Roland®

V-MIXING CONSOLE

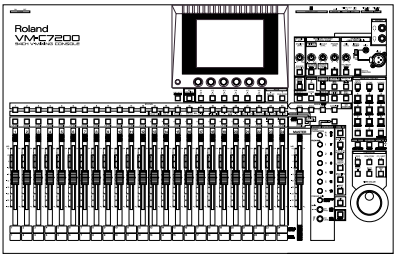
VM-C7200
VM-C7100

QUICK START

Thank you, and congratulations on your choice of the Roland **VM-C7200 (VM-C7100) V-Mixing Console**.
The documentation for the VM-7000 Series consists of the volumes as listed below.If you are using the VM-7000 for the first time, we recommend you to first start with the "Quick Start" (this volume) when using this system, to get a thorough grasp of its operation performance ability. The details to the use for every function can be found in the Console (C7200 / C7100) section of the "Owner's Manual". Look up the function you are searching for on the index and read the chapter carefully.

For The Console
- **Quick Start (this volume):** Easy instructions for basic steps of operations.
- **VM-C7200/C7100 Owner's Manual:** Detailed instructions for each function, glossary, Q&As, Parameter List, MIDI Implementation, etc.
- **VM-C7200/C7100 Libraries:** Internal connections templates, list of EQ and effects preset library

For The Processor
- **VM-7200/7100 Owner's Manual:** Instructions for using the Processor, how to install optional devices, etc.
- **VM-7000 SERIES Block Diagram:** Block diagram of the whole system



Roland Website **http://www.roland.co.jp/**
Roland US Website **http://www.rolandus.com/**

Table of Contents

Getting Started

How to Use The QUICK START

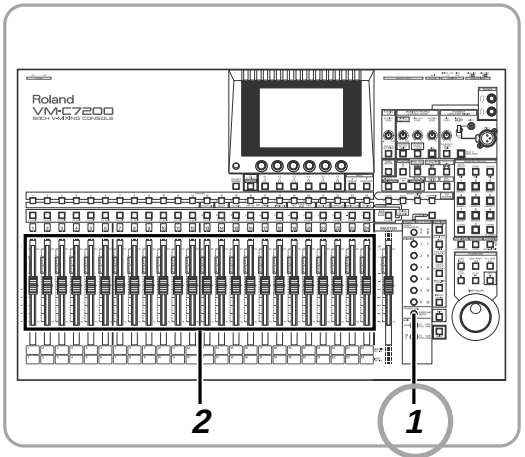
The QUICK START basically explains the operations as follows:

Mixing Operations

Now let's do some mixing. This chapter describes two-channel – stereo – mixing of connected sources that will be sent out from the system through its MAIN OUT jacks.

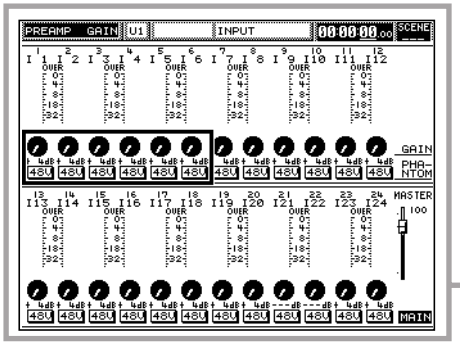
Setting the Input Gain

Let's adjust the input gain levels of all of your connected instruments and so on. (If you are working on digital connected sources, you do not have to read this section.)



1 Press [PREAMP GAIN].

[PREAMP GAIN] lights and the "PREAMP GAIN" display appears.



Owner's Manual "Gain, Phantom Power Supply, Phase and Attenuator" (p.68)

HINT
As preset at the factory, all channel numbers on the console correspond to the input numbers on the processor. You may, however, change the channels' connections or work on multiple channels at once (Owner's Manual "Selecting an input channel's signal source" p.67).

MEMO
If you selected DIGITAL IN A/B as your source input, these steps will not be necessary.

HINT
You can also set the gain level with the cursor and knobs on the display.

26

Step number in the setup procedure.

NOTE
Important notifications to prevent considerable damage to your equipment.

Reference page for detailed information to this section.

HINT
Other convenient setup operations.

MEMO
Additional suppllemental remarks.

Keys or knobs used in the corresponding Step number.

The display mainly used during the operation.

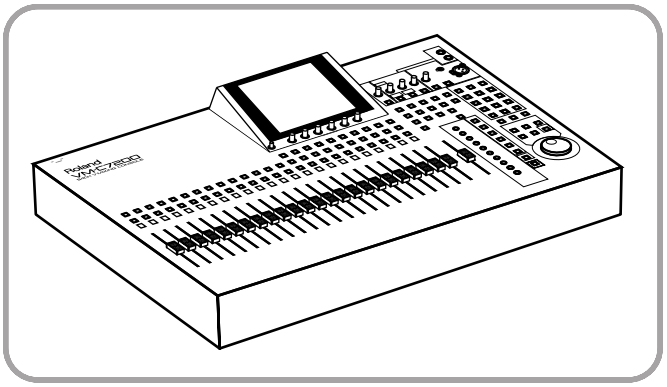
- For further information to operations or functions, read your console's and processor's Owner's Manuals.

Installing the VM-C7100/C7200 Digital Mixing System

The VM-C7100/C7200 Digital Mixing System consists of two units – the mixing console and the mixing processor.

About the VM-C7100/C7200 Digital Mixing System

The Mixing Console



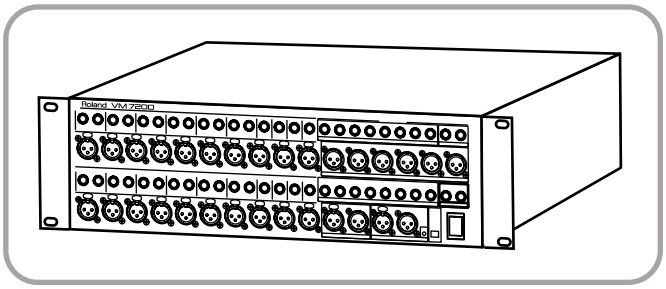
All mixing activities take place on the mixing console, including the adjusting of faders, the assignment of signals to busses and the application of effects.
Place the console in an area such as a control room. Then, connect your monitors, audio equipment, stereo mastering recorders and headphones to the corresponding jacks on the console.

Owner's Manual "Names of Things and What They Do" (p.11)

HINT

You may attach an optional wooden panel and a level meter bridge (sold separately) to the console.

The Mixing Processor



The mixing processor supplies the majority of the system's input and output jacks.
Place the processor at a convenient location near your performers, such as in a studio or on a stage. Next, connect instruments, microphones, amplifiers, multi-track recorders, effects processors, and monitors for the performers to the corresponding mixing processor jacks.

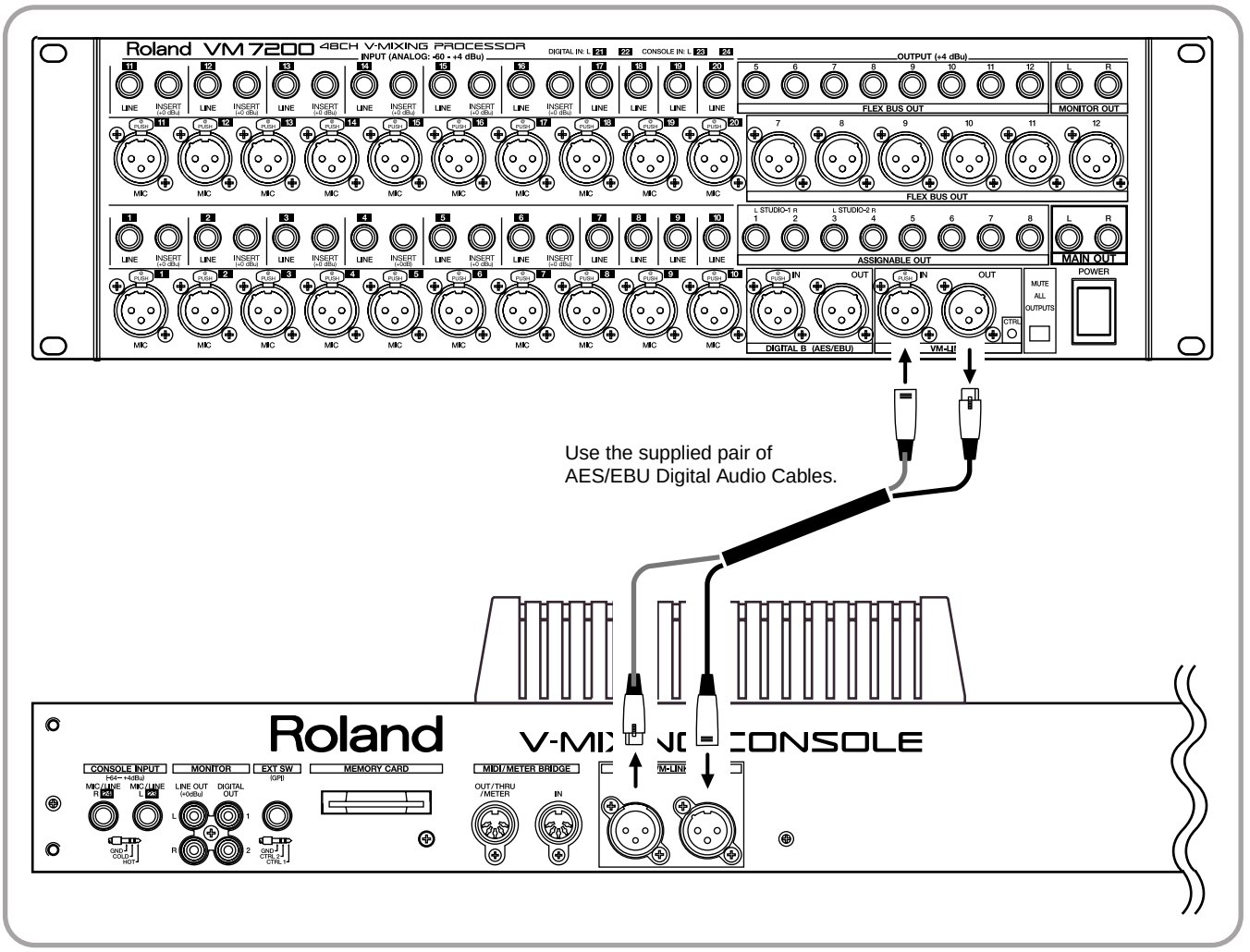
OWNER'S MANUAL for the Processor

HINT

Up to 2 processors can be connected to each console, which enables you to achieve 94 input channels (Owner's Manual "Settings related to cascade connection" p.41, OWNER'S MANUAL for the Processor "Connecting Two Processors (Cascade Connection)" p.32).

To Connect the VM-C7100/C7200 Digital Mixing System

Use a pair of AES/EBU digital audio cables to connect the mixing console and mixing processor. These cables are supplied as a set with the mixing console.

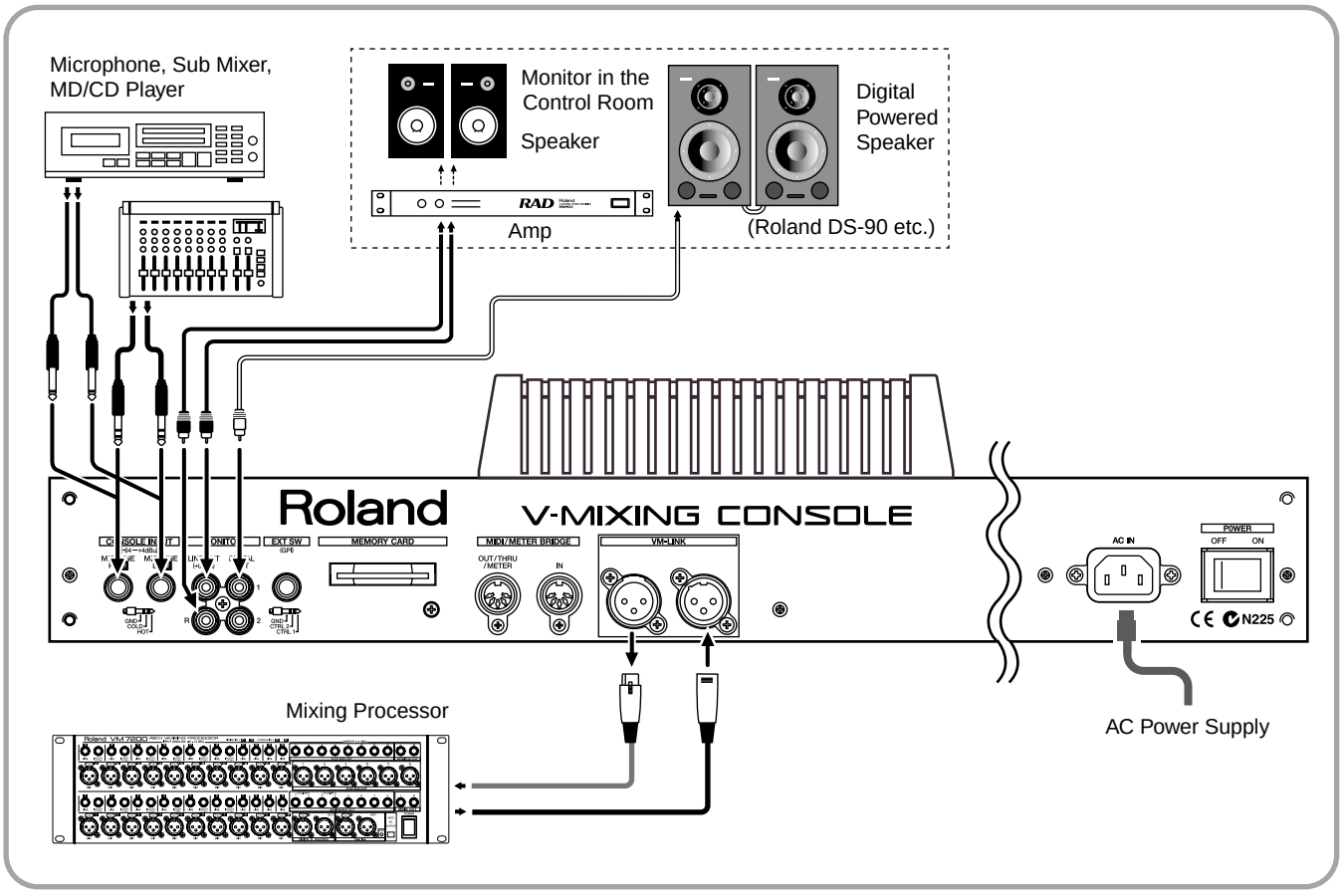


Connections

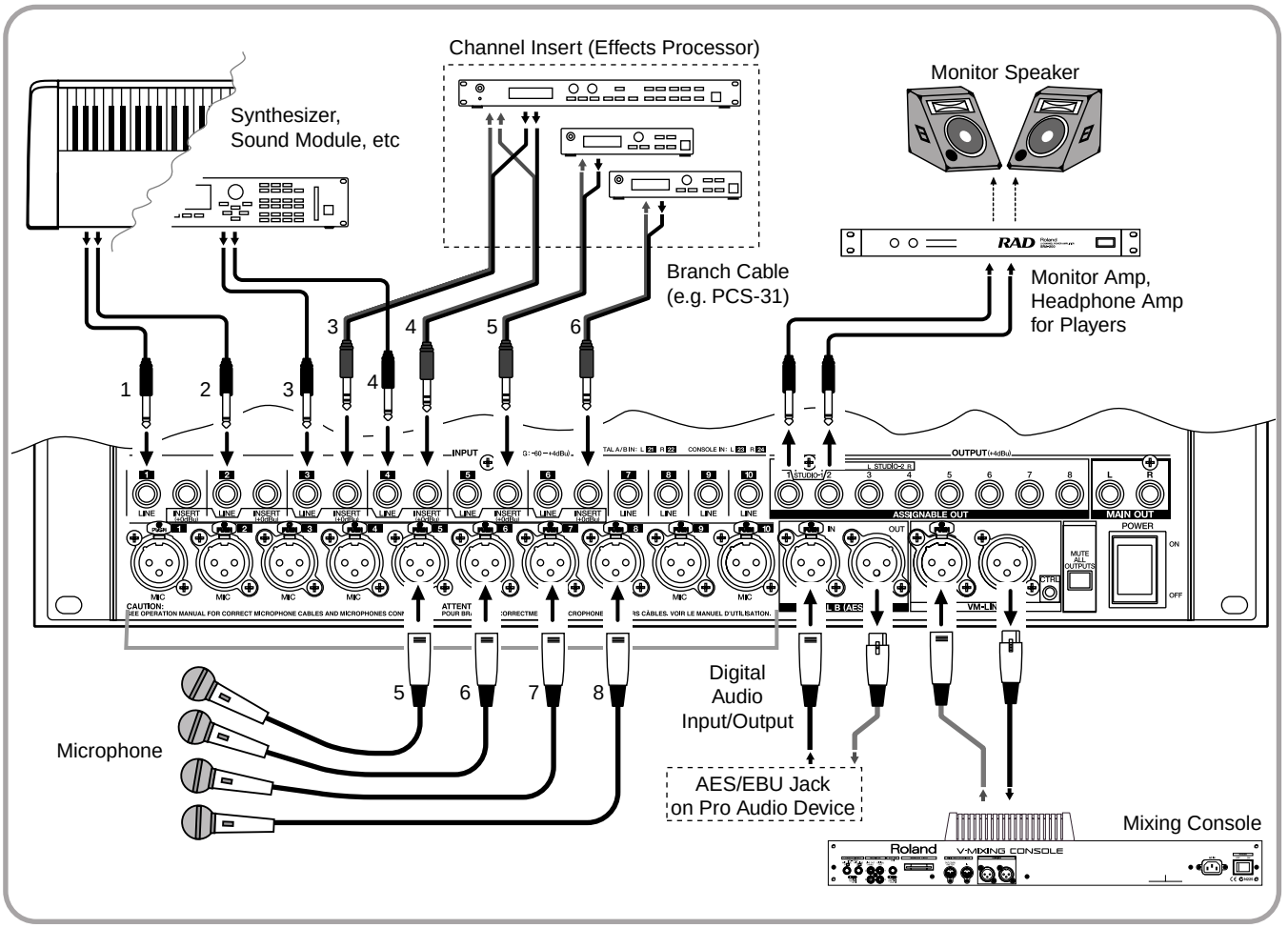
NOTE **To avoid problems and/or damage to speakers or other devices, always turn down the volume and turn off the power on all devices before making any connections.**

Basic Connections

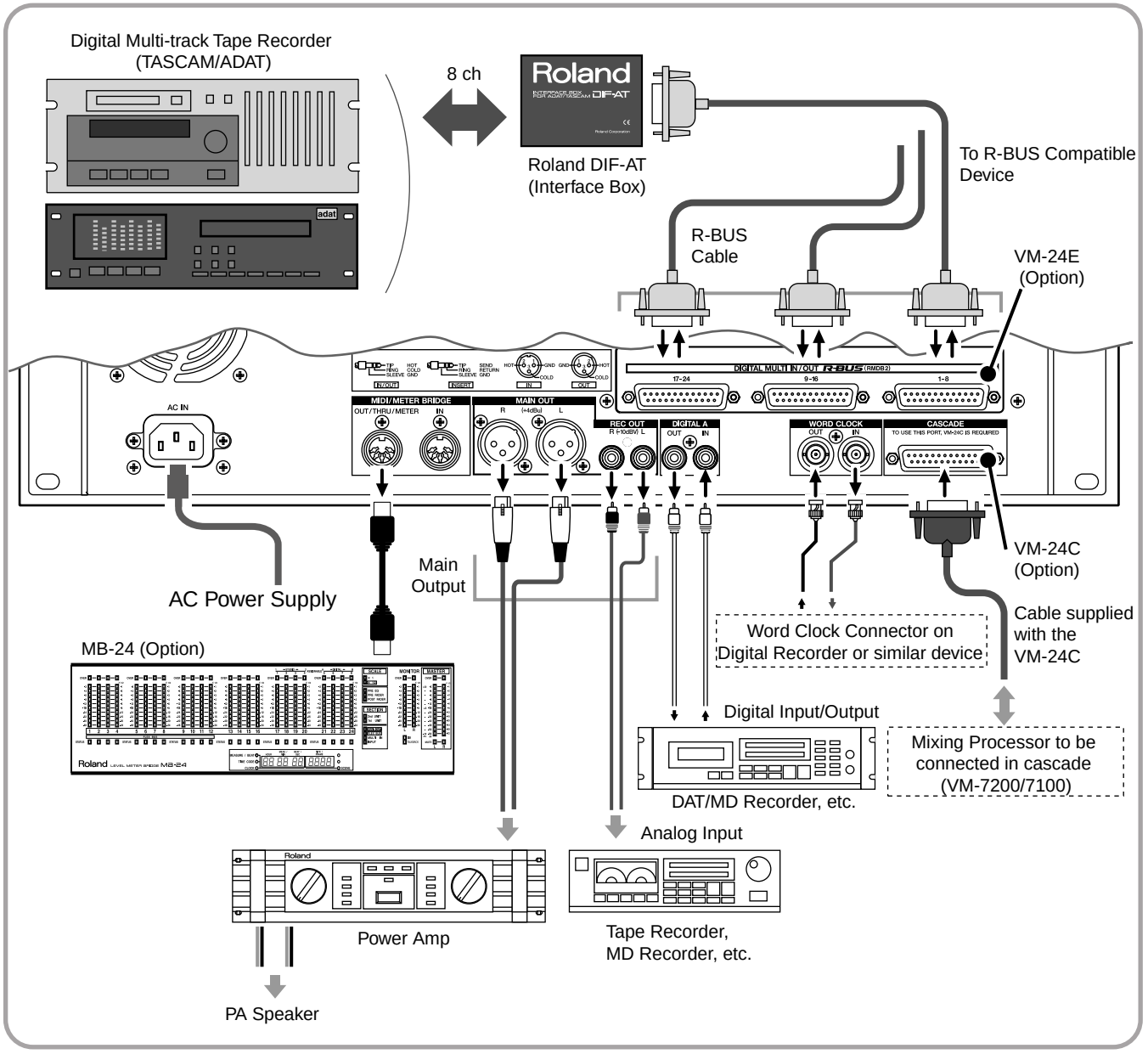
Rear Panel of the Mixing Console



Front Panel of the Mixing Processor



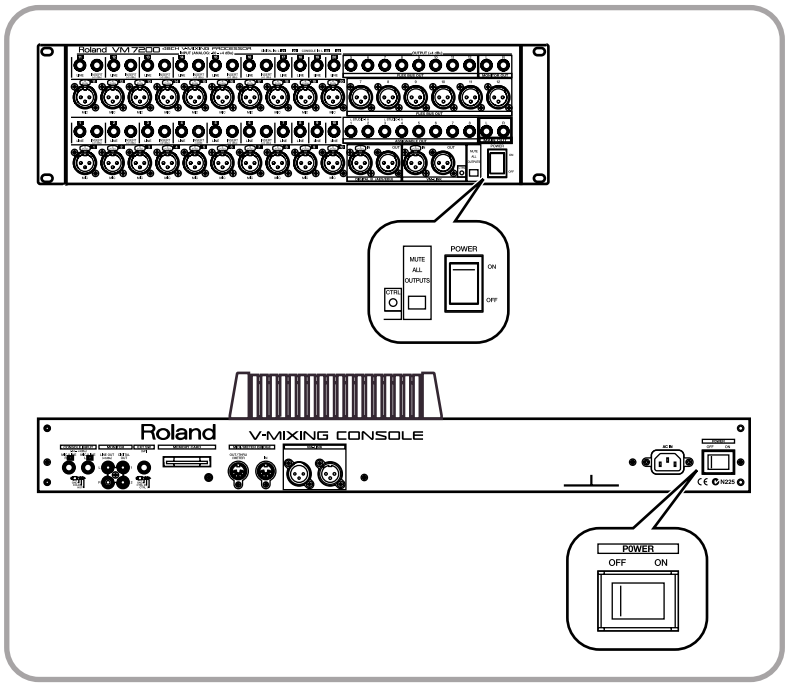
Rear Panel of the Mixing Processor



If you wish to connect the VM-C7100/C7200 to ADAT or TASCAM digital multi-track tape recorders, you must first install an optional VM-24E, sold separately (OWNER'S MANUAL for the Processor "Installing R-BUS (RMDB2) Connectors (VM-24E)" p.14).

Turning On the Power

After you have finished making connections (QUICK START: p.7), be sure to turn on all of your devices in the proper order, as described in the instructions below. Powering up in the wrong order may cause malfunctions and / or damage to speakers and the devices.
Always make sure that each device's volume level is turned down before turning on its power. You may hear a slight noise even with the volume turned down – this is normal, however, and does not indicate a malfunction.



1 Turn on the power of any connected digital multi-track tape recorder.

It takes a while for the device to startup.

2 Turn on the power of any additional connected digital devices (DAT, MD recorder, hard disc recorder, etc.).

3 Turn on the power of any connected analog devices (instruments, sound modules, effects processors, microphones, CD players, MD players, tape recorders, etc.).

MEMO

If an external device is to be the source of the system's Word Clock (Owner's Manual: p.31), turn on the power of that device first.

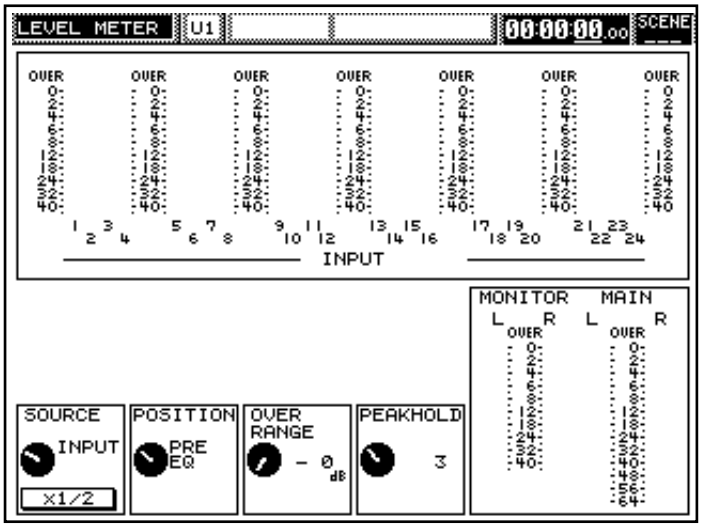
4 Set [POWER] to ON on the front panel of the mixing processor.

The CTRL indicator blinks during startup. When startup is completed, the indicator lights in green.

5 After the CTRL indicator on the processor has turned green, set [POWER] to ON on the rear panel of the mixing console.

6 When the “Check SYSTEM CONFIGURATION” message appears on the display, press [F2](START) to execute the start-up procedure.

The “LEVEL METER” display appears.



It takes a short while for the system to start up. When you turn on the power, all connected external devices must be recognized by the system, and certain data must be loaded.

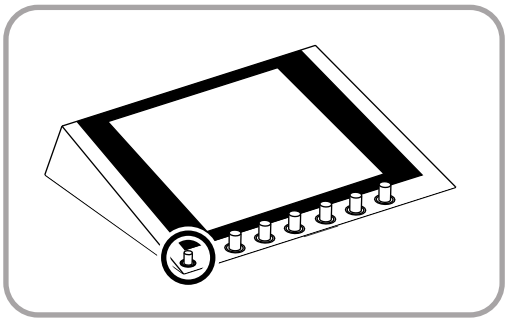
7 Turn on the power of connected audio equipment (amplifiers and speakers).

NOTE **When you change settings on a digital connected device, a loud noise may occur. Always turn down the volumes to all speaker outputs to prevent serious damage to your equipment, before working on your digital devices.**

MEMO When connected in cascade (Owner’s Manual “Settings related to cascade conection” p.41), turn on the power of the Slave processor (“2nd UNIT”) first.

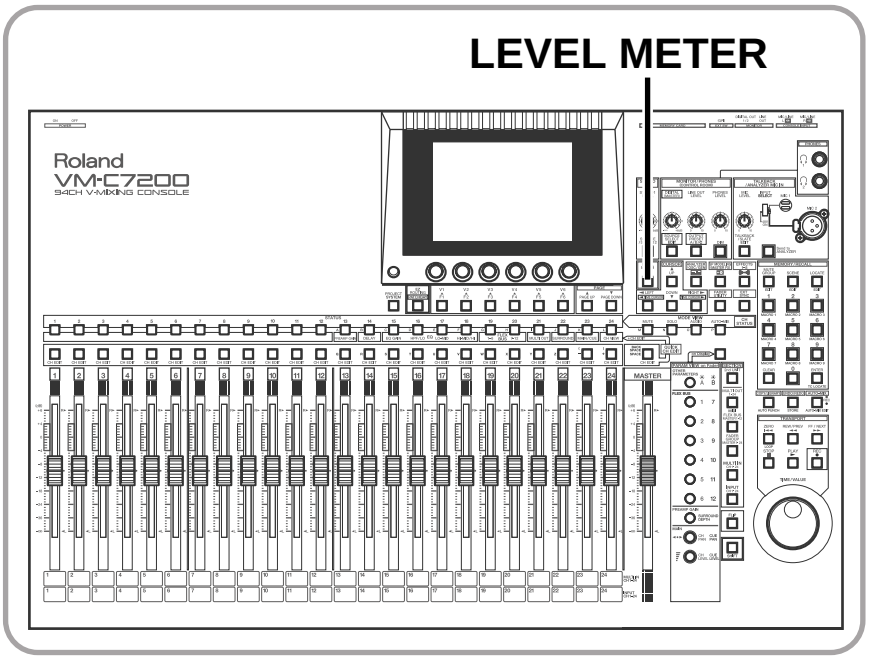
To Adjust the Brightness of the Display

You may wish to adjust the brightness of the display immediately after power-up, under unusual viewing conditions, or after the unit has been on for an extended period of time. Adjust the brightness of the screen using the [CONTRAST] knob on the left bottom of the display.



If You're Confused About What's Being Displayed or What's Going On

If you become confused about what you're seeing on the display, or have lost your way during some procedure, press [LEVEL METER]. The display returns to the screen shown immediately after power-up. You can try the procedure you have been working on again from the beginning.



If you find that your system functions differently than described in the QUICK START or the Owner's Manual, read "Troubleshooting" (Owner's Manual: p.261) for further information.

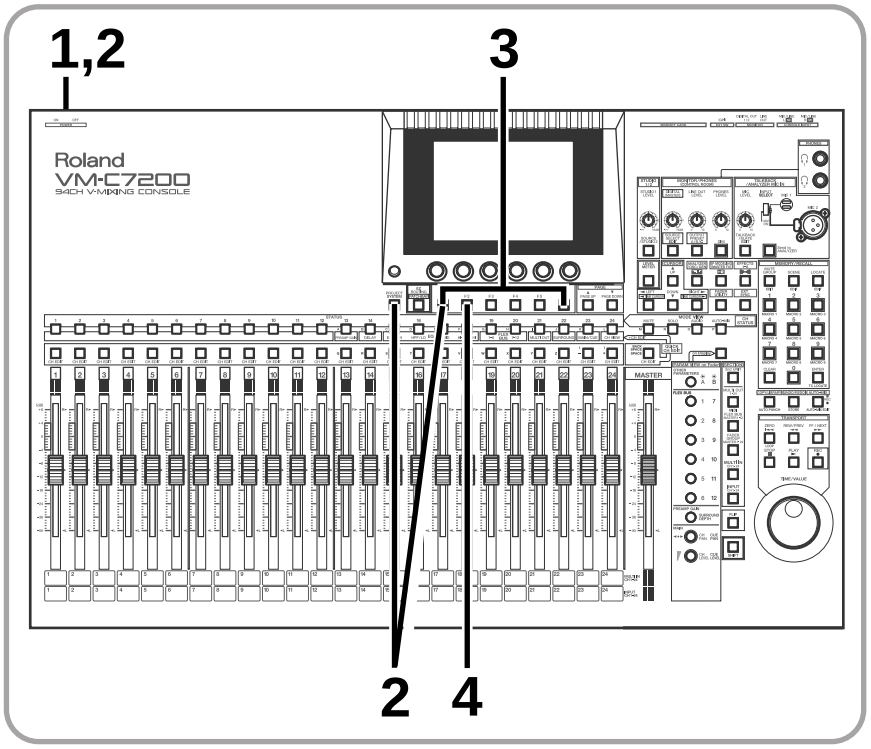
If the above steps do not resolve your problem, contact a nearby Roland Service Center or an authorized Roland distributor, or the shop where you made your purchase.

Restoring the Original Factory Settings

You can restore the system's parameters to their original default settings using the following procedure.

NOTE

- **The Factory Reset function deletes all of your own settings.**
- **Be sure to turn off the power of all amplifiers and speakers before executing Factory Reset.**



1 Turn off the power of the mixing console.

2 Hold down [PROJECT] and [F1] while turning on the console's power.

3 When the "FACTORY RESET" display appears, press [F1](OK).

To cancel, press [F6](Cancel).

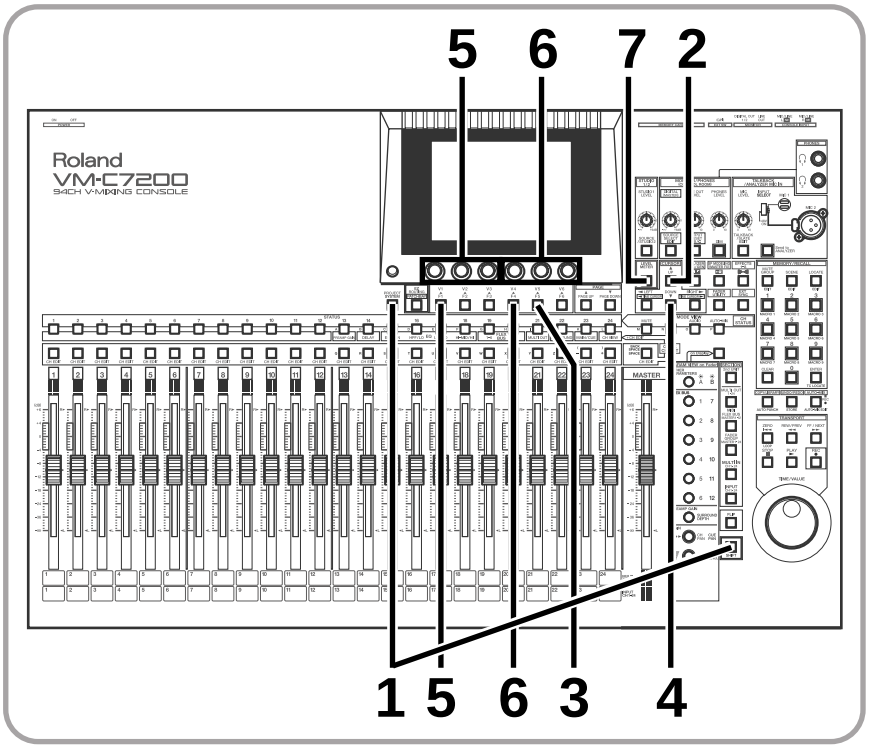
It takes a while to reset the system.

4 Press [F2](START) to startup the system.

The "LEVEL METER" display appears.

Setting the Internal Clock

The mixing console unit contains an internal clock. When you store a Project, the current time, day, and month information is automatically stamped into the Project (Time Stamp). This makes the management of Projects easier, since you can sort them in day / time order. When you turn on the power for the first time after purchase, be sure to set your system's date and time by following the instructions below.

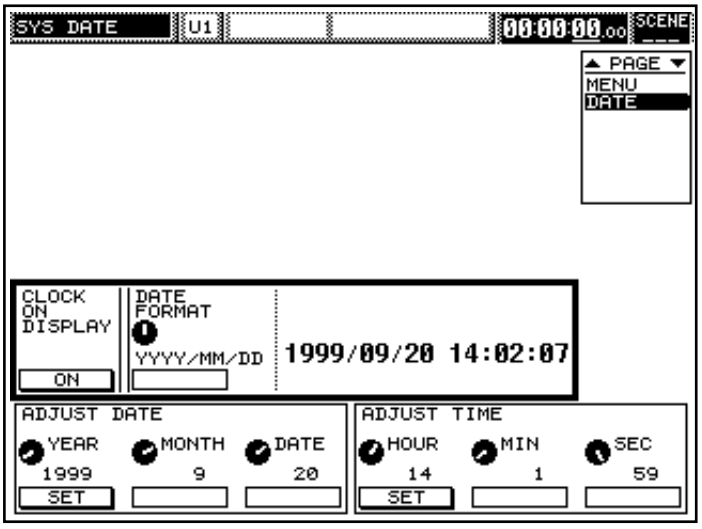


1 Hold down [SHIFT] and press [PROJECT].

2 Press CURSOR [UP] to move the cursor to the upper field.

3 Press [F5](DATE).

The “SYS DATE” display appears.



4 Press CURSOR [DOWN] to move the cursor to the “ADJUST DATE / ADJUST TIME” field.

5 Set the current date. Turn [V1](YEAR), [V2](MONTH), [V3](DATE) to select the current date, and then press [F1](SET) to confirm your selection.

6 Set the current time. Turn [V4](HOUR), [V5](MIN), [V6](SEC) to select the current time, and then press [F4](SET) to confirm. The time you set becomes effective immediately.

The date and time are set.

- To return to the original display (the “LEVEL METER” display), press [LEVEL METER].

HINT

You can set the time on / off on the display, and select from various date display formats (Owner’s Manual “Adjusting internal clock” p.25).

NOTE

The console contains a lithium battery that allows the system to retain the internal clock settings and certain other parameter values. When the battery becomes weak, malfunctions may occur – the system clock may not function correctly, or the unit may not properly recall your last settings at power-up. If such things occur, restart the mixing console. If a message indicating low battery power appears, change the battery (Owner’s Manual “How to replace the battery” p.26), and restore the original factory settings (QUICK START: p.13).

Preparing a Memory Card

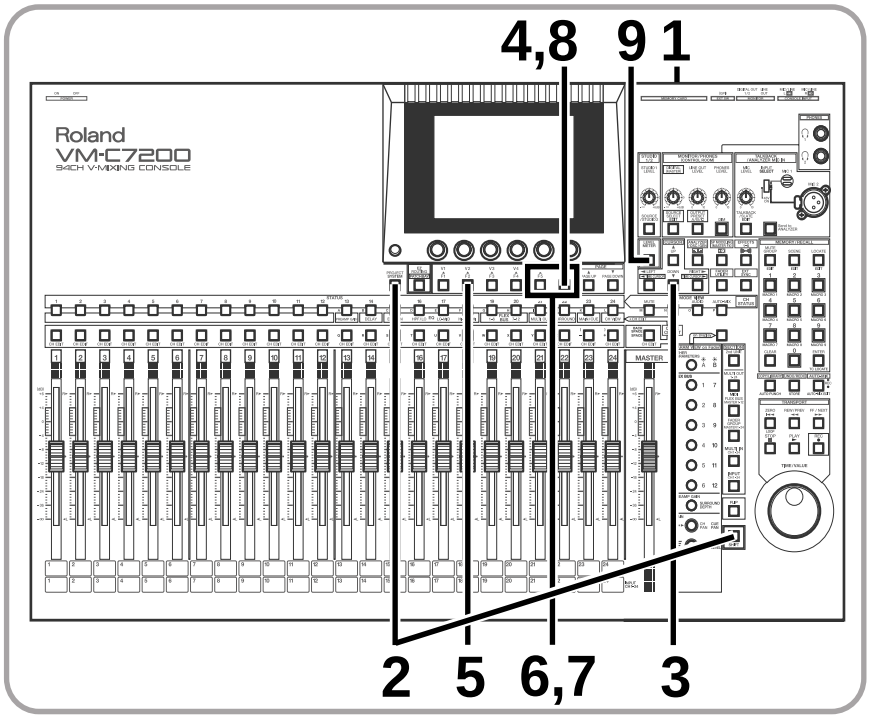
You can store your current mixing settings on your console as a Project onto a memory card (SmartMedia). A Project is a group of parameter settings that the system memorizes. Such settings include Scenes (Owner's Manual: p.244) and Automix data (Owner's Manual: p.232). You can instantly store / recover these settings at any time by overwriting / reloading the Project.

We recommend you always create a new Project at the beginning of a new mixing / recording session or live performance.

If a card is new, or if it has been used in another device, it must be formatted for use in the system. If you already have a formatted the memory card, proceed to "To Create a New Project" (p.19).

To Format a Memory Card

NOTE **During formatting, all data on the card is erased. Therefore, be sure that the card you intend to format does not contain data you wish to preserve.**



Owner's Manual "Storing and Recalling All Mixer Settings (Project)" (p.50)

1 Insert the memory card into the mixing console.

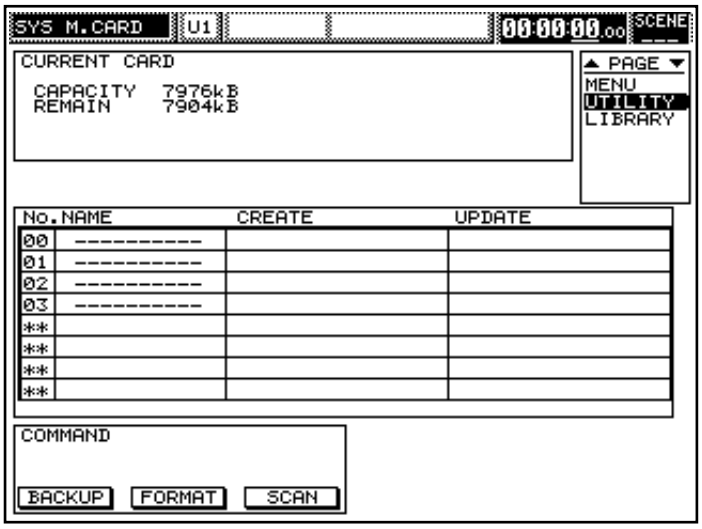
Insert the memory card with the golden terminal strip upside.

2 Hold down [SHIFT] and press [PROJECT].

3 Press CURSOR [DOWN] to move the cursor to the lower field.

4 Press [F6](MEMORY CARD).

The “SYS M.CARD” display with the card information appears.



5 Press [F2](FORMAT).

The “CONFIRM / Format Card, OK?” message appears on the display.

6 Press [F5](OK).

To cancel, press [F6](CANCEL).

7 When the “CONFIRM / Really Sure?” message appears, press [F5](OK) again.

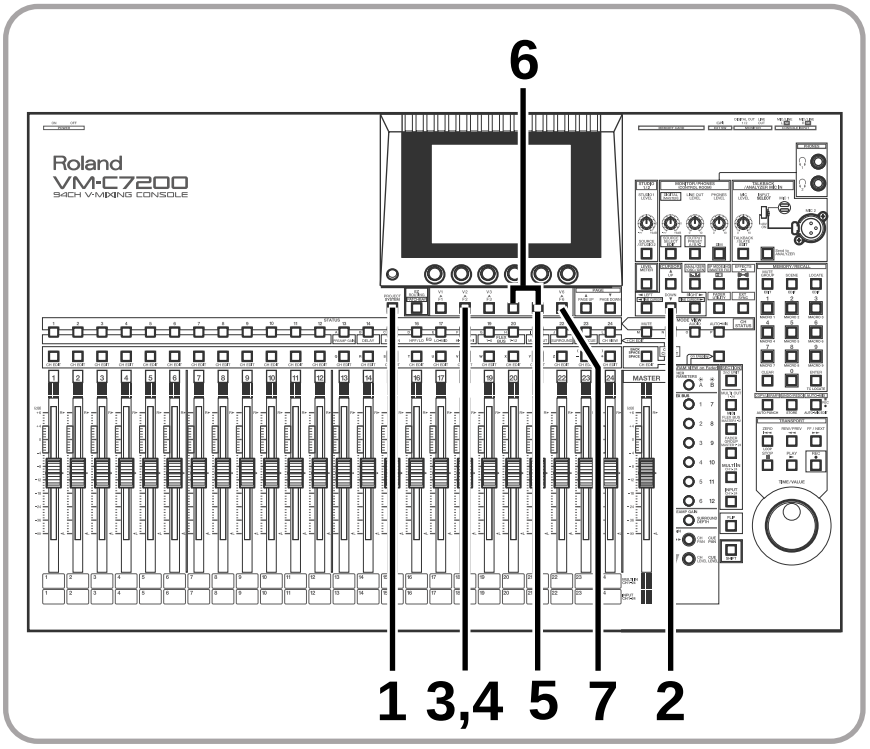
To cancel, press [F6](CANCEL).

After the formatting is finished, the “MESSAGE / Completed” message appears on the display.

8 Press [F6](EXIT).

- To return to the original display (the “LEVEL METER” display), press [LEVEL METER].

To Create a New Project



1 Press [PROJECT].

The “PROJECT” display appears.

2 Press CURSOR [DOWN] to move the cursor to the lower field.

3 Press [F2](NEW).

The “CREATE NEW PROJECT” message appears on the display.

4 Press [F2](CREATE).

The “CONFIRM / Create New Project, OK ?” message appears.

5 Press [F5](OK).

The “CONFIRM / Keep Current Mixer Setting ?” message appears.

6 Press [F4](YES) or [F5](NO).

- [F4]...The current settings are kept after a new Project is created.
- [F5]...The system will restore the original factory settings after a new Project is created.

7 When the “MESSAGE / Completed” display appears, press [F6](EXIT).

A new Project has been created.

Owner’s Manual “Storing and Recalling All Mixer Setings (Project)” p.50

HINT

You can name a Project by pressing [F3](NAME / PROJECT) in Step 3 (Owner’s Manual “Re-naming / erase-protecting a project” p.53).

Turning Off the Power

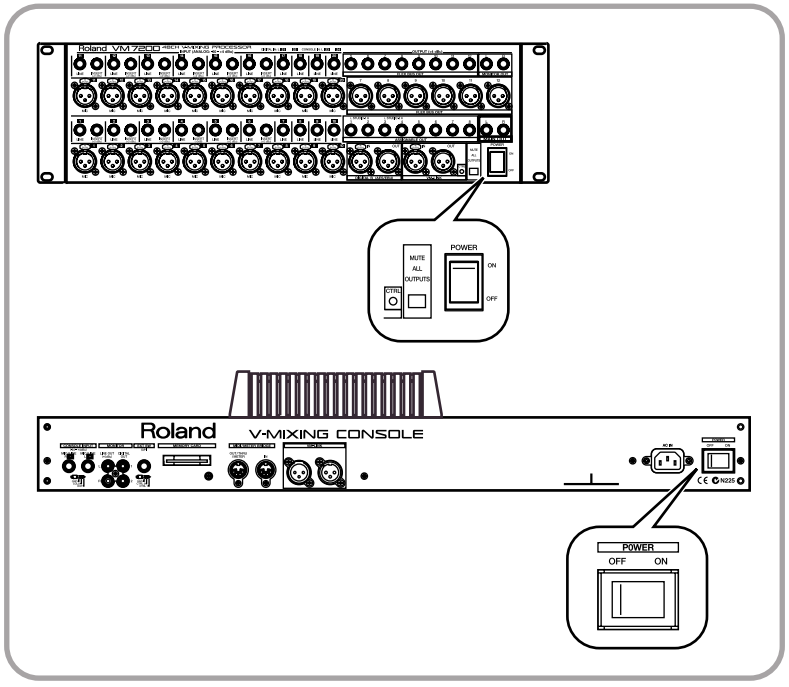
Points to check before turning the power off

- **Have you stored your Automix data on a memory card?**

  Your current Automix data is stored in the console's temporary memory – this memory is cleared when you turn off the power. Be sure to save any Automix data you wish to preserve onto a card before powering down.

- **Did you turn down the volumes of the mixing console and connected audio equipment?**

  If you leave the volume levels of your equipment turned up when you turn off the power, a loud noise may occur that can cause damage to your equipment.



1 Store the current settings onto a memory card.

QUICK START "Storing a Project" (p.39)

2 Turn off the power of connected audio equipment (amplifiers and speakers).

3 Set [POWER] to OFF on the rear panel of the mixing console.

4 Set [POWER] to OFF on the front panel of the mixing processor.

5 Turn off the power of connected analog devices (instruments, sound modules, effects processors, microphones, CD players, MD players, tape recorders, etc.).

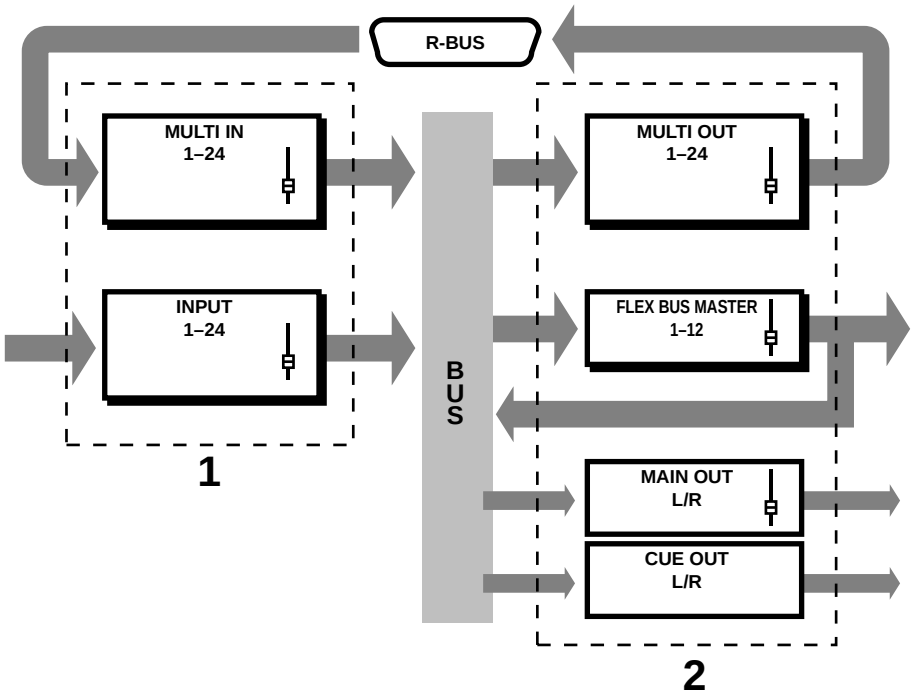
6 Turn off the power of connected digital devices (DAT, MD recorder, hard disc recorder, etc.).

7 Turn off the power of any connected digital multi-track tape recorder.

Before Mixing Operations

Internal Signal Flow

The diagram below provides an overview of the audio signal flow. For details, refer to the "Block Diagram" attached to the processor (VM-7200/7100).



1. Input Channels

There are two input modes to this system – [INPUT] and [MULTI IN].

INPUT...1-24

The following input jacks can be assigned to these channels:

- 20 analog input jacks on the VM-7200 mixing processor (10 on VM-7100).
- Stereo digital input jacks on the mixing processor (A or B)
- 2 analog input jacks on the mixing console (stereo L/R).

MULTI IN...1-24

Multi-channel audio signals can be input from external equipment – such as multi-track recorders – via these channels.

The correspondence between input signal channel numbers and Multi In channels can be re-patched internally.

MEMO

In order to use Multi In channels, a VM-24E (sold separately) must be connected to the mixing processor in order to add an R-BUS connector I/O terminal (OWNER'S MANUAL for the Processor: p.14).

2. Busses / Output Routes

MULTI OUT

A multiple output channel to which signals from any input channel and / or Flex Bus can be routed. Digital multi-track output to a digital multi-track recorder can be performed by installing an optional VM-24E (sold separately) in the system. You can also send analog track outputs from ASSIGNABLE OUT jacks.

FLEX BUSSES 1-12

A Flex Bus is a multi-purpose bus through which signals can be sent to another bus, to other internal destinations or to external devices. Flex Busses are capable of sending signals from all input channels as well as Flex Busses 1-8. Any ASSIGNABLE OUT, DIGITAL OUTs A and B, and MULTI OUT can be selected for outputting Flex Bus signals to external destinations. If you are using a VM-7200 processor, dedicated output jacks are also available for Flex Busses 5-12.

MAIN OUT

Output of the overall stereo mix containing all desired channels, to be sent to the master recorder or the main PA amplifier. Signals can be sent from all input channels and Flex Busses.

In addition to the dedicated output terminals (MAIN OUT and REC OUT), signals can be directed to any ASSIGNABLE OUT, DIGITAL OUTs A and B, and / or any MULTI OUT.

CUE OUT

Stereo bus used mainly for monitoring. Signals can be sent to the Cue bus from all input channels and Flex Busses.

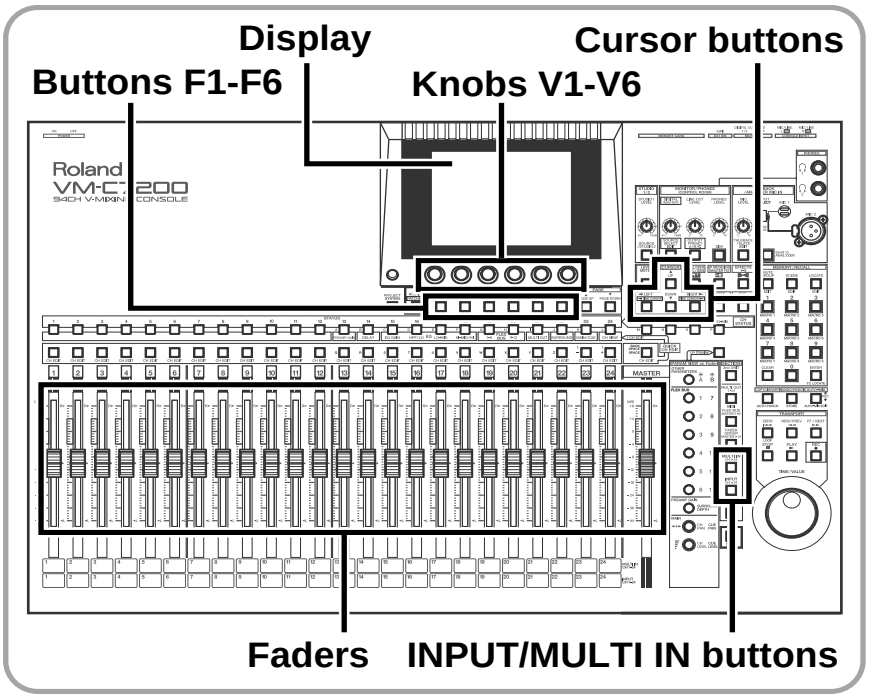
Cue signals can be output from MONITOR OUT and PHONES jacks to external monitoring amplification equipment. They can also be routed to any ASSIGNABLE OUT, DIGITAL OUTs A and B, or any MULTI OUT.

You can also output other busses' signals from MONITOR OUT jacks.

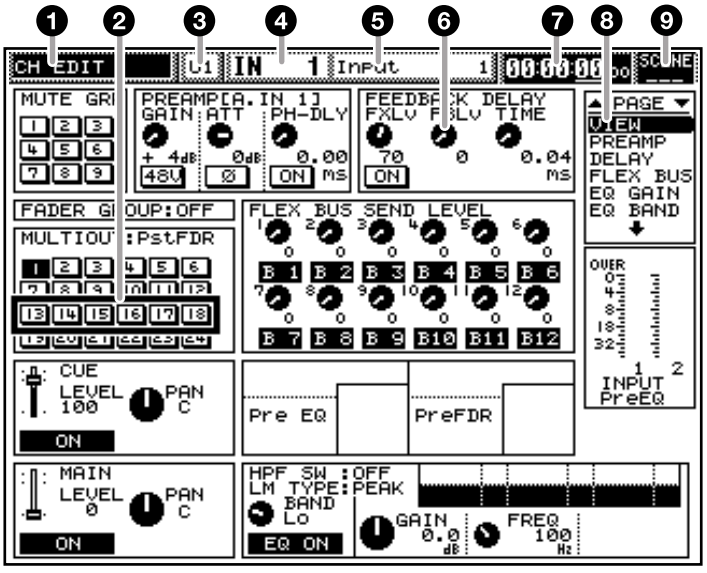
How to Operate This System

When operating this system, you'll most frequently use the cursor, the knobs [V1]-[V6], and buttons [F1]-[F6] beneath the display.

This chapter explains the display, and how these knobs and buttons interact with the display.



The Display (example)



❶ Screen title
❷ Cursor
❸ Processor currently targeted
❹ Current Section and Channel
❺ Name of Channel
❻ Parameter icon
❼ Current time (Time Code)
❽ Current page
❾ Number of Scene currently selected

To Change Parameters

To change the value of a parameter, move the cursor to select a parameter, and use the knobs [V1]-[V6], faders, and / or buttons [F1]-[F6] to change its value, as described below.

To Move the Cursor

The cursor – a bold rectangle on the display – selects a single parameter or group of parameters so that their values can be adjusted. To move the cursor, press CURSOR [UP] [DOWN] [LEFT] [RIGHT].

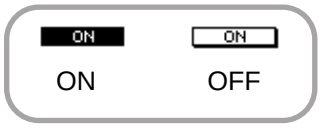
MEMO

The cursor does not appear on a display where no cursor selection is needed.

To Set the Values of Parameters

There are certain rules for setting parameters, as listed below. We recommend you keep them in mind.

- parameters are set by turning knobs [V1]-[V6]. Turn the knob below the parameter you wish to change.
- ON parameters are set by pressing buttons [F1]-[F6]. Press the button for ON – this highlights the parameter in black on the display – or OFF (not highlighted) below the parameter you wish to change.



- parameters are set by turning knobs [V1]-[V6] first, and then pressing buttons [F1]-[F6](SET) to confirm the changes. Use the knob and button below the parameter you wish to change. (Some parameters can be set by pressing [F1]-[F6](SET) only.)
- Parameters shown as faders are set using the console's faders. If the fader indicated is selected by the cursor, you can also change its value by turning the corresponding knobs [V1]-[V6].

If you want to display or change frequently used parameters, or the value of a single parameter on all of the channels at once, you can do this more easily by using the console's faders (Owner's Manual "Useful Functions" p.58).

To Operate on [INPUT] or [MULTI IN] channels

To set the input source's gain level and the tone, such as using the equalizer and so on, press [INPUT] or [MULTI IN] to select the type of channel you wish to setup.

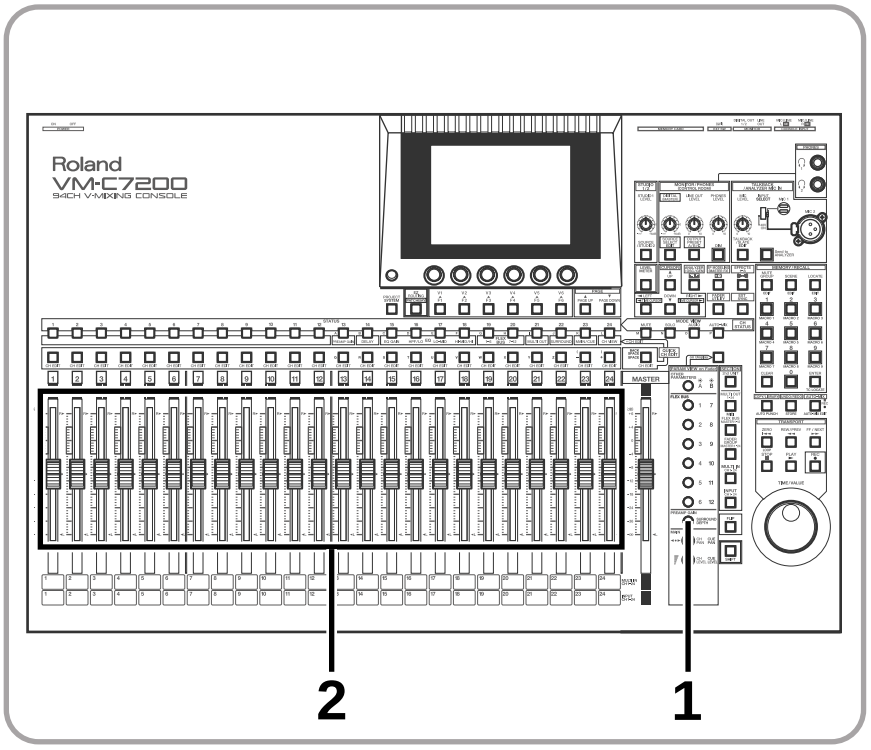
With the selected button lit in red, you can control the behavior of each source signal using the console's faders or display controls.

Mixing Operations

Now let's do some mixing. This chapter describes two-channel – stereo – mixing of connected sources that will be sent out from the system through its MAIN OUT jacks.

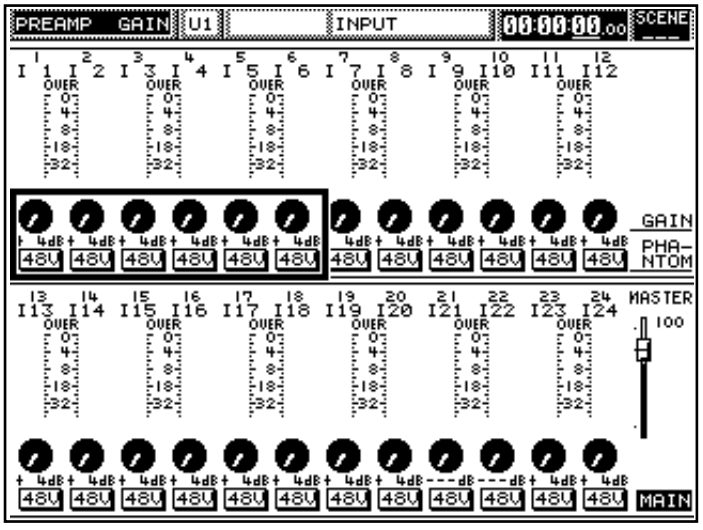
Setting the Input Gain

Let's adjust the input gain levels of all of your connected instruments and so on. (If you are working on digital connected sources, you do not have to read this section.)



1 Press [PREAMP GAIN].

[PREAMP GAIN] lights and the "PREAMP GAIN" display appears.



Owner's Manual "Gain, Phantom Power Supply, Phase and Attenuator" (p.68)

HINT

As preset at the factory, all channel numbers on the console correspond to the input numbers on the processor. You may, however, change the channels' connections or work on multiple channels at once (Owner's Manual "Selecting an input channel's signal source" p.67).

MEMO

If you selected DIGITAL IN A/B as your source input, these steps will not be necessary.

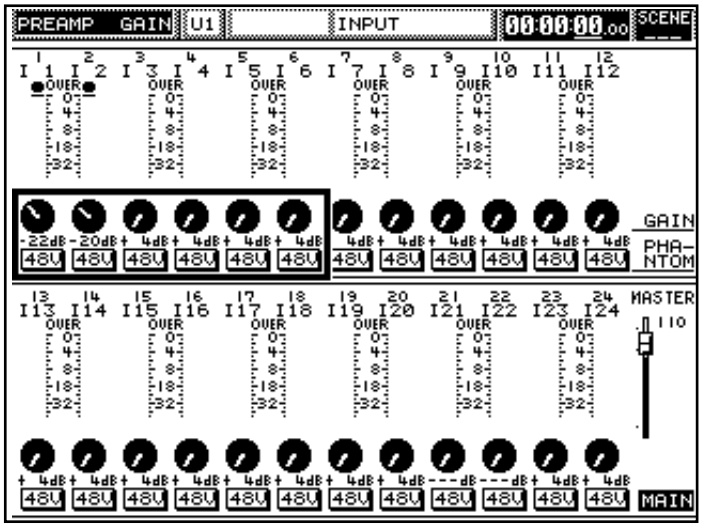
HINT

You can also set the gain level with the cursor and knobs on the display.

2

Use the fader of each channel you wish to adjust to set the input gain level of its connected microphone / instrument / audio device. (+4 to -64dB)

Do this by first turning up each instrument's own output volume as much as possible so that it produces a strong, loud signal. Next, on the console, turn its channel's input gain level as high as possible within the displayed level-meter range. If the input gain goes beyond OVER, ● appears on the level-meter.



When you have finished with these settings, you can set the channel levels and L / R stereo pans.

HINT

The fader, at this point, controls the input gain level of each channel. To send signals from the Main out, set the output level of each channel (go to next page).

MEMO

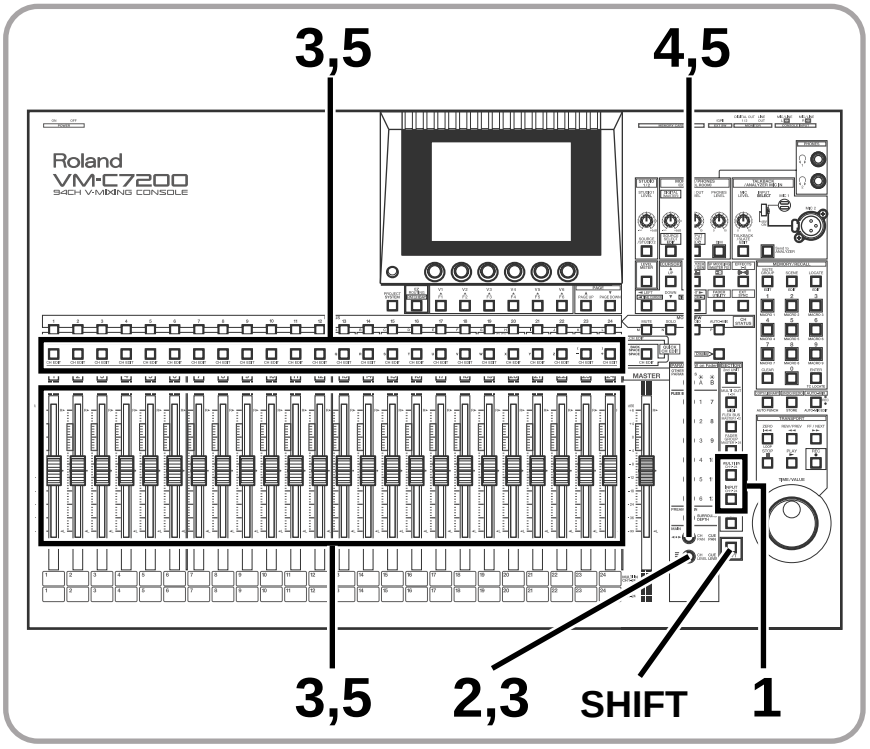
If you are using a condenser microphone or any other similar equipment, activate their PHANTOM power.

HINT

You can also set each channel's PHASE ON / OF, PHANTOM POWER ON / OFF and ATTENUATOR if required by the input source.

Setting the Channel Levels and L/R Pans

Here you can set the output level and L/R pan of each channel in the Main out mix or the Cue bus. You can see each level and pan setting shown numerically on the display.



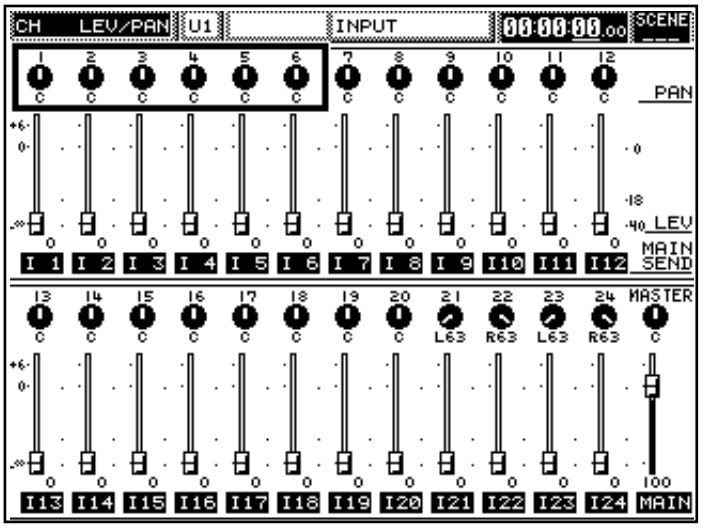
Owner's Manual "Setting up ON / OFF, SEND LEVEL and PAN for a Channel" (p.70)

1 Press [INPUT] or [MULTI IN] to select the type of channel you wish to set up.

2

Press [CH LEVEL].

[CH LEVEL] lights in red and the “CH LEV/PAN” display appears.



3

Use the fader of the channel you wish to adjust to change its output level.

To set the channel level at 0db (100), hold down [CH LEVEL] and press [CH EDIT] of the channel you wish to set at 0db.

4

Press [CH PAN]

[CH PAN] lights in red and the “CH LEV/PAN” display appears.

5

Use the fader of the channel you wish to adjust to change its stereo position.

Move the fader upwards for right (R) pan, downwards for left (L) pan.

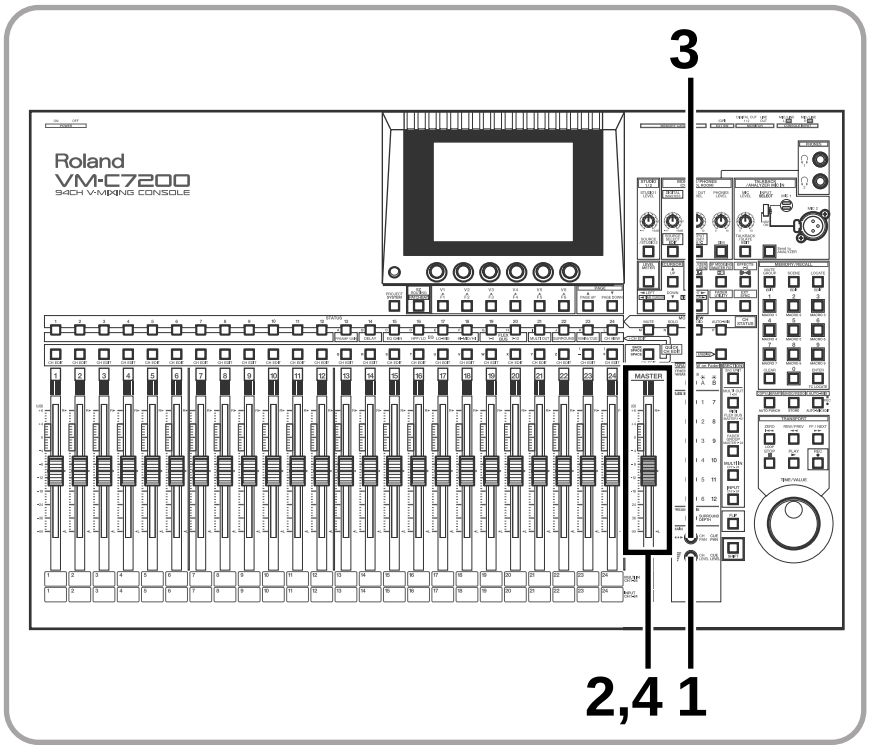
To set the pan to center, hold down [CH LEVEL] and press [CH EDIT] of the channel you wish to set the pan to center.

To send signals to the Cue bus, hold down [SHIFT] when pressing [CH LEVEL] in Step 2, and when pressing [CH PAN] in Step 4. The buttons will light in green.

When you have finished with these settings, let’s set the master level and stereo balance.

Setting the Master Level and Master Stereo Balance

Let's now set the total output level and stereo balance for the Main out mix containing all Input and Multi In sources.



Owner's Manual "Setting Master Mix Levels and Stereo Balance" (p.84)

1 Press [CH LEVEL] to light [CH LEVEL] in red.

2 Use the [MASTER] fader to set the master level for the Main out.

3 Press [CH PAN] to light [CH PAN] in red.

4

Use the [MASTER] fader to set the overall stereo balance of the Main out.

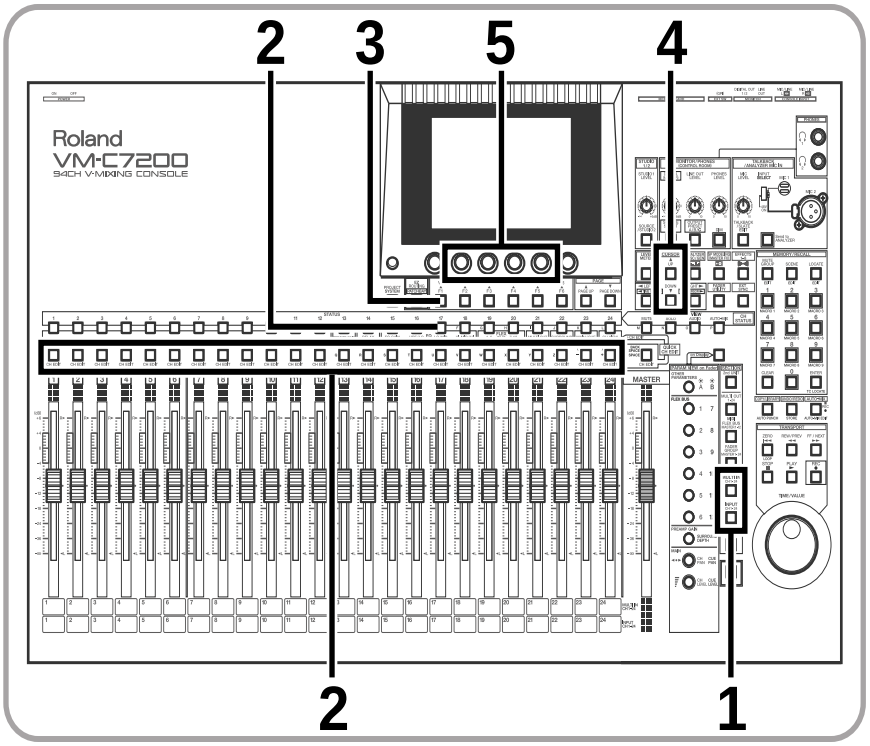
Move the fader upwards for right(R) pan, downwards for left(L) pan.

Adjusting a Signal's Tone (Equalizer)

You can set the desired tone quality of each signal by using an equalizer (EQ).

In this system, each channel provides a parametric EQ. You can select from a 4-band- or a 3-band-plus-1-effect-type EQ. The high-range and low-range bands are shelving type EQs. The middle-high-range and middle-low-range bands are peaking type EQs.

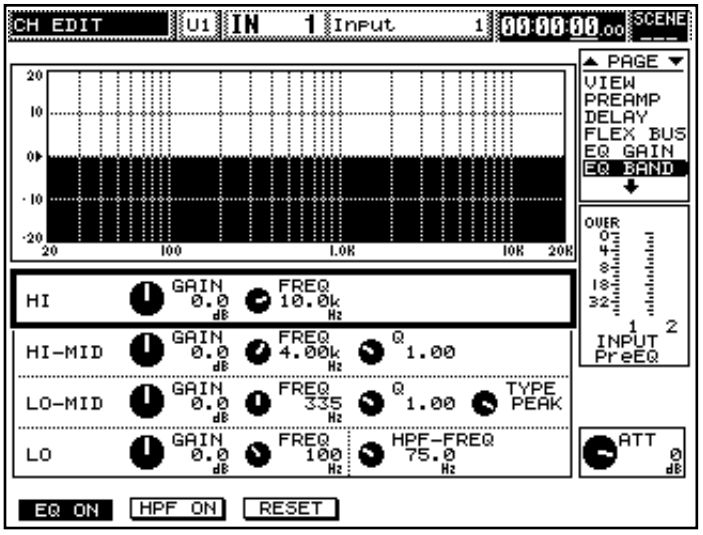
Owner's Manual "Adjusting Various Channel Settings (Equalizer, etc.)" (p.78)



1 Press [INPUT] or [MULTI IN] to select the type of channel you wish to set up.

2 Hold down [CH EDIT] of the channel controlling the signal whose tone you wish to adjust, and press [HI-MID / HI].

The "EQ BAND" editing page on the "CH EDIT" display appears.



3 Press [F1](EQ ON) to turn on the equalizer.

"EQ ON" highlights in black.

4 Press CURSOR [UP] [DOWN] to select the desired band.

HI (high-range), HI-MID (mid-high-range), LO-MID (middle-low-range), LO (low-range).

5 Adjust the settings for the selected band.

GAIN

Turn [V2](GAIN) to add ("boost") or reduce ("cut") gain (-15.0 to +15.0dB).

FREQUENCY

Turn [V3](FREQ) to adjust the center frequency.

Q

Turn [V4](Q or RESO) to set the bandwidth.

When working with HI-MID and LO-MID bands, you can raise the volume of the frequencies at the center of the selected band by raising the Q level (0.36 to 16). (For the LO band, [V4] sets the HPF-FREQ bands.)

TYPE

Turn [V5](TYPE) to select the LO-MID band's equalizer type. You can choose from a variety of filter types. The equalizer returns to its normal behavior when you select "TYPE PEAK".

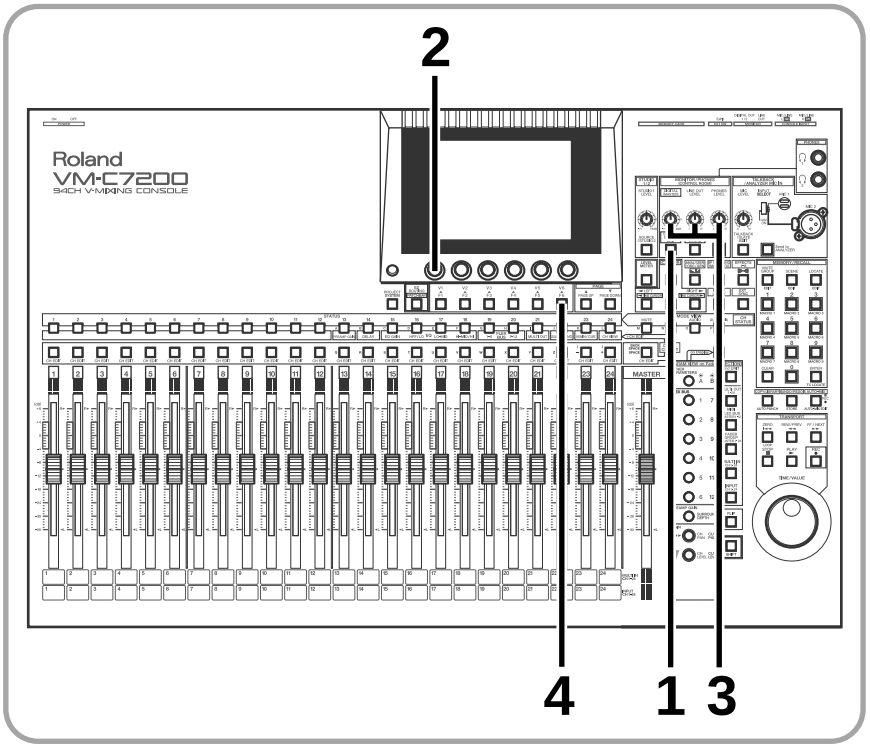
MEMO

To turn off the equalizer, press [F1] again. "EQ ON" returns to normal.

Setting Up a Monitor

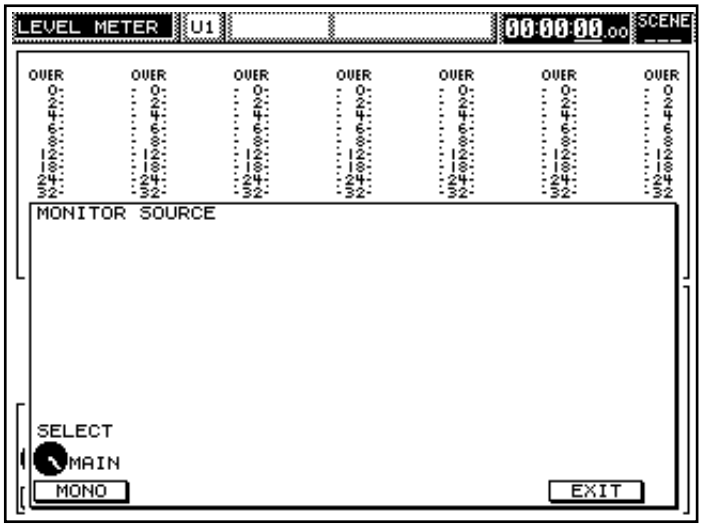
You can monitor the system through headphones connected to the PHONES jack, or through monitoring speakers connected to the MONITOR OUT jack. You will hear the same sound from both outputs. You can monitor the Cue bus, the Main out, or any Flex Bus by itself.

Owner's Manual "Mixing Procedure 2 (Output and Monitor)" (p.84)



1 Press [SOURCE SELECT].

The "MONITOR SOURCE" sub-window appears on the display.



2 Turn [V1](SELECT) to select the output you want to monitor.

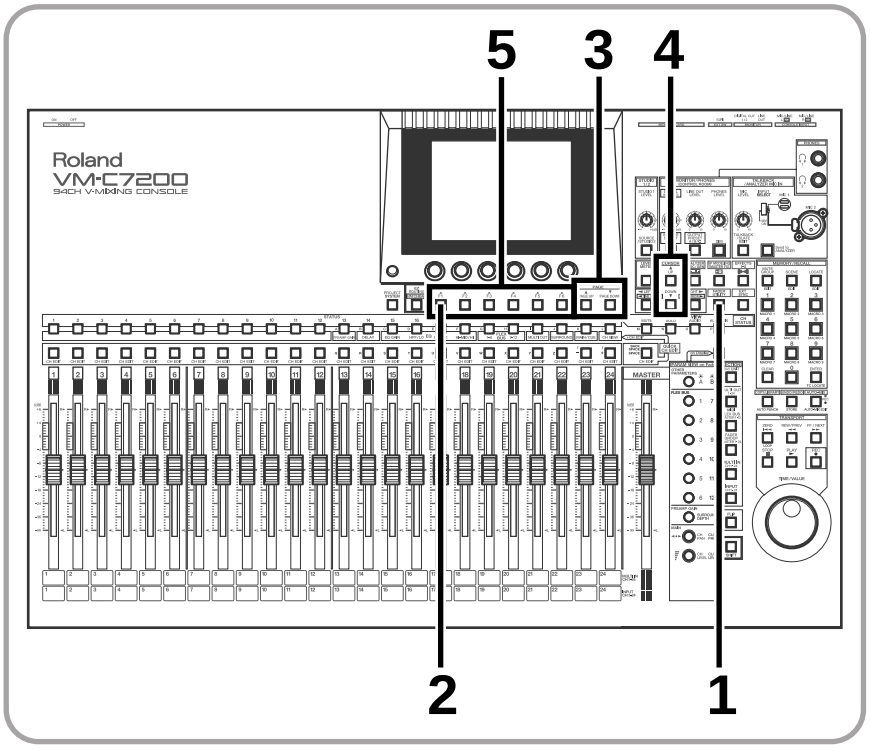
3 Turn [DIGITAL(MASTER)] to adjust the monitor out level.

- If you have a device connected to the LINE OUT jack on the console, turn [LINE OUT LEVEL] to set the favorable line out level in advance.
- If you are using headphones, turn [PHONES LEVEL] to adjust the volume.

4 Press [F6](EXIT) to exit.

Coupling Adjacent Channels

If you are editing a stereo source, you can couple adjacent odd- and even-numbered channels – changes you make to either channel will affect both.

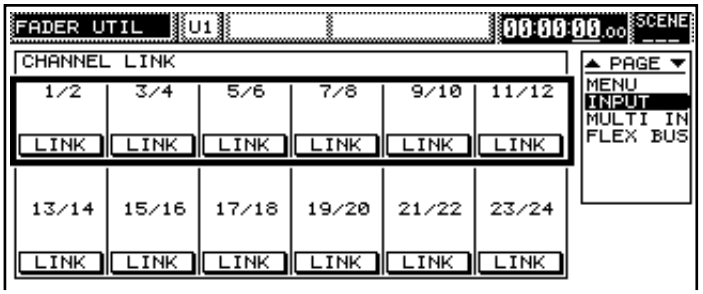


Owner's Manual "Simultaneously Controlling the Signals of Multiple Channels (Link and Group)" (p.102)

1 Press [FADER UTILITY].

The "FADER UTIL" display appears.

2 Press [F1](CHANNEL LINK).



3 Press [PAGE UP] [PAGE DOWN] to display the type of channels you want to link.

Select from “INPUT”, “MULTI IN”, or “FLEX BUS”.

4 Press CURSOR [UP] [DOWN] to select the group of six channels containing the channels you want to link.

5 Press [F1]-[F6] to turn ON (black highlight) the Channel Link of any pair you wish to couple.

To cancel Channel Link, press [F1]-[F6] again.

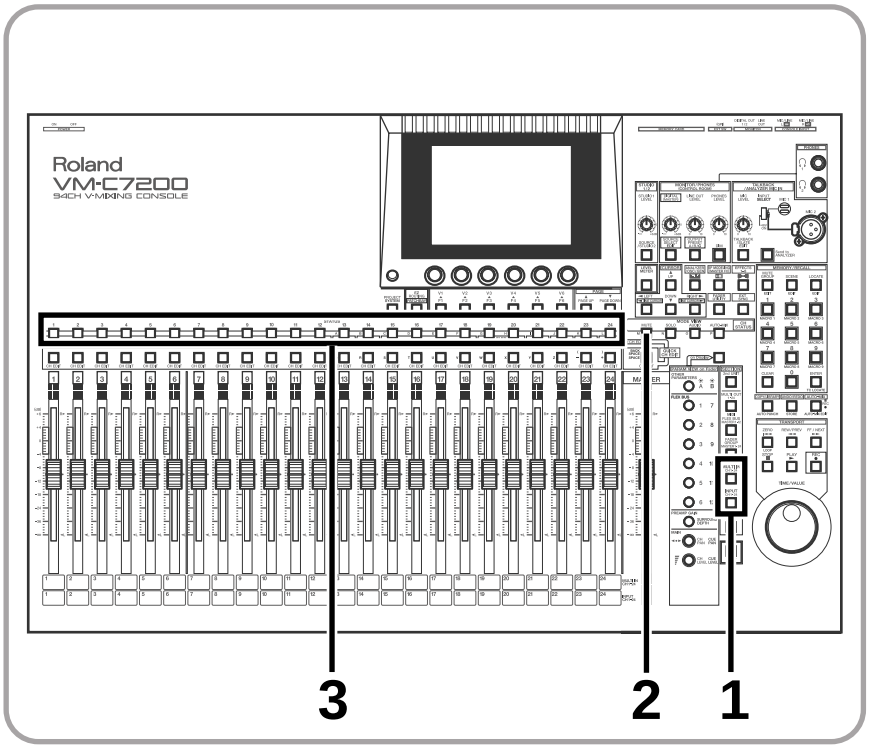
The following parameters cannot be linked.

- GAIN
- MAIN SEND PAN
- INPUT SOURCE
- SURROUND DEPTH
- SURROUND PAN
- MULTI OUT SEL
- 48V (PHANTOM) SW
- CH NAME

Muting a Channel

You can mute a channel's signal by using the [CH STATUS] buttons.

Owner's Manual "Muting a channel (MUTE)" (p.77)



1. Press [INPUT] or [MULTI IN] to select the type of channel you wish to mute.

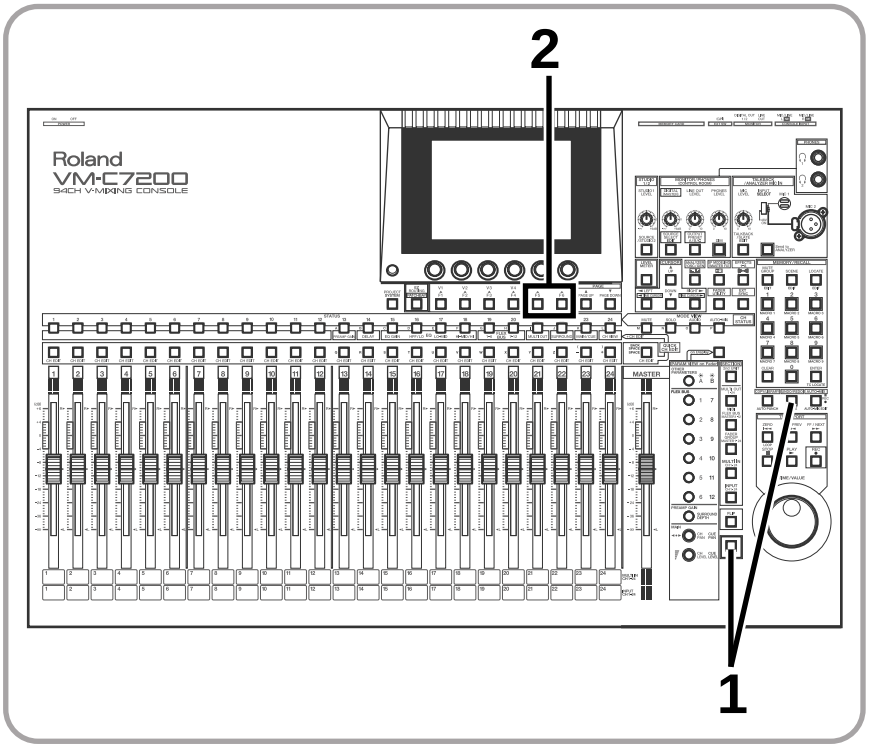
2. Press [MUTE] to light [MUTE].

3. Press [STATUS] of the channel you wish to mute.

   The muted channel's [STATUS] button lights in red.

Storing a Project

The current state of the console settings can be stored at any time by updating the Project created on a memory card in the beginning of the session. Let's store the system's current state as a Project.



1 Hold down [SHIFT] and press [STORE].

The "CONFIRM / Store Current Project OK?" message appears.

2 Press [F5](OK), and then press [F6](EXIT) after storing is completed.

To cancel, press [F6](CANCEL).

Owner's Manual "Storing and Recalling All Mixer Settings (Project)" (p.50)

MEMO

You cannot store a Project without an inserted memory card that holds a Project created in advance (QUICK START: p.16).

Using Sub Outputs

Signals can be sent from the system's MAIN OUT to a mixdown recorder or a stage speaker system. They can also be sent to other destinations, such as studio monitors, or even to individual tracks of a multi-track recorder.

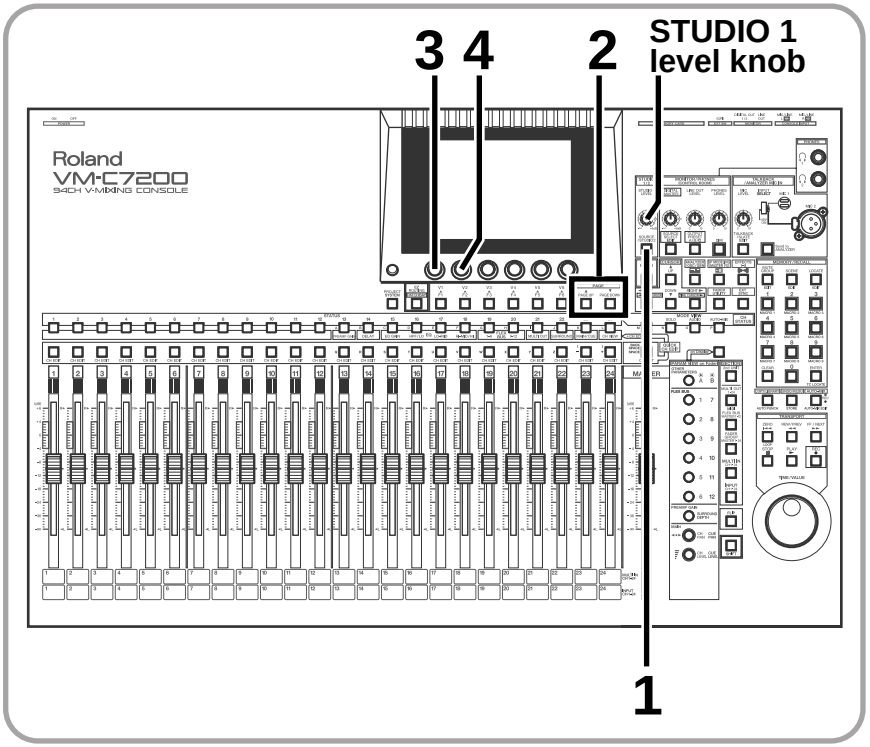
Setting Up Monitor Sends for Studio or Stage

The system's ASSIGNABLE OUTs (Owner's Manual "Routing Signals to MULTI OUTs and ASSIGNABLE OUT Jacks" p.93) 1-4 can send signals to monitors for a performer in another room –perhaps a studio – or on a stage. You can easily set up two such independent stereo monitoring systems: "STUDIO 1" and "STUDIO 2". ASSIGNABLE OUTs 1 and 2 can be used as L and R outputs to "STUDIO 1", and ASSIGNABLE OUTs 3 and 4 as L and R outputs to "STUDIO 2".

Connect a stereo headphone or monitor speaker amplifier to the STUDIO output jacks.

Each monitor mix can be tailored to the needs of the performer listening to it. "STUDIO 1" has a dedicated level knob. This makes "STUDIO 1" handy for the monitoring of vocals on a stage – you can use this knob to quickly lower the "STUDIO 1" volume if the undesirable howling occurs.

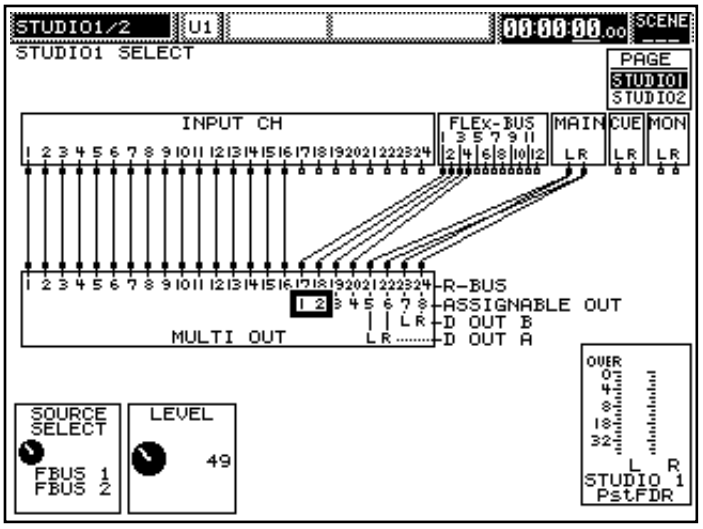
To Select Signals for Studio Monitors



Owner's Manual "Setting Up Monitor Sends For Studio Or Stage (STUDIO 1 or 2)" (p.95)

1 Press [SOURCE/STUDIO2].

The “STUDIO1/2” display appears.



2 Press [PAGE UP] [PAGE DOWN] to go to the “STUDIO 1” or “STUDIO 2” page.

3 Turn [V1](SOURCE SELECT) to select the type of source signal you wish to monitor.

The following can be selected.

- Input channel 1-24
- Flex Bus 1-12
- Cue bus L/R
- Monitor L/R
- Main out L/R

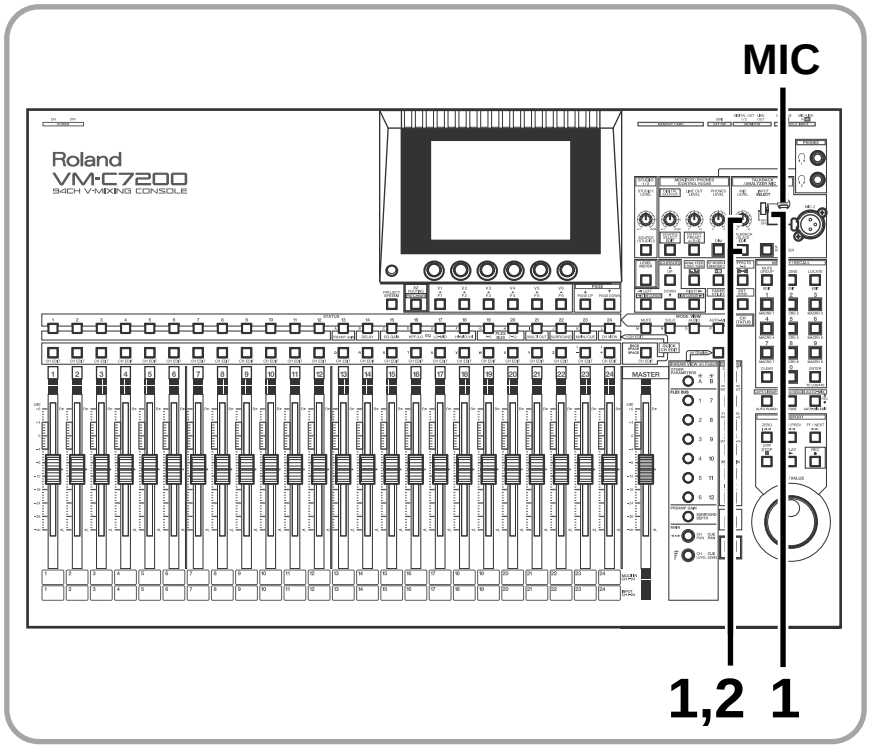
4 Turn [V2](LEVEL) to adjust the send level.

The source signals you selected in Step 3 can be heard from ASSIGNABLE OUTs 1 and 2 for “STUDIO 1” L/R, or ASSIGNABLE OUTs 3 and 4 for “STUDIO 2” L/R.

To Talk to Someone on a Stage or out in a Studio (Talkback)

Owner's Manual "Talkback and Slate to Player" (p.100)

The Talkback feature allows you to talk to a performer or assistant on a stage or in a studio by speaking into the Talkback microphone built into the console. This microphone can be routed to a monitor speaker or other monitoring device.



1 Set [INPUT SELECT] to MIC 1.

Before switching the [INPUT SELECT], turn [MIC LEVEL] to turn the mic level to 0.

2 Hold down [TALKBACK / SLATE] while speaking into the microphone. Your voice is sent to the Main out and / or the Cue bus. The Talkback / Slate is normally active only when the button is held down (it lights in red).

To change the Talkback microphone's volume, turn [MIC LEVEL].

NOTE **To prevent howling, be sure to lower the volume of the monitor speakers first when using the Talkback function.**

HINT You can also send your voice to various other destinations, such as the ASSIGNABLE OUTs or Flex Busses.

Flex Bus

Each mixing processor provides 12 unique multi-purpose busses– these are called “Flex Busses.” A bus – be it a Flex Bus or traditional recording, mixing or Aux bus – is a pathway down which multiple signals can be sent to a common destination. The signals assigned to a Flex Bus can be sent out of the system through various outputs, or can even be directed into another Flex Bus within the system. This allows you to send signals through external signal processors or internal effects, or to monitors for performers on the stage or in the studio.

Example 1

You may wish to use reverb on some channels before sending them to the Main out mix. Route them to a Flex Bus connected to the desired effect.

Example 2

You can record to individual tracks on an 8 track multi-track recorder by assigning your input channels to any of eight Flex Busses, and using the MULTI OUTs or ASSIGNABLE OUTs to send each Flex Bus to one of the eight tracks on the recorder.

Example 3

Since you can adjust each channel’s send level to a Flex Bus, you can create up to eight separate, fully controllable stage monitor mixes using eight Flex Busses routed to ASSIGNABLE OUTs 1-8.

You may couple a pair of adjacent Flex Busses and use them as stereo Flex Busses (QUICK START: p.36).

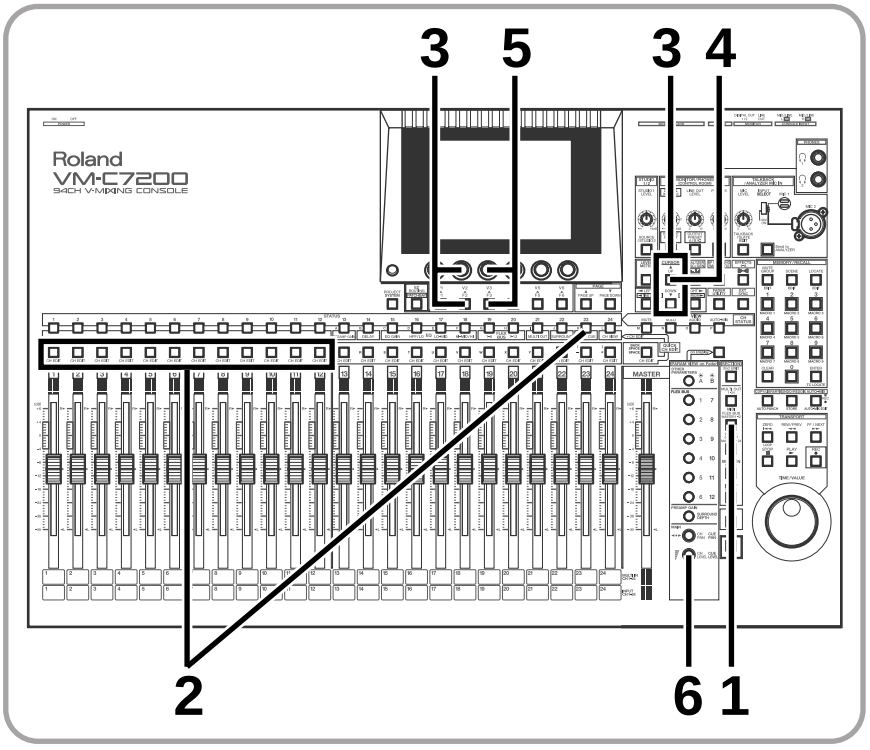
Let’s start by assigning Flex Busses to outputs.

Flex Bus Output (MULTI OUT/ASSIGNABLE OUT)

Owner's Manual "Outputting signals directly from a Flex Bus" (p.86), "Routing Signals to MULTI OUTs and ASSIGNABLE OUT Jacks" (p.93)

Each of the Flex Bus signal can be routed to a MULTI OUT / ASSIGNABLE OUT. You can send its signal to multi-track recorders, external signal processors, or to stage monitors, for example.

The MULTI OUTs are primarily used for 24 channel digital recording outputs – which calls for an additional purchased VM-24E – but can also be routed to ASSIGNABLE OUT jacks for analog output.

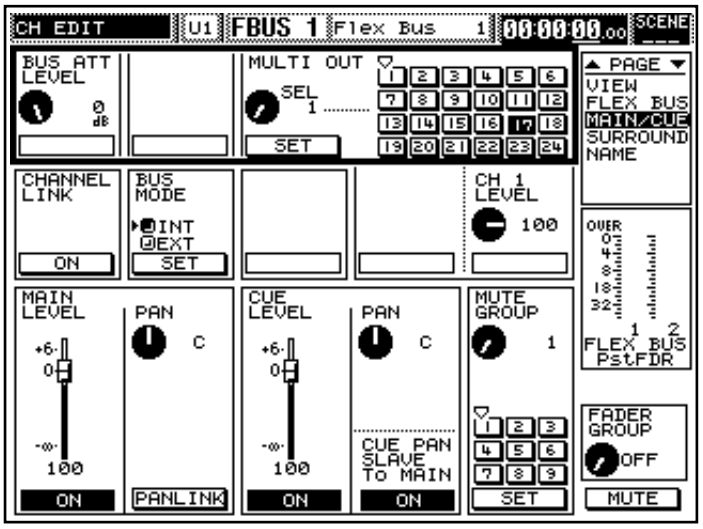


1 Press [FLEX BUS MASTER 1-12].

If you wish to edit Flex Busses 9-12, proceed to Step 4.

2 Hold down [CH EDIT] on the channel strip numerically corresponding to the Flex Bus you wish to edit, and press [MAIN / CUE].

The "MAIN / CUE" editing page on the "CH EDIT" display appears.



3

Press CURSOR [UP] [DOWN] to select the middle field. Turn [V2](BUS MODE) to select "EXT", and then press [F2](SET) to confirm your choice. (Flex Busses 9-12 do not call for this step.)

The Flex Bus is now set to External.

4

Press CURSOR [UP] to move the cursor to the upper field.

5

Turn [V3](MULTI OUT SEL) to select the MULTI OUT number, and then press [F3](SET) to confirm.

The Flex Bus signals are normally sent out from the corresponding MULTI OUTs, but can also be routed to the following ASSIGNABLE OUT jacks for analog output.

- MULTI OUT 17 - ASSIGNABLE OUT 1
- MULTI OUT 18 - ASSIGNABLE OUT 2
- MULTI OUT 19 - ASSIGNABLE OUT 3
- MULTI OUT 20 - ASSIGNABLE OUT 4
- MULTI OUT 21 - ASSIGNABLE OUT 5
- MULTI OUT 22 - ASSIGNABLE OUT 6
- MULTI OUT 23 - ASSIGNABLE OUT 7
- MULTI OUT 24 - ASSIGNABLE OUT 8

6

Press [CH LEVEL].

The Flex Bus' signals are now set to exit the system from the selected MULTI OUT or ASSIGNABLE OUT jacks.

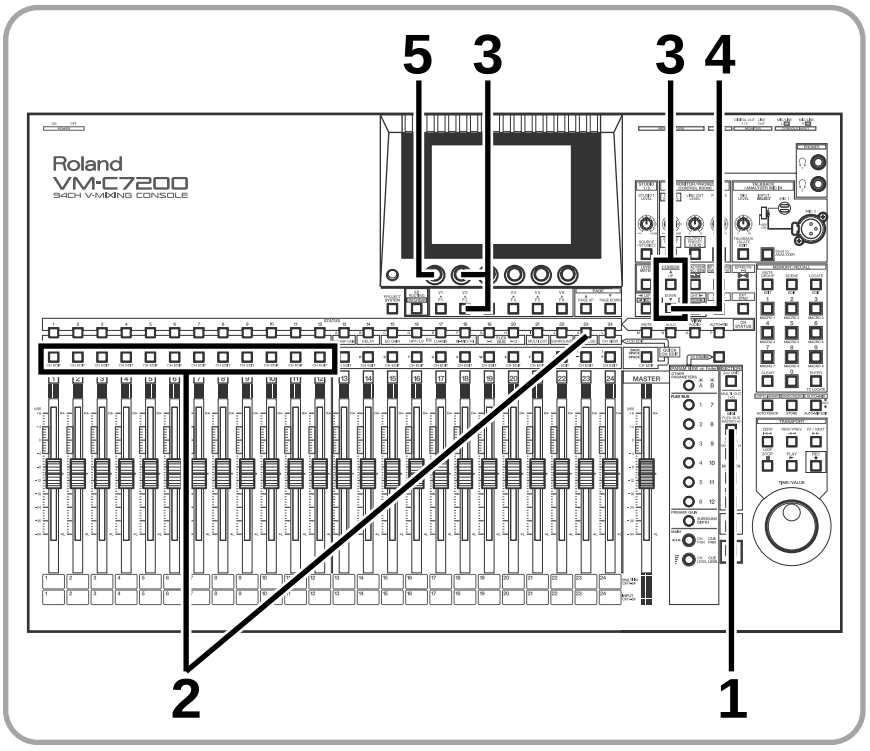
MEMO

If an effect has been inserted on a Flex Bus, it may lose its effect when you switch from "INT" to "EXT". When this happens, set the effect's parameters again (QUICK START: p.54).

Flex Bus Output (Internal)

Owner's Manual "Sending Flex Bus signals to internal destinations" (p.87)

Flex Bus signals can also be routed into the Main out mix. This is convenient if you are planning to add internal effects to signals used in the main mix.

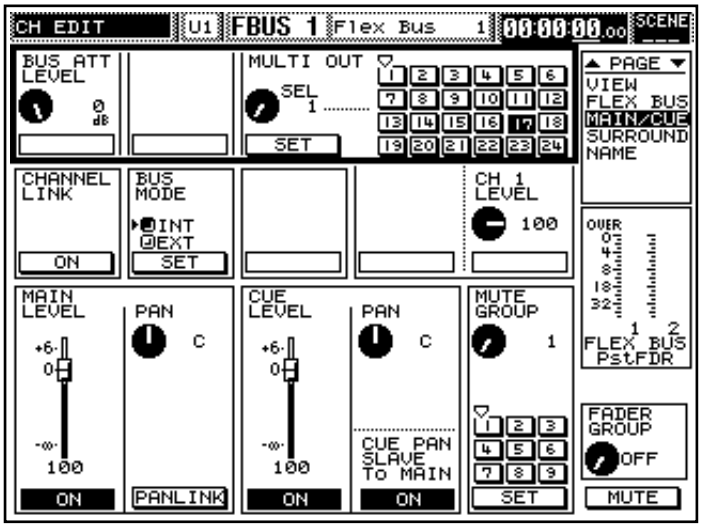


1 Press [FLEX BUS MASTER 1-12].

If you wish to edit Flex Busses 9-12, proceed to Step 4.

2 Hold down [CH EDIT] on the channel strip numerically corresponding to the Flex Bus you wish to edit, and press [MAIN / CUE].

The "MAIN / CUE" editing page on the "CH EDIT" display appears.



3 Press CURSOR [UP] [DOWN] to select the middle field. Turn [V2](BUS MODE) to select "INT", and then press [F2](SET) to confirm your choice.

The Flex Bus signals are now set to Internal.

4 Press CURSOR [DOWN] to move the cursor to the lower field.

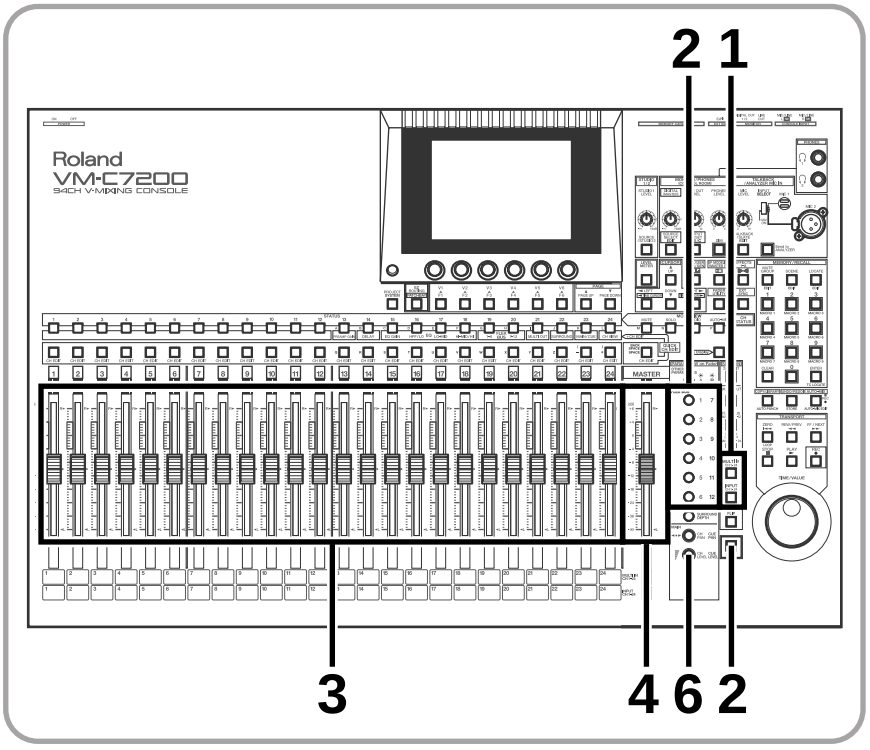
5 Turn [V1](MAIN LEVEL) to adjust the Main out send level.

The Flex Bus' signals are now routed into the Main out mix.

Sending Signals to a Flex Bus

Now let's assign some signals to a Flex Bus.

You may wish to monitor a Flex Bus directly – this is possible only when the Flex Bus is set to External (QUICK START: p.44). To monitor the Flex Bus' signals, select "FBUS 1-12" at "Setting Up a Monitor" (QUICK START: p.34).

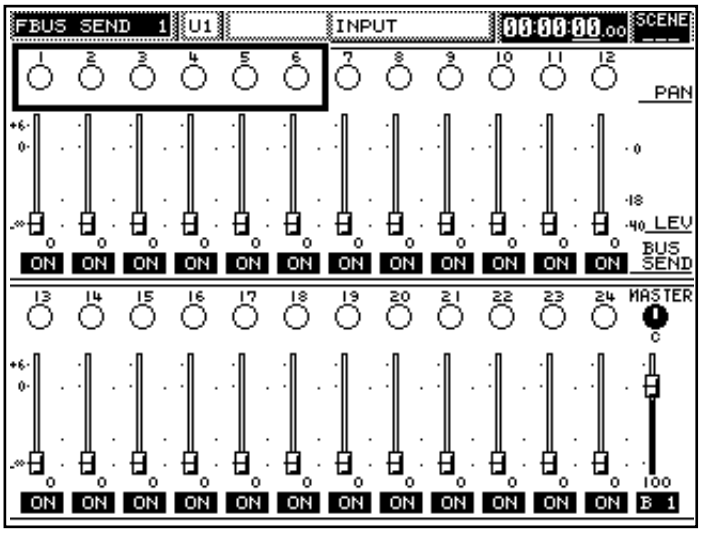


Owner's Manual "Setting a channel's send level and send point to Flex Buses" (p.72)

1 Press [INPUT] or [MULTI IN] to select the type of channel signals you wish to send to a Flex Bus.

2 Press FLEX BUS [1]-[6] (lights in red) – or hold down [SHIFT] to select [7]-[12] (lights in green) – to select the Flex Bus to which you want to send the signals.

The “FBUS SEND” display appears.



3 Use the channel faders to adjust each channel’s send level to the Flex Bus.

4 Use the [MASTER] fader to adjust the Flex Bus’ overall level.

5 Repeat Steps 1-4 to assign signals to other Flex Busses.

6 Press [CH LEVEL].

Using On-Board Effects

In this system, there are two internal effects available to the Input and Multi In channels, and an additional effect provided for the Main out and monitors. In addition, you can install optional VS8F-2 Effects Expansion Boards – sold separately – allowing the system to produce up to nine effects simultaneously from a single mixing processor (see list below).

- FX-1, FX-2 - Pre-installed
- FX-3, FX-4 - VS8F-2 (optional) installed to EFFECT A inside the processor
- FX-5, FX-6 - VS8F-2 (optional) installed to EFFECT B inside the processor
- FX-7, FX-8 - VS8F-2 (optional) installed to EFFECT C inside the processor
- MASTER FX - Pre-installed. Only for MASTER OUT and monitors.

On using the effects, the following steps will be necessary.

1. Make a decision as to where you wish to insert an effect.
You may insert the effect on a Flex Bus to create a send-return loop effect, or directly on an input channel.

2. To create a send-return loop effect, send the signals to which you wish to apply the effect to a Flex Bus that is routed to the Main out.

3. Select the desired effect.

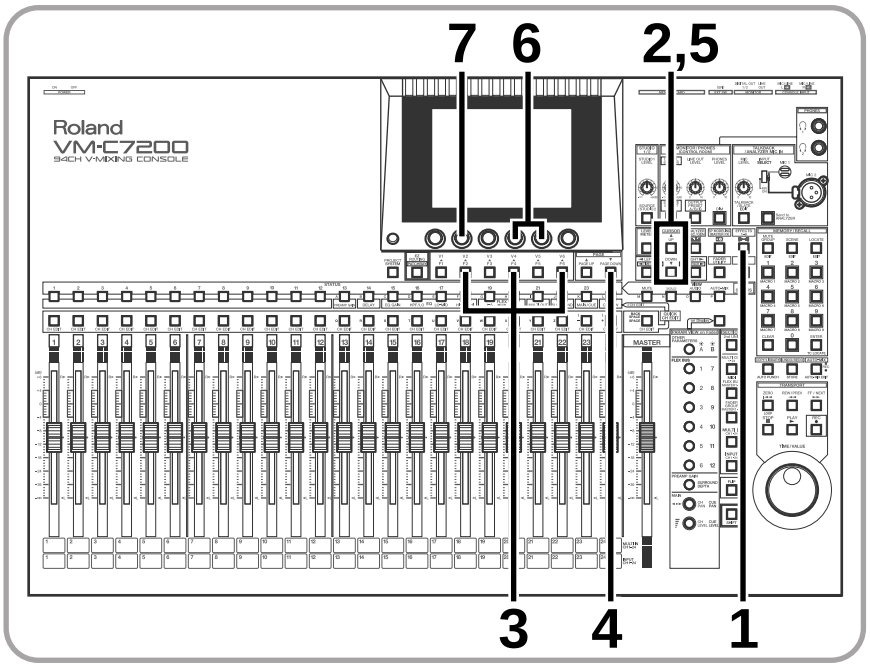
Each input also has its own feedback-type delay that produces a delay effect without using the on-board effect.

Now, let's add some effects to your signals.

Read OWNER'S MANUAL for the Processor "Installing Effects Processors (VS8F-2)" (p.13) to learn about the installation of the VS8F-2.

Send-Return Loop Effect

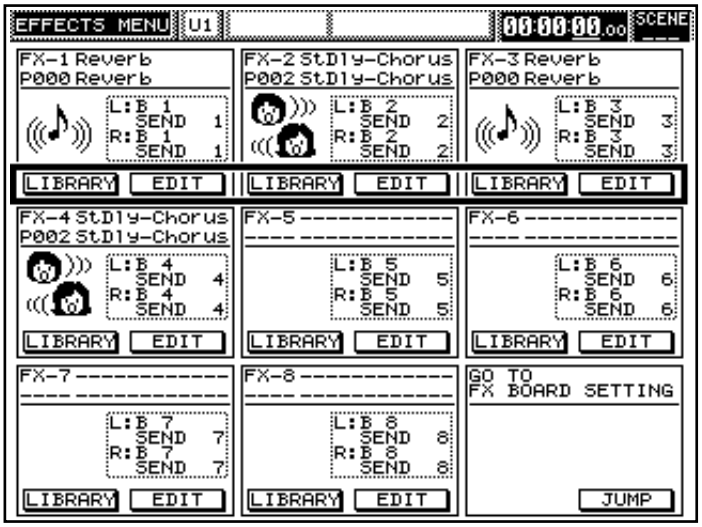
Let's try creating a send-return loop effect using the internal effects 1-8.



Owner's Manual
"Determining the effect position" (p.110)

1 Press [EFFECTS 1-8].

The "EFFECTS MENU" display appears.



2 Press CURSOR [UP] [DOWN] to select the FX field.

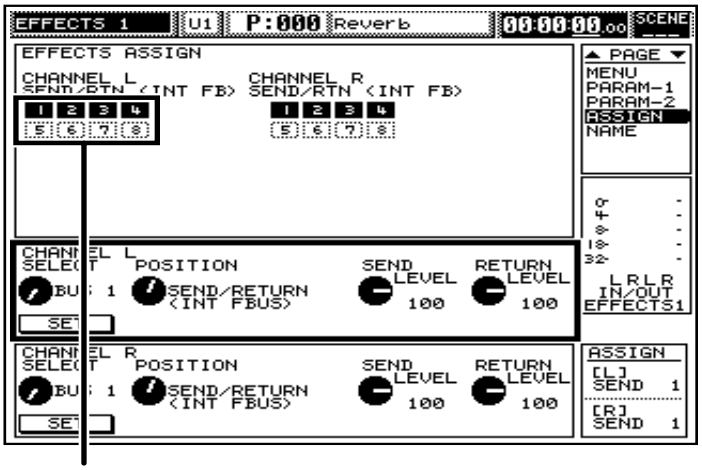
FX-1-3 are located in the upper field, FX-4-6 in the middle, and FX-7-8 in the lower. If you have not installed an optional VS8F-2, you can only select FX-1 or FX-2.

3 Press [F2], [F4], or [F6] to "EDIT" the effect.

The "EFFECT (1-8)" editing display appears.

4 Press [PAGE DOWN] to go to the "ASSIGN" page.

At this point, you set the insertion point of the effect.



1 Flex Bus channel to which an effect is inserted.

5 Flex Bus channel to which an effect is not inserted.

5 Press CURSOR [UP] [DOWN] to select L or R.

6 Turn [V4](SEND LEVEL) to adjust the level to be sent into the effect, and [V5](RETURN LEVEL) to adjust the effect's output level.

The setting's range is 0 to 127, with no boost or cut applied to the gain (0dB) at 100.

7 Turn [V2](POSITION) to select "SEND/RTN"

The effect is automatically assigned to its like-numbered Flex Bus.

8

Set the Flex Bus' output destination to the Main out.

1. Press [FLEX BUS MASTER 1-12].

2. Hold down [CH EDIT] numerically corresponding to the Flex Bus to which you have inserted the effect, and press [MAIN / CUE].

3. Press CURSOR [UP] [DOWN] to select the middle field. Then turn [V2](BUS MODE) to select "INT", and then press [F2](SET) to confirm.

Go to QUICK START : p.43 for Flex Bus setup instructions.

9

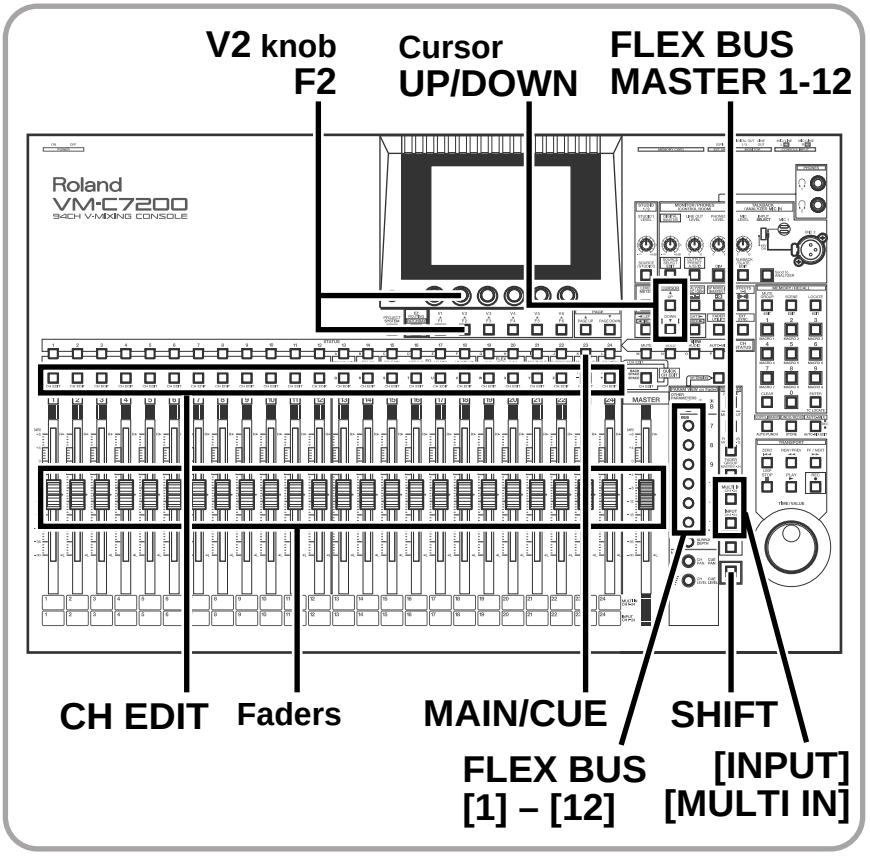
Route the input channels that hold the signals to which you wish to apply the effect to the selected Flex Bus.

1. Press [INPUT] or [MULTI IN] to select the type of channel signals you wish to send to the Flex Bus.

2. Press FLEX BUS [1]-[6] (lights in red) – or hold down [SHIFT] to select [7]-[12] (lights in green) – to select the Flex Bus to which you wish to send the signals.

3. Use the channel faders to adjust each channel's send level to the Flex Bus.

4. Use the [MASTER] fader to adjust the Flex Bus' overall level

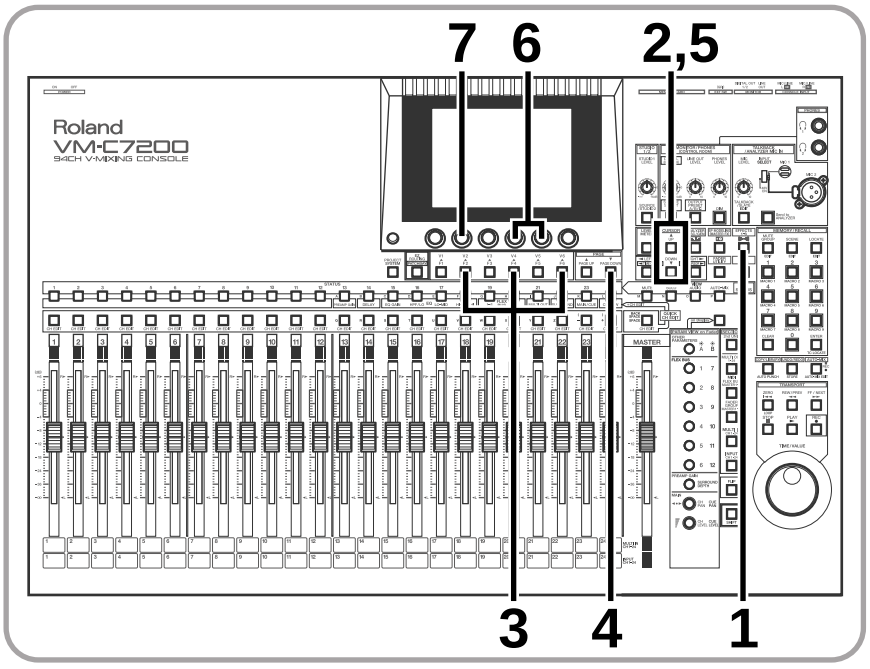


Setting the Onboard Effect Position and Value

You can insert an internal effect at any of several points along a signal's path. Most effects are inserted on a Flex Bus or the Main out, but there are some effect types you may wish to insert directly into an Input or Multi In channel.

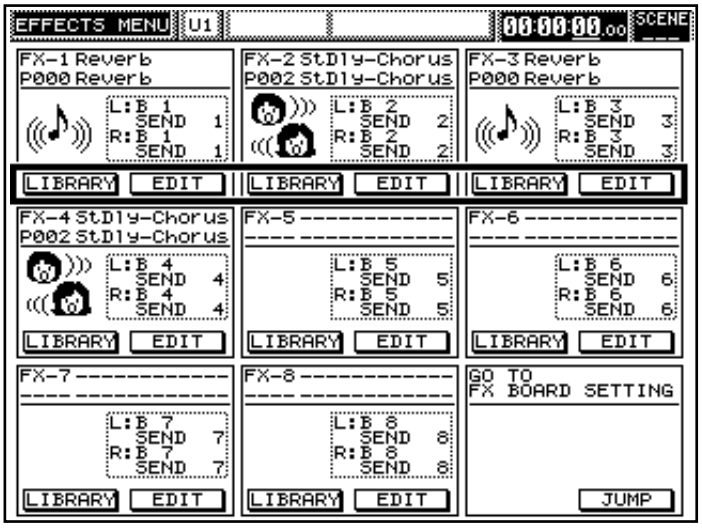
First, make a decision as to where you wish to insert an effect. Then adjust the appropriate send / return values.

Owner's Manual "Determining the effect position" (p.110)



1 Press [EFFECTS 1-8] to select FX-1-8, or [SP MODELING (MASTER FX)] for MASTER FX.

The "EFFECTS MENU" or "MST FX MENU" display appears.



2

Press CURSOR [UP] [DOWN] to select the FX field.

FX-1-3 are located in the upper field, FX-4-6 in the middle, and FX-7-8 in the lower (“MST FX MENU” does not call for this step).

If you do not have an optional VS8F-2 installed, you can only select FX-1 or FX-2.

3

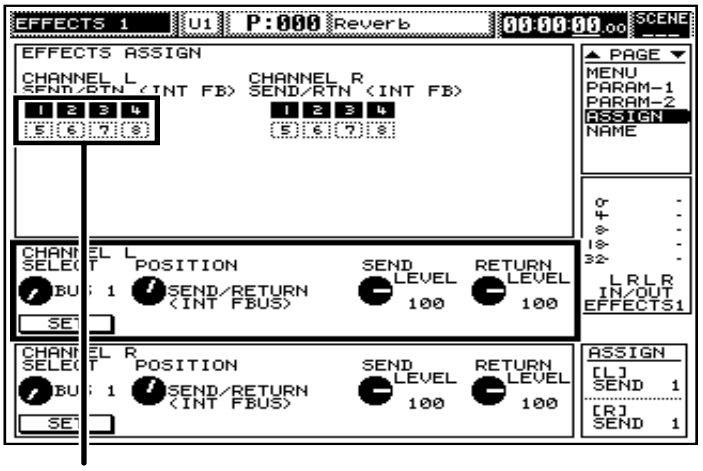
Press [F2], [F4], [F6], or [F2] on “MST FX MENU” to “EDIT”.

The “EFFECT (1-8)” or “MASTER FX” display appears.

4

Press [PAGE DOWN] to go to the “ASSIGN” page.

At this point, you set the insertion point of the effect.



1 Flex Bus channel to which an effect is inserted.

5 Flex Bus channel to which an effect is not inserted.

5

Press CURSOR [UP] [DOWN] to select L or R.

(“MST FX MENU” does not call for this step.)

6

Turn [V4](SEND LEVEL) to adjust the level to be sent into the effect, and [V5](RETURN LEVEL) to adjust the effect’s output level.

The setting’s range is 0 to 127, with no boost or cut applied to the gain (0dB) at 100.

7 Turn [V2](POSITION) to define the insertion point of the effect.

The insertion points are as listed below. (Turn [V1] for “MASTER FX” to select from the following: OFF, MAIN, MONITOR.)

- OFF - No effect
- INPUT PRE EQ - Insert before EQ on Input channels
- INPUT PRE FDR - Insert before fader on Input channels
- MULTI IN PRE EQ - Insert before EQ on Multi In channels
- MULTI IN PRE FDR - Insert before fader on Multi In channels
- SEND/RTN (INT) - Effect receives mono input from a Flex Bus and produces a stereo effect that can be routed to Main out or Cue bus, etc. Signal is sent to each effect via its like-numbered Flex Bus.
- INT FBUS - Insert on Flex Bus (Internal mode)
- EXT FBUS - Insert on Flex Bus (External mode)
- MAIN - Insert on Main out
- MONITOR - Insert on Monitor out

examples

- When using an equalizer or compressor on an input signal itself, insert the effect directly on the Input or Multi In channel.
- When using a reverb for multiple channels, use SEND/RTN (INT) to create a mono-send/stereo-return loop effect, or insert the effect on a Flex Bus for a mono-send-return loop effect.
- When using the Total Compressor on your entire mix, insert it on the Main out.

The precise insertion point of the effects can be seen on the “Block Diagram” that is supplied with the processor.

8 If you have inserted the effects on an Input or Multi In channel or a Flex Bus, turn [V1](CHANNEL SELECT) to select the intended channel / bus, and press [F1](SET).

The insertion point and the send / return values have been set.

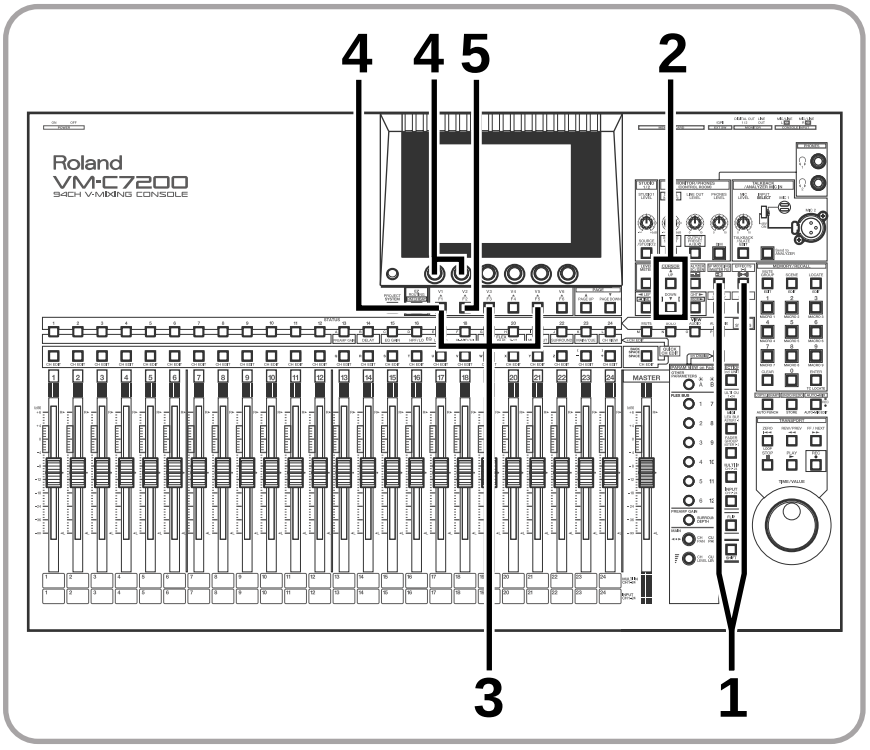
MEMO

Effects can be inserted on Flex Busses 1-8.

Selecting the Effects

A selection of 200 Preset Libraries (P000 to P199) are provided for the effects. You can select a Library that suits your purpose, and copy it to an effect from 1 through 8, or the Master effect.

Owner's Manual "Selecting the effect library" (p.113)



1 Press [EFFECTS 1-8] to select "FX-1-8", or [SP MODELING (MASTER FX)] for "MASTER FX".

The "EFFECTS MENU" or "MST FX MENU" display appears.

2 Press CURSOR [UP] [DOWN] to select the FX field.

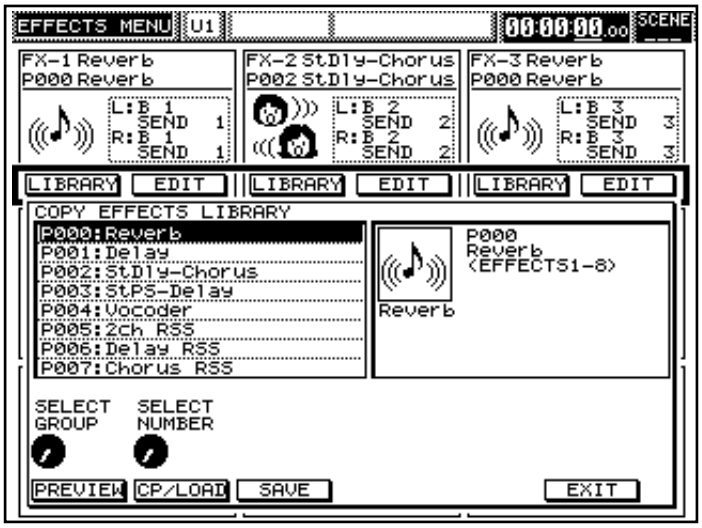
FX-1-3 are located in the upper field, FX-4-6 in the middle, and FX-7-8 in the lower.

("MST FX MENU" does not call for this step.)

3

Press [F1], [F3], [F5], or [F1] on “MST FX MENU” to call up the “LIBRARY”.

The “COPY EFFECTS LIBRARY” sub-window opens on the display.



4

First, turn [V1](SELECT GROUP) to select “U” (User’s) or “P” (Preset) group. (As preset at the factory, the User’s group holds the same effects as the Preset group.) Next, turn [V2](SELECT NUMBER) to select the desired effect (000 to 199) (Owner’s Manual “Algorithm List” p.119).

Press [F1](PREVIEW) to try out the effect you have selected (“PREVIEW” highlights in black when turned on). To cancel the preview, press [F1] again.

The following algorithms require two circuits.

- Voice Transformer
- Vocoder2
- Mastering Tool Kit
- 31-Band Graphic Equalizer

5

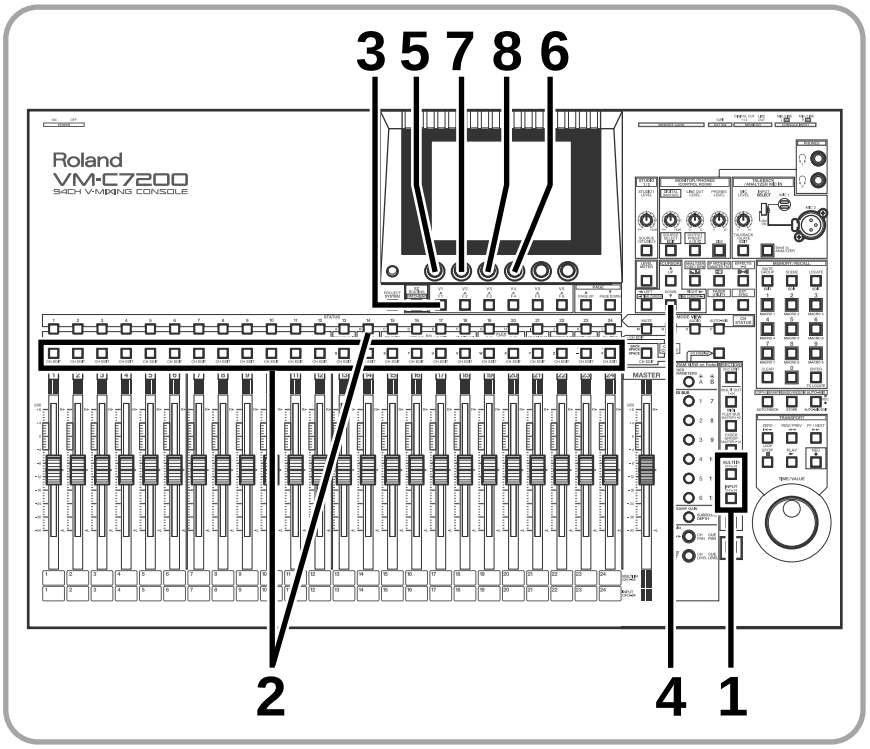
Press [F2](CP / LOAD) to confirm your effect choice.

The selected effect has been set.

Using a Channel's Feedback Delay (Channel Delay)

Each channel input has its own delay effect positioned before the EQ in its signal path. The delay is a monaural in/out, and provides various delay effects, including a feedback echo.

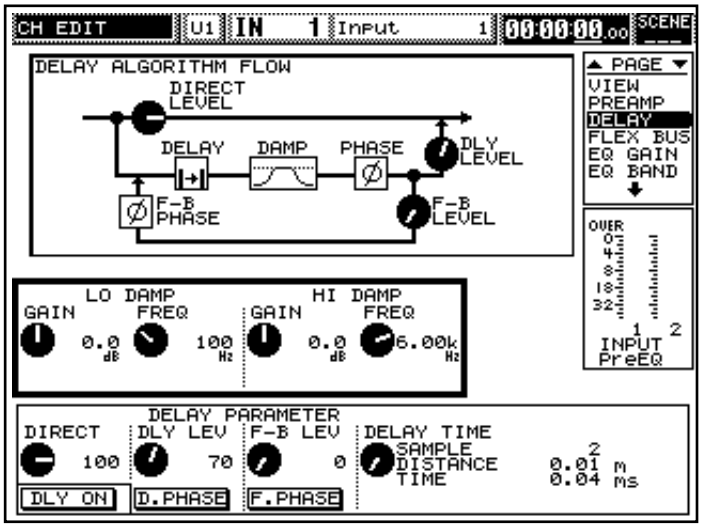
Owner's Manual "Adding a delay-based echo (Feedback Delay)" (p.81)



1 Press [INPUT] or [MULTI IN] to select the type of channel you wish to set up.

2 Hold down [CH EDIT] of the channel you wish to apply the delay effect, and press [DELAY].

The "DELAY" page of the "CH EDIT" display appears.



3 Press [F1](DLY ON) to turn on the Channel Delay.

"DLY ON" highlights in black.

4 Press CURSOR [DOWN] to move the cursor to the lower field.

5 Turn [V1](DIRECT) to adjust the dry-out level– the original, un-delayed signal.

6 Turn [V4](DELAY TIME) to adjust the delay time.

The DELAY TIME sets both the basic delay (shown as TIME) and the spacing between the repeating feedback delays (shown as DISTANCE).

The selected delay time is also shown in samples.

7 Turn [V2](DLY LEV) to adjust the delay level.

8 Turn [V3](F-B LEV) to adjust the feedback level.

The feedback level determines the number of times the delay repeats on itself.

The channel's signal is now being processed by the channel's delay effect.

HINT

You can also use the channel delay as a Comb filter (Owner's Manual: p.233).

Other Important Features

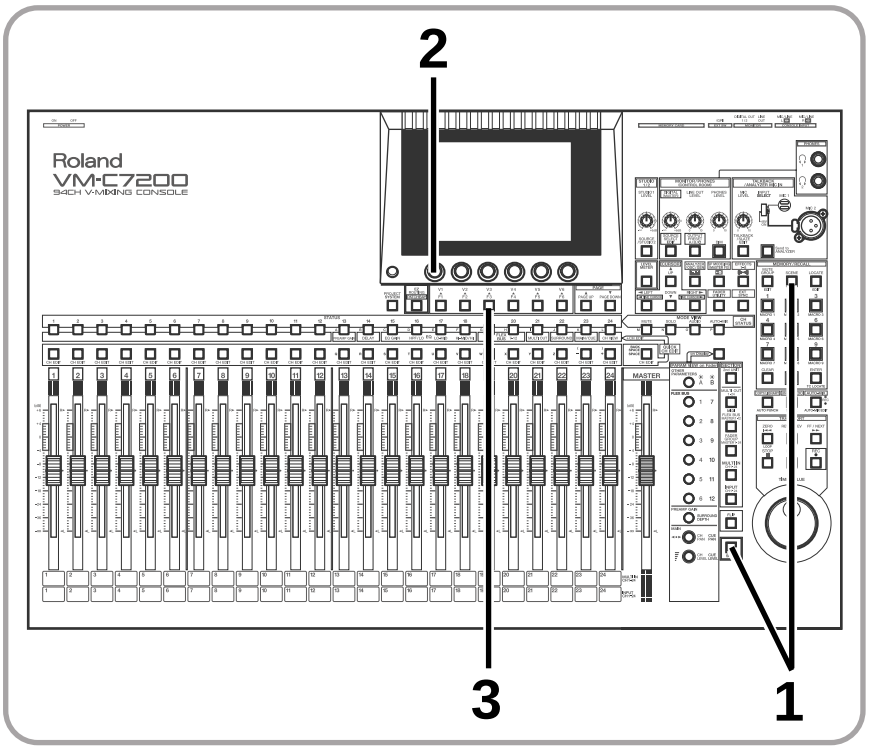
Storing a Mixing State (Scene)

A Scene is a complete set of mixer settings that can be stored at any point during work on a Project. A Project can store 100 Scenes (00-99), that can easily be recalled.

Items Stored in a Scene

A Scene holds the level and pan settings of Input and Multi In channels, the Main out, Cue bus, and Flex Busses. It also stores the settings of all equalizers, delays, and internal patch connections.

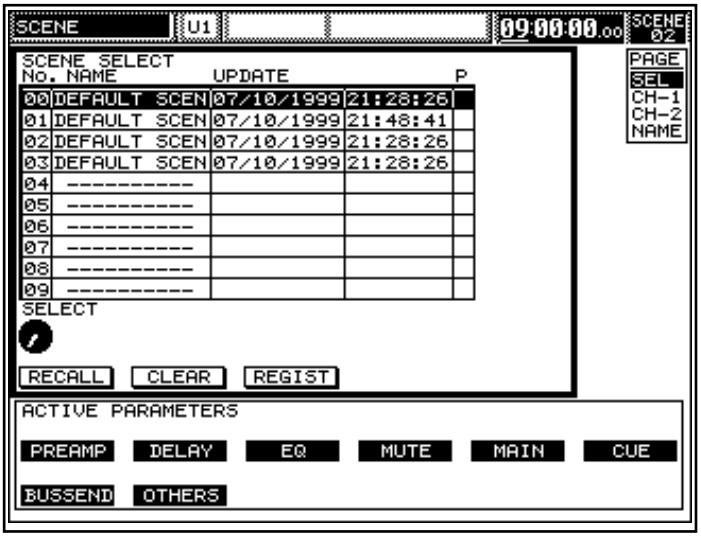
To Store a Scene



Owner's Manual "Storing / recalling / erasing a scene" (p.47)

1 Hold down [SHIFT] and press [SCENE].

The “SCENE” display appears.



2 Turn [V1] to select the Scene number you wish to store.

The black highlighted field indicates the selected Scene.

3 Press [F3](REGIST).

The current settings are stored as a Scene.

MEMO

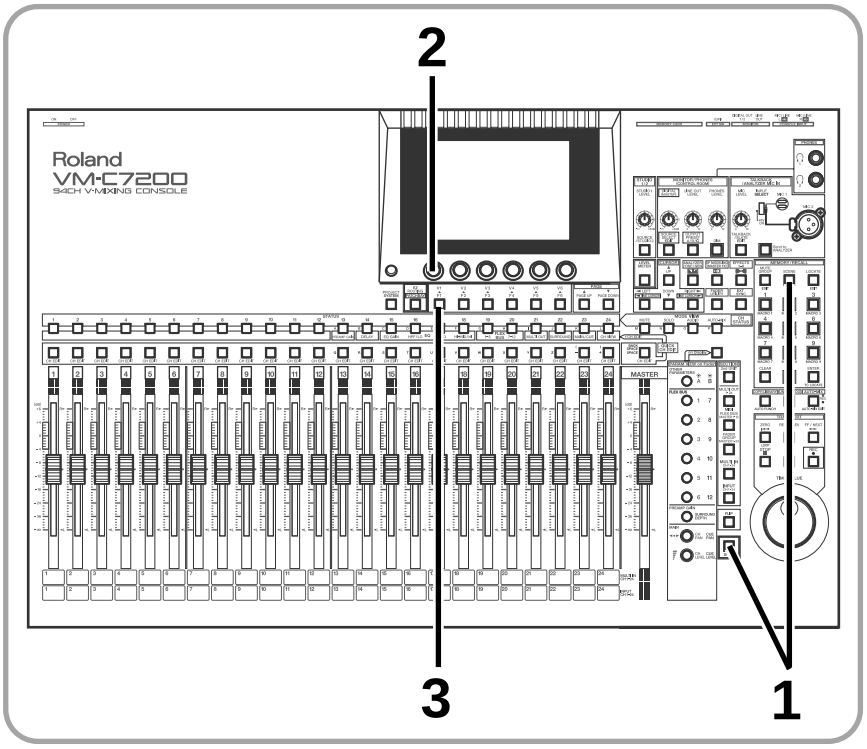
The Scene memory function requires an inserted memory card on which a Project has been created or selected.

HINT

You can also use the ten-key buttons to store / recall scenes.

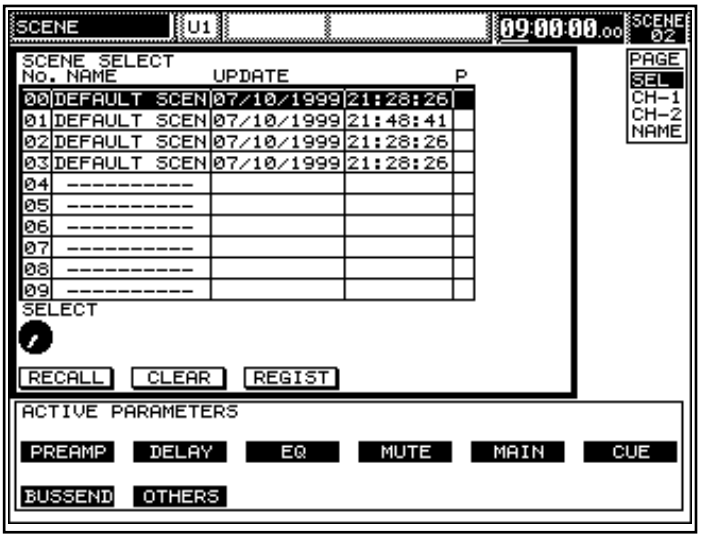
To Recall a Scene

Owner's Manual "Storing / recalling / erasing a scene" (p.47)



1 Hold down [SHIFT] and press [SCENE].

The "SCENE" display appears.



2 Turn [V1] to select the Scene number you wish to recall.

The black highlighted field indicates the selected Scene.

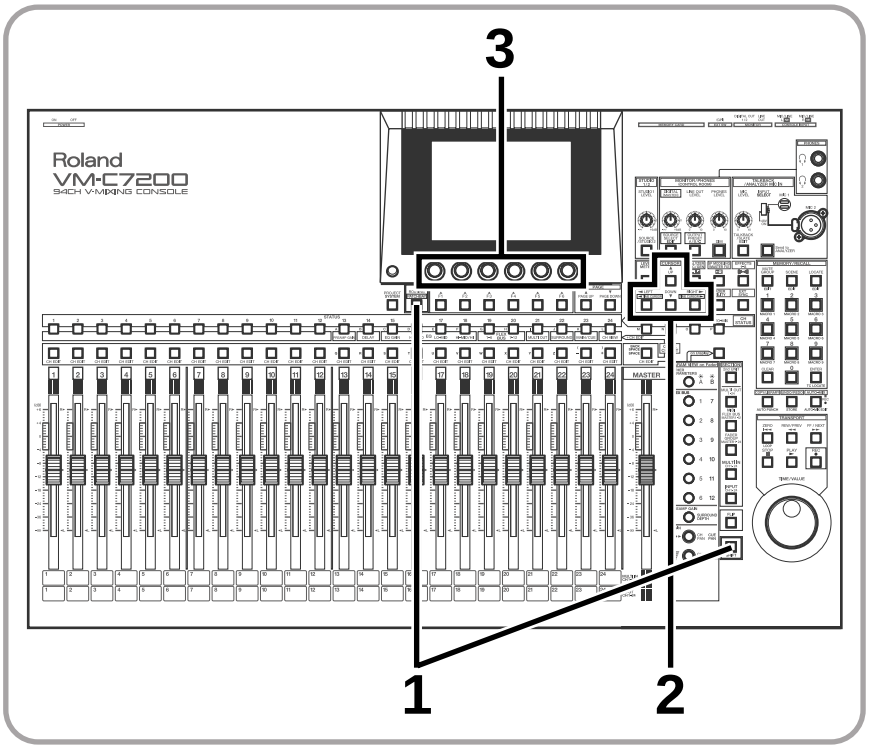
3 Press [F1](RECALL).

The selected Scene is recalled.

Setting Signal Routings on the Display (Virtual Patchbay)

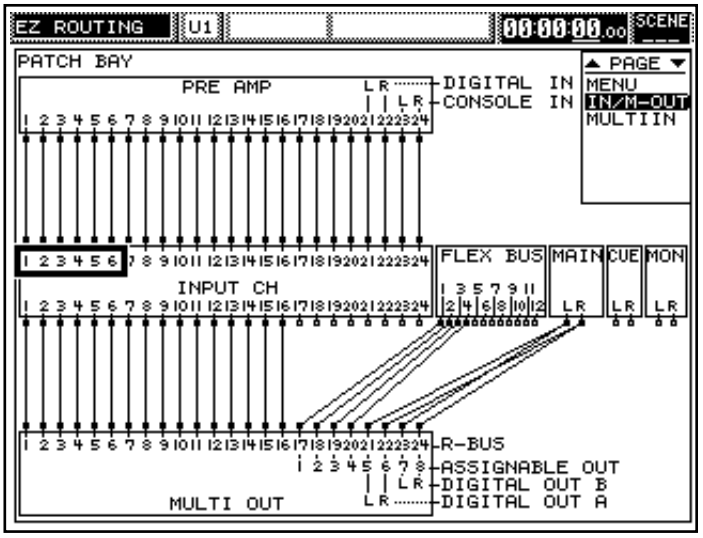
You can establish the routing of signals by making connections between input jacks and ASSIGNABLE OUT jacks using virtual cables shown on the display.

Owner's Manual "Virtual patchbay" (p.60)



1 Hold down [SHIFT] and press [EZ ROUTING].

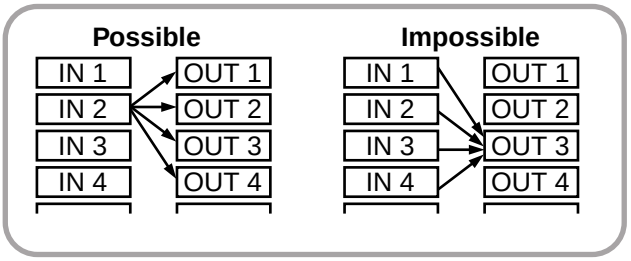
The "EZ ROUTING" display appears.



2 Press CURSOR [UP] [DOWN] [LEFT] [RIGHT] to select a group of six input jacks or output jacks.

3 Turn [V1]-[V6] to change their connections.

- For internal connections using the Virtual Patchbay, signals can also be assigned to several destinations. Multiple signals, however, can not be simultaneously assigned to a single destination.



HINT

The MULTI OUT connection thread can be cut off by turning the knob all the way to the left. You cannot, however, cut connections between PRE AMP and INPUT CH.

Simultaneously Adjusting the Levels of Multiple Channels

You can group multiple channels together, allowing you to control all of the channels simultaneously. You can use, for example, a single fader to boost or cut all of the grouped channels' levels at once.

This can be convenient in situations where you want to maintain volume balances between a set of channels while raising or lowering their overall level, such as when working with multiple microphones on a drum kit.

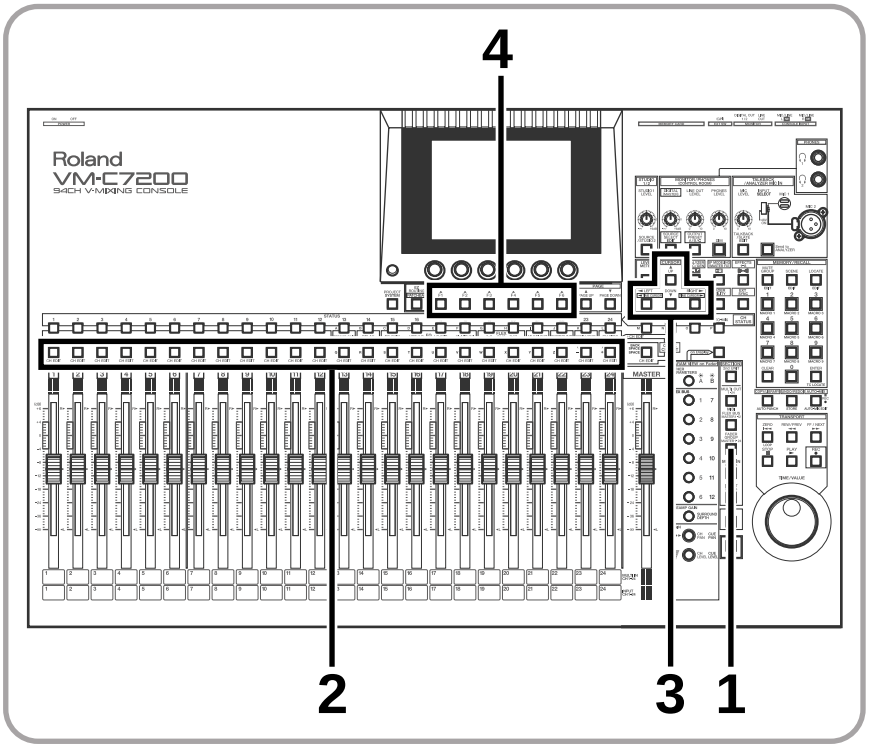
To Create a Group of Channel Faders (Fader Group Master)

Owner's Manual "Simultaneously Controlling the Signals of Multiple Channels (Link and Group)" (p.102)

You can control the volume of multiple channels' signals using a single Fader Group Master fader. By raising and lowering this fader, the levels of all channels registered in the group are raised and lowered simultaneously. You can set up as many as 24 Fader Groups.

The following channels can be grouped.

- Input channels 1-24
- Multi In channels 1-24
- Flex Bus Masters 1-12
- MIDI faders 1-16

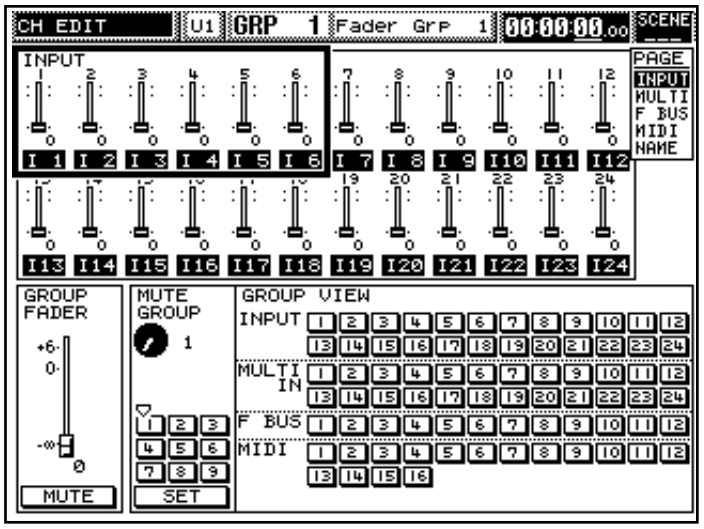


1 Press [FADER GROUP MASTER 1-24]

The “FADER GROUP” display appears – the faders now function as Fader Group Masters.

2 Press [CH EDIT] of the Fader Group you wish to edit.

The “CH EDIT” display appears with the Fader Group setting screen.



3 In the lower right “GROUP VIEW” field of the screen, use CURSOR [UP] [DOWN] [LEFT] [RIGHT] to select a set of six channels containing the first channel you wish to include in the group.

4 Press [F1]-[F6] to turn ON (black highlight) / OFF (normal) the desired channel faders. Then repeat Steps 3-4 to register all of the desired channels in the Fader Group selected in Step 2.

If you want to register or change another Fader Group, start over from Step 2.

To change the levels of channels registered in the group, press [FADER GROUP MASTER 1-24] to light [FADER GROUP MASTER 1-24], and use the group’s master fader.

MEMO

You can also mute a Fader Group in the same way as a normal channel by pressing [MUTE] (QUICK START: p.38).

To Mute a Group of Multiple Channels (Mute Group)

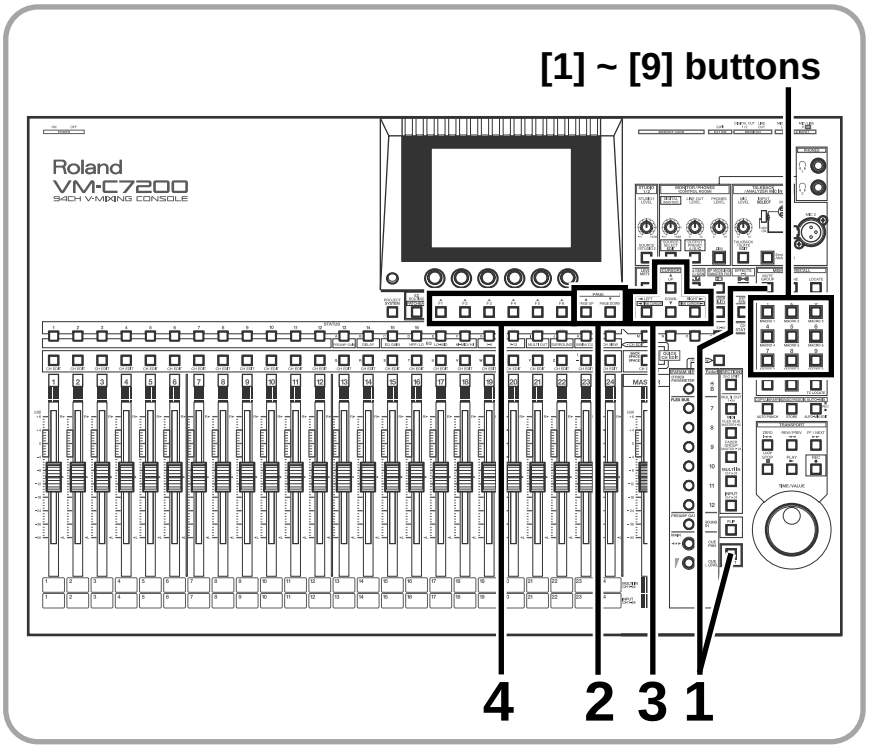
Owner's Manual "Simultaneously Controlling the Signals of Multiple Channels (Link and Group)" (p.102)

You can also mute a group of multiple channels simultaneously by using the Mute Group function.

This system provides nine Mute Groups. By turning a Mute Group on or off, all channels registered in the group are muted or un-muted simultaneously.

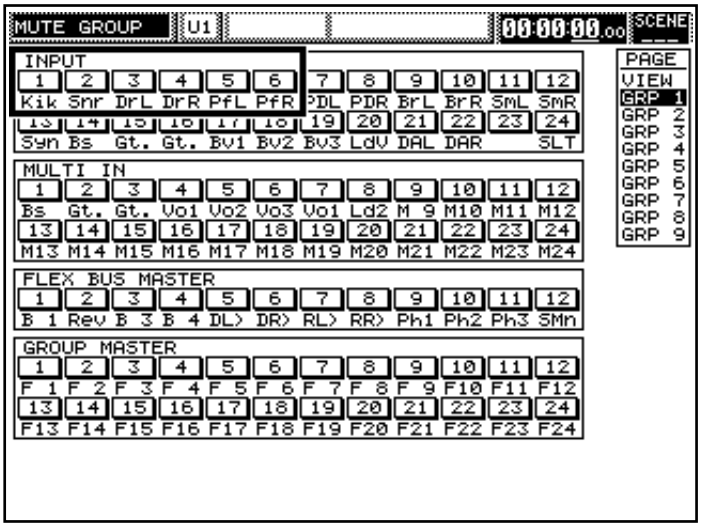
The following channels can be grouped.

- Input channels 1-24
- Multi In channels 1-24
- Flex Bus Masters 1-12
- Fader Group Masters 1-24



1 Hold down [SHIFT] and press [MUTE GROUP].

The “MUTE GROUP” display appears.



2 Press [PAGE UP] [PAGE DOWN] to select the Mute Group you wish to set up.

For example, if you wish to set up Mute Goup 2, select “GRP 2”.

3 Press CURSOR [UP] [DOWN] [LEFT] [RIGHT] to select the set of six channels that contains the first channel you want to register in the Mute Group.

4 Press [F1]-[F6] to turn ON (black highlight) / OFF (normal) the Mute Group. Then repeat Steps 3-4 to register all of the desired channels to the Mute Group selected in Step 2.

If you want to register or change another Mute Group, start over from Step 2.

To turn a Mute Group on or off, press [MUTE GROUP] to light [MUTE GROUP], then press the corresponding [1]-[9] button on the numeric keypad.

Some Special Features

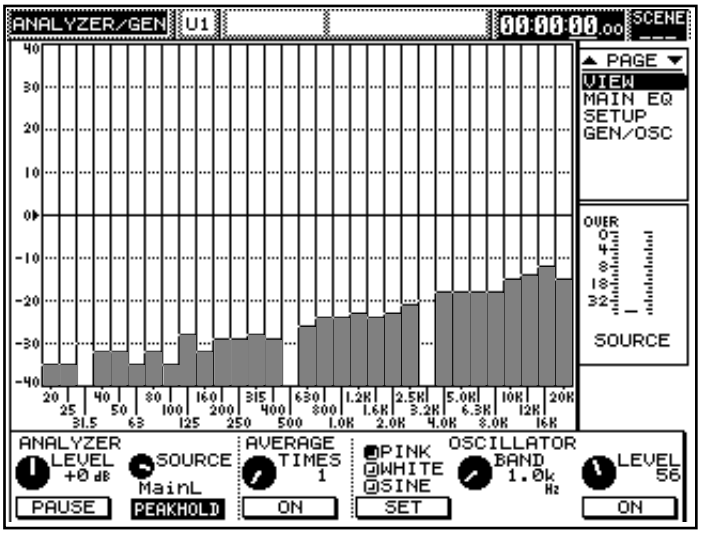
This chapter introduces some other special features.

The instructions for their use can be found in the Owner's Manual.

The Spectrum Analyzer

This system is equipped with a Spectrum Analyzer, with which you can measure the frequency characteristics of signals. This Spectrum Analyzer (referred to as "analyzer" for the remainder of this section) divides input signal frequencies into 31 narrow bands, and displays the momentary level of each band on a graph in real-time. This allows you to become visually acquainted with the frequency characteristics of your recorded work, the frequency response of a concert hall, or even to pinpoint problem frequency ranges when a howling occurs.

Owner's Manual "Using the Spectrum Analyzer" (p.184)



Some Examples of How to Use the Spectrum Analyzer

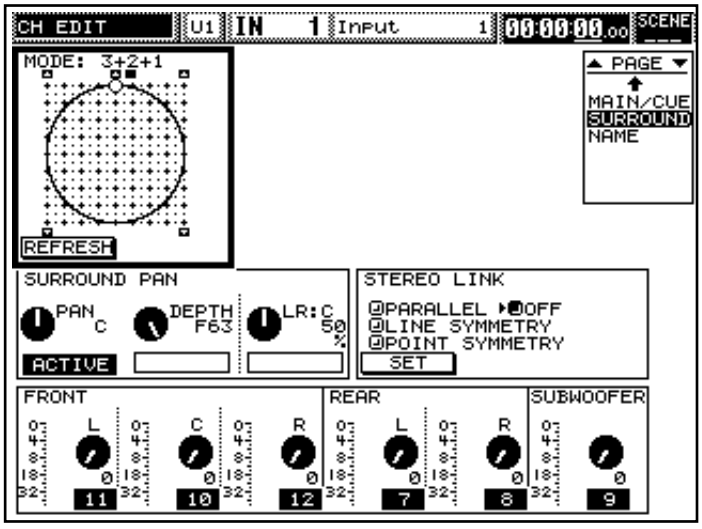
- To create a perfectly balanced mix, you can use the analyzer to view the distribution of frequencies in your material. This can help you determine what EQ is needed during the mixing process.
- Using the built-in noise generator, you can inspect the frequency response of a concert hall by analyzing microphone signals that capture a noise burst sounded in the hall.
- You may use a built-in 31-band graphic equalizer – the same number of bands as the analyzer – to monitor and adjust frequency balance problems in real time.

5.1 Surround

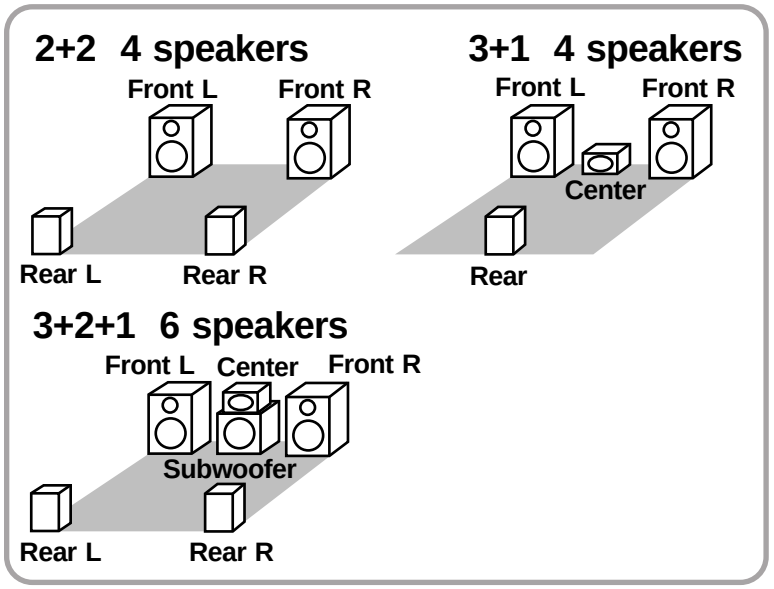
This system supports multi-speaker surround sound.

A normal stereo audio system consists of two speakers – left and right in front of the listener – for stereo playback. A surround system creates a three-dimensional sound field with three to six speakers located in the front and rear, as well as to the left and right. You can create surround sound by positioning and adjusting the Flex Bus outputs on the "SURROUND" editing display.

Owner's Manual "PAN and DEPTH for using SURROUND" (p.73), "Surround Output" (p.91)



There are certain conventions for surround sound, according to the number and positions of the speakers. This system supports three of the most popular surround modes, as shown below.



Speaker Modeling

This system provides a powerful collection of exclusive Roland speaker modeling effects.

With Roland's DS-90 Powered Monitors connected, you can simulate almost any speaker system, ranging from commonly used pro monitor speakers to those found on small TV sets and portable radios. This allows you to try out your mix on a variety of virtual speaker systems.

Owner's Manual "Using the Speaker Modeling function" (p.109), "Speaker Modeling" (p.170)

Speaker Modeling works best with digital speakers such as Roland's DS-90 Powered Monitors – other speakers may not be able to attain the same degree of sonic accuracy.

With the provided library of speaker modeling effects, you can easily simulate a wide range of speakers, including bright-sounding powered monitors, compact full-range speakers that might be used in a recording studio, or the tiny speakers of a radio-cassette recorder.

If you are using the following speakers on your PA system, you may find it easy to keep the frequency characteristics at a flat level.

- DS-90
- MS-50
- SST-151
- SST-251
- SSW-351

Using EZ Routing Templates

The system provides nine preset EZ Routing templates that can help you quickly configure your console for a wide variety of applications. These templates cover a range of mixing tasks: studio and stage recording, mixing, live sound with stage monitors, and MIDI synchronization for working with bands that play along to MIDI sequencers, for example. They also suggest some of the many ways in which you can configure this highly flexible system.

The nine templates are as listed below.

- 8 Track MDM With MIDI Sound Module Recording
- 24 Track Digital Recording Session With a Rock Band
- 24 Track Mixing Session From Digital Tape
- 94 Channel Mixing Session
- Live Rock Band Concert Mix With 16 Track Digital Recording
- Live Jazz Ensemble With 8 Track Digital Recording
- Public Address, Large Meetings and Media Presentations
- Post Production Recording and Surround Sound Mixing
- Basic Mixer Setup Example

Now let's try out some of the EZ Routing templates.

8 Track MDM With MIDI Sound Module Recording

This EZ Routing template configures the system for recording live elements (vocal, guitar, etc.) along with sequenced MIDI backing tracks (synthesizers, rhythm-box, etc.) on an 8 track digital recorder. (VM-C7200 / C7100 Libraries “8 TRACK MDM WITH MIDI SOUND MODULE RECORDING” p. 3)

See your Owner’s Manual for more details.

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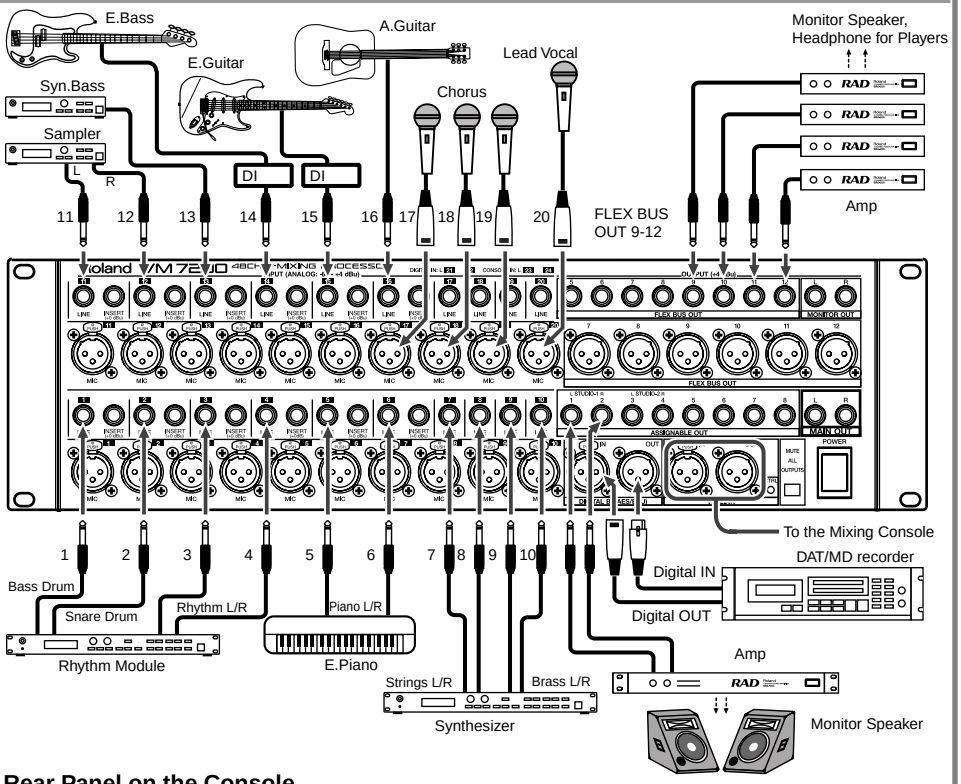
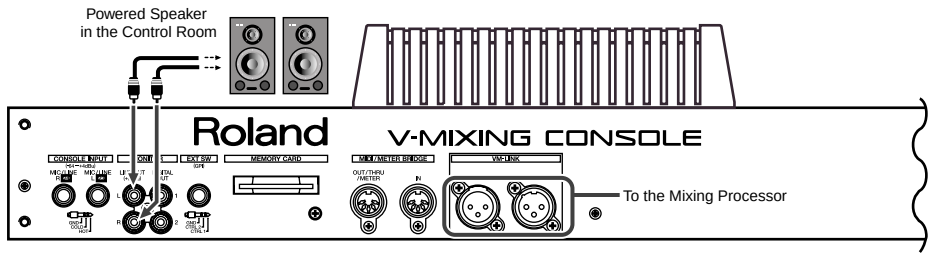
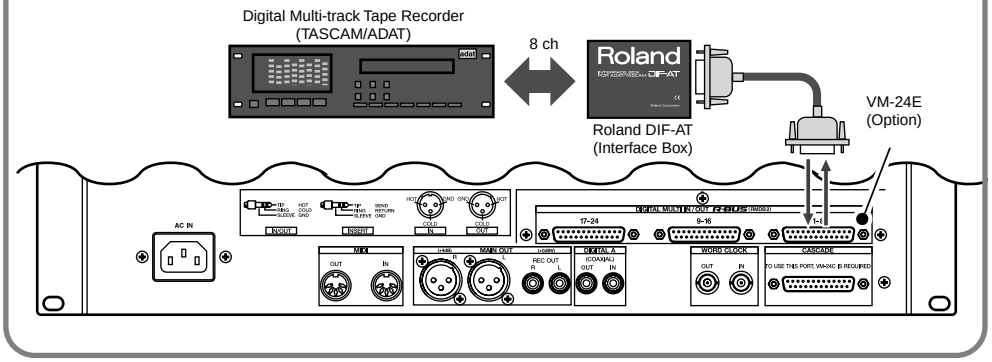
Front Panel on the Processor



Rear Panel on the Console



Rear Panel on the Processor



INPUT channel

1 Rhythm module (Bass Drum)
2 Rhythm module (Snare Drum)
3 Rhythm module (L)
4 Rhythm module (R)
5 E. Piano (L)
6 E. Piano (R)
7 Strings (L)
8 Strings (R)
9 Brass (L)
10 Brass (R)
11 Sampler (L)
12 Sampler (R)
13 Syn. Bass
14 E. bass
15 E. Guitar
16 A.Guitar
17 Chorus 1
18 Chorus 2
19 Chorus 3
20 Vocal
22 DAT (L)
23 DAT (R)
24 Slate

MULTI-IN channel

1 E. bass
2 E. Guitar
3 A.Guitar
4 Chorus 1
5 Chorus 2
6 Chorus 3
7 Vocal
8 Vocal (additional)

MIDI Connections

Connect the MIDI cable to the MIDI OUT socket on the MIDI sync device (sequencer), and to the MIDI IN socket on the sound module.

1

Make your connections as shown on the left.

- Use MIDI cables to connect the system to your MIDI devices (sound module, sampler, digital multi-track recorder, etc.).
- You can set up as many as four monaural monitor outputs for your performers. Connect their headphones or monitor amplifiers to FLEX BUS OUTs 9-12.
- Route any guitar or electric bass through direct boxes or a compact effect processor connected to the system input.

2

Turn on the power to your devices in the following sequence.

1. Digital multi-track recorder
2. Digital devices (DAT, MD recorder, etc.)
3. Analog devices (instruments, sound modules, effects processors, microphones, electric guitars, etc.)
4. Mixing processor
5. Mixing console
6. Audio equipment (amplifiers, speakers)

QUICK START “Turning On the Power” (p.10)

3

Select the EZ Routing template for 8 Track Recording With MIDI Sound Modules.

1. Press [EZ ROUTING], and then press [F1](TEMPLATE)
2. Turn [V1](SELECT GROUP) to select group “P”, and then turn [V2](SELECT NUMBER) to select “P000: MIDI+8TrREC”.
3. Press [F2](CP / LOAD).
   - The “MIDI+8TrREC” template has been recalled.

Owner’s Manual “Calling Up Stored Connections (EZ Routing)” (p.59)

4

Configure your MIDI devices to be synchronized to the system.

- As set at the factory, the console is set to transmit MTC (MIDI Time Code) as the master timing reference. Set your external MIDI slave devices to sync to MTC.
- Consult your MIDI devices’ documentation to learn how to set them up for external MTC synchronization.

Owner’s Manual “Using with MIDI Devices” (p.222)

5

Set the input gain of each signal on the console.

1. Press [INPUT].
2. Press [PREAMP GAIN].
3. Use the faders to adjust the input gain level of each source.
   - If you are using any condenser microphones, activate their PHANTOM power.

Owner's Manual "Gain, Phantom Power Supply, Phase and Attenuator" (p.68)

6

Adjust each EQ as necessary.

1. Press [CH EDIT] on the desired channel.
2. Press [PAGE UP] [PAGE DOWN] to select the "EQ BAND" page.
3. Use CURSOR [UP] [DOWN], [V1]-[V6] and [F1]-[F6] to set the EQ.

Owner's Manual "Adjusting Various Channel Settings (Equalizer, etc.)" (p.78)

7

Set the channel levels.

1. Press [CH LEVEL].
2. Adjust each channel's output level using its fader.

Owner's Manual "Setting up ON / OFF, SEND LEVEL and PAN for a Channel" (p.70)

8

Set up the monitors.

- Flex Bus 9-12 signals can be sent out of the system via the FLEX BUS OUT 9-12 jacks. You can send and balance the signals sent to FlexBusses 9-12 according to the performers' needs.
- You can monitor the overall sound through the MONITOR OUT.
- The Talkback signal is assigned to Channel 24.
- You can also send a rough mix into a DAT or MD from the MONITOR OUT.
- Adjust the live elements' signals (E. Bass, E. Guitar, Acoustic Guitar, Choruses 1-3, Lead Vocal) at [MULTI IN] 1-8 Channels.

Owner's Manual "Mixing Procedure 2 (Output and Monitor)" (p.84)

9

Adjust the effects.

Owner's Manual "Using the Internal Effects" (p.109)

1. Press [EFFECTS 1-8].
2. Press CURSOR [UP] [DOWN] to navigate to the field showing the desired effect's name, and press [F2] [F4] or [F6] to select the effect.
   - The following are the effects chosen by the "MIDI+8TrREC" template in a system with three optional VS8F-2 Effects Expansion Boards (sold separately) installed. The number of available effects listed below will depend on the number of the VS8F-2s installed.

FX1: COMPRESSOR (P038)

The left channel of this dual-mono compressor provides compression for E. Bass (Ch 14). Its right side supplies compression for E. Guitar (Ch 15).

FX2: REVERB 1 (P048)

This effect is inserted on Flex Bus 2, to which channels 1-13 are routed.
To add reverb to a channel's signal, turn up the channel's send level to Flex Bus 2 until the desired amount of reverb is applied.

FX3: REVERB 2 (P127)

This effect is inserted on Flex Bus 3.
This is a general-purpose reverb that can be used on any channel. To add reverb to a channel's signal, turn up the channel's send level to Flex Bus 3 until the desired amount of reverb is applied.

FX4: CHORUS (P021)

This effect is inserted on Flex Bus 4.
This is a chorus effect suitable for Chorus mics. To add chorusing to a channel's signal, turn up the channel's send level to Flex Bus 4 until the desired amount of chorusing is applied.

FX5: COMPRESSOR (P038)

The left channel of this dual-mono compressor provides compression for Chorus mic 1 (Ch 17). Its right side supplies compression for Chorus mic 2 (Ch 18).

FX6: COMPRESSOR (P038)

The left channel of this dual-mono compressor provides compression for Chorus mic 3 (Ch 19). Its right side supplies compression for Lead Vocal mic (Ch 20).

FX7: GUITAR MULTI (P009)

This effect is inserted on Flex Bus 7.
This is a chain of effects that can add excitement to the E. Guitar. To add these effects to the channel's guitar signal, turn up the channel's send level to Flex Bus 7 until the desired amount of reverb is applied.

3. Use CURSOR [UP] [DOWN], [PAGE UP] [PAGE DOWN], [V1]-[V6] and [F1]-[F6] to adjust the effects.

About The Word Clock

To share digital audio signals between this system and any external digital device, you must first define the Word Clock Master / Slave to each device. The setting orders depend on the types of devices you are using.

When you change settings on a digital connected device, a loud noise may occur. Always turn down the volumes to all speaker outputs to prevent serious damage to your equipment, before working on your digital devices.

Owner's Manual "About Digital Connections and the Master Clock" (p.31), "Combining Recorders" (p.190)

Using ADAT types

1. Connect your ADAT to DIF-AT, using an ADAT optical cable and SYNC cable.

   (Connect the SYNC cable to the SYNC IN socket on the ADAT.)

2. Hold down [SHIFT] and press [PROJECT] to call up the system menu.
3. Select "DIGITAL I / O" and check if "WORD CLOCK SOURCE" is set to "INTERNAL".
4. Repeat Step 2 and Select "SYSTEM CONFIG".
5. Select the "R-BUS 1-3" page and check if "DIF-AT CONTROL TARGET" is set to "ADAT".
6. Repeat Step 2 and Select "SYNC CLOCK".
7. Check if "SYNC MASTER" (Time Code Master) is set to "INT" (console).

   If you want to use the recorder as master, you must change the settings. (See Owner's Manual "Settings related to synchronization" p. 224.)

8. Set the ADAT input mode to DIGITAL.

(The setting orders differ depending on the types of devices. Read the instructions in the manual of the recorder you are using.)

About ADAT SYNC IN / SYNC OUT sockets

The definition of the ADAT Master / Slave mode depends on whether the SYNC IN is connected or not. If the SYNC IN is connected to DIF-AT, the ADAT will automatically run as Slave. If there are no connections, the ADAT will become Master. When using as Master, make a choice from "MULTI 1-8", "MULTI 9-16", or "MULTI 17-24" in Step 3 above.

Using TASCAM types

The basic steps are mostly the same as formerly mentioned (ADAT), but there are some exceptions.

- Use a TDIF-1 cable and SYNC cable to connect your TASCAM to DIF-AT.

(Connect the SYNC cable to the REMOTEIN / SYNC IN socket on the TASCAM.)

- In Step 3, set "WORD CLOCK SOURCE" to the TASCAM ("MULTI 1-8", "MULTI 9-16", or "MULTI 17-24").
- In Step 5, set "DIF-AT CONTROL TARGET" to "DA-88".
- As formerly mentioned, read the instructions in the manual of the connected recorder. If you are planning to use several TASCAMs in synchronization, you must beforehand set the ID of each recorder.

To Send Signals to a FlexBus

Owner's Manual "Setting a channel's send level and send point to Flex Buses" (p.72)

1. Press FLEX BUS [1]-[6] – or hold down [SHIFT] to select [7]-[12] – to select the Flex Bus to which you want to send the signals.
2. Use the channel faders to adjust each channel's send level to the Flex Bus.
3. Use the [MASTER] fader to adjust the Flex Bus' overall level.
4. Repeat Steps 1-3 to assign signals to other Flex Busses.

8 Track Digital Recording

The 8 Track Digital Recording EZ Routing template sends your signals to Flex Busses routed to an R-BUS, a stream of digital data containing eight separate channels of digital audio. Each of these R-BUS channels is routed to the corresponding track of an R-BUS connected 8 track digital recorder.

R-BUS 1: Electric Bass (Ch 14)

R-BUS 2: Lead Guitar (Ch 15)

R-BUS 3: Acoustic Guitar (Ch 16)

R-BUS 4: Chorus 1 (Ch 17)

R-BUS 5: Chorus 2 (Ch 18)

R-BUS 6: Chorus 3 (Ch 19)

R-BUS 7: Lead Vocal (Ch 20)

R-BUS 8: Lead Vocal spare track (Ch 20)

The 8 Track Mixdown Procedure

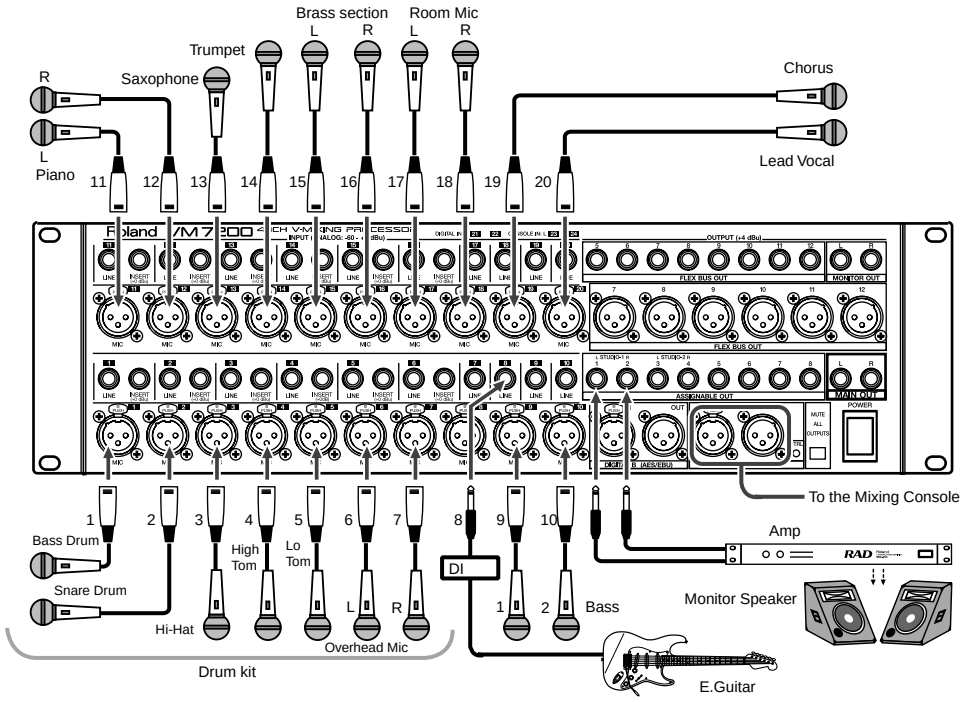
During mixdown, you can use MTC to play back tracks recorded on your 8 track digital recorder while your MIDI sequencer runs in sync with the system. Control the MIDI-sequenced materials at [INPUT] channels, and the live elements on the digital recorder at [MULTI IN] channels.

Live Jazz Ensemble With 8 Track Digital Recording

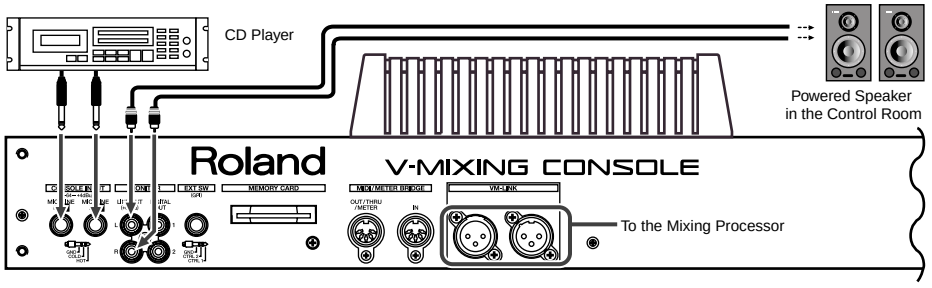
This EZ Routing template is designed for an acoustic, jazz-oriented concert or recording session. (VM-C7200/C7100 Libraries “LIVE JAZZ ENSEMBLE WITH 8 TRACK DIGITAL RECORDING” (Page 9)

See your Owner’s Manual for more details.

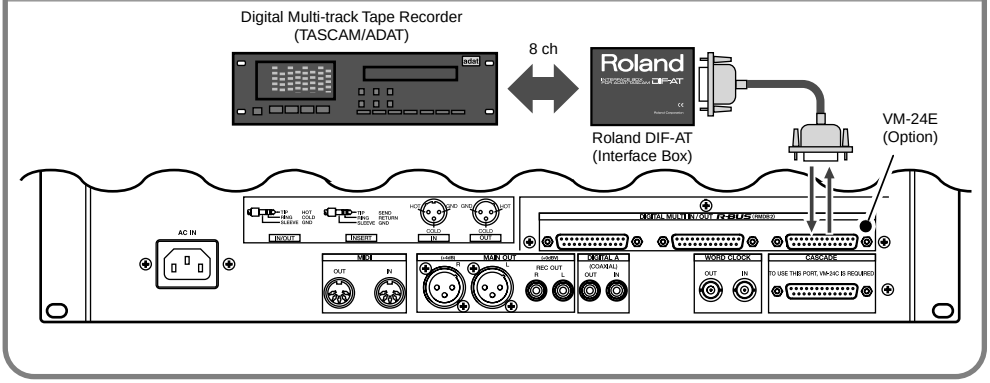
Front Panel on the Processor



Rear Panel on the Console



Rear Panel on the Processor



INPUT channel

1 Bass Drum
2 Snare Drum
3 Hi-Hat
4 High Tom
5 Lo Tom
6 Overhead Mic (L)
7 Overhead Mic (R)
8 E. Guitar
9 Bass 1
10 Bass 2
11 Piano (L)
12 Piano (R)
13 Saxophone
14 Trumpet
15 Brass section (L)
16 Brass section (R)
17 Room Mic (L)
18 Room Mic (R)
19 Chorus
20 Vocal
23 CD (L)
24 CD (R)

MULTI-IN channel

1 Bass
2 Vocal
3 Drum set (L)
4 Drum set (R)
5 Other instruments (L)
6 Other instruments (R)
7 Room Mic (L)
8 Room Mic (R)

1

Make your connections as shown on the left.

- Place monitor amplifier speakers on the stage and connect them to FLEX BUS OUTs 11 and 12 (for a single stereo monitor feed).
- Route any electric guitar or instrument with pickups through direct boxes or a compact effect processor connected to the system input.

2

Turn on the power of devices in the following sequence.

1. Digital multi-track recorder
2. Digital devices (CD player, etc.)
3. Analog devices (instruments, microphones, electric guitars, etc.)
4. Mixing processor
5. Mixing console
6. Audio equipment (amplifiers, speakers)

QUICK START “Turning On the Power” (p.10)

3

Select the EZ Routing template for 8 Track Recording of a Live Jazz Ensemble.

1. Press [EZ ROUTING], and then press [F1](TEMPLATE)
2. Turn [V1](SELECT GROUP) to select group “P”, and then turn [V2](SELECT NUMBER) to select “P004: Live Jazz”.
3. Press [F2](CP / LOAD).
   - The “Live Jazz” template has been recalled.

Owner’s Manual “Calling Up Stored Connections (EZ Routing)” (p.59)

4

Set the input gain of each signal on the console.

1. Press [INPUT].
2. Press [PREAMP GAIN].
3. Use the faders to adjust the input gain level of each source.
   - If you are using any condenser microphones, activate their PHANTOM power.

Owner’s Manual “Gain, Phantom Power Supply, Phase and Attenuator” (p.68)

5

Adjust each EQ as necessary.

1. Press [CH EDIT] on the desired channel.
2. Press [PAGE UP] [PAGE DOWN] to select the “EQ BAND” page.
3. Use CURSOR [UP] [DOWN], [V1]-[V6] and [F1]-[F6] to set the EQ.

Owner’s Manual “Adjusting Various Channel Settings (Equalizer, etc.)” (p.78)

6

Set the channel levels.

1. Press [CH LEVEL].

2. Adjust each channel's output level using its fader.

7

Set up the monitors.

- The signals from Flex Busses 11 and 12 are sent to STUDIO 1 and 2. You can send and balance the signals to Flex Busses 11 and 12, according to the performers' needs.

8

Adjust the effects.

1. Press [EFFECTS 1-8].

2. Press CURSOR [UP] [DOWN] to navigate to the field showing the desired effect's name, and press [F2] [F4] or [F6] to select the effect.

- The following are the effects chosen by the "Live Jazz" template in a system with three optional VS8F-2 Effects Expansion Boards (sold separately) installed. The number of available effects listed below will depend on the number of the VS8F-2s installed.

FX1: GRAPHIC EQUALIZER (P036)

This effect is inserted on the Main out L / R signals. Use it in conjunction with the Spectrum Analyzer (Owner's Manual "Using the Spectrum Analyzer" p.184) to tune the system to the frequency characteristics of the concert hall or club in which you are working.

FX2: OFF

FX3: REVERB (P000)

This is a general-purpose reverb inserted on Flex Bus 3, to which Channels 1-5, 8, 11-16, 19-20 are routed.

To add reverb to a channel's signal, turn up the channel's send level to Flex Bus 3 until the desired amount of reverb is applied.

FX4: COMPRESSOR (P038)

The left channel of this dual-mono compressor provides compression for the Bass Drum (Ch 1). Its right side supplies compression for the Snare Drum (Ch 2).

FX5: OFF

FX6: COMPRESSOR (P038)

The left channel of this dual-mono compressor provides compression for Vocal 1 (Ch 19). Its right side supplies compression for Vocal 2 (Ch 20).

FX7: COMPRESSOR (P038)

The left channel of this dual-mono compressor provides compression for Bass 1 (Ch 9). Its right side supplies compression for Bass 2 (Ch 10).

3. Use CURSOR [UP] [DOWN], [PAGE UP] [PAGE DOWN], [V1]-[V6] and [F1]-[F6] to adjust the effects.

Owner's Manual "Setting up ON / OFF, SEND LEVEL and PAN for a Channel" (p.70)

Owner's Manual "Mixing Procedure 2 (Output and Monitor)" (p.84)

Owner's Manual "Using the Internal Effects" (p.109)

.

To Send Signals to a Flex Bus

Owner's Manual "Setting a channel's send level and send point to Flex Buses" (p.72)

1. Press FLEX BUS [1]-[6] – or hold down [SHIFT] to select [7]-[12] – to select the Flex Bus to which you want to send the signals.

2. Use the channel faders to adjust each channel's send level to the Flex Bus.

3. Use the [MASTER] fader to adjust the Flex Bus' overall level.

4. Repeat Steps 1-3 to assign signals to other Flex Busses.

8 Track Digital Recording

The Live Jazz EZ Routing template sends your signals to Flex Busses routed to an R-BUS, a stream of digital data containing eight separate channels of digital audio. Each of these R-BUS channels is routed to the corresponding track of an R-BUS connected 8 track digital recorder.

FB 1 Assigned to Bass 1, 2 (Ch 9, 10) and sent to R-BUS 1.

FB 2 Assigned to Vocals 1, 2 (Ch 19, 20) and sent to R-BUS 2.

FB 5, 6 Assigned to the Drum kit: Kick (Ch 1). Snare (Ch 2), Hi Hat (Ch 3), High Toms (Ch 4), Lo Toms (Ch 5), Overhead Mic L (Ch 6), Overhead Mic R (Ch 7). These signals are mixed in stereo and sent to R-BUS 3 (left), and R-BUS 4 (right).

FB 7, 8 Assigned to other instruments: Guitar (Ch 8), Piano L (Ch 11), Piano R (Ch 12), Saxophone 1 (Ch 13), Trumpet (Ch 14), Brass Section 1 (Ch 15), Brass Section 2 (Ch 16). These signals are mixed in stereo and sent to R-BUS 5 (left), and R-BUS 6 (right).

FB 9, 10 Assigned to Room mic L (Ch 17), Room mic R (Ch 18). These signals are mixed in stereo and sent forward to R-BUS 7 (left), and R-BUS 8 (right).

Advanced Operations – 8 Track Analog Recording

The Live Jazz EZ Routing template described earlier can also be helpful when recording to an 8 track analog multi-track recorder.

1 Prepare for analog output to the recorder

In this template, Flex Busses 1, 2, 5-10 are designated as output busses to the 8 track recorder. Connect your recorder's inputs to the output jacks to which these Flex Busses are routed.

Route the Flex Busses 1 and 2 to ASSIGNABLE OUTs 3 and 4 by following the steps below.

1. Press [EZ ROUTING], and then press [F2](PATCHBAY) to go to the "PATCHBAY" display.
2. Move the cursor to select the "MULTI OUT 19-24" field.
3. Use [V1] and [V2] to change the internal connections as follows.

   MULTI OUT 19 - FLEX BUS 1

   MULTI OUT 20 - FLEX BUS 2

   - Signals sent to MULTI OUTs 19 and 20 are now routed to ASSIGNABLE OUTs 3 and 4.
   - If you are using a VM-7200, Flex Busses 5-10 have their own dedicated outputs. Connect your recorder's track inputs 3-8 to the processor's FLEX BUS OUT jacks 5-10.
     If you are using a VM-7100, repeat Steps 1-3 above to set up ASSIGNABLE OUTs 1-8.

2 Set the monitor-out from the multi-track recorder

To listen to the recorder, connect the recorder's track outputs to any free INPUT channel.

3 Prepare the headphone monitors

If you are using a VM-7200, you can supply a monitor feed to the performers using Flex Busses 11 and 12, which are designated in this template as on-stage monitor-speaker sends.
If you are using a VM-7100, read the following instructions.

4 Select the desired output for each input channel.

Make sure that each input channel sending a signal to a recorder track is not also sending the signal into the Main out mix.

1. Press [INPUT] to light [INPUT] in red.
2. Press [AUDIO].

   When a channel is being routed into the Main out mix, its [STATUS] button is lit in green.
3. Press [STATUS] on each of the channels being sent to the recorder. This will turn the channel's [STATUS] light off to indicate that it is no longer being sent into the main mix. Since you will be listening to the recorder's track outputs as you record, removing the original signals from the main mix will ensure that you won't be hearing these signals as a double.
4. Press and light [STATUS] on the input channels handling the recorder's track outputs. This will allow you to hear what is coming into the recorder, and, therefore, what is being recorded. It will also allow you to play back your recording.

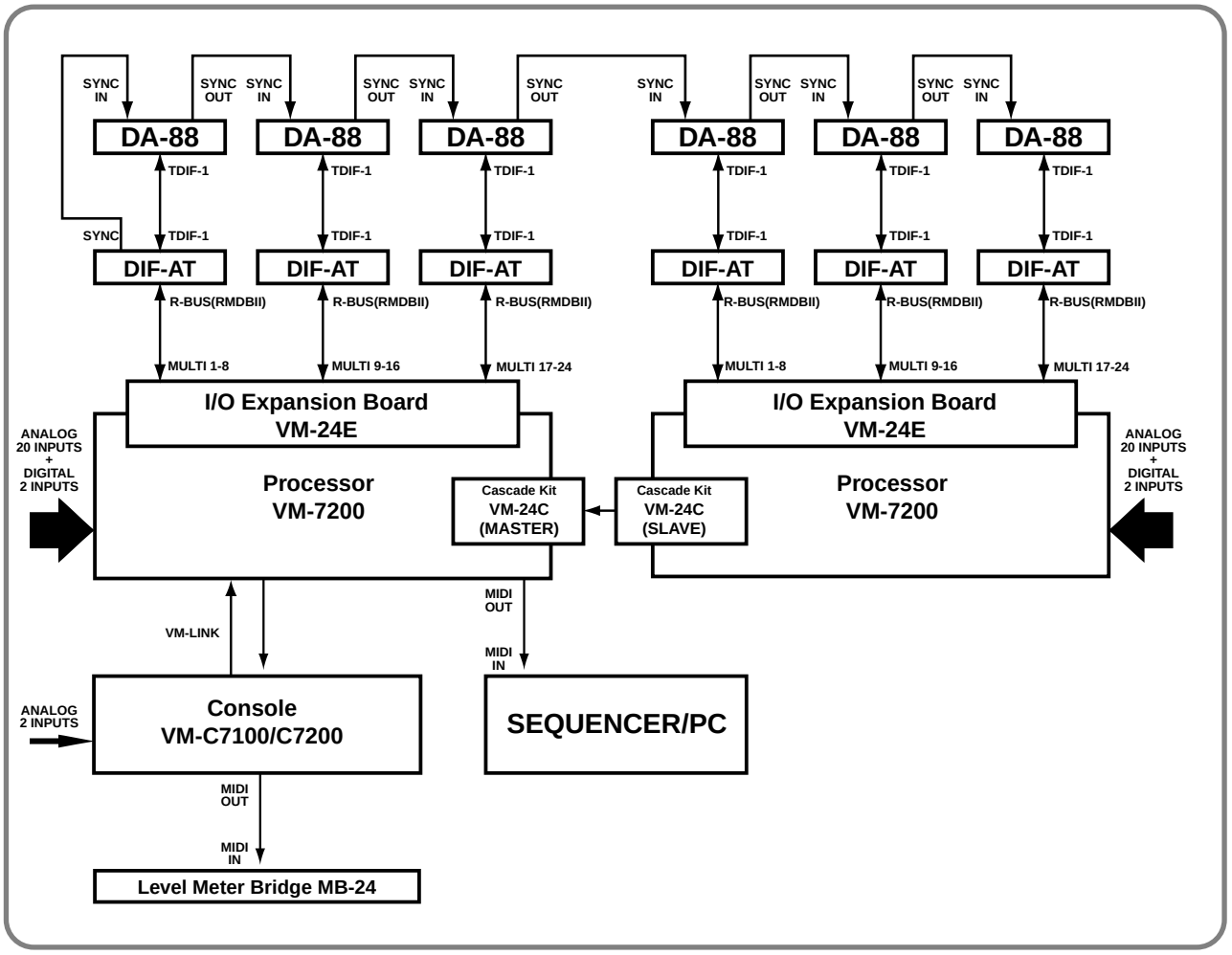
- The VM-7100 does not provide separate dedicated Flex Bus outputs. As a result, all of its ASSIGNABLE OUTs may be needed as outputs to your 8-track recorder, and you will not be able to use these jacks to provide headphone monitor outputs. There are, however, some other ways to provide monitor feeds. You can reduce the number of tracks to be recorded simultaneously, freeing up ASSIGNABLE OUTs for monitoring. As an alternative, you can create several MAIN OUT sends and use one as a monitor feed. (Owner's Manual "Mixing Procedure 2 (Output and Monitor)" p.84)
- The 31-band EQ inserted on the Main out in the template may not be required during recording. You may consider using other effects (Owner's Manual "Using the Internal Effects" p.109).

Connection Samples

Here are some examples that might be helpful when connecting your equipments.

Connection Samples Using the TASCAM DA Series

48 Track Recording System (TASCAM DA-88 x 6)

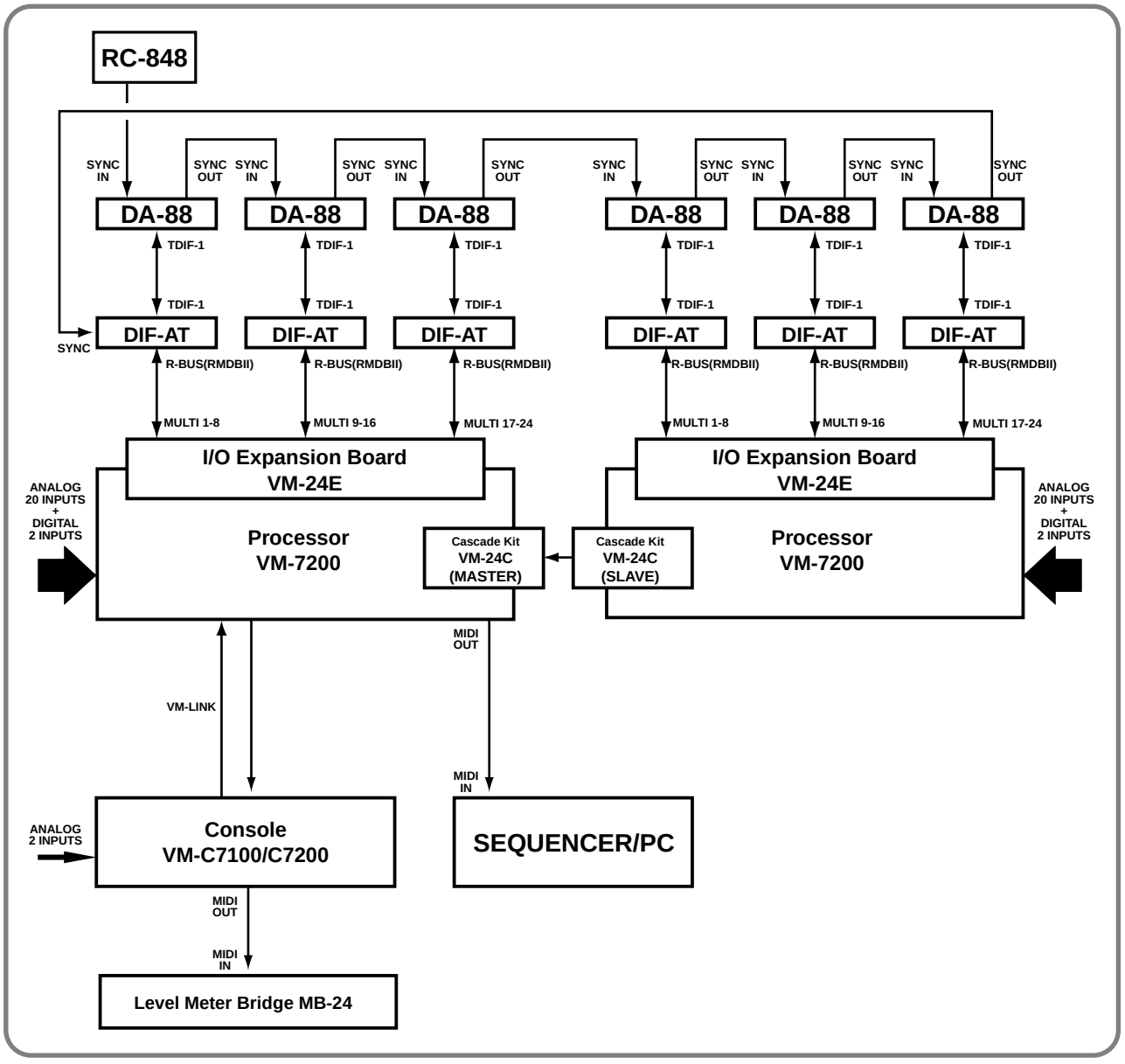


- This is a 48 Track Recording System with six TASCAM DA Series recorders in use.
- You can record to individual tracks on 42 analog channels + 4 digital channels at once.
- You can mix 42 analog channels + 4 digital channels + 48 tape channels at once.
- You can control the recorder's Transport and the tracks' REC switch on the VM mixing console.
- You can memorize 100 Location points, and also search a Location by entering Time Codes.
- You can sync Automix with the tape.
- You can also connect the sequencer to the MIDI THRU on the "LEVEL METER".

NOTE

- Turn the power on in the [DA Series]–[VM Series] order.
- 50 Scenes can be stored per Project (because of cascade connection).
- To run the secuencer in sync with the MIDI CLOCK, connect it to the MIDI THRU on the "LEVEL METER".
- Connect the SYNC cable to DIF-AT connected MULTI 1-8 on the Master processor.
- The VM-7000 Series cannot be used as the Word Clock Master.

48 Track Recording System (TASCAM DA-88 x 6 + RC-848)

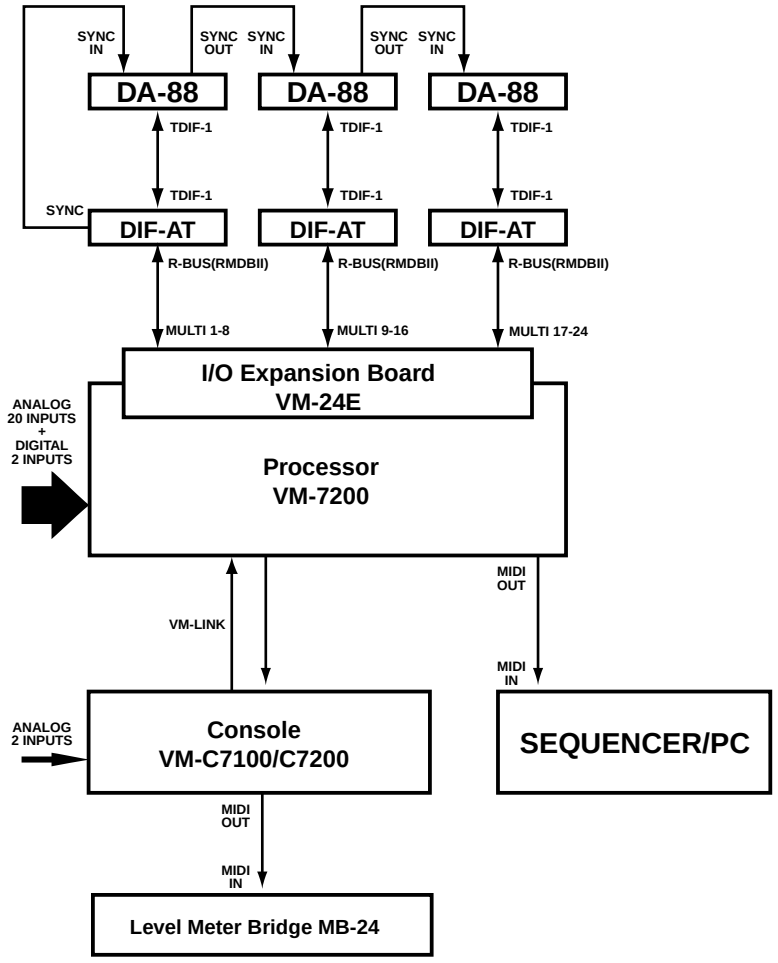


- This is a 48 Track Recording System with six TASCAM DA Series recorders in use.
- These recorders are controlled by the RC-848.
- You can record to individual tracks on 42 analog channels + 4 digital channels at once.
- You can mix 42 analog channels + 4 digital channels + 48 tape channels at once.
- You can sync Automix with the tape.
- You can also connect the sequencer to the MIDI THRU on the ”LEVEL METER”.

NOTE

- Turn the power on in the [DA Series]–[VM Series] order.
- 50 Scenes can be stored per Project (because of cascade connection).
- To run the secuencer in sync with the MIDI CLOCK, connect it to the MIDI THRU on the ”LEVEL METER”.
- Connect the SYNC cable to DIF-AT connected MULTI 1-8 on the Master processor.
- The VM-7000 Series cannot be used as the Word Clock Master.

24 Track Recording System (TASCAM DA-88 x 3)

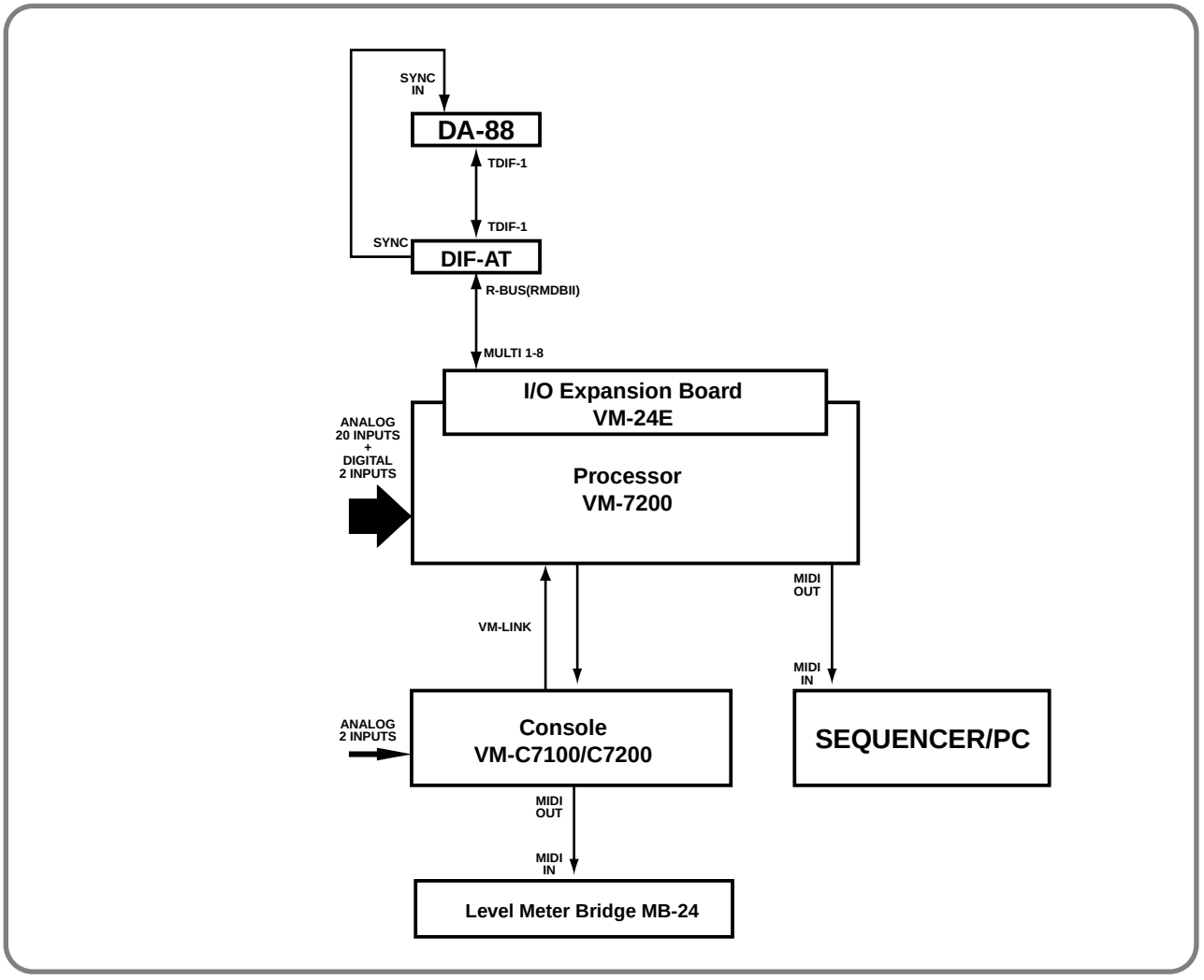


- This is a 24 Track Recording System with three TASCAM DA Series recorders in use.
- You can record to individual tracks on 22 analog channels + 2 digital channels at once.
- You can mix 22 analog channels + 2 digital channels + 24 tape channels at once.
- You can control the recorder's Transport and the tracks' REC switch on the VM mixing console.
- You can memorize 100 Location points, and also search a Location by entering Time Codes.
- You can sync Automix with the tape.
- You can also connect the sequencer to the MIDI THRU on the "LEVEL METER".

NOTE

- Turn the power on in the [DA Series]–[VM Series] order.
- To run the secuencer in sync with the MIDI CLOCK, connect it to the MIDI THRU on the "LEVEL METER".
- The VM-7000 Series cannot be used as the Word Clock Master.

8 Track Recording System (TASCAM DA-88 x 1)



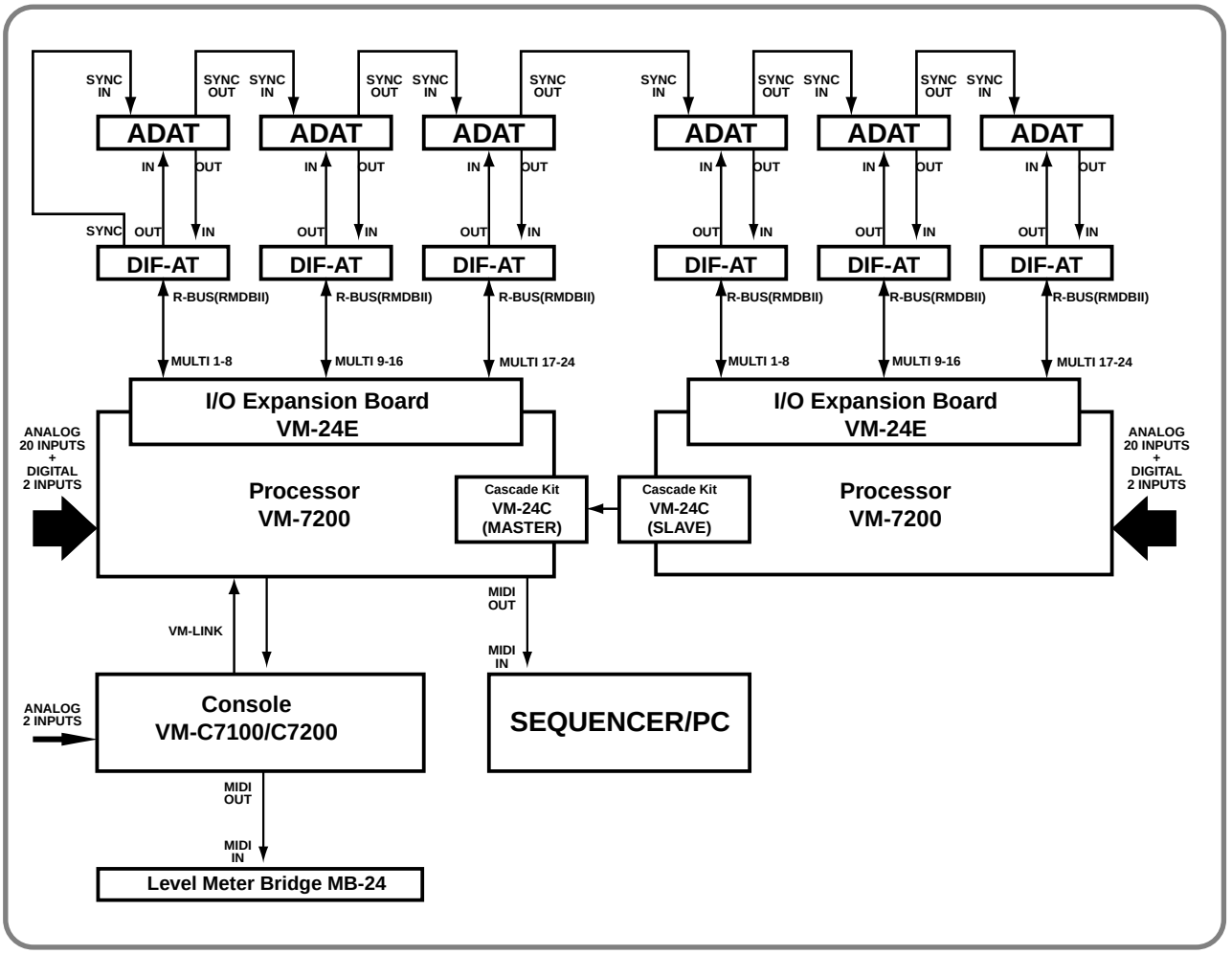
- This is an 8 Track Recording System with one TASCAM DA Series recorder in use.
- You can mix 22 analog channels + 2 digital channels + 8 tape channels at once.
- You can control the recorder's Transport and the tracks' REC switch on the VM mixing console.
- You can memorize 100 Location points, and also search a Location by entering Time Codes.
- You can sync Automix with the tape.
- You can also connect the sequencer to the MIDI THRU on the "LEVEL METER".

NOTE

- Turn the power on in the [DA Series]–[VM Series] order.
- To run the secuencer in sync with the MIDI CLOCK, connect it to the MIDI THRU on the "LEVEL METER".
- The VM-7000 Series cannot be used as the Word Clock Master.

Connection Samples Using the Alesis ADAT Series

48 Track Recording System (Alesis ADAT x 6)

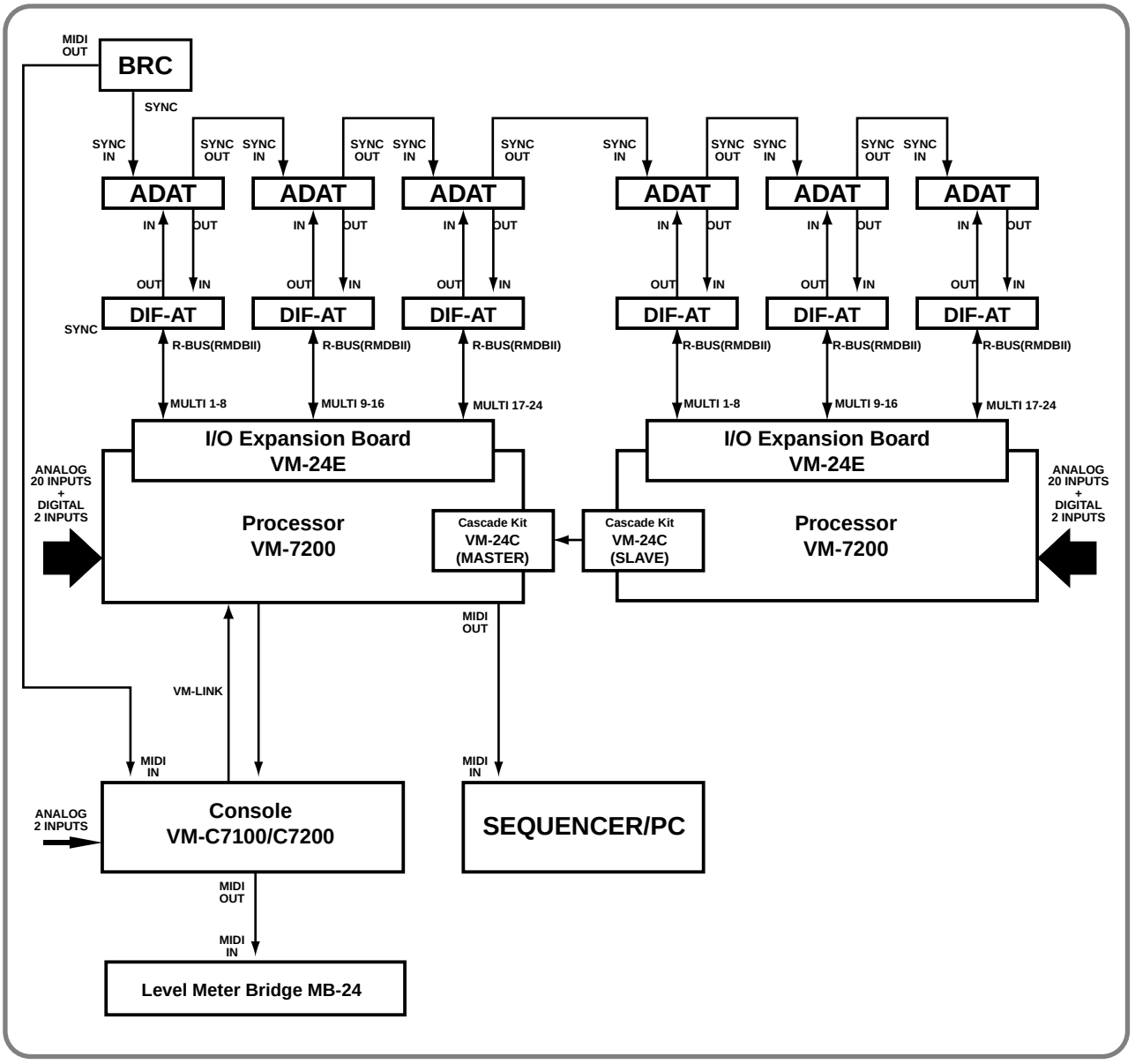


- This is a 48 Track Recording System with six Alesis ADAT Series recorders in use.
- You can record to individual tracks on 42 analog channels + 4 digital channels at once.
- You can mix 42 analog channels + 4 digital channels + 48 tape channels at once.
- You can control the recorder's Transport and the tracks' REC switch on the VM mixing console.
- You can memorize 100 Location points, and also search a Location by entering Time Codes.
- You can sync Automix with the tape.
- You can also connect the sequencer to the MIDI THRU on the "LEVEL METER"

NOTE

- Turn the power on in the [ADAT Series]–[VM Series] order.
- 50 Scenes can be stored per Project (because of cascade connection).
- The Slave processor will not receive any signals from the Master processor.
- To run the secuencer in sync with the MIDI CLOCK, connect it to the MIDI THRU on the "LEVEL METER".
- Connect the SYNC cable to DIF-AT connected MULTI 1-8 on the Master processor.

48 Track Recording System (Alesis ADAT x 6 and BRC)

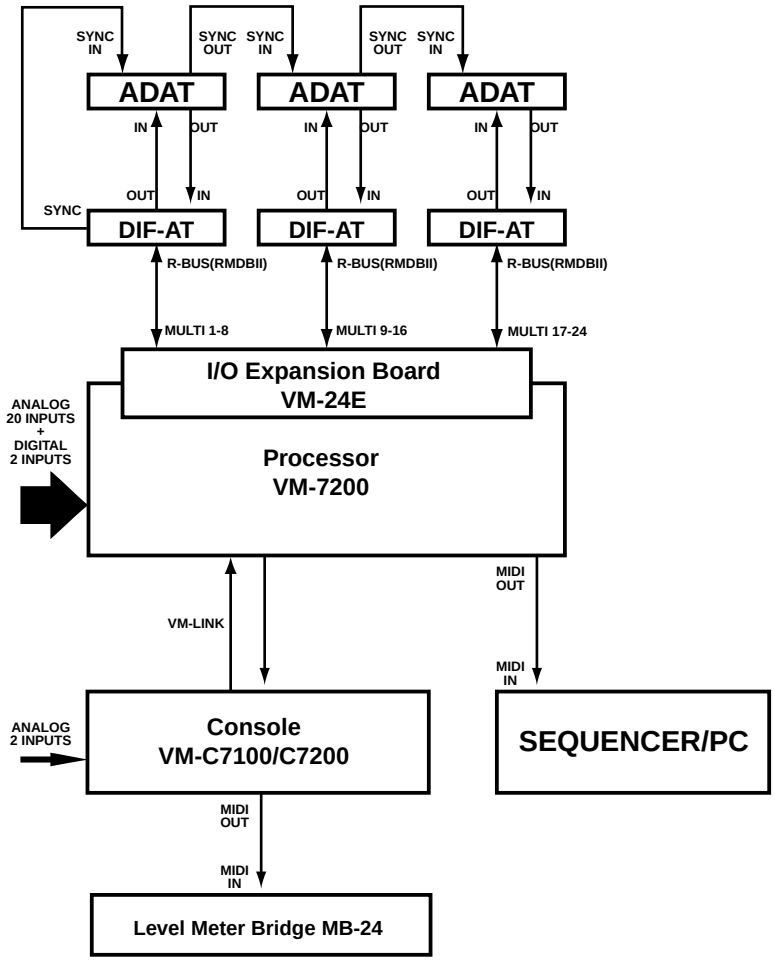


- This is a 48 Track Recording System with six Alesis ADAT Series recorders in use.
- These recorders are controlled by the BRC.
- You can record to individual tracks on 42 analog channels + 4 digital channels at once.
- You can mix 42 analog channels + 4 digital channels + 48 tape channels at once.
- You can sync Automix with the tape.
- You can also connect the sequencer to the MIDI THRU on the ”LEVEL METER”.

NOTE

- Turn the power on in the [ADAT Series]–[VM Series] order.
- 50 Scenes can be stored per Project (because of cascade connection).
- The Slave processor will not receive any signals from the MASTER processor.
- To run the secuencer in sync with the MIDI CLOCK, connect it to the MIDI THRU on the ”LEVEL METER”.
- On the VM, set “WORD CLOCK MASTER” to “MULTI 1-8”, and “SYNC MASTER” to “EXT/MTC”.
- To switch from Digital In to Analog In, and vise versa, do it on the ADAT, not on the BRC.

24 Track Recording System (Alesis ADAT x 3)

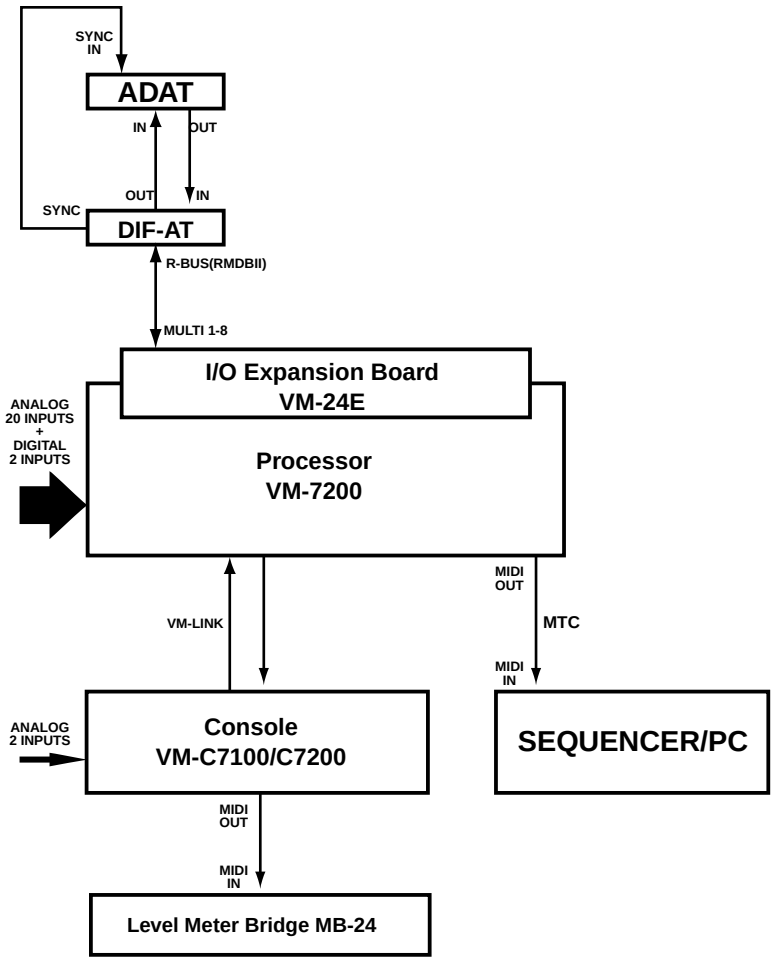


- This is a 24 Track Recording System with three Alesis ADAT Series recorders in use.
- You can record to individual tracks on 22 analog channels + 2 digital channels at once.
- You can mix 22 analog channels + 2 digital channels + 24 tape channels at once.
- You can control the recorder's Transport and the tracks' REC switch on the VM mixing console.
- You can memorize 100 Location points, and also search a Location by entering Time Codes.
- You can sync Automix with the tape.
- You can also connect the sequencer to the MIDI THRU on the "LEVEL METER".
- To run the secuencer in sync with the MIDI CLOCK, connect it to the MIDI THRU on the "LEVEL METER".

NOTE

- Turn the power on in the [ADAT Series]–[VM Series] order.

48 Track Recording System (Alesis ADAT x 1)

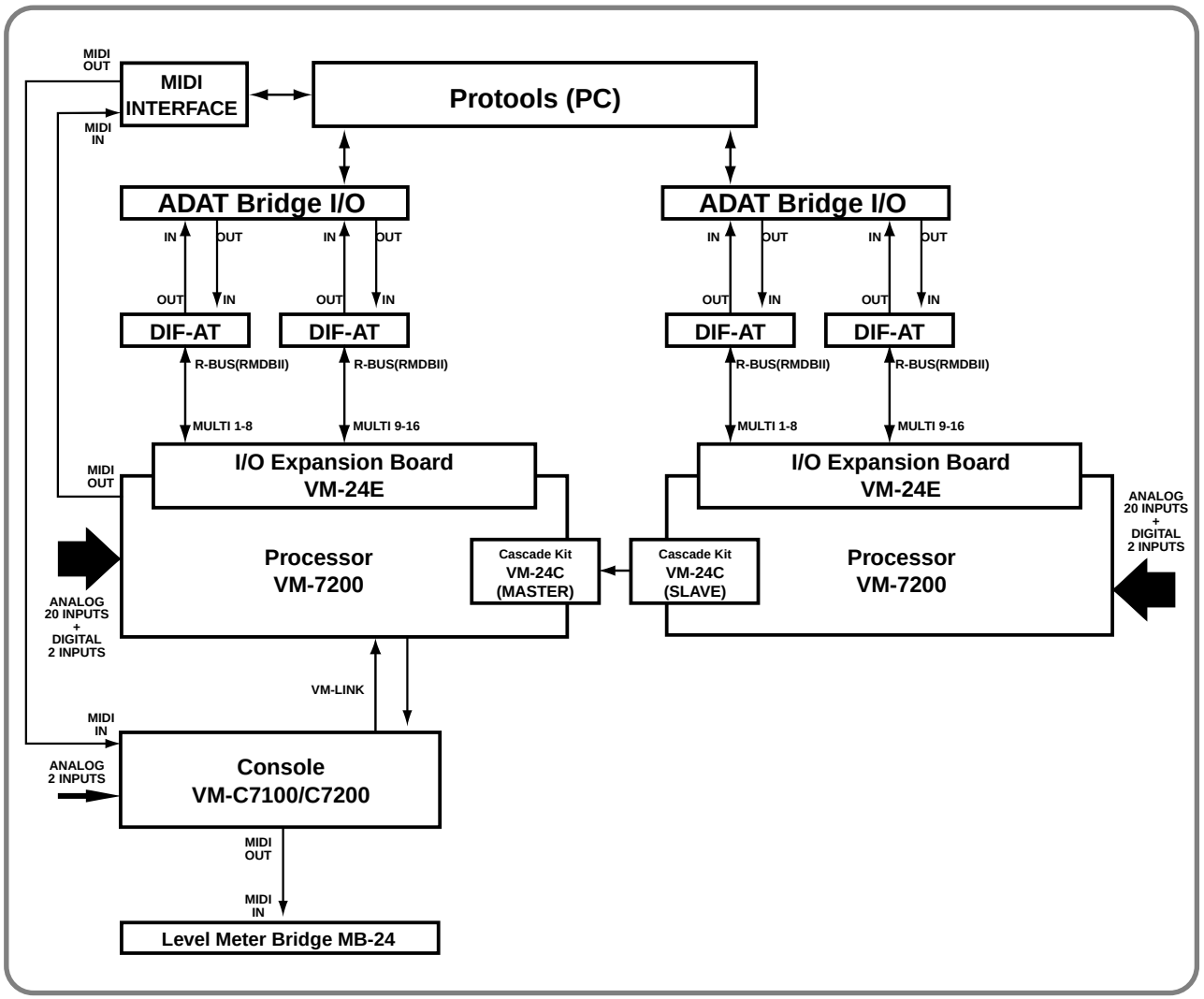


- This is an 8 Track Recording System with one Alesis ADAT Series recorder in use.
- You can mix 22 analog channels + 2 digital channels + 8 tape channels at once.
- You can control the recorder's Transport and the tracks' REC switch on the VM mixing console.
- You can memorize 100 Location points, and also search a Location by entering Time Codes.
- You can sync Automix with the tape.
- You can also connect the sequencer to the MIDI THRU on the "LEVEL METER".
- To run the secuencer in sync with the MIDI CLOCK, connect it to the MIDI THRU on the "LEVEL METER".

NOTE

- Turn the power on in the [ADAT Series]–[VM Series] order.

Connection Sample Using Digidesign Protools



- This is a sample for connections with a Protools device using two ADAT Bridge I/O.
- You can mix 42 analog channels + 4 digital channels + 32 Protools channels at once.
- You can control the Protools' Transport on the VM mixing console.
- You can memorize 100 Location points, and also search a Location by entering Time Codes.
- You can sync Automix with the Protools.

NOTE

- Turn the power on in the [Protools]–[VM Series] order.
- 50 Scenes can be stored per Project (because of cascade connection).

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02128867 '99-12-B3-11N