In the OVERVIEW screen, you can use the TO MIX / TO MATRIX field to send signals from a channel to the MIX buses and MATRIX buses. This field includes the following items.

1. TO MIX/TO MATRIX SEND LEVEL knob
Adjusts the send level of the signal sent from the input channel to each MIX bus / MATRIX bus. To adjust the value, press the knob for the desired bus to select it, and operate multifunction encoders 1–8.

If the send-source is an input channel, you’ll need to first select the send-destination buses (MIX buses or MATRIX buses). Use the SELECTED CHANNEL VIEW screen TO MIX/TO MATRIX button (→ p. 82) to make this selection. The screen will change as follows according to the buses you select.

Press the selected knob once again, and the MIX SEND / MATRIX SEND popup window (8 ch) will appear, depending on the send-destination buses you selected. This popup window contains on/off switches for the signals sent from the channel to the corresponding buses, and lets you select the send point (PRE or POST). (For details on the popup window → p. 212).

If MIX buses are selected as the send-destination
If MATRIX buses are selected as the send-destination

If the send-destination MIX bus or MATRIX bus is set to stereo, the left of the two adjacent knobs will operate as the TO MIX PAN or TO MATRIX PAN knob (or as the BALANCE knob if the send-source channel is stereo).

2. TO MIX SEND ON/OFF button
These are on/off switches for the signal sent from the input channel to the MIX buses. These buttons are shown only when the send-source is an input channel and the send-destination is a FIXED type MIX bus.

To switch the on/off status of the signal sent from the channel to VARI type MIX buses or to MATRIX buses, press the selected knob once again to open the MIX SEND / MATRIX SEND popup window (8 ch). (Alternatively, you can use the SELECTED CHANNEL VIEW screen.)

● Adjusting the send levels from all MIX channels to a MATRIX bus
In the OVERVIEW screen, you can simultaneously adjust the send level of the signals sent from all MIX channels to each MATRIX bus.

To do this, use the [MATRIX] key of the NAVIGATION KEYS section to assign MATRIX channels 1–8 to the Centralogic section. At this time, the OVERVIEW screen will show the FROM MIX field. This field includes the following items.

1. FROM MIX SEND LEVEL knob
For each MATRIX bus, this shows the send level of the signals sent from MIX channels 1–16. To adjust the value, press the knob to select it, and operate multifunction encoders 1–8.

If you press the selected knob once again, the MATRIX SEND popup window (8 ch) will appear. In this popup window you can switch the on/off status of the signal sent from a specific MIX channel to MATRIX buses 1–8, and select the send position (PRE/POST). (Use the ←/→ buttons in the window to select MIX channels. For details on the popup window → p. 64).
Operations in the Centralogic section

Adjusting the pan/balance (INPUT, ST IN, STEREO, and MIX channels only)

In the OVERVIEW screen, you can use the TO STEREO/MONO field to switch the on/off status and adjust the pan/balance of the signal sent from each channel to the STEREO/MONO buses. The following items are shown in the TO STEREO/MONO field.

1. **PAN/BALANCE knob**
   - When an INPUT channel or monaural MIX channel is selected
     - The panning of the signal sent to the STEREO bus is shown.
   - When a ST IN channel or a stereo MIX channel is selected
     - The balance of the left/right signals sent to the STEREO bus is shown.
   - When a STEREO channel or a stereo MATRIX channel is selected
     - The balance of the left/right output signals is shown.

To adjust the value, press the knob to select it, and operate multifunction encoders 1–8.

If you press the selected knob once again, the TO STEREO/MONO popup window (8 ch) will appear. In this popup window, you can switch between ST/MONO mode and LCR mode, and change the on/off status of the signal sent to the STEREO/MONO bus for up to eight channels at a time. (For details on the popup window → p. 57).

2. **OVER indicator**
   This indicator will light if any of the level detection points in each channel reach the OVER level.

3. **ST/MONO indicator (INPUT, ST IN, and MIX channels only)**
   This indicates the on/off status of the signal sent from that channel to the STEREO (L/R) bus and MONO (C) bus. To switch this on/off, press the selected knob once again to open the TO STEREO/MONO popup window.

If an INPUT, ST IN, or MIX channel is set to LCR mode, the 3 area will change as follows.

4. **LCR indicator (INPUT, ST IN, MIX channels only)**
   The LCR indicator shows the overall on/off status of the signals sent from that channel to the STEREO (L/R) bus and MONO (C) bus.
   To switch this on/off, press the selected knob once again to open the TO STEREO/MONO popup window.

Assigning a channel to a DCA group or Mute group

In the OVERVIEW screen, you can use the DCA/MUTE GROUP field to assign a channel to a DCA group (input channels only) or mute group. This field includes the following items.

1. **DCA indicator (input channels only)**
   This indicator shows the DCA group(s) to which the input channel is assigned. The numbers of DCA groups to which this channel belongs are highlighted.

2. **Mute indicator**
   This indicator shows the mute groups to which the channel is assigned. The numbers of mute groups to which this channel belongs are highlighted.

To assign a channel to a DCA group or Mute group, press the DCA/MUTE GROUP field to open the DCA/MUTE GROUP ASSIGN popup window. (For details on the popup window → p. 114).
Fixing the channels or DCA groups of the Centralogic section

If desired, you can fix the channels or DCA groups controlled by the faders, [ON] keys, meters, [CUE] keys, and [SEL] keys of the Centralogic section, and switch between groups of eight channels for control in the OVERVIEW screen.

In this case, the multifunction encoders will control a different set of eight channels than the Centralogic section’s faders and [ON] keys.

1. In the NAVIGATION KEYS section, press the navigation key for the channels or DCA group you want to fix in the Centralogic section, and hold it down for two seconds or longer.
   
   The LED of the navigation key will blink. The blinking indicates that the corresponding channels or DCA groups are now fixed to the Centralogic section.

2. Press a navigation key (other than the [DCA] key) to select the eight channels you want to control in the OVERVIEW screen.
   
   The LED of the navigation key you selected in step 2 will light. The lit status indicates that the corresponding channels can be controlled in the OVERVIEW screen and by the multifunction encoders.

   **NOTE**
   - You cannot operate DCA groups in the OVERVIEW screen using the multifunction encoders. For this reason, pressing the [DCA] key in step 2 will have no effect.

3. As desired, use the navigation keys to switch the group of eight channels controlled by the OVERVIEW screen, multifunction encoders.

4. To release the channels or DCA groups that were fixed to the Centralogic section, press the navigation key you operated in step 1 once again, and hold it down until the navigation key LED changes from blinking to lit.
   
   When the navigation key LED changes to being lit, its channels or DCA groups will be assigned to both the Centralogic section and the OVERVIEW screen.
This chapter explains how to edit the input patch and output patch settings, and how to use insert connections and direct output.

### Changing the output patch settings

When the M7CL is in its default state, the output ports are patched to the following channels.

<table>
<thead>
<tr>
<th>Output Port</th>
<th>Assigned Channels</th>
</tr>
</thead>
<tbody>
<tr>
<td>OMNI OUT jacks 1–12</td>
<td>MIX channels 1–12</td>
</tr>
<tr>
<td>OMNI OUT jacks 13/14</td>
<td>MATRIX channels 1/2</td>
</tr>
<tr>
<td>OMNI OUT jacks 15/16</td>
<td>STEREO channels (L/R)</td>
</tr>
<tr>
<td>2TR OUT DIGITAL jack</td>
<td>STEREO channels (L/R)</td>
</tr>
<tr>
<td>Slot 1 output channels 1–8</td>
<td>MIX channels 1–8</td>
</tr>
<tr>
<td>Slot 1 output channels 9–16</td>
<td>MIX channels 1–8</td>
</tr>
<tr>
<td>Slot 2 output channels 1–8</td>
<td>MIX channels 9–16</td>
</tr>
<tr>
<td>Slot 2 output channels 9–16</td>
<td>MIX channels 9–16</td>
</tr>
<tr>
<td>Slot 3 output channels 1–8</td>
<td>MATRIX channels 1–8</td>
</tr>
<tr>
<td>Slot 3 output channels 9–16</td>
<td>MATRIX channels 1–8</td>
</tr>
</tbody>
</table>

However, the above patching can be changed as desired. To change the patching, you can either select the output port that will be the output destination of each output channel, or you can select the output channel that will be the output source for each output port.

#### ● Selecting the output port for each output channel

Here’s how to select the output port that will be the output destination for each output channel.

1. Use the navigation keys to access the OVERVIEW screen containing the output channel whose output port you want to assign.

2. In the top part of the screen, press the channel number / channel name field to access the PATCH / NAME popup window.

   In the PATCH / NAME popup window you can change the channel name, icon, and output port assigned to each output channel. The window includes the following items.

   - **Icon button**
     This indicates the icon selected for that channel. When you press this button, a screen will appear in which you can select an icon or sample name.

   - **Channel name input box**
     This indicates the name assigned to that channel. When you press this field, a keyboard window allowing you to assign a name will appear.

   - **Output port button**
     This indicates the currently selected output port. If you press this button when selecting an icon or changing the channel name, you will return to the output port select screen.

   - **Output port select tabs**
     These tabs select the output ports shown in the popup window. Each tab corresponds to the following output ports.

     - **OMNI/2TR OUT**
       OMNI OUT jacks 1–16 and the 2TR OUT DIGITAL jack will be displayed.

     - **SLOT 1–SLOT 3**
       Output channels 1–16 of slots 1–3 will be displayed.
Changing the output patch settings

- **RACK**
  The input ports of rack 1–8 will be displayed.

  ➤ For details on the GEQ, refer to p. 161.

5 **Output port select buttons**
These buttons assign an output port to the currently selected output channel.

6 **Tabs**
Use these tabs to switch between items.

3 **Use the output port select tabs and the output port select buttons to specify the output port that will be assigned to that channel.**
If the output port select buttons are not shown at the bottom of the window, press the PATCH tab.

4 **Use the navigation keys and the [SEL] keys to switch the output channels being controlled, and specify their output ports in the same way.**

5 **When you have finished making settings, press the “x” symbol located in the upper right to close the window.**
You will return to the OVERVIEW screen.

- **Selecting the output channel for each output port**
Here’s how you can select the output channel that will be the output source for each output port.

1 In the function access area, press the SETUP button to access the SETUP screen.

2 In the SYSTEM SETUP field located in the center of the screen, press the OUTPORT SETUP button to open the OUTPUT PORT popup window.
In the OUTPUT PORT popup window you can assign the source channel for each output port. The popup window includes the following items.

1 **Slot number / Card type**
If an output channel of slot 1–3 is selected for operations, this shows the slot number and the type of I/O card installed in that slot.

2 **DELAY SCALE field**
Here you can select the units for the delay time shown below the delay time knob (5).
- **METER (343.59m/s)**

  ......... The delay time is shown as a distance in meters, calculated as the speed of sound (343.59 m/s) at an air temperature of 20 °C (68 °F) multiplied by the delay time (seconds).
Changing the output patch settings

3. Output port
This indicates the type and number of the output port to which the channel is assigned.

4. Channel select popup button
This button lets you select the channel that is assigned to the output port. The name of the currently selected channel is displayed.

5. Delay time knob
This knob sets the delay time of the output port. Press this knob to select it, and use multifunction encoders 1–8 to adjust the settings. The millisecond value is shown above the knob, and the delay time value in the units selected in the DELAY SCALE field (2) is shown below the knob.

6. DELAY button
Switches the output port delay on/off.

7. ø (Phase) button
Switches the phase of the signal assigned to the output port between normal phase (black) and reverse phase (orange).

8. ATT knob
Adjusts the amount of attenuation for the signal assigned to the output port. To adjust this value, press the knob in the screen to select it, and operate multifunction encoders 1–8. You can adjust the setting in 0.1 dB steps over a range of -96 to +24 dB. The current value is shown immediately below the knob.

9. Level meter
This meter indicates the level of the signal assigned to the output port.

10. Output port select tabs
These tabs switch the output ports controlled in the popup window in groups of up to eight ports.

3 Use the output port select tabs at the bottom of the popup window to select the output port you want to control.
Each tab corresponds to the following output ports.

● Omni 1–8, 9–16
These control OMNI OUT jacks 1–8 and 9–16 respectively.

● Slot 1–8, 9–16
These control output channels 1–8 and 9–16 of slots 1–3 respectively.

● 2TR OUT
Control the L/R channels of the 2TR OUT DIGITAL jack.

4 To assign a channel to an output port, press the channel select popup window for that port.
The OUTPUT CH SELECT popup window will appear. The popup window includes the following items.

1. Channel select tabs
These select the type of channel shown in the popup window. Each tab corresponds to the following channels.

● OUT CH........ Shows the output channels (MIX channels 1–16, MATRIX channels 1–8, STEREO L/R channels, and MONO (C) channel).

● MONITOR OUT........ Shows the MONITOR OUT L/R/C channels.

● CH 1–32
● CH 33–48 (M7CL–48 only)
........ Shows INPUT channels 1–32 (1–48)

2. Channel select button
Selects the channel to be assigned to the output port you selected in step 3.

- If you selected CH 1–32 or CH 33–48 (M7CL–48 only), the input channel you selected will be output directly from the corresponding output port. At this time, the channel select button in the OUTPUT PORT popup window is shown as “DIR CH xx” (xx= channel number). (For details on direct output → p. 102).
5 Use the channel select tabs and the channel select buttons to select the source channel, and press the CLOSE button. You will return to the OUTPUT PORT popup window.

6 Make settings for delay, phase, and attenuator as desired.

7 Repeat step 3–6 to assign channels for other output ports.

8 When you have finished making settings, click the “×” symbol in the upper right of the window to return to the previous screen.

Changing the input patch settings

When the M7CL is in its default state, the following input ports are patched to each input channel.

<table>
<thead>
<tr>
<th>INPUT channels 1–32 (1–48)</th>
<th>INPUT jacks 1–32 (1–48)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ST IN channels 1–4</td>
<td>EFFECT RETURN 1–4 (L/R)</td>
</tr>
</tbody>
</table>

However, the above patching can be changed as desired. Here we will explain how to change the patching for each input channel.

1 Use the navigation keys to access the OVERVIEW screen for the input channels whose input source you want to change.

2 In the top part of the screen, press the channel number / channel name field to access the PATCH / NAME popup window. In the PATCH / NAME popup window you can change the channel name, icon, and input port assigned to each input channel.

3 If PATCH CONFIRMATION is ON, a confirmation dialog box will appear when you attempt to change the patch settings. If STEAL PATCH CONFIRMATION is ON, a confirmation dialog box will appear when you attempt to change a location that is already patched elsewhere. (For details, refer to → p. 198).

When the M7CL is in its default state, the following input ports are patched to each input channel.

1. **Input port button**
   - This indicates the currently selected input port. If you press this button when selecting an icon or changing the channel name, you will return to the input port select screen.

2. **Icon button**
   - This indicates the icon selected for that channel. When you press this button, a screen will appear in which you can select an icon or sample name.

3. **Channel name input box**
   - This indicates the name assigned to that channel. When you press this field, a keyboard window allowing you to assign a name will appear.

4. **Input port select tabs**
   - These tabs select the input ports shown in the popup window. Each tab corresponds to the following input ports.
     - CH IN 1–32
     - CH IN 33–48 (M7CL–48 only)

5. **Input port button**
   - If PATCH CONFIRMATION is ON, a confirmation dialog box will appear when you attempt to change the patch settings. If STEAL PATCH CONFIRMATION is ON, a confirmation dialog box will appear when you attempt to change a location that is already patched elsewhere. (For details, refer to → p. 198).

6. **Input port select tabs**
   - These tabs select the input ports shown in the popup window. Each tab corresponds to the following input ports.
     - CH IN 1–32
     - CH IN 33–48 (M7CL–48 only)

.........: INPUT jacks 1–32 or 33–48 (M7CL–48 only) will be displayed.
Changing the input patch settings

3 Access the input port selection screen of the PATCH / NAME popup window, and use the input port select tabs and input port select buttons to select an input port.

4 When you have finished making settings, press the “×” symbol located in the upper right to close the window. You will return to the OVERVIEW screen.

5 Repeat step 2–4 to assign input ports for other channels.

• ST IN.............L/R channels of ST IN jacks 1–4 will be displayed.

• SLOT 1–SLOT 3
  .............Input channels 1–16 of slots 1–3 will be displayed.

• RACK.............The output ports of rack 1–8 will be displayed.

5 Input port select buttons
These buttons assign an input port to the currently selected input channel.

6 Tabs
Use these tabs to switch between them.

If PATCH CONFIRMATION is ON, a confirmation dialog box will appear when you attempt to change the patch settings. If STEAL PATCH CONFIRMATION is ON, a confirmation dialog box will appear when you attempt to change a location that is already patched elsewhere. (For details, refer to → p. 198).

• In the PATCH / NAME popup window you can select the icon for a channel or assign a name to it (→ p. 53).
• You can also select input ports from the HA/PATCH popup window.
Inserting an external device into a channel

If desired, you can insert an effect processor or other external device into the signal path of an INPUT, MIX, MATRIX, STEREO, or MONO channel. When doing so, the type of input/output port used for the insertion and the location of the insertion in/out can be specified individually for each channel.

1. As desired, connect your external equipment to the I/O card(s) in slots 1–3.

2. Use the navigation keys to access the OVERVIEW screen for the channel to which you want to assign an input source.

3. Press the INSERT/DIRECT OUT field to access the INSERT/DIRECT OUT popup window.

   In the INSERT/DIRECT OUT popup window you can view or change the type of input/output port used for insertion and the location at which insertion will occur. There are two variations of this popup window; one-channel and eight channel. These windows include the following items.

   [INSERT/DIRECT OUT popup window (1ch)]

   ① Icon / Channel number / Channel name
   This indicates the icon selected for that channel, the channel number, and the channel name.

   ② INSERT field
   Here you can make insert-related settings. Press either the left or right field to choose PRE EQ (before the attenuator) or PRE FADER (before the fader) as the insert-out/in position.

   ③ INSERT OUT popup button
   This indicates the output port that is selected as the insert-out for this channel. Press this button to open a popup window where you can select the output port.

   ④ INSERT IN popup button
   This indicates the input port that is selected as the insert-in for this channel. Press this button to open a popup window where you can select the input port.

   ⑤ INSERT ON/OFF button
   This button switches the insert on/off. If this button is off, the insert-signal path is bypassed.

   [INSERT/DIRECT OUT popup window (8ch)]

   ① Channel number / Icon
   This shows the channel number and the icon that is selected for that channel. You can press this field to change the selected channel.

   ② Channel name
   This indicates the name assigned to that channel.

   ③ INSERT OUT popup button
   This indicates the output port that is selected as the insert-out for this channel. Press this button to open a popup window where you can select the output port. The currently specified insert-out/in position is shown below the button.

   ④ INSERT ON/OFF button
   This button switches the insert on/off. If this button is off, the insert-out/in signal path is bypassed.

   ⑤ INSERT IN popup button
   This indicates the input port that is selected as the insert-in for this channel. Press this button to open a popup window where you can select the input port.

HINT
• If you install a digital I/O card in a slot and digitally connect an external device, you’ll need to synchronize the word clock between the M7CL and your external device (→ p. 208).
4 Access either the one-channel or the eight-channel INSERT/DIRECT OUT popup window, and press the INSERT OUT popup button.

The OUTPUT PORT SELECT popup window will appear, allowing you to select the output port used for insert-out. The window includes the following items.

1 Output port select tabs
These tabs select the output ports shown in the window. Each tab corresponds to the following output ports.
   • SLOT 1–SLOT 3
     ..........Output channels 1–16 from slots 1–3 will be displayed.
   • RACK
     ..........Input ports to rack 1–8 will be displayed.

2 Output port select buttons
These buttons assign the output port that will be used as insert-out for the currently selected channel.

NOTE
• If a rack in which a GEQ is mounted is specified as the insert-out or insert-in, the other patch point will automatically be assigned to the same rack.
   Additionally, if you defeat the insert-out or insert-in of a rack in which a GEQ is mounted, the other patch point will automatically be defeated.

5 Use the output port select tabs and the output port select buttons to specify the output port that will be used as insert-out, and press the CLOSE button.
You will return to the INSERT/DIRECT OUT popup window.

6 Press the INSERT IN popup button.
The INPUT PORT SELECT popup window will appear, allowing you to select the input port used for insert-in.

7 Specify the input port you will use for insert-in, and press the CLOSE button.

8 Press the INSERT ON/OFF button to turn it ON.
In this state, insert-out/in is enabled. Adjust the input/output levels of your external device as necessary.

   ➤ Even if the INSERT ON/OFF button is OFF, the signal selected for insert-out will continue to be sent.

9 If you want to change the insert-out/in position, access the one-channel INSERT/DIRECT OUT popup button, and press one of the two INSERT fields.
The INSERT field you pressed will be enabled, and the other INSERT field will be disabled.

10 When you have finished making all settings, click the “×” symbol located in the upper right to close the window.
You will return to the OVERVIEW screen.

11 As desired, make insert settings for other channels as well.
Directly outputting an INPUT channel

The signal of an INPUT channel can be directly output from a desired OMNI OUT jack or from an output channel of the desired slot. For example, signals can be sent via a digital I/O card installed in a slot to an external digital recorder, so that a live recording can be made without being affected by mixing operations within the M7CL.

1. As desired, connect your external equipment to an OMNI OUT jack or to an I/O card in slots 1–3.

2. Use the navigation keys to access the OVERVIEW screen for the input channel that you want to directly output.

3. Press the INSERT/DIRECT OUT field to access the INSERT/DIRECT OUT popup window.

There are two variations of this popup window: one-channel and eight-channel. These windows include the following items.

**INSERT/DIRECT OUT popup window (1ch)**

1. **Icon / Channel number / Channel name**
   This indicates the icon selected for that channel, the channel number, and the channel name.

2. **DIRECT OUT field**
   Here you can make settings for direct output. Press a field to select PRE HPF (before the HPF), PRE EQ (before the attenuator), or PRE FADER (before the fader) as the position for direct output.

3. **DIRECT OUT popup button**
   This indicates the output port used for direct output. Press this button to open a popup window where you can select the output port.

4. **DIRECT OUT ON/OFF button**
   Turns the direct output on/off.

5. **DIRECT OUT LEVEL knob**
   Adjusts the level of the signal that is directly output.

**INSERT/DIRECT OUT popup window (8ch)**

1. **Channel number / Icon**
   This shows the channel number and the icon that is selected for that channel. You can press this field to change the selected channel.

2. **Channel name**
   This indicates the name assigned to that channel.

3. **DIRECT OUT ON/OFF button**
   This button switches the direct output on/off. If this button is off, the direct output for that channel will be disabled.

   The currently selected direct output position is shown above the button.

4. **DIRECT OUT popup button**
   This indicates the output port used for direct output. Press this button to open a popup window where you can select the output port.

5. **DIRECT OUT LEVEL knob**
   Adjusts the level of the signal that is directly output.

• If you install a digital I/O card in a slot and digitally connect an external device, you’ll need to synchronize the word clock between the M7CL and your external device (→ p. 208).

**HINT**
Directly outputting an INPUT channel

4. Access either the one-channel or the eight-channel INSERT/DIRECT OUT popup window, and press the DIRECT OUT popup button.

The OUTPUT PORT SELECT popup window will appear, allowing you to select the output port used for direct output. The window includes the following items.

1. **Output port select tabs**
   These tabs select the output ports shown in the window. Each tab corresponds to the following output ports.
   - **OMNI**
     OMNI OUT jacks 1–16 will be displayed.
   - **SLOT 1–SLOT 3**
     Output channels 1–16 of slots 1–3 will be displayed.

2. **Output port select buttons**
   These buttons assign the output port used for direct output of the currently selected INPUT channel.

5. **Use the output port select tabs and the output port select buttons to specify the output port that will be used for direct output, and press the CLOSE button.**
   You will return to the INSERT/DIRECT OUT popup window.

6. Press the DIRECT OUT ON/OFF button to turn it ON.

   In this state, direct output is enabled. Adjust the input level of your external device as necessary.

7. **If you want to change the position of the direct output, access the one-channel INSERT/DIRECT OUT popup button, and press one of the three DIRECT OUT fields.**

   The DIRECT OUT field you pressed will be enabled, and the other DIRECT OUT field will be disabled.

8. **If you want to adjust the level of the direct output, access either the one-channel or the eight-channel INSERT/DIRECT OUT popup window, and operate the DIRECT OUT LEVEL knob.**

9. **When you have finished making all settings, click the “×” symbol located in the upper right to close the window.**

   You will return to the OVERVIEW screen.

10. **As desired, make direct output settings for other channels as well.**

   • With the factory settings, all are turned on.
This chapter explains the EQ (equalizer) and dynamics that are provided on each channel of the M7CL.

About EQ and dynamics

Each input channel and output channel of the M7CL provides a four-band EQ and dynamics. EQ can be used on all input channels and all output channels. An attenuator is provided immediately before the EQ, allowing you to adjust the level of the input signal. Input channels also provide a high-pass filter that is independent of the EQ. Input channels provide two dynamics processors; Dynamics 1 can be used as a gate, ducking, compressor, or expander, while Dynamics 2 can be used as a compressor, hard compander, soft compander, or de-esser. Output channels provide one dynamics processor, which can be used as a compressor, expander, hard compander, or soft compander.

Using EQ

This section explains the four-band EQ that is provided on input channels and output channels.

1. Use the navigation keys to access the OVERVIEW screen for the channel whose EQ you want to control.
   The EQ field shows the response of the EQ. In this OVERVIEW screen, you can use the EQ encoders of the SELECTED CHANNEL section to edit the parameter settings.

2. If you want to edit while watching the ATT/HPF/EQ parameter values, press the EQ field in the OVERVIEW screen to access the ATT/HPF/EQ popup window.
   In the ATT/HPF/EQ popup window, you can edit the EQ and high-pass filter parameters and switch them on/off.
   There are three variations of this popup window; one-channel, eight-channel, and ALL. These windows include the following items.

   • TYPE I, II buttons
     These buttons select the type of EQ. Turn the TYPE I button on if you want to use the same algorithm as on previous Yamaha digital mixers, or turn the TYPE II button on if you want to use the newly developed algorithm. TYPE II reduces the interference between bands.

   • LOW shelving button
     If this button is on, the LOW band EQ will function as a shelving-type EQ. In this case, the LOW band Q knob is not shown.
Using EQ

① FLAT button
This button resets the GAIN parameters of all bands to the default value (0.0 dB). If you press this button, a confirmation dialog box will appear.

② HIGH shelving button
If this button is on, the HIGH band EQ will function as a shelving-type EQ. In this case, the HIGH band Q knob is not shown.

③ Low pass filter button
If this button is on, the HIGH band EQ will function as a low-pass filter. In this case, the HIGH band Q knob is not shown, and the GAIN knob will act as an on/off switch for the low pass filter.

④ EQ ON/OFF button
Switches the EQ on/off.

⑤ Level meter
These meters indicate the peak levels before EQ and after EQ. If the signal clips before or after EQ, the OVER segment will light. If the corresponding channel is stereo (a ST IN channel, a MIX/MATRIX channel set to stereo, or the STEREO channel), level meters for two channels are displayed.

⑥ EQ graph
This graph shows the approximate response of the EQ parameters. A pointer is shown at the peak of each band. The response curve will change when you edit the Q, FREQUENCY, or GAIN knobs of each band. If the EQ or high-pass filter is on, the response curve is highlighted.

⑦ ATT knob
This knob adjusts the amount of attenuation/gain immediately before input to the EQ, in a range of -96 dB to +24 dB. Use this to compensate for level changes produced by the EQ. You can use multifunction encoder 1 to control this.

⑧ HPF knob, HPF ON/OFF button
Here you can switch on/off the high pass filter located after attenuation and before EQ, and adjust its cutoff frequency. You can use multifunction encoder 2 to adjust the cutoff frequency in a range of 20–600 Hz.

⑨ Q/FREQUENCY/GAIN knobs
These knobs adjust the Q, FREQUENCY (center frequency), and GAIN (amount of boost/cut) for each band (LOW, LOW MID, HIGH MID, and HIGH). Press a knob to select the band you want to control, and use multifunction encoders 3–8 to make adjustments.

⑩ High-pass filter button
(output channels only)
If this button is on, the LOW band EQ will function as a high-pass filter. In this case, the LOW band Q knob is not shown, and the GAIN knob will act as an on/off switch for the high-pass filter.

[ATT/HPF/EQ popup window (8 ch)]
This shows the input channel or output channel EQ settings in groups of eight channels at a time.
Use the encoders of the SELECTED CHANNEL section to edit the EQ settings. This window lets you control the ATT and HPF settings of all eight channels shown.

⑪ Channel select button
This indicates the channel number, the icon selected for that channel, and the channel name. Press these buttons to select the channel you want to copy or paste, or to select multiple channels.

⑫ EQ graph
This mini-graph shows the approximate response of the EQ parameters. You can press the EQ graph to switch to the one-channel window with that channel selected. If the EQ or high-pass filter is on, the response curve is highlighted.

⑬ EQ ON/OFF button
Switches the EQ on/off.

⑭ ATT knob
This knob adjusts the attenuation / gain amount before the signal enters the EQ. You can press the ATT knob to select it, and then use multifunction encoders 1–8 to make adjustments.

⑮ HPF knob, HPF ON/OFF button
(input channels only)
These controls switch the high-pass filter on/off, and adjust its cutoff frequency. You can press the HPF knob to select it, and then use multifunction encoders 1–8 to make adjustments.
[EQ popup window (ALL)]
This window displays all input channels (or output channels) at once. This page is only for display, and does not allow the parameters to be edited. It is useful when you need to quickly check the EQ settings for all channels, or when you want to copy/paste EQ settings between distant channels.

1. **Channel select button**
   This indicates the channel number, the icon selected for that channel, and the channel name. Press these buttons to select the channel you want to copy or paste, or to select multiple channels.

2. **EQ graph**
   This mini-graph shows the approximate response of the EQ parameters. You can press the EQ graph to switch to the one-channel window with that channel selected. If the EQ or high-pass filter is on, the response curve is highlighted.

3. **Access the ATT/HPF/EQ popup window (1 ch), and press the EQ ON button to enable the EQ.**
   If the ATT/HPF/EQ popup window is displayed, you will be able to edit all of the EQ parameters.

4. **If you want to use the high-pass filter on an input channel, operate the HPF knob or HPF ON/OFF button in the ATT/HPF/EQ popup window.**
   Input channels provide a high-pass filter that is independent of the four-band EQ. The HPF ON/OFF button switches the high-pass filter on/off, and the HPF knob adjusts the cutoff frequency.

   - Output channels do not have a high-pass filter that is independent of the EQ. However, you can turn on the high-pass filter in the popup window to use the LOW band EQ as a high-pass filter.
   - For both input channels and output channels, you can turn on the low-pass filter button to use the HIGH band EQ as a low-pass filter.

5. **If you want to copy EQ settings to another channel, or initialize the EQ settings, use the tool buttons of the ATT/HPF/EQ popup window.**
   For details on how to use these buttons, refer to “Using the tool buttons” (→ p. 31).

   - EQ settings can be saved/loaded at any time using the dedicated library (→ p. 31). Presets suitable for a variety of instruments or situations are also provided.
   - You can also access the SELECTED CHANNEL VIEW screen, and use the encoders of the SELECTED CHANNEL section to edit the EQ and high-pass filter (→ p. 81).
   - Even when the ATT/HPF/EQ popup window is displayed, you can use the encoders of the SELECTED CHANNEL section to control the EQ.
Using dynamics

Input channels provide two dynamics processors, and output channels provide one dynamics processor.

1 Use the navigation keys to access the OVERVIEW screen for the channel whose dynamics you want to control.
   The DYNAMICS 1/2 field shows the dynamics on/off status and the amount of gain reduction.

2 In the OVERVIEW screen, press the DYNAMICS 1/2 field to access the DYNAMICS 1 (2) popup window.
   In the DYNAMICS 1 (2) popup window, you can edit the dynamics settings and turn the processor on/off.
   There are three variations of this popup window; one-channel, eight-channel, and ALL. These windows include the following items.

[DYNAMICS 1 (2) popup window (1ch)]
   This window shows only the currently selected channel. All dynamics parameters can be viewed and edited. This is convenient when you want to make detailed dynamics settings for a specific channel.

[DYNAMICS 1 (2) popup window (8ch)]

[DYNAMICS 1 (2) popup window (ALL)]

1 Dynamics type buttons
   Use these buttons to select one of the following four types of dynamics.
   • Input channels

<table>
<thead>
<tr>
<th>DYNAMICS 1</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>GATE</td>
<td></td>
</tr>
<tr>
<td>DUCKING</td>
<td></td>
</tr>
<tr>
<td>COMPRESSOR</td>
<td></td>
</tr>
<tr>
<td>EXPANDER</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DYNAMICS 2</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>COMPRRESSOR</td>
<td></td>
</tr>
<tr>
<td>COMPANDER-H</td>
<td></td>
</tr>
<tr>
<td>COMPANDER-S</td>
<td></td>
</tr>
<tr>
<td>DE-ESSER</td>
<td></td>
</tr>
</tbody>
</table>

2 Dynamics graph
   This graph displays the approximate response of the dynamics processor.

3 Level meter
   These meters show the amount of gain reduction (GR), and the peak levels before the gate (IN) and after the gate (OUT). If the signal clips, the OVER segment will light. If the corresponding channel is stereo (a ST IN channel, a MIX/MATRIX channel set to stereo, or the STEREO channel), level meters for two channels are displayed.

4 DYNAMICS ON/OFF button
   Turns the dynamics on/off.

5 KEY IN CUE button (only for GATE and DUCKING)
   This button cue-monitors the currently selected key-in signal.

6 THRESHOLD knob
   This specifies the threshold at which the dynamics will begin operating. You can use multifunction encoder 1 to control this.

7 Other parameters
   The other parameters of the dynamics processor are shown here. The parameters displayed will depend on the dynamics type that is selected. You can use multifunction encoders to adjust these parameters.

• Output channels

<table>
<thead>
<tr>
<th>DYNAMICS 1</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>COMPRESSOR</td>
<td></td>
</tr>
<tr>
<td>EXPANDER</td>
<td></td>
</tr>
<tr>
<td>COMPANDER-H</td>
<td></td>
</tr>
<tr>
<td>COMPANDER-S</td>
<td></td>
</tr>
</tbody>
</table>

• For details on the parameters, refer to the supplementary material at the end of this manual. (→ p. 225)

• Even if the Cue mode is set to MIX CUE (the mode in which all channels whose [CUE] key is on are mixed for monitoring), turning on the KEY IN CUE button will cause only the signal of the corresponding channel to be monitored. The [CUE] keys that had been turned on previously will be forcibly defeated.

• For details on the parameters, refer to the supplementary material at the end of this manual. (→ p. 225)
Using dynamics

KEY IN FILTER button (only for GATE and DUCKING)
This field lets you apply a filter to the key-in signal. As the filter to use, choose either a HPF (high pass filter), BPF (band pass filter), or LPF (low pass filter). If all of these buttons are off, no filter will be applied.

If a filter is enabled, you can use multifunction encoders 6/7 to adjust the Q and FREQUENCY (cutoff frequency / center frequency).

KEY IN SOURCE button
This displays the KEY IN SOURCE SELECT popup window, where you can select the key-in signal.

[DYNAMICS 1 (2) popup window (8 ch)]
This window shows the settings for eight channels, including the currently selected channel. You can switch between eight-channel groups such as 1–8 and 9–16. Compared to the one-channel display, fewer parameters can be controlled. This window is convenient when you want to adjust the threshold or certain other parameters while watching the adjacent channels to the left and the right.

Channel select button
This indicates the channel number, the icon selected for that channel, and the channel name. You can press these buttons to select a channel or a range of channels.

GR meter
This indicates the amount of gain reduction. If you are using “GATE” as the dynamics type, an indicator showing the open/closed state of the gate is shown.

Dynamics graph
This mini-graph displays the approximate response of the dynamics processor.

THRESHOLD knob
This specifies the threshold at which the dynamics processor will begin operating. You can use multifunction encoders 1–8 to control this.

DYNAMICS ON/OFF button
This turns the dynamics processor on/off.

[DYNAMICS 1 (2) popup window (ALL)]
This window displays the dynamics settings of all input channels (or output channels) at once. This page is only for display, and does not allow the parameters to be edited. It is useful when you need to quickly check the dynamics settings for all channels, or when you want to copy/paste dynamics settings between distant channels.

Access the DYNAMICS 1 (2) popup window (1 ch), and press the DYNAMICS ON button to enable the dynamics processor.

If you access the DYNAMICS 1 (2) popup window (1 ch), you’ll be able to edit all parameters.
**Using dynamics**

4 To select a key-in signal, proceed as follows.

1 In the DYNAMICS 1 (2) popup window (1 ch), press the KEY IN SOURCE button to access the KEY IN SOURCE SELECT popup window.

2 Select one of the following as the key-in signal.
   - For an input channel
     | SELF PRE EQ  | The pre-EQ (attenuator) signal of the currently selected input channel |
     | SELF POST EQ | The post-EQ signal of the currently selected input channel |
     | CH 1–48 POST EQ, STIN 1L/1R–4L/4R POST EQ | The post-EQ signal of the corresponding input channel (*1) |
     | MIX OUT 13–16 | The post-ON signal of the corresponding MIX channel |

   *1 The selectable signals are limited to the group to which that channel belongs, from the seven groups CH 1–8, CH 9–16, CH 17–24, CH 25–32, CH 33–40, CH 41–48, and STIN 1L/1R–4L/4R.

   - For an output channel
     | SELF PRE EQ  | The pre-EQ (attenuator) signal of the currently selected output channel |
     | SELF POST EQ | The post-EQ signal of the currently selected output channel |
     | MIX 1–16 POST EQ, MTRX 1–8 POST EQ, ST L/R, MONO (C), POST EQ | The post-EQ signal of the corresponding output channel (*2) |
     | MIX OUT 13–16 | The post-ON signal of the corresponding MIX channel |

   *2 The selectable signals are limited to the group to which that channel belongs, from the four groups MIX 1–8, MIX 9–16, MATRIX 1–8, and ST/MONO (C).

3 Press the CLOSE button to close the popup window.

5 If you want to copy dynamics settings to another channel, or initialize the dynamics settings, use the tool buttons of the popup window.

For details on how to use these buttons, refer to “Using the tool buttons” (→ p. 31).

- Dynamics settings can be saved/loaded at any time using the dedicated library (→ p. 31). Presets suitable for a variety of instruments or situations are also provided.

- You can also access the SELECTED CHANNEL VIEW screen, and use the encoders of the SELECTED CHANNEL section to edit the dynamics settings (→ p. 81).

- Even when the DYNAMICS 1 (2) popup window is displayed, you can use the encoders of the SELECTED CHANNEL section to control the dynamics.
You can use dedicated libraries to store and recall EQ and dynamics settings.

**EQ library**

There is an “INPUT EQ LIBRARY” that lets you store/recall EQ settings for input channels, and an “OUTPUT EQ LIBRARY” that lets you store/recall EQ settings for output channels.

To recall settings from a library, press the LIBRARY tool button in the ATT/HPF/EQ popup window.

For details on using the library, refer to “Using libraries” (→ p. 31).

**HINT**

- You can recall 199 different settings each from the input EQ library and from the output EQ library. 40 of the input library items are read-only presets, and 3 of the output library items are read-only presets.
- For details on how to access the ATT/HPF/EQ popup window, refer to “Using EQ” (→ p. 105).

**Dynamics library**

Use the “Dynamics Library” to store/recall dynamics settings. All of the M7CL’s dynamics processors use this dynamics library. (However, the available types will differ between an input channel’s Dynamics 1 and Dynamics 2, and an output channel’s Dynamics 1. Types that cannot be selected cannot be recalled.)

To recall an item from the dynamics library, press the LIBRARY tool button in the DYNAMICS 1 (2) popup window.

For details on using the library, refer to “Using libraries” (→ p. 31).

**HINT**

- 199 items can be recalled from the library. 41 of these are read-only presets.
- For details on how to access the DYNAMICS 1(2) popup window, refer to “Using dynamics” (→ p. 108).
This chapter explains the DCA Group and Mute Group functions that let you control the level or muting of multiple channels together, the Channel Link function that links the parameters of multiple channels, and the operations that let you copy or move parameters between channels.

**About DCA Groups and Mute Groups**

The M7CL provides eight DCA groups and eight mute groups that let you control the level of multiple channels simultaneously. DCA groups allow you to assign input channels to eight groups, so that the Centralogic section faders 1–8 can be used to control the level of all channels in each group. A single DCA fader will control the level of all input channels belonging to the same DCA group while maintaining the level difference between the channels. This provides a convenient way in which drum mics etc. can be grouped. Mute groups allow you to use user-defined keys [1]–[12] to mute/unmute multiple channels in a single operation. You can use this to cut out multiple channels simultaneously. Mute groups 1–8 can be used with both input channels and output channels. Both types of channel can exist in the same group.

**Using DCA groups**

This section explains how to assign input channels to the eight DCA groups and use the faders of the Centralogic section to control them.

**Assigning channels to a DCA group**

To assign a channel to a DCA group, you can either select a specific DCA group first and then specify the channels to be assigned to the group, or you can select a specific channel and then specify the DCA group to which it should be assigned.

- DCA groups can be used only with input channels.
- DCA group settings are saved as part of the scene.

**Selecting the channels that will belong to a specific DCA group**

1. In the function access area, press the CH JOB button.

The CH JOB button lets you perform grouping, linking, and copying operations between channels. When you press this button, the function access area will change as follows.
2 Press the DCA GROUP button to access the DCA/MUTE GROUP ASSIGN MODE popup window.

In the DCA/MUTE GROUP ASSIGN MODE popup window you can select the channels to be assigned to DCA groups. The popup window includes the following items.

1. Channel display field
Channels assigned to the DCA group selected by the DCA GROUP 1–8 buttons (③) are highlighted in yellow.

2. DCA GROUP ASSIGN button
Use this button to switch the mode in which you want to assign DCA groups.

3. DCA GROUP 1–8 buttons
Use these buttons to select the DCA group for which you want to make assignments.

4. CLEAR ALL button
Press this button to clear all channels that are assigned to the selected DCA group.

**HINT**
- If the [DCA] key is selected in the NAVIGATION KEYS section, you can access the DCA/MUTE GROUP ASSIGN MODE popup window by pressing the Centralogic section [SEL] key twice in rapid succession. In this case, the DCA/MUTE GROUP ASSIGN MODE popup window will appear with the DCA GROUP 1–8 button selected for that DCA group.

3 Use the DCA GROUP 1–8 buttons to select the DCA group to which you want to assign channels.

**HINT**
- If the [DCA] key is selected in the NAVIGATION KEYS section, you can also select the assignment-destination DCA group by pressing a [SEL] key in the Centralogic section.

4 Use the [SEL] keys of the INPUT section or ST IN section to select the channels you want to assign to the group (multiple selections are allowed).

The [SEL] keys of the assigned channels will light, and the corresponding channels will be highlighted in yellow in the channel display field of the window. To cancel an assignment, press a lit [SEL] key once again to make it go dark.

5 Assign channels to other DCA groups in the same way.

**HINT**
- You may assign a single channel to more than one DCA group. In this case, the value will be the sum of the levels of all assigned DCA faders.

6 When you finish making assignments, press the CLOSE button to close the popup window, and press the “×” symbol in the function access area (CH JOB display).

You will return to the previous screen. The DCA/ MUTE GROUP field of the OVERVIEW screen indicates the DCA group(s) to which each channel is assigned. Numbers that are lit yellow in the upper line of this field indicate the DCA groups to which that channel belongs.

**HINT**
- You can also access the DCA/MUTE GROUP ASSIGN MODE popup window by pressing the DCA/MUTE GROUP field in the OVERVIEW screen.

● Selecting the DCA groups to which a specific channel will belong

1 Press a [SEL] key to select the input channel for which you want to make assignments.

2 Press any one of the encoders of the SELECTED CHANNEL section to access the SELECTED CHANNEL VIEW screen.

In this screen you can view all mix parameters for the currently selected channel.

1. DCA field
Here you can make DCA group settings for the currently selected channel.

2. Popup button
Press this button to open the DCA/MUTE GROUP ASSIGN MODE popup window. For details, refer to “Selecting the channels that will belong to a specific DCA group” (→ p. 113).
Using DCA groups

3 Use the DCA group select buttons to select the DCA group(s) to which the currently selected channel will be assigned (multiple selections are allowed).

4 Select the DCA group(s) for other channels in the same way.

---

Controlling DCA groups

Use the faders of the Centralogic section to control DCA groups.

1 Assign input channels to DCA groups.

2 Using the faders of the top panel INPUT section or ST IN section, adjust the relative balance between the input channels belonging to the DCA group you want to use.

3 In the NAVIGATION KEYS section, press the [DCA] key to make it light so that the Centralogic section will be controlling the DCA groups.

4 Operate the Centralogic section fader corresponding to the DCA group you want to use.

The level of the channels assigned to that DCA group will change while preserving the level differences you established in step 1.

- The input faders will not operate at this time.

5 To switch a DCA group on/off, press the Centralogic section [ON] key for that DCA group.

When you press a Centralogic section [ON] key to make it go dark, the channels assigned to that DCA group will be turned off (the same state as when the faders are lowered to the \(-\infty\) dB position).

6 To cue-monitor a DCA group, press the Centralogic section [CUE] key for that DCA group.

When you press the Centralogic section [CUE] key to make it light, the [CUE] keys of the channels assigned to that DCA group will blink, and cue monitoring will be enabled. For more about cue, refer to “Using the Cue function” (→ p. 145).
Using mute groups

This section explains how to assign channels to mute groups and use the user-defined keys to control them.

**Assigning channels to mute groups**

To assign channels to mute groups, you can either select a specific mute group and then assign channels to that mute group, or you can select a specific channel and then specify the mute groups to which it will belong.

To operate a mute group, you’ll need to assign the desired channels to a mute group, and then assign MUTE MASTER to a user-defined key.

**NOTE**

- Mute groups can be used for both input channels and output channels. Both types of channel can exist in the same group.
- Mute group settings are saved as part of the scene.

**Selecting the channels that will belong to a specific mute group**

1. In the function access area, press the CH JOB button.
   The function access area will change as follows.

2. Press the MUTE GROUP button to access the DCA/MUTE GROUP ASSIGN MODE popup window.
   In this popup window you can select the channels that will be assigned to each mute group. The popup window includes the following items.

   - **Channel display field**
     Channels assigned to the mute group selected by the MUTE GROUP 1–8 buttons are highlighted in red. If the MUTE SAFE button is selected, channels that are temporarily excluded from all mute groups are highlighted in green.

   - **MUTE GROUP ASSIGN button**
     Use this button to switch the mode in which you want to assign mute groups.

   - **MUTE GROUP 1–8 buttons**
     These buttons select mute groups 1–8.

   - **MUTE SAFE button**
     Use this button when you want to temporarily exclude a specific channel from all mute groups. The channel display field shows the channels that are temporarily excluded from the mute groups. For more about mute safe, refer to “Using the Mute Safe function” (→ p. 119).

   - **CLEAR ALL button**
     You can press this button to clear the channels that are assigned to the mute groups.

3. Use the MUTE GROUP 1–8 buttons to select the mute group to which you want to assign channels.

4. Press the [SEL] key of the input channels / output channels (you may select more than one) that you want to assign.
   The [SEL] keys of the assigned channels will light, and the corresponding channels will be highlighted in red in the channel display field of the window. To cancel an assignment, press a lit [SEL] key once again to make it go dark.

5. Assign channels to other mute groups in the same way.

   - **HINT**
     You are free to assign a single channel to more than one mute group.

6. When you finish making assignments, press the CLOSE button to close the popup window, and press the “×” symbol in the function access area (CH JOB display).
   You will return to the previous screen. The DCA/MUTE GROUP field of the OVERVIEW screen indicates the mute group(s) to which each channel is assigned. Numbers that are lit red in the lower line of this field indicate the mute groups to which that channel belongs.
● Selecting the mute groups to which a specific channel will belong

1 Press the [SEL] key of the input channel / output channel that you want to assign.

2 Press any one of the encoders of the SELECTED CHANNEL section to access the SELECTED CHANNEL VIEW screen.
   In this screen you can view the mix parameters for the currently selected channel.

   ① MUTE field
   Here you can make mute group settings for the currently selected channel.

   ② Popup button
   Press this button to open the DCA/MUTE GROUP ASSIGN MODE popup window. For details, refer to “Selecting the channels assigned to a specific mute group.”

   ③ MUTE SAFE indicator
   This will light if the currently selected channel is set to Mute Safe. For more about mute safe, refer to “Using the Mute Safe function” (→ p. 119).

   ④ Mute group select buttons 1–8
   These select the mute group(s) to which the currently selected channel will be assigned.

3 Use the mute group select buttons to select the mute group(s) to which the currently selected channel will be assigned (multiple selections are allowed).

4 Select the mute group(s) for other channels in the same way.

Controlling mute groups

To use mute groups, you must first assign the Mute On/Off function for a mute group 1–8 to a user-defined key, and then operate that user-defined key.

1 In the function access area, press the SETUP button to access the SETUP screen.

2 In the upper left of the screen, press the USER SETUP button to access the USER SETUP popup window.
   This popup window lets you limit the functionality that can be used by the user, and also lets you make system-wide settings. This window includes several pages, which you can switch between using the tabs located at the bottom of the window.

3 Press the USER DEFINED KEYS tab to select the USER DEFINED KEYS page.
   The USER DEFINED KEYS page lets you assign functions to user defined keys [1]–[12].

   ① User defined keys popup buttons
   Press the popup button for the user-defined key to which you want to assign the mute on/off function.
   The USER DEFINED KEY SETUP popup window will appear.
5 Choose “MUTE MASTER” in the FUNCTION column, and choose “MUTE GROUP x” (where “x” is the mute group number) in the PARAMETER 1 column. Then press the OK button.

To select an item in each column, use ↑/↓ buttons or the multifunction encoders. When you press the OK button, the Mute On/Off function for the specified mute group will be assigned to the user-defined key you selected in step 4, and you will return to the USER DEFINED KEYS page.

6 In the same way, assign the Mute On/Off function for another mute group to a different user-defined key.

7 When you have finished assigning functions to user-defined keys, press the “×” symbol to close the USER DEFINED KEYS page.

8 In the function access area, press the SETUP button to close the SETUP screen.

9 To mute a mute group, press the user-defined key [1]–[12] that’s assigned to the desired mute group.

The LED of the user-defined key will light, and all channels belonging to the selected mute group will be muted. At this time, the [ON] key of the muted channels will blink. You can turn on more than one user-defined key to mute multiple mute groups.

10 To defeat muting of a mute group, press the user-defined key that you lit in step 9.

- For more about user-defined keys, refer to “User-defined keys” (→ p. 200).

- Even if a channel is assigned to a mute group, it will not be affected by operations of the user-defined key if the [ON] key of that channel is already turned off to begin with.

- If you cancel the assignment of the user-defined key, that mute group will be forcibly set to the unmuted state. If, after synchronizing with M7CL Editor, the system goes offline, mute groups not assigned to user-defined keys will forcibly be un-muted.
Using the Mute Safe function

If necessary, specific channels belonging to a mute group can be temporarily excluded from mute group operations (Mute Safe).

1 In the function access area, press the CH JOB button.

2 Press the MUTE GROUP button to access the DCA/MUTE GROUP ASSIGN MODE popup window.

1 Channel display field
When the MUTE SAFE button is on, channels that are temporarily excluded from the mute group are highlighted in this field.

2 MUTE SAFE button
This lets you select the channels that will be set to Mute Safe status.

3 Press the MUTE SAFE button.

4 Press a [SEL] key to select the channel(s) you want to exclude from mute groups (multiple selections are allowed).

The [SEL] key will light, and the corresponding channel in the channel display field of the window will be highlighted in green. You can cancel the Mute Safe status by pressing a lit [SEL] key once again to make it go dark.

Channels that are set to Mute Safe will not be affected when you mute a mute group to which that channel belongs.

HINT
• Mute Safe settings are not saved in the scene. They will remain valid until you cancel the settings.
The Channel Link function

Channel Link is a function that links the operation of parameters such as fader and EQ between input channels. The parameters to be linked can be selected from the following choices.

- Head amp settings
- EQ settings
- Dynamics 1 and 2 settings
- On/off status of signals sent to MIX buses
- Send levels of signals sent to MIX buses
- On/off status of signals sent to MATRIX buses
- Send levels of signals sent to MATRIX buses
- Fader operations
- [ON] key operations

Two or more input channels that are linked are called a “link group.” There is no limit on the number of link groups you can create, or on the number and combinations of input channels that can be included in these link groups. However, the types of parameters that are linked will be the same for all link groups.

Linking the desired input channels

Here’s how to link specific parameters of input channels.

1. In the function access area, press the CH JOB button.

2. Press the CH LINK button to open the CH LINK MODE popup window.

   In this popup window you can view the channels that are linked and specify the parameters that will be linked. The window includes the following items.

   1. **Channel display field**
      
      When you create a link group, the corresponding channels will be highlighted. If there are two or more link groups, each group is shown in a different color.

   2. **LINK PARAMETER field**
      
      Use the buttons in this field to select the parameters that you want to be linked. These settings are shared by all link groups.

   3. **SEND PARAMETER field**
      
      If you have turned on the MIX ON, MIX SEND, MATRIX ON, or MATRIX send buttons in the LINK PARAMETER field, use the buttons of this field to specify the send-destination bus(es).
3 Use the buttons of the LINK PARAMETER field to select the parameter(s) that will be linked (multiple selections are allowed).

The table below lists the parameters you can select in the LINK PARAMETER field.

<table>
<thead>
<tr>
<th>Button</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>HA button</td>
<td>Head amp settings</td>
</tr>
<tr>
<td>EQ button</td>
<td>EQ settings (including ATT/HPF)</td>
</tr>
<tr>
<td>DYNAMICS 1, 2 button</td>
<td>Dynamics 1 and 2 settings</td>
</tr>
<tr>
<td>MIX ON button</td>
<td>On/off status of signals sent to MIX buses</td>
</tr>
<tr>
<td>MIX SEND button</td>
<td>Send levels of signals sent to MIX buses</td>
</tr>
<tr>
<td>MATRIX ON button</td>
<td>On/off status of signals sent to MATRIX buses</td>
</tr>
<tr>
<td>MATRIX SEND button</td>
<td>Send levels of signals sent to MATRIX buses</td>
</tr>
<tr>
<td>FADER button</td>
<td>Fader operations</td>
</tr>
<tr>
<td>CH ON button</td>
<td>[ON] key operations</td>
</tr>
</tbody>
</table>

**HINT**
- If you link Dynamic 1 and 2 for two or more input channels, the parameter values will be linked, but the key-in signals are not linked. For more about dynamics, refer to “Using dynamics” (→ p. 108).
- If you turn on the EQ button or DYNAMICS 1, 2 button, library recall operations will also be linked.

4 If you turned on the MIX ON, MIX SEND, MATRIX ON, or MATRIX send buttons in step 3, use the buttons of the SEND PARAMETER field to specify the bus(es) for which you want operations to be linked (multiple selections are allowed).

The table below lists the parameters you can select in the SEND PARAMETER field.

<table>
<thead>
<tr>
<th>Button</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MX 1–16 buttons</td>
<td>MIX buses 1–16</td>
</tr>
<tr>
<td>MT 1–8 buttons</td>
<td>MATRIX buses 1–8</td>
</tr>
</tbody>
</table>

**NOTE**
- If nothing is selected in the SEND PARAMETER field, send on/off and send level will not be linked.

5 To link channels, hold down the [SEL] key of the link-source input channel and press the [SEL] key of the link-destination channel.

At this time, the values of the parameters you selected in steps 3 and 4 will be copied from the link-source to the link-destination channel. Subsequent operations of the parameters you selected in steps 3 and 4 will be linked between channels belonging to the same link group.

The current link status is shown in the channel display field of the window.

6 If you want to add a new channel to an existing link group, hold down any [SEL] key within the group and press the [SEL] key that you want to add to the group.

**HINT**
- If the link-destination channel is already assigned to another link group, its assignment to the previous group will be cancelled, and it will be added to the newly assigned group.

7 To remove a channel from a link group, hold down any [SEL] key in the same link group, and press the [SEL] key of the channel that you want to remove.
Copying, moving, or initializing a channel

You can copy or move mix parameters between channels, or restore the parameters of a specific channel to their default settings.

### Copying the parameters of a channel

You can copy the mix parameter settings of a channel to another channel. When you execute the copy operation, the settings will overwrite the parameters of the copy-destination.

You can copy between the following combinations of channels.
- Between input channels
- Between the STEREO L/R channel and MONO channel
- Between MIX channels
- Between MATRIX channels

1. In the function access area, press the CH JOB button to access the CH JOB menu.

2. Press the COPY button to access the CH COPY MODE popup window. This popup window lets you copy channel settings. The window contains the following items:

   - **SOURCE CH field**: Indicates the channel that is selected as the copy-source. You can press this field to cancel the channel that is shown.
   - **DESTINATION CHs field**: Indicates the channel that is selected as the copy-destination. You can press this field to cancel the channel that is shown.

3. To select the copy-source channel, press the corresponding [SEL] key to make it light. The corresponding channel is highlighted in the SOURCE CH field of the window. When you choose the copy-source channel, the DESTINATION CHs field is automatically emboldened, allowing you to select the copy-destination. If you want to re-select the copy-source channel, press the SOURCE CH field.

4. To select the copy-destination channel(s), press the corresponding [SEL] key to make it light (multiple selections are allowed). The corresponding channel(s) is/are highlighted in the DESTINATION CHs field of the window. The channels that can be selected will depend on the channel you selected in step 3. If you want to defeat all of the selected copy-destination channels, press the DESTINATION CHs field.

5. If you selected a MIX/MATRIX channel as the copy-source, use the buttons of the COPY TARGET field to select the parameters you want to copy.

**NOTE**

- Copy settings can be made only in the order of “copy-source” → “copy-destination.”

---

---
6 To execute the copy, press the COPY button.
The copy will be executed, and the settings will overwrite the parameters of the copy-destination channel(s). After the copy has been executed, the SOURCE CH field and DESTINATION CHs field will return to an unset state.

7 To close the CH COPY MODE popup window, press the CLOSE button.

Moving the parameters of a channel

The settings of a specific input channel can be moved to a different input channel. When you execute a Move operation, the numbering of the channels between the move-source and move-destination will move forward or backward by one.

1 In the function access area, press the CH JOB button to access the CH JOB menu.

2 Press the MOVE button to access the CH MOVE MODE popup window.
This popup window lets you move channel settings.

3 To select the move-source channel, press the corresponding [SEL] key to make it light.
The corresponding channel is highlighted in the SOURCE CH field of the window.
When you select the move-source channel, the DESTINATION CH field will automatically be emboldened, allowing you to select the move-destination. If you want to re-select the move-source channel, press the SOURCE CH field.

4 To select the move-destination channel, press the corresponding [SEL] key to make it light.
The corresponding channel is highlighted in the DESTINATION CH field of the window. The channels that can be selected will depend on the channel you selected in step 3.
If you want to defeat the selected move-destination channel, press the DESTINATION CH field.

5 To execute the move, press the MOVE button.
The settings of all channels between the move-source and move-destination will shift toward the move-source by one channel, and the channel settings will move from the move-source to the move-destination. When the Move has been executed, the SOURCE CH field and DESTINATION CH field will return to an unset state.

6 To close the CH MOVE MODE popup window, press the CLOSE button.

NOTE
• Settings for the Move operation can be made only in the order of "move-source" → "move-destination."
**Initializing the parameters of a channel**

If desired, you can restore the parameters of a channel to an initialized state. This operation can be performed on any channel(s).

1. **In the function access area, press the CH JOB button to access the CH JOB menu.**

2. **Press the CLEAR button to access the CH CLEAR MODE popup window.**
   - This popup window lets you initialize parameters.

3. **To select the channel(s) to be initialized, press the corresponding [SEL] key to make it light (multiple selections are allowed).**
   - The corresponding channel(s) is/are highlighted in the TARGET CHs field of the window.
   - If you want to de-select all of the selected channels, press the TARGET CHs field.

4. **To execute the initialization, press the CLEAR button.**
   - The parameters of the selected channel(s) will be initialized.
   - After initialization, the TARGET CHs field will return to a state in which nothing is selected.

5. **To close the CH CLEAR MODE popup window, press the CLOSE button.**
This chapter explains how to perform scene memory operations.

**About scene memories**

On the M7CL, the mix parameter settings and input/output port patching can be assigned a name and stored into memory (and later recalled from memory) as a “scene.” Each scene is assigned a number in the range of 000–300. Scene 000 is a read-only scene used for initializing the mix parameters, and scenes 001–300 are writable scenes. Each scene contains the position of the top panel faders and [ON] keys, as well as the following parameters.

- Input/output port patching
- Bus settings
- Head amp settings
- EQ settings
- Dynamics 1 and 2 settings
- Rack (GEQ/effect) settings
- Pan/balance settings
- Insert/direct out settings
- On/off status and send level of signals sent to MIX buses
- On/off status and send level of signals sent to MATRIX buses
- DCA group settings
- Mute group settings
- Channel link settings

**Using scene memories**

This section explains how to store and recall the M7CL’s mix parameters as “scenes.”

**Storing a scene**

To store the current mix settings as a scene memory, you can either use the keys of the top panel SCENE MEMORY/MONITOR section, or use the SCENE LIST window.

- Using the keys of the SCENE MEMORY/MONITOR section

1. Use the pad controls of the top panel or the buttons in the touch screen to set the mix parameters as desired.

2. Use the SCENE MEMORY [▲]/[▼] keys to select the store-destination scene number.

   The number of the currently selected scene is shown in the SCENE field of the function access area. When you select a new scene number, the number will blink. This blinking indicates that the displayed scene number is different than the currently-loaded scene number.
**Using scene memories**

1. **SCENE field**
   This field always displays general information about the scene. You can press this field to access the SCENE LIST window, where you can view and edit more detailed settings for the scene.

2. **Scene number**
   This indicates the number of the currently selected scene.

3. **R symbol (READ ONLY symbol) / Protect symbol**
   Read-only scenes are indicated by an R symbol (Read-only symbol) displayed here. Write-protected scenes are indicated by a Protect symbol.

4. **Scene title**
   This displays the title of the currently selected scene.

5. **E symbol (EDIT symbol)**
   This symbol will appear when you edit the mix parameters of the currently-loaded scene. This symbol indicates that you must execute the Store operation if you want to keep the changes you made.

3. **Press the SCENE MEMORY [STORE] key.**
   The SCENE STORE popup window will appear, allowing you to assign a title or comment to the scene.

4. **Assign a title or comment to the scene as desired.**
   For details on entering text, refer to “Entering names” (→ p. 30).

5. **Press the SCENE MEMORY [STORE] key or the STORE button located in the lower part of the SCENE STORE popup window.**
   The SCENE STORE popup window will close, and a dialog box will ask you to confirm the Store operation.

6. **To execute the Store operation, press the OK button.**
   The current mix settings will be stored to the scene number you selected in step 2. When storing is completed, the scene number in the function access area will stop blinking. If you decide to cancel the Store operation, press the CANCEL button instead of the OK button.

   • If you hold down either of the SCENE MEMORY [▲]/[▼] keys, the scene number will change consecutively.
   • If you press the SCENE MEMORY [▲]/[▼] keys simultaneously, the SCENE field indication will return to the number of the currently-loaded scene.

   • You cannot Store to a scene number for which the Protect symbol or R symbol is displayed.

   • You have the option of making settings so that the Store Confirmation dialog box does not appear (→ p. 198). In this case, pressing the SCENE MEMORY [STORE] key once will display the SCENE STORE popup window as usual, and pressing it once again will execute the Store operation. Alternatively, you can rapidly press the SCENE MEMORY [STORE] key twice to store without seeing the SCENE STORE popup window.

   • If you store to a scene number in which a scene is already stored, the previous data will be overwritten. It is possible to cancel a scene store operation immediately after overwriting a scene (→ p. 128).
● Using the SCENE LIST window

1 Use the pad controls of the top panel or the buttons in the touch screen to set the mix parameters as desired.

2 Press the SCENE field in the function access area.

The SCENE LIST window will appear, where you can perform various scene-related operations. The window includes the following items.

3 Turn one of the multifunction encoders to select the store-destination scene number.

4 Press the STORE button.

The SCENE STORE popup window will appear, allowing you to assign a title or comment to the scene.

5 Assign a title or comment to the scene as desired.

For details on entering text, refer to “Entering names” (→ p. 30).

6 Press the STORE button located at the bottom of the SCENE STORE popup window.

The SCENE STORE popup window will close, and a dialog box will ask you to confirm the Store operation.

7 To execute the Store operation, press the OK button.

The current mix settings will be stored to the scene number you selected in step 3. If you decide to cancel the Store operation, press the CANCEL button instead of the OK button.

8 If you want to cancel a scene overwrite-store operation, press the STORE UNDO button.

Immediately after overwrite-storing a scene, you can use the STORE UNDO button to undo (cancel) the most recently executed scene store operation. When you press the STORE UNDO button, a dialog box will ask you to confirm the Undo operation. Press the OK button if you want to execute the Undo. After executing the Undo, you can press the STORE UNDO button once again to Redo (re-execute) the store operation.

HINT

• You can select multiple scene numbers as the store-destination. To do so, turn the MULTI SELECT button on and turn a multifunction encoder, or press the multifunction encoder while you turn it.

• If you selected multiple scenes as the store-destination, the same contents will be stored in all scene numbers. This is convenient when you want to create several variations of the same mix settings.

• You can also use the SCENE MEMORY [▲]/[▼] keys to select scene numbers.

NOTE

• Note that you can’t use the STORE UNDO button if you’ve stored to multiple scenes simultaneously.

NOTE

• You can also assign the same function as the STORE UNDO button to a user-defined key. (→ p. 200)
Recalling a scene

Here's how to recall a stored scene from scene memory. You can recall a scene either by using the keys of the top panel SCENE MEMORY / MONITOR section, or by using the SCENE LIST window.

● Using the keys of the SCENE MEMORY / MONITOR section

1 Use the SCENE MEMORY [▲]/[▼] keys to select the scene number that you want to recall.

   The number of the currently selected scene is shown in the SCENE field of the function access area.

2 Press the SCENE MEMORY [RECALL] key.

   A dialog box will ask you to confirm the Recall operation.

3 To execute the Recall operation, press the OK button.

   The scene you selected in step 1 will be recalled. If you decide to cancel the Recall operation, press the CANCEL button instead of the OK button.

   • You have the option of making settings so that the Recall Confirmation dialog box does not appear in step 2 (→ p. 198).

● Using the SCENE LIST window

1 Press the SCENE field in the function access area.

   The SCENE LIST window will appear, where you can perform various operations for scene memory.

   • You can assign the same function as the RECALL UNDO button to a user-defined key. (→ p. 200)

   • You can also use MIDI messages (program changes) to recall scenes. (→ p. 184)
You can use the user-defined keys to directly recall a selected scene with a single keystroke, or to step through the scenes. To do this, you must first assign a scene recall operation to a user-defined key. The following recall operations can be assigned to a user-defined key.

- **INC RECALL**
  
  ...........Immediately recalls the scene of the number that follows the currently loaded scene.

- **DEC RECALL**
  
  ...........Immediately recalls the scene of the number that precedes the currently loaded scene.

*HINT*

- If no scene is stored in the number that precedes or follows the currently loaded scene, the closest scene number in which a scene is stored will be recalled.

- **DIRECT RECALL**
  
  ...........Directly recalls the scene number that you assigned to the user-defined key. When you press a user-defined key to which this function is assigned, the assigned scene will be recalled immediately.

To assign one of these functions to a user-defined key so that a scene can be recalled in a single keystroke, proceed as follows.

1. In the function access area, press the SETUP button to access the SETUP screen.

2. In the upper left of the screen, press the USER SETUP button to access the USER SETUP popup window.

   This window includes several pages, which you can switch between using the tabs located at the bottom of the window.

3. Press the USER DEFINED KEYS tab to select the USER DEFINED KEYS page.

   The USER DEFINED KEYS page lets you assign functions to user defined keys [1]–[12].

   User defined keys popup buttons

4. Press the popup button for the user-defined key to which you want to assign a function.

   The USER DEFINED KEY SETUP popup window will appear.

5. In the FUNCTION row, select “SCENE.”

   Proceed as follows, depending on the function you want to assign.

   - **To assign INC RECALL or DEC RECALL**
     
     Choose “INC RECALL” or “DEC RECALL” in the PARAMETER 1 column.

   - **To assign DIRECT RECALL**
     
     Choose “DIRECT RECALL” in the PARAMETER 1 column, and choose “SCENE #xxx” (xxx is the scene number) in the PARAMETER 2 column.

6. When you’ve finished making settings, press the OK button to close the popup window.

   If desired, assign scene-recall functions to other user-defined keys in the same way.

7. Press the user-defined key to which you assigned a recall function.

   The corresponding scene will be recalled.
Editing scene memories

This section explains how to sort the scenes stored in scene memory, edit their titles, and copy/paste them.

Sorting and renaming scene memories

You can use a dedicated window to sort scene memories in alphabetical order of their titles or in order of the date on which they were created. You can also edit their titles.

1 Press the SCENE field in the function access area.

The SCENE LIST window will appear, where you can perform various operations for scene memory. You can use tabs to switch the right half of the SCENE LIST window between three different fields.

1 SCENE field
2 COMMENT field

2 Press the COMMENT tab at the bottom of the SCENE LIST window.

The COMMENT field will appear in the right half of the SCENE LIST window.

Scene list
This lists the scenes that are stored in scene memory. The line highlighted in blue indicates the scene currently selected for operations.

HINT
• To change the default setting for the way in which the list is sorted (ascending or descending order of scene number), access the USER SETUP popup window PREFERENCE tab, and change the "LIST ORDER." (→ p. 198)

2 Scene number
This is the scene number 000–300. You can also press this scene number to select a scene.

3 TITLE
This is the name assigned to each scene (maximum 16 characters). You can press this area to access the SCENE STORE popup window, where you can assign a title or comment to the scene.

4 R symbol (READ ONLY symbol) / Protect symbol
A read-only scene is indicated by the R symbol, and a write-protected scene is indicated by the protect symbol. By pressing this area for scenes 001–300, you can switch between protected and un-protected settings.

5 Scene select knob
This knob selects a scene number shown in the scene list. You can use any of the multifunction encoders to operate this knob.

In addition, you can select multiple scenes by pressing the multifunction encoder while you turn it.

6 MULTI SELECT button
You can select multiple scenes by switching this button on and turning the multifunction encoder. (This is the same result as pressing the scene select knob while turning it.)

7 Store/Recall buttons
These buttons are used to store/recall scenes. You can also undo (cancel) or redo (re-execute) store/recall operations. For details, refer to “Using scene memories” (→ p. 125).

8 Tool buttons
Use these buttons to perform operations such as Copy and Paste on the scenes stored in scene memory. For details, refer to “Scene memory editing” (→ p. 132).

9 COMMENT field
Here you can assign a comment to each scene, and view the status of the Focus function or Fade function settings.

10 Comment
This is the comment assigned to each scene (maximum 32 characters). You can press this area to access the SCENE STORE popup window, where you can assign a title or comment to the scene.
11 STATUS field
This field indicates the status of each scene. For scenes for which something other than the ALL button is selected in the Focus function (→ p. 135), and for scenes in which the Fade function is enabled (→ p. 139), the “FOCUS” and “FADING” indications will respectively be lit.

12 Time stamp
This indicates the date and time at which the scene was last stored, as the year/month/date and hours/minutes/seconds.

13 Field select tabs
These tabs switch the fields that are shown in the right half of the SCENE LIST window. For details on the Focus field refer to “Using the Focus function” (→ p. 135), and on the Fade Time field refer to “Using the Fade function” (→ p. 139).

3 To select a scene number, turn any of the multifunction encoders on the top panel.
The line highlighted in blue in the scene list indicates the scene currently selected for operations.

HINT
• You can also use the SCENE MEMORY [▲]/[▼] keys to select scene numbers.
• The operation that occurs when you press the SCENE MEMORY [▲]/[▼] keys (whether the number will move up/down, or the list itself will move up/down) can be specified in the PREFERENCE screen SCENE UP/DOWN field.

4 To sort the list, press one of the column headers “NO.”, “TITLE,” “COMMENT,” or “TIME STAMP” at the top of the scene list and COMMENT field.
The list will be sorted as follows, according to the location you pressed.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>NO.</td>
<td>TITLE</td>
<td>COMMENT</td>
<td>STATUS</td>
</tr>
</tbody>
</table>

1 NO.
Sorted in order of scene number.

2 TITLE
Sorted in numeric/alphabetical order of title.

3 COMMENT
Sorted in numeric/alphabetical order of comment.

4 TIME STAMP
Sorted in order of date of creation.

HINT
• By pressing the same location again, you can change the direction (forward or backward) in which the list is sorted.

5 If you want to edit the title or comment of a scene, press the TITLE field or COMMENT field of the scene to access the SCENE TITLE EDIT or SCENE COMMENT EDIT popup window.
For details on entering text, refer to “Entering names” (→ p. 30).

HINT

1 SCENE TITLE field
You can press this field to select it, and enter a title for the scene (maximum 16 characters).

2 COMMENT field
You can press this field to select it, and enter a comment for the scene. (The maximum is 32 characters.)

HINT
• You cannot edit the title or comment of a read-only scene or a write-protected scene.

6 To enable/disable the protect setting, press the protect symbol.
A protect symbol is displayed for write-protected scenes; these scenes cannot be overwritten.

NOTE
• The R symbol for scene number 000 cannot be disabled.

7 Use the tool buttons to edit the scene memory.
For details, refer to the section “Scene memory editing” that follows.
Scene memory editing

The scenes stored in scene memory can be copied/pasted to other scene numbers, or cleared (erased).

1 Press the SCENE field in the function access area.
   The SCENE LIST window will appear, where you can perform various operations for scene memory. Scene memories are edited using the buttons shown in the upper part of the SCENE LIST window. Each button has the following function.

   1 COPY button
   Copies a scene into a memory buffer (a temporary storage area). For details on how to use this, refer to “Copying/pasting a scene” that follows.

   2 PASTE button
   This button pastes a scene (previously copied into the memory buffer) into another scene number. For details on how to use this, refer to “Copying/pasting a scene” that follows.

   3 CLEAR button
   This button clears (erases) the selected scene. For details on how to use this, refer to “Clearing a scene” (→ p. 133).

   4 CUT button
   Cuts a scene and places it in the memory buffer. Scenes following the scene number you cut will be moved forward. For details on how to use this, refer to “Cutting a scene” (→ p. 134).

   5 INSERT button
   Inserts a scene from the memory buffer at the location of a different scene number. Scene numbers following the inserted position will be moved backward. For details on how to use this, refer to “Inserting a scene” (→ p. 134).

   6 UNDO button
   This button cancels the most recently-executed scene editing operation. If you’ve accidentally cleared an important scene, you can press this key to return to the state prior to editing the scene.

   NOTE
   • The UNDO button cannot be used if you’ve simultaneously edited multiple scenes.

2 Perform the desired editing operation.
   For details on the procedure, refer to the following explanations.

Copying/pasting a scene

Here’s how to copy a scene into buffer memory, and then paste it to a different scene number.

1 Press the SCENE field in the function access area.
   The SCENE LIST window will appear.

2 Turn any one of the multifunction encoders to select the copy-source scene number, and then press the COPY button.
   A dialog box will ask you to confirm the Copy operation.

3 To execute the copy, press the OK button.
   The scene you selected in step 2 will be saved in the buffer memory.

   NOTE
   • Be aware that if you copy/cut another scene before you paste, the other scene will be overwritten to the buffer memory.
   • You cannot select multiple scenes as the copy-source.

4 Turn any one of the multifunction encoders to select the paste-destination scene number, and then press the PASTE button.
   A dialog box will ask you to confirm the Paste operation.

   HINT
   • You can select multiple paste-destination scenes. To do so, turn the MULTI SELECT button on and turn a multifunction encoder, or press the multifunction encoder while you turn it. In this case, the same content will be pasted to all selected scenes.
   • A copied scene can also be inserted (→ p. 134).

   NOTE
   • If nothing has been stored in the buffer memory, the PASTE button is not available.
To execute the paste operation, press the OK button.
The scene stored in the buffer memory will be pasted to the scene number you selected in step 4. If you decide to cancel the Paste operation, press the CANCEL button instead of the OK button.

**NOTE**
- Be aware that when you paste to a scene number in which a scene has already been stored, the existing scene will be overwritten.
- Read-only scenes or write-protected scenes cannot be pasted.

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**Clearing a scene**

Here’s how to clear a specified scene.

1. Press the SCENE field in the function access area.
The SCENE LIST window will appear.

2. Turn any one of the multifunction encoders to select the scene number that you want to clear, and press the CLEAR button.
A dialog box will ask you to confirm the Clear operation.

![Clearing a scene dialog box]

**HINT**
- You may select multiple scenes to be cleared. To do so, turn the MULTI SELECT button on and turn a multifunction encoder, or press the multifunction encoder while you turn it.

3. To execute the Clear operation, press the OK button.
The scene number(s) you selected in step 2 will be cleared. If you decide to cancel the Clear operation, press the CANCEL button instead of the OK button.

**NOTE**
- Read-only scenes or write-protected scenes cannot be cleared.
Cutting a scene

Here’s how to cut one or more scenes. When you cut a scene, the scenes of subsequent numbers will move forward. If you cut a single scene, you’ll be able to paste or insert it at the desired location.

1 Press the SCENE field in the function access area.
   The SCENE LIST window will appear.

2 Turn any one of the multifunction encoders to select the scene number that you want to cut, and press the CUT button.
   A dialog box will ask you to confirm the Cut operation.

3 To execute the Cut operation, press the OK button.
   The scene(s) you selected in step 2 will be cut, and the scenes of subsequent numbers will be moved forward. At this time, the scene that was cut will be held in the buffer memory (unless two or more scenes were cut).

4 If desired, you can paste (→ p. 132) or insert the cut scene (that was held in the buffer memory).

   • You may select multiple scenes to be cut. If you cut multiple scenes, the scenes of the selected region will be cut, and the subsequent scenes will move forward by the corresponding number.
   • If you intend to paste or insert a scene, you must select only one scene to cut.
   • The CUT button cannot be used if the scene list is sorted in any other way than by the “NO.” column.

   • Read-only scenes or write-protected scenes cannot be cut.

   • Be aware that if you copy or cut a different scene before you paste or insert, the newly copied or cut scene will overwrite the scene in the buffer memory.

Inserting a scene

Here’s how a scene held in the buffer memory can be inserted at the desired scene number location.

1 Press the SCENE field in the function access area.
   The SCENE LIST window will appear.

2 Perform the Copy operation (→ p. 132) or Cut operation so that the scene you want to insert is placed in the buffer memory.

   • You cannot copy or cut multiple scenes as the source.

3 Turn any one of the multifunction encoders to select the insert-destination scene number, and then press the INSERT button.
   A dialog box will ask you to confirm the Insert operation.

4 To execute the Insert operation, press the OK button.
   The scene stored in the buffer memory will be inserted at the scene number you selected in step 3. If you selected multiple scenes as the insert-destination, the same scene will be inserted multiple times starting at the scene number you selected. Scenes that were stored in subsequent numbers following that location will be moved backward by the number of scenes that were inserted.

   • If you select multiple scenes as the insert-destination, the same scene will be inserted for the selected number of times.

   • The INSERT button cannot be used if the scene list is sorted in any other way than by the “NO.” column.
   • If nothing has been stored in the buffer memory, the INSERT button is not available.
   • The INSERT button cannot be used if the Insert operation would cause the number of stored scenes to exceed 300.
Using the Focus function

“Focus” is a function that lets you specify the parameters that will be updated when you recall a scene. For example, it is convenient to use this if you want to recall only the input channel settings of a certain scene.

1 Press the SCENE field in the function access area.
   The SCENE LIST window will appear, where you can perform various operations for scene memory.

2 Press the FOCUS tab at the bottom of the SCENE LIST window.
   The FOCUS field will appear in the right half of the SCENE LIST window.

3 Use the buttons other than “ALL” to select the parameters that will be subject to recall for each scene.
   These buttons correspond to the following parameters (multiple selections are allowed).

<table>
<thead>
<tr>
<th>Button name</th>
<th>Corresponding parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>RACK</td>
<td>Rack settings</td>
</tr>
<tr>
<td>HA</td>
<td>Head amp settings</td>
</tr>
<tr>
<td>IN PATCH</td>
<td>Input channel patching</td>
</tr>
<tr>
<td>OUT PATCH</td>
<td>Output channel patching</td>
</tr>
<tr>
<td>IN</td>
<td>Input channel parameters (including DCA group settings)</td>
</tr>
<tr>
<td>OUT</td>
<td>Output channel parameters</td>
</tr>
<tr>
<td>WITH SEND</td>
<td>On/off status and send level settings for signals sent from input channels to MIX buses and MATRIX bus (shown only if the OUT button is on)</td>
</tr>
</tbody>
</table>

4 If you want to cancel the restrictions you specified in step 3, so that all parameters will be subject to recall, turn the ALL button on.
   When you turn on the ALL button, all other buttons for that scene will be turned off. Turning on any other button will turn off the ALL button.

5 Recall a scene for which you’ve made Focus settings.
   If buttons other than ALL are turned on for the scene, only the parameters whose buttons are on will be recalled. If the ALL button is turned on for the scene, all parameters will be updated.

HINT
• Scenarios for which Focus settings are made are shown by a “FOCUS” indication in the STATUS field of the SCENE LIST window.
• The Focus function can be used in conjunction with the Recall Safe function (→ p. 136). Channels or parameters that are excluded from Recall operations by either Focus or Recall Safe will not be recalled.
Using the Recall Safe function

“Recall Safe” is a function that excludes only specific parameters/channels (DCA groups) from Recall operations. This differs from the Focus settings (→ p. 135) made for individual scenes in that Recall Safe settings are common to all scenes.

1 In the function access area, press the CH JOB button to access the CH JOB popup window.

2 Press the RECALL SAFE button to access the RECALL SAFE MODE popup window.

   In this popup window you can make settings for the Recall Safe function. The window contains the following items.

   ① CH RECALL SAFE field
      The channels and DCA groups for which Recall Safe is turned on are highlighted in this field. If you turn on the SET BY SEL button, you can turn on Recall Safe for a channel or DCA group simply by pressing the [SEL] key of that channel or DCA group.

   ② CLEAR ALL button
      This clears all Recall Safe settings for the channels or DCA groups that are highlighted in the CH RECALL SAFE field.

   ③ GLOBAL RECALL SAFE field
      Press the buttons in this field to select the global parameters (i.e., parameters that apply to the entire mix, rather than to specific channels) that will be set to Recall Safe.

   ④ SAFE PARAMETER SELECT field
      Here you can switch Recall Safe on/off for the desired channels or DCA groups, and choose the parameters that will be excluded from Recall operations. The channel or DCA group you selected by pressing its [SEL] key will be shown in this field as the target of your operations. If you press any of the [SEL] keys of the DCA groups, the parameters for DCA groups 1–8 will be shown simultaneously.

   ⑤ APPLY TO ALL INPUT button / APPLY TO ALL OUTPUT button
      If these buttons are on when you operate the SAFE PARAMETER SELECT buttons, the changes will apply to all input (or output) channels. This is convenient when you want to make settings for all channels together.

3 To select the channel or DCA group whose Recall Safe settings you want to edit, press the corresponding [SEL] key.

   The corresponding channel or DCA group will be enclosed by a white frame in the CH RECALL SAFE field. (However, this white frame does not mean that the Recall Safe setting is now enabled.) The selected channel or DCA groups 1–8 will be recalled to the SAFE PARAMETER SELECT field.

4 If you want to enable Recall Safe for specific parameters of the selected channel or DCA group, make the following settings in the SAFE PARAMETER SELECT field.

   • Simply selecting a parameter in step 4 does not enable Recall Safe. To turn Recall Safe on/off, you must also perform the operation of step 5.

   • While the APPLY TO ALL INPUT button (or the APPLY TO ALL OUTPUT button) is on, operations in the SAFE PARAMETER SELECT field will apply to all input channels (or output channels).
● If an input channel is selected
Use the buttons in the lower part of the SAFE PARAMETER SELECT field (except for the “ALL” button) to select the parameters that will be subject to Recall Safe (multiple selections are allowed). If you want all parameters to be subject to Recall Safe, turn on the ALL button (this is the default setting).
These buttons correspond to the following parameters.

<table>
<thead>
<tr>
<th>Button name</th>
<th>Corresponding parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALL</td>
<td>All parameters</td>
</tr>
<tr>
<td>HA</td>
<td>Head amp settings (including external HA)</td>
</tr>
<tr>
<td>EQ</td>
<td>EQ settings (including ATT/HPF)</td>
</tr>
<tr>
<td>DYNA 1</td>
<td>Dynamics 1 settings</td>
</tr>
<tr>
<td>DYNA 2</td>
<td>Dynamics 2 settings</td>
</tr>
<tr>
<td>MIX ON</td>
<td>On/off status of signals sent to MIX buses</td>
</tr>
<tr>
<td>MIX SEND</td>
<td>Send levels of signals sent to MIX buses</td>
</tr>
<tr>
<td>MATRIX ON</td>
<td>On/off status of signals sent to MATRIX buses</td>
</tr>
<tr>
<td>MATRIX SEND</td>
<td>Send levels of signals sent to MATRIX buses</td>
</tr>
<tr>
<td>FADER</td>
<td>Fader positions</td>
</tr>
<tr>
<td>CH ON</td>
<td>On/off status of [ON] keys</td>
</tr>
</tbody>
</table>

**NOTE**
- If the ALL button is on, all other buttons in the lower part of the SAFE PARAMETER SELECT field will be turned off.

● If a MIX channel is selected
Use the buttons in the lower part of the SAFE PARAMETER SELECT field (except for the “ALL” button) to select the parameters that will be subject to Recall Safe (multiple selections are allowed). In addition, you can use the WITH MIX SEND button displayed in the lower-left part of the field to enable Recall Safe for the on/off status and send level of the signals sent from input channels to MIX buses.
If you want all parameters shown in the lower part of the field to be subject to Recall Safe, turn on the ALL button (this is the default setting).
These buttons correspond to the following parameters.

<table>
<thead>
<tr>
<th>Button name</th>
<th>Corresponding parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALL</td>
<td>All parameters (except for WITH MIX SEND)</td>
</tr>
<tr>
<td>EQ</td>
<td>EQ settings (including ATT)</td>
</tr>
<tr>
<td>DYNA 1</td>
<td>Dynamics 1 settings</td>
</tr>
<tr>
<td>MATRIX ON</td>
<td>On/off status of signals sent to MATRIX buses</td>
</tr>
<tr>
<td>MATRIX SEND</td>
<td>Send levels of signals sent to MATRIX buses</td>
</tr>
<tr>
<td>FADER</td>
<td>Fader positions</td>
</tr>
<tr>
<td>CH ON</td>
<td>On/off status of [ON] keys</td>
</tr>
<tr>
<td>WITH MIX SEND</td>
<td>On/off status and send level of signals sent from input channels to MIX buses</td>
</tr>
</tbody>
</table>

**NOTE**
- If the ALL button is on, all buttons will be turned off except for the WITH MIX SEND button located in the lower part of the SAFE PARAMETER SELECT field.
  - You can switch the WITH MIX SEND button on/off while the ALL button is left on.

● If a MATRIX channel is selected
With the exception of the types of button that are displayed, this is the same as for a MIX channel. These buttons correspond to the following parameters.

<table>
<thead>
<tr>
<th>Button name</th>
<th>Corresponding parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALL</td>
<td>All parameters (except for WITH MATRIX SEND)</td>
</tr>
<tr>
<td>EQ</td>
<td>EQ settings (including ATT)</td>
</tr>
<tr>
<td>DYNA 1</td>
<td>Dynamics 1 settings</td>
</tr>
<tr>
<td>FADER</td>
<td>Fader positions</td>
</tr>
<tr>
<td>CH ON</td>
<td>On/off status of [ON] keys</td>
</tr>
<tr>
<td>WITH MATRIX SEND</td>
<td>On/off status and send level of signals sent from input channels / MIX channels / STEREO/ MONO channels to MATRIX buses</td>
</tr>
</tbody>
</table>

**NOTE**
- If the ALL button is on, all other buttons in the lower part of the SAFE PARAMETER SELECT field will be turned off.
Using the Recall Safe function

If a DCA group is selected
If you press any of the [SEL] keys of the DCA groups, the parameters for DCA groups 1–8 will be shown simultaneously. As the parameters subject to Recall Safe, you can select either “ALL” or “LEVEL/ON” (fader position and on/off status of [ON] key). Recall Safe will be enabled when you make this selection.

If you want all parameters of the DCA group to be subject to Recall Safe, turn on the ALL button. Unlike when a channel is selected, Recall Safe will be enabled for that DCA group the moment you turn on either the LEVEL/ON button or the ALL button.

To enable Recall Safe for the selected channel, turn on the SAFE button in the SAFE PARAMETER SELECT field. (If you selected a DCA group, turn on either the LEVEL/ON button or the ALL button.)

Channels or DCA groups for which Recall Safe is enabled will be highlighted in the CH RECALL SAFE field.

To turn on Recall Safe for global parameters, turn on the buttons of the GLOBAL RECALL SAFE field.

These buttons correspond to the following parameters.

<table>
<thead>
<tr>
<th>Button name</th>
<th>Corresponding parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>INPUT PATCH</td>
<td>Input channel patching</td>
</tr>
<tr>
<td>INPUT NAME</td>
<td>Input channel name</td>
</tr>
<tr>
<td>OUTPUT PATCH</td>
<td>Output channel patching</td>
</tr>
<tr>
<td>OUTPUT NAME</td>
<td>Output channel name</td>
</tr>
<tr>
<td>RACK 1–8</td>
<td>Rack 1–8 settings</td>
</tr>
</tbody>
</table>

When you've finished making settings, press the CLOSE button to close the popup window. Then perform a Recall operation.

Only the selected channel(s) (DCA group(s) and parameter(s) will be excluded from Recall operations. Channel Link (→ p. 120) and bus settings (→ p. 212) are not subject to Recall Safe; they will always be reproduced in the recalled scene.

This means that if Recall Safe is enabled for one of several channels included in a link group or one of two channels set to stereo, the parameter settings of that channel may differ from those of the other channel(s). In such cases, the applicable parameter will be automatically re-linked the next time it is operated.

The Recall Safe function can be used in conjunction with the Focus function (→ p. 136). Channels or parameters that are excluded from Recall operations by either Focus or Recall Safe will not be recalled.

If you perform a Recall operation while holding down a [SEL] key, the Recall Safe settings of that channel will temporarily be able for that Recall operation.

• In the CH RECALL SAFE field, the color of the highlight will be green if the ALL button was selected in step 4, or blue if buttons other than ALL were selected.

• If you press the CLEAR ALL button, Recall Safe will be defeated for all channels and DCA groups for which it is enabled (i.e., the highlighted channels and DCA groups).

• You can also switch Recall Safe on/off in the SEL CH VIEW screen’s RECALL SAFE field (→ p. 85).
Using the Fade function

“Fade” is a function that smoothly changes the faders of specified channels and DCA groups to their new values over a specified duration when you recall a scene. The settings of the Fade function are made independently for each scene.

1. Press the SCENE field in the function access area.
   The SCENE LIST window will appear, where you can perform various operations for scene memory.

2. Press the “FADE TIME” tab at the bottom of the SCENE LIST window.
   You can use tabs to switch the right half of the SCENE LIST window between three different fields. In this case, press the tab to make the FADE TIME field appear.

3. Press the SET button to access the FADE TIME popup window.
   In this popup window you can select the channel to which Fade will be applied, and adjust the fade time.

4. Press the [SEL] keys of the desired channels or DCA groups to select the channels and DCA groups to which the Fade effect will be applied (multiple selections are allowed).
   The [SEL] keys of the selected channels and DCA groups will light, and those channels and DCA groups will be highlighted in the channel display field of the popup window. You can cancel a selection by pressing a lit [SEL] key once again to make it go dark.

**HINT**
- When you recall a scene, the Fade settings of that scene will be reflected in CURRENT SETTING.
5 Use the multifunction encoders corresponding to the FADE TIME knobs to adjust the fade time.
The range is 0.0 sec – 60.0 sec.
When you’ve finished making settings, press the CLOSE button to close the FADE TIME popup window.

- The fade time you specify here is used for all channels and DCA groups selected in step 4.

6 To enable the Fade function, press the FADING button.
The Fade on/off setting is made individually for each scene.

- Scenes for which Fade settings are made are shown by a "FADING" indication in the STATUS field of the SCENE LIST window.

7 Recall a scene for which the Fade function is turned on.
The faders will begin to move immediately after Recall occurs, and will reach the values of the recalled scene over the course of the specified fade time.

- The Fade function settings can be applied individually even if faders are linked by Channel Link.

- By stopping a moving fader while you hold down the corresponding [SEL] key, you can stop the fade operation of the fader at that point.
- If you recall the same scene while faders are moving, the faders of all channels and DCA groups will move immediately to their target positions.
This chapter explains the M7CL's monitor/cue functions.

**About the monitor/cue functions**

The Monitor function lets you audition various outputs through your nearfield monitors or headphones. Below the M7CL's front pad there is a PHONES OUT jack for monitoring, and this jack always lets you monitor the signal that is selected as the monitoring source. By assigning the MONITOR OUT L/R/C channels to the desired output jacks, you can also monitor the same signal through external speakers. You can select the following signals as the monitor source.

- STEREO channel output signal
- MONO channel output signal
- STEREO + MONO channel output signal
- ST IN channel 1–4 input signal
- A combination of up to eight MIX, MATRIX, STEREO, or MONO channel output signals and ST IN channel input signals.

The Cue function lets you check an individual selected channel/DCA group by temporarily monitoring it via MONITOR OUT or PHONES. When you press the top panel [CUE] key, the cue signal of the corresponding channel/DCA group is sent as the monitor output from the selected output port.

**NOTE**

- The cue signal is sent to the same output destination as the monitor signal. Be aware that for this reason, if you turn off the Monitor function, the cue signal will no longer be sent to the connected monitor speakers. However, the cue signal will always be sent to the PHONES OUT jack.

The following diagram shows the cue/monitor signal flow.

**MONITOR SELECT**

Selects the monitor source.

**METER**

Detects and indicates the level of the monitor signal or cue signal.

**DIMMER**

Attenuates the monitor/cue signal by a fixed amount.

**MONITOR LEVEL**

This affects the output jacks that are assigned to the MONITOR OUT L/R/C channels. If PHONES LEVEL LINK is ON, this will also affect the PHONES OUT jack.

**ON (On/off)**

Switches the monitor function on/off.

**DELAY (Monitor delay)**

Delays the monitor signal. The Delay function is disabled if the Cue signal is being output.

**PHONES LEVEL** (Headphone level)

Adjusts the output level of only the PHONES OUT jack.

**PHONES LEVEL LINK** (Headphone level link function)

If this is on, the MONITOR LEVEL knob will adjust the level of the signal sent to the PHONES OUT jack.
Using the Monitor function

This section explains how to select the desired monitor source, and monitor it from the PHONES OUT jack or external monitor speakers.

1. Connect your monitor system to the rear panel OMNI OUT jacks, 2TR OUT DIGITAL jack, or an I/O card installed in a slot.
   The monitor signal can be sent to any desired output jack or output channel. If you’re monitoring through headphones, make sure that your headphones are connected to the PHONES OUT jack under the front pad.

2. In the function access area, press the MONITOR button to access the MONITOR screen.
   In the MONITOR screen, the MONITOR field lets you check the current monitor settings, and turn monitoring on/off.
   The MONITOR screen includes the following items.

   - **Popup button**
     Opens the MONITOR popup window, where you can make detailed settings for monitoring.

   - **SOURCE SELECT field**
     Use the buttons in this field to select the monitor source. This operation can also be performed using the SOURCE SELECT field in the MONITOR screen.

   - **DIMMER field**
     The Dimmer function which temporarily attenuates the monitor signal can be switched on/off here. If you press the knob in this field so that it is enclosed by a heavy frame, you can use multifunction encoder 4 to adjust the amount of attenuation.

   - **TALKBACK DIMMER field**
     If Talkback is enabled, this will indicate the on/off status of the Talkback Dimmer function which automatically attenuates the monitor signal. Here you can also specify the amount of attenuation applied by the talkback dimmer.

   - **Meter field**
     This indicates the level of the monitor signal. This meter shows the level immediately before the dimmer. The MONITOR popup window will appear if you press this field, allowing you to make detailed settings for monitoring.

3. Press the popup button or the meter field to open the MONITOR popup window.
   In the MONITOR popup window you can make detailed settings for monitoring. The popup window includes the following items.

   - **SOURCE SELECT field**
     Use the buttons in this field to select the monitor source. This operation can also be performed using the SOURCE SELECT field in the MONITOR screen.

   - **DIMMER field**
     Here you can make settings for the Dimmer function which temporarily attenuates the monitor signal.
     - **DIMMER knob**
       ............ This adjusts the amount by which the monitor signal will be attenuated when the dimmer is on. You can use multifunction encoder 4 to control this. This operation can also be performed in the DIMMER field of the MONITOR screen.
     - **DIMMER ON button**
       ............ If this button is on, the monitor signal level will be attenuated according to the setting of the DIMMER knob. This operation can also be performed in the DIMMER field of the MONITOR screen.
3 TALKBACK DIMMER field
Here you can view and make settings for the Talkback Dimmer.

- TALKBACK DIMMER knob
  .........This adjusts the amount by which the monitor signal will be attenuated when talkback is on. You can use multifunction encoder 5 to control this. This operation can also be performed in the TALKBACK DIMMER field of the MONITOR screen.

- TALKBACK DIMMER indicator
  .........This indicator shows that talkback is on, and that the talkback dimmer is operating.

HINT
- If the normal dimmer and the talkback are both switched on simultaneously, the setting with the greatest amount of attenuation will be applied.

4 MONITOR DELAY field
This field specifies the monitor delay setting by which the monitor signal is delayed. You can use this in large auditoriums where there is a time difference between the monitor signal and the direct sound.

- MONITOR DELAY knob
  .........Adjusts the delay time for the monitor signal. You can use multifunction encoder 6 to control this.

- MONITOR DELAY ON button
  .........If this button is on, the monitor signal will be delayed according to the setting of the MONITOR DELAY knob.

5 MONO MONITOR button
This button allows monaural monitoring. If this button is on, the signal sent from the PHONES OUT jack and the MONITOR OUT L/R channels will be monaural.

6 PHONES LEVEL LINK button
If this is on, the MONITOR LEVEL knob will adjust the level of the signal sent to the PHONES OUT jack.

7 OUTPUT button
Switches the monitor function on/off. This operation can also be performed using the OUTPUT button in the MONITOR screen.

8 Meter field
- Output select button
  .........This opens the OUTPUT PORT SELECT popup window, where you can select the port that will output the monitor signal.

- Level meter ....This indicates the level of the monitor signal. This meter shows the level immediately before the dimmer.

9 ASSIGN field
If you selected DEFINE in the SOURCE SELECT field, use this field to specify the monitor source. You can select up to eight monitor sources simultaneously. Pressing the CLEAR ALL button will clear all selections.

4 Use the buttons of the SOURCE SELECT field to select a monitor source.
In the SOURCE SELECT field you can select only one monitor source. However if you’ve selected DEFINE, you can use the ASSIGN field to specify multiple monitor sources.

The following table shows the monitor sources you can select in the SOURCE SELECT field.

<table>
<thead>
<tr>
<th>SOURCE SELECT</th>
<th>ASSIGN</th>
</tr>
</thead>
<tbody>
<tr>
<td>ST IN 1–4 buttons</td>
<td>ST IN jacks 1–4 input signals</td>
</tr>
<tr>
<td>DEFINE button</td>
<td>The signal(s) selected in the ASSIGN field</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>STEREO L/R button</th>
<th>STEREO L/R channel output signal</th>
</tr>
</thead>
<tbody>
<tr>
<td>MONO (C) button</td>
<td>MONO channel output signal</td>
</tr>
<tr>
<td>LCR button</td>
<td>STEREO L/R + MONO channel (LCR) output signal</td>
</tr>
<tr>
<td>ST IN 1–4 buttons</td>
<td>ST IN jacks 1–4 input signals</td>
</tr>
</tbody>
</table>

HINT
- You can select a maximum of eight monitor sources in the ASSIGN field. If you select eight monitor sources, no further selections will be possible. Please turn off the buttons for unneeded sources.

5 To specify a port as the output destination for monitor signals L, C, R, press one of the output select buttons (L/R/C) in the meter field to open the OUTPUT PORT SELECT popup window, and choose from the following monitor signal output destinations (multiple selections are allowed).

<table>
<thead>
<tr>
<th>SOURCE SELECT</th>
<th>ASSIGN</th>
</tr>
</thead>
<tbody>
<tr>
<td>MIX 1–16 buttons</td>
<td>Output signals of MIX channels 1–16</td>
</tr>
<tr>
<td>MTRX 1–8 buttons</td>
<td>Output signals of MATRIX channels 1–8</td>
</tr>
<tr>
<td>STEREO L/R button</td>
<td>STEREO L/R channel output signal</td>
</tr>
<tr>
<td>MONO (C) button</td>
<td>MONO channel output signal</td>
</tr>
<tr>
<td>ST IN 1–4 buttons</td>
<td>ST IN jacks 1–4 input signals</td>
</tr>
</tbody>
</table>

NOTE
- You can select a maximum of eight monitor sources in the ASSIGN field. If you select eight monitor sources, no further selections will be possible. Please turn off the buttons for unneeded sources.

When you’ve selected an output port, press the CLOSE button to close the popup window.
In the same way, specify the output ports for MONITOR OUT L, R, and C.
6 To enable monitoring, press the OUTPUT button to turn it on.
The monitor source you selected in step 4 will be sent to the output destination you specified in step 5.

7 To adjust the monitor level, use the MONITOR LEVEL knob located in the SCENE MEMORY/MONITOR section of the top panel.
If PHONES LEVEL LINK is ON, you can use both the MONITOR LEVEL knob and the PHONES LEVEL knob to adjust the monitor level when monitoring through headphones.
The MONITOR LEVEL knob will apply to the PHONES OUT jack as well.

8 Make settings for Dimmer, Delay, and Moraual as desired.

HINT
• If desired, you can specify output ports only for MONITOR OUT L and R, and monitor through two speakers.
• If you have not specified an output port for MONITOR OUT C, selecting the MONO (C) button or LCR button as the monitor source will automatically cause the MONO channel signal to be distributed to MONITOR OUT L/R.

HINT
• If you have not specified an output port for MONITOR OUT C, selecting the MONO (C) button or LCR button as the monitor source will automatically cause the MONO channel signal to be distributed to MONITOR OUT L/R.

HINT
• The PHONES OUT jack will always output the monitor signal, regardless of whether the OUTPUT button is on or off.
Using the Cue function

This section explains how to use the M7CL’s Cue function.

### About cue groups

The M7CL’s cue signals can be categorized into the following four groups.

1. **INPUT CUE group**
   
The cue signals of input channels make up this group. To enable Cue for this group, press the [CUE] key of any INPUT channel or ST IN channel to turn Cue on.

2. **DCA CUE group**
   
The cue signals of DCA groups make up this group. To enable Cue for this group, assign the DCA groups to the Centralogic section and press a [CUE] key in the Centralogic section to turn Cue on.

3. **OUTPUT CUE group**
   
The cue signals of output channels make up this group. To switch Cue on/off for this group, press the [CUE] key of a STEREO/MONO channel, or assign MIX channels or MATRIX channels to the Centralogic section and press a [CUE] key of the Centralogic section.

4. **Other CUE group**
   
These are the Cue signals operated using buttons displayed in the touch screen. This group is enabled if you turn on the Cue button in an EFFECT popup window or the KEY IN CUE button in the DYNAMICS 1 popup window. This group will automatically be disabled when you exit the corresponding popup window.

It is not possible to simultaneously turn on Cue between different groups. Normally, the group to which the most recently pressed [CUE] key (or a CUE/KEY IN CUE button in the screen) belongs will take priority, and the [CUE] keys of the previously selected group will be defeated. However if you switch the Cue signal group in a specific order, the state of the [CUE] keys of the previously-selected group will be restored when the current Cue signal is defeated.

The following illustration shows the priority order of the [CUE] keys. After you have switched groups from lower to upper levels, if you then defeat Cue for the upper group, the previous [CUE] key status of the group immediately below will be restored.

For example if you switch groups in the order of OUTPUT CUE group → DCA CUE group → INPUT CUE group → Other CUE group, you can then successively defeat the [CUE] keys (CUE/KEY IN CUE buttons) to successively restore the [CUE] key status of the previously selected group.
Operating the Cue function

This section explains how you can use the [CUE] key of a desired channel or DCA group to monitor the Cue signal.

**NOTE**

- The cue signal is sent to the same output destination as the monitor signal. Be aware that for this reason, the cue signal will not be sent to the connected monitor speakers if you turn off the Monitor function. However, PHONES OUT jack under the front pad will always output the cue signal regardless of the Monitor on/off setting. For details on Monitor function settings, refer to “Using the Monitor function” (→ p. 142).

1. In the function access area, press the MONITOR button to access the MONITOR screen.

   The CUE field of the MONITOR screen lets you check the current Cue settings, and turn Cue on/off.

   1. **Popup button**
      Opens the CUE popup window, where you can make detailed settings for Cue.
   2. **CUE MODE field**
      Specifies how the Cue function will operate.
   3. **INPUT/DCA/OUTPUT field**
      For each CUE group, this indicates the signal output position and the output level. You can press this field to open the CUE popup window.
   4. **CLEAR CUE button**
      Clears all Cue selections.

2. Press the popup button or the INPUT/DCA/OUTPUT field to open the CUE popup window.

   The popup window includes the following items.

   - **CUE MODE field**
     This specifies the mode of operation when multiple [CUE] keys within the same group are turned on. This operation can also be performed in the CUE MODE field of the MONITOR screen.
   - **INPUT field**
     Here you can select one of the following positions from which input channels will be cued.
     - PFL (Pre-Fader Listen) button
       The pre-fader signal will be output.
     - AFL (After-Fader Listen) button
       The post-fader signal will be output.
     - POST PAN button
       The post-pan signal will be output.
     - PFL TRIM knob
       If PFL is selected, you can adjust the output level of the cue signal in a range of -20 dB – +10 dB. You can operate this knob using multifunction encoder 3.
   - **DCA field**
     Here you can select the position from which Cue will be output from DCA groups, and specify the output level.
     - PRE PAN button
       The pre-pan signal will be output.
     - POST PAN button
       The post-pan signal will be output.
Operating the Cue function

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Monitor/Cue

• DCA TRIM knob
  ...Adjusts the level of cue output from
  a DCA group in a range of -20 dB–
  +10 dB. You can operate this knob
  using multifunction encoder 4.

• DCA UNITY button
  ...If this button is on, pressing the
  [CUE] key of a DCA group will
  always monitor the corresponding
  DCA group at unity gain (the same
  level at when the fader in the Centr-
  alogic section is at 0 dB).

4 OUTPUT field
Here you can select one of the following choices as the
position from which output channels will be cued.
• PFL (Pre-Fader Listen) button
  .......The pre-fader signal will be output

• AFL (After-Fader Listen) button
  .......The signal immediately after the
  [ON] key will be output

• PFL TRIM knob
  .......If you select PFL, you can also use
  the PFL TRIM knob located in the
  lower part of this field to adjust the
  output level in a range of -20 dB–
  +10 dB. You can operate this knob
  using multifunction encoder 5.

5 Meter field
• Level meter ....This indicates the level of the cue
  signal.
• ACTIVE CUE indicator
  .......This indicates the currently-active
  Cue group.
• CLEAR CUE button
  .......Clears all Cue selections. This oper-
  ation can also be performed using
  the CLEAR CUE button in the MON-
  ITOR screen.

3 Use the buttons of the CUE MODE section
to specify what will happen when multiple
[CUE] keys within the same CUE group are
turned on.

Use the following two buttons to choose the Cue
mode.

● MIX CUE button
  All channels or DCA groups within the same Cue
group whose [CUE] key is on will be mixed for
monitoring (MIX CUE mode).

● LAST CUE button
  Only the channel or DCA group whose [CUE] key
was last turned on will be monitored (LAST CUE
mode).

4 Use the buttons and knobs of the INPUT
field, DCA field, and OUTPUT field to spec-
ify the output position and output level for
each Cue group.

Refer to the explanation for each item in step 2, and
make the desired settings.

5 Press the [CUE] key of a desired channel or
DCA group to turn it on.
The Cue signal of the corresponding channel will be
sent to the monitor signal output destination.
The background of the Cue meter in the function
access area will turn blue, indicating the Cue output
level. An abbreviation of the currently-on Cue group
or button is shown above the Cue meter.
The abbreviations displayed for the Cue meter have
the following meaning.

| IN   | INPUT CUE group |
| DCA  | DCA CUE group   |
| OUT  | OUTPUT CUE group|
| EFFECT | CUE button in the EFFECT popup window (Other cue group) |
| KEY IN | KEY IN CUE button of the DYNAMICS 1 popup window (Other cue group) |

6 To adjust the Cue signal level, use the
MONITOR LEVEL knob located in the
SCENE MEMORY/MONITOR section of the
top panel.

If PHONES LEVEL LINK is ON, you can use both
the MONITOR LEVEL knob and the PHONES
LEVEL knob to adjust the Cue signal level when mon-
itoring through headphones.

HINT
• [CUE] keys belonging to different Cue groups cannot be
turned on simultaneously. The Cue group to which the last-
pressed [CUE] key belongs will be turned on, allowing only
the signals of that group to be monitored.

HINT
• When using the MIX bus select buttons in the SENDS ON
FADER popup window, you can press the selected button
once again to turn on Cue for the corresponding MIX channel
(→ p. 64).

• If you want Cue operations and channel select operations to
be linked, open the USER SETUP popup window, choose the
PREFERENCE tab, and turn “[CUE]>>[SEL] LINK” on (→ p. 198).
7 To defeat Cue, press the currently-on [CUE] key once again.

You can press the CLEAR CUE button in the Meter field to clear all Cue selections.

- If you press the CUE meter in the function access area, all Cue selections will be cleared.
- All Cue selections will be cleared if you switch between MIX CUE mode and LAST CUE mode in the CUE MODE section.
- You can also assign the same function as the CLEAR CUE button to a user-defined key (→ p. 200).
This chapter explains how to use talkback and oscillator.

**About the talkback and oscillator functions**

Talkback is a function that sends the signal of a mic connected to the TALKBACK jack to the desired bus. This is used mainly to convey instructions from the mixing engineer to the performers or staff. If necessary, a mic connected to INPUT jacks 1–32 (1–48) can also be used for talkback.

The M7CL also contains an oscillator that can output a sine wave or pink noise to the desired bus, and this can be used to check external equipment or to test the acoustical response of the room.

The diagram below shows the signal flow of the talkback/oscillator signals.

**Using talkback**

Here’s how the signal sent to the TALKBACK jack or an INPUT jack 1–32 (1–48) can be sent to the desired bus.

1. **Popup button**
   Opens the TALKBACK popup window.

2. **TALKBACK IN field**
   This indicates the input level of the mic connected to the TALKBACK jack, and the phantom power on/off status.

3. **INPUT TO TALKBACK field**
   Of the INPUT jacks 1–32 (1–48), this indicates the input sensitivity, input level, and phantom power on/off status of the jack that is being used for talkback. You can select an INPUT jack for talkback by pressing the button located at the left side. If you press the GAIN knob to be active, you can adjust the input sensitivity using the corresponding multifunction encoder.

4. **ASSIGN field**
   Indicates the bus to which the talkback signal is sent. You can press this field to open the TALKBACK popup window.

5. **TALKBACK ON button**
   Switches talkback on/off.
Using talkback

2 Press the popup button or the ASSIGN field to open the TALKBACK popup window.
In this popup window you can make detailed settings for talkback.

3 Connect a mic to the front panel TALKBACK jack, and turn the TALKBACK GAIN knob to adjust the input sensitivity of the mic.
The meter in the TALKBACK IN field indicates the input level of the mic connected to the TALKBACK jack. If you want phantom power (+48V) to be supplied to the TALKBACK jack, turn on the +48V button located in the TALKBACK IN field.

4 If you want to use an INPUT jack 1–32 (1–48) as supplementary input for talkback, proceed as follows.
1 Press the INPUT TO TALKBACK field INPUT select button to open the INPUT PORT SELECT popup window.
2 Of the IN 1–32 (1–48) buttons, press the button for the input you want to use for talkback, making it light.
You can select only one input at a time.
3 Press the CLOSE button to close the popup window.
Use the INPUT TO TALKBACK field GAIN knob and level meter to adjust the input level of the connected mic.

5 Press a button in the ASSIGN field to specify the bus(es) to which the talkback signal will be sent (multiple selections are allowed).
These buttons correspond to the following buses.

<table>
<thead>
<tr>
<th>MIX 1–16 buttons</th>
<th>MIX buses 1–16</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTRX 1–8 buttons</td>
<td>MATRIX buses 1–8</td>
</tr>
<tr>
<td>ST L, ST R buttons</td>
<td>STEREO bus L/R</td>
</tr>
<tr>
<td>MONO (C) button</td>
<td>MONO bus</td>
</tr>
</tbody>
</table>

NOTE
• The PAD will be internally switched on or off when the HA gain is adjusted between -14 dB and -13 dB. Keep in mind that noise may be generated if there is a difference between the Hot and Cold output impedance of the external device connected to the INPUT connector when using phantom power.

HINT
• You can assign talkback on/off or an ASSIGN change to a user-defined key. In this case, you can select either latched operation or unlatched operation (the function will be on only while you continue holding down the key) (→ p. 200).
• When talkback is on, you can use the talkback dimmer to lower the monitor levels other than talkback (→ p. 143).