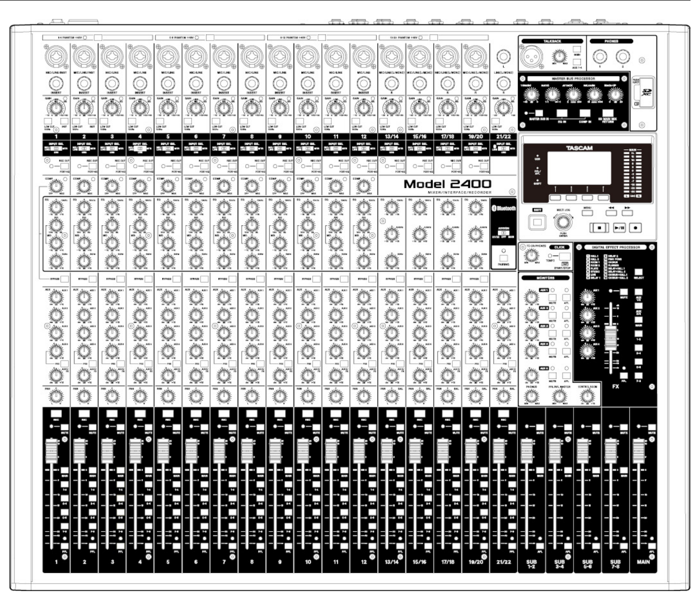
TASCAM

D01438920A

Model 2400

Multitrack Recording Console

OWNER'S MANUAL



1 - Introduction

Thank you very much for purchasing the TASCAM Model 2400 Multitrack Recording Console.
Before using this unit, read this Owner's Manual carefully so that you will be able to use it correctly and enjoy working with it for many years. After you have finished reading this manual, please keep it in a safe place for future reference.
You can also download this Owner's Manual from the TEAC Global Site (https://teac-global.com/).

Features

- 22 input analog mixer with 22 line and 12 mic inputs
- Multitrack recording and playback with 24-track recording (input channels 1–12 and 13/14–21/22 and MAIN MIX L/R bus)
- USB audio interface functions built-in
  - 24 inputs (22 input channels and MAIN MIX L/R bus) can be input to a computer
  - 22 outputs and computer outputs can be assigned to channel inputs (channels 1–12 and 13/14–21/22)
  - Supports USB 2.0 audio with resolutions up to 24-bit and 48 kHz sampling frequency
- Ultra-HDDA mic preamps built-in (for channels 1–12)
- Phantom power (+48V) can be turned on/off in groups of 4 channels
- Mono input channels 1–12 have inserts, analog compressors and 3-band semi-parametric EQs
- Mono input channels 1–2 have TRS jacks that support high-impedance (Hi-Z) input
- Stereo input channels 13/14–19/20 have 3-band EQs
- REC-OUT (POST-EQ) switches enable recording audio with EQ
- BYPASS switches can be used to bypass COMP/EQ on channels
- Numerous buses include stereo main (MAIN MIX L/R) and stereo sub (SUB 1–2, 3–4, 5–6 and 7–8) buses
- 5 AUX sends include AUX 1, AUX 2, AUX 3, AUX 4 (Pre/Post) and AUX 5 (combined with FX)
- MASTER BUS PROCESSOR with 4-band digital equalizer and compressor on MAIN output
- MAIN OUTPUT has bus insert jacks
- Input channels and the FX return have PFL, and the AUX masters, SUB buses and MAIN have AFL
- TALKBACK jack connected to MAIN and AUX 1–4
- 100mm faders enable precise adjustments
- Track swap function that replaces tracks recorded on SD cards
- Punching in and out function per track (including punching in and out automatically and with footswitches)
- DAW transport control and track recording control functions with HUI/MCU emulation supported by major DAWs
- MIDI interface function enables MIDI keyboard input when using a DAW, output to connected MIDI sound sources, and output to drum machines and sequencers with MTC/MIDI CLOCK output
- 16 TASCAM preset effects support precise parameter adjustments
- CLICK output that supports TAP TEMPO
- Multiple footswitch functions available (select play/pause, effect muting or punch in/out)
- Audio playback and recording from devices connected by Bluetooth® supported
- Audio delay for USB output can be adjusted (0–2000 ms)
- 2 headphone output jacks
- Free Settings Panel app (Windows/Mac) includes a metering screen that can be adjusted for size

Conventions used in this manual

In this manual, we use the following conventions:

- The four buttons under the display are called the function buttons. From left to right, they are shown as buttons F1, F2, F3 and F4. Moreover, the functions at the bottoms of the screens will be shown after the button names.
  Examples: F1 METR button, F4 MARK button
- SD/SDHC/SDXC memory cards are referred to as "SD cards".
- Computers, portable audio devices and other equipment connected to this unit using Bluetooth are called "Bluetooth devices".
- Groups of recorded data are referred to as "songs".
- The song that is currently selected is called the "current song".
- Information shown on a computer display is written like this: "OK".
- References to "iOS" in this document also include "iPad OS".
- Additional information is introduced in the styles below when needed:

TIP

These are tips about how to use the unit.

NOTE

These provide additional explanations and describe special cases.

ATTENTION

Failure to follow these instructions could result in damage to equipment or lost data, for example.

⚠ CAUTION

Failure to follow these instructions could result in injury.

Trademarks and copyrights

- TASCAM is a registered trademark of TEAC Corporation.
- SDXC Logo is a trademark of SD-3C, LLC.
- The Bluetooth® word mark and logo are the property of Bluetooth SIG, Inc. and are used by TEAC Corporation with permission.
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About SD cards

This unit uses SD cards for recording and playback.
This unit can use SD cards that are Class 10 or higher and compatible with SD, SDHC or SDXC standards.
A list of SD cards that have been confirmed for use with this unit can be found on our web site. Access this list from the product page of this product on the TEAC Global Site (https://teac-global.com) or contact the TASCAM customer support service.

NOTE

When using external media (SD cards) with our products, we strongly recommend using media confirmed to work with them.
Media that has not been confirmed to work with this product can be used, but unexpected problems could occur.

Precautions for use

SD cards are delicate media.
In order to avoid damaging SD cards, please take the following precautions when handling them.

- Do not leave them in extremely hot or cold places.
- Do not leave them in extremely humid places.
- Do not let them get wet.
- Do not put things on top of them or twist them.
- Do not hit them.
- Do not remove or insert them during recording, playback, data transmission or other access.
- When transporting them, put them into cases, for example.

SD card write protection

This unit writes track information to the media in order to improve operation performance. Since, for example, setting information cannot be written to SD cards that are writeprotected, settings will not be retained when the unit is restarted and performance will be otherwise affected.

Note about formatting

SD cards formatted by this unit are optimized to improve performance during recording. Use this unit to format the SD cards to be used with it. Errors might occur when recording with this unit using an SD card formatted by a computer or other device.

Bluetooth®

This unit has a built-in Bluetooth audio receiver, and can input sound played on a computer or portable audio device that supports Bluetooth (Bluetooth device).

ATTENTION

The Bluetooth function of this unit is not guaranteed to enable connection or operation with all Bluetooth devices.

Profiles

This unit supports the following Bluetooth profiles.

- A2DP (Advanced Audio Distribution Profile)

In order to transfer audio by Bluetooth, the Bluetooth device must support A2DP.
Even if a Bluetooth device supports the same profiles, though, its functions might differ according to its specifications.

Codecs

This unit supports the following codecs. It will automatically select one of them during audio transfer.

- SBC
- AAC

The unit will select the appropriate codec to use according to the codec compatibility of the other Bluetooth device and communication conditions.

NOTE

- You cannot select the codec to be used by pressing a button, for example.
- Due to characteristics of Bluetooth wireless technology, playback from this unit will be slightly delayed compared to playback from the Bluetooth device.

Content protection

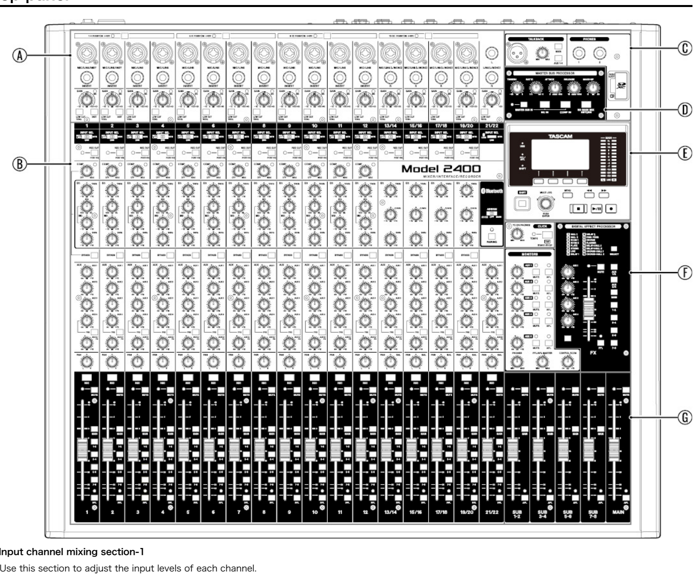
This unit supports SCMS-T as a form of content protection when transmitting audio, so it can play protected audio.

Transmission security

This unit supports security functions during Bluetooth transmission in accordance with the Bluetooth standard specifications, but it does not guarantee the privacy of such transmissions.
TEAC CORPORATION will bear no responsibility should an information leak occur during transmission by Bluetooth.

2 - Names and Functions of Parts

Top panel



Ⓐ **Input channel mixing section-1**
Use this section to adjust the input levels of each channel.

Ⓑ **Input channel mixing section-2**
Use this section to choose input sources for each channel, adjust compressors and equalizers, and set levels sent to each bus (MAIN MIX L/R, PFL/AFL L/R, AUX 1–4, AUX 5/FX, SUB 1–2 – 7–8). (see "Input channel mixing section-2")

Ⓒ **Talkback / headphone output jack / SD card slot section**
Control talkback, connect headphones and insert SD cards here. (see "Talkback / headphone output jack / SD card slot section")

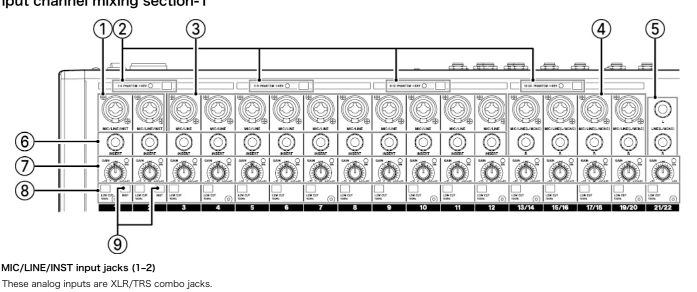
Ⓓ **MASTER BUS PROCESSOR section**
Select the signal that is output from the MAIN OUTPUT jacks and set the MASTER BUS PROCESSOR compressor and equalizer here. (see "MASTER BUS PROCESSOR functions")

Ⓔ **Screen operation section**
Use this section to operate the meter, home and MENU screens shown on the display. (see "Screen operation section")

Ⓕ **Monitoring section**
Set the CLICK function and adjust the output levels from the AUX OUTPUT jacks (1–5) and the built-in effects, for example, here. (see "Monitoring section")

Ⓖ **Analog output adjustment section**
Adjust the output levels from the MAIN OUTPUT, SUB OUTPUT jacks in this section. (see "Analog output adjustment section")

Input channel mixing section-1



① **MIC/LINE/INST input jacks (1–2)**
These analog inputs are XLR/TRS combo jacks.
- XLR (1: GND, 2: HOT, 3: COLD)
- TRS (Tip: HOT, Ring: COLD, Sleeve: GND)

The balanced XLR jacks are for XLR balanced mic input.
These standard TRS jacks are for line input.
When directly connecting a guitar, bass or other instrument, use a TRS jack and turn on (pushed in) the INST switch.

NOTE

When an INST switch is on , input through that MIC/LINE/INST input jack will be unbalanced.

② **PHANTOM +48V switch and indicator**
Use this switch to supply +48V phantom power to the 1–4, 5–8 and 13/14–19/20 MIC input jacks on the top of the unit.
The indicator lights when the PHANTOM +48V switch is set to on (pushed in). (see "Setting phantom power")

③ **MIC/LINE input jacks (3–12)**
These analog inputs are XLR/TRS combo jacks.
- XLR (1: GND, 2: HOT, 3: COLD)
- TRS (Tip: HOT, Ring: COLD, Sleeve: GND)

The balanced XLR jacks are for XLR balanced mic input.
These standard TRS jacks are for balanced line input.

④ **MIC/LINE (L/MONO) input jacks (13/14–19/20)**
These XLR/TRS combo jacks and standard TRS jacks are stereo analog input jacks.
- XLR (1: GND, 2: HOT, 3: COLD)
- TRS (Tip: HOT, Ring: COLD, Sleeve: GND)

The balanced XLR jacks are for XLR balanced mic input.
These standard TRS jacks are for balanced line input. If only the L jack is connected, the same signal will be sent to both L and R channels.

⑤ **LINE (L/MONO) input jacks (21/22)**
These standard TRS jacks are stereo line inputs.
If only the L jack is connected, the same signal will be sent to both L and R channels.
- TRS (Tip: HOT, Ring: COLD, Sleeve: GND)

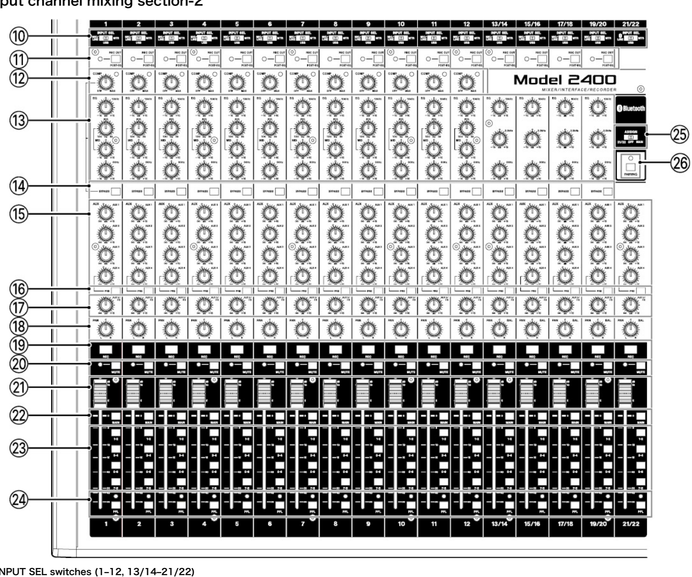
⑥ **INSERT jacks (1–12, standard)**
Use these standard TRS jacks to connect external devices (effects).
- TRS (Tip: SEND, Ring: RETURN, Sleeve: GND)

⑦ **GAIN knobs and SIG indicators (1–12, 13/14–21/22)**
Use the GAIN knobs to adjust the input levels of each channel.
its SIG indicator will light green when a signal is input (–18 dBu or higher: MIC input).
If a SIG indicator stays lit red continuously, lower the GAIN knob (+7dBu or higher: MIC input).

⑧ **LOW CUT switches (1–12, 13/14–21/22)**
Turn this switch on (pushed in) to enable low cut filters that cut noise and other sounds at low frequencies.
(Cutoff frequency: 100 Hz)

⑨ **INST switches (1–2)**
Set these according to the input sources of the MIC/LINE/INST (1–2) TRS input jacks.
Turn the INST switch on (pushed in) when connecting an guitar, bass or other equipment with high output impedance.
Turn the INST switch off (not pushed in) when connecting electronic instruments, audio devices, mics and other equipment.

Input channel mixing section-2



⑩ **INPUT SEL switches (1–12, 13/14–21/22)**
Use these to select the input source for each channel. (see "Setting the INPUT SEL switch")

⑪ **REC OUT switches and indicators (1–12, 13/14–19/20)**
When these switches are on (set to POST-EQ), the audio recorded to the SD card and sent by USB to the computer will be processed by the equalizer beforehand. (see "REC OUT switch function (channels 1–12, 13/14–19/20)")

⑫ **COMP knobs and indicators (1–12)**
Use these knobs to adjust the compression thresholds for the signals input to each channel.
When compression is being applied, the COMP indicators light.

⑬ **EQ knobs (1–12, 13/14–19/20)**
- Use these to boost and attenuate the HIGH, MID and LOW bands of each channel.

Setting range: –15dB – +15 dB

⑭ **BYPASS switches (1–12, 13/14–19/20)**
When these switches are on, the compressor and equalizer settings for the corresponding channels will not be applied.

⑮ **AUX 1–4 knobs (1–12, 13/14–21/22)**
Use these to adjust the levels of the signals sent to the AUX 1–4 buses.

⑯ **AUX 4 PRE switches (1–12, 13/14–21/22)**
When these switches are on, the signals sent to the AUX 4 bus, which are normally post-fader will become pre-fader.

⑰ **AUX 5/FX knobs (1–12, 13/14–21/22)**
Use to adjust the levels of the signals sent to the AUX 5/FX bus (POST FADER).

⑱ **PAN knobs (1–12, 13/14–21/22)**
Use to adjust the stereo positions of the signals input to each channel.

NOTE

- When PAN knobs are centered (C), signals are reduced by 3 dB and sent to both left and right MAIN MIX L/R bus.
- When a PAN knob is turned all the way to the left (L), that channel signal is sent only to the left MAIN MIX L/R bus. It is not sent to the right bus.
- When a PAN knob is turned all the way to the right (R), that channel signal is sent only to the right MAIN MIX L/R bus. It is not sent to the left bus.

⑲ **REC buttons and indicators (1–12, 13/14–21/22)**
Use these to select the channels to record to the SD card.
- When these buttons are on (indicators blinking), those channels are in recording standby.
- When the indicators of these buttons are lit (without blinking), those channels are recording.

⑳ **MUTE switches and indicators (1–12, 13/14–21/22)**
When these switches are on (pushed in, MUTE indicator lit), those channels are muted.

㉑ **Channel faders (1–12, 13/14–21/22)**
Use these to adjust the send levels of channel signals.

㉒ **MAIN switches (1–12, 13/14–21/22)**
Turn these switches on (pushed in) to send channel signals to the MAIN MIX L/R bus.

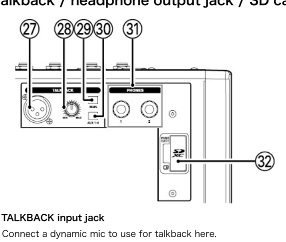
㉓ **SUB switches (1–12, 13/14–21/22)**
Turn these switches on (pushed in) to send channel signals to the SUB buses.

㉔ **PFL switches and indicators (1–12, 13/14–21/22)**
Turn these switches on (pushed in) to send channel signals to the PFL/AFL L/R bus.

㉕ **ASSIGN switch**
Sound from the Bluetooth device is sent to channels 21/22 when this switch is set to "21/22" or the MAIN MIX L/R bus when it is set to "MAIN".

㉖ **PAIRING button and indicator**
Press and hold this button to activate Bluetooth pairing mode.
Press when pairing to end pairing mode. (see "Connecting with Bluetooth devices")

Talkback / headphone output jack / SD card slot section



㉗ **TALKBACK input jack**
Connect a dynamic mic to use for talkback here.

㉘ **TALKBACK volume**
Use this to adjust the TALKBACK input level.

㉙ **TALKBACK MAIN switch**
Use this to send the TALKBACK audio to the MAIN MIX L/R bus.

㉚ **TALKBACK AUX 1–4 switch**
Use this to send the TALKBACK audio to the AUX 1–4 buses.

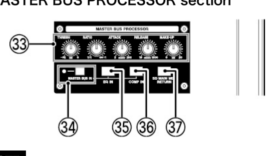
㉛ **PHONES jack (1/2)**
Use this standard stereo jack to connect stereo headphones. Use commercially-available adapters to connect headphones with mini plugs.
These can be used to monitor signals from the MAIN MIX L/R or PFL/AFL L/R buses. (see "Block diagram")

NOTE

The output levels of the 1 and 2 PHONES jacks cannot be adjusted individually.

㉜ **SD card slot**
Insert SD cards in this slot. (see "Inserting and removing SD cards")

MASTER BUS PROCESSOR section



NOTE

See "MASTER BUS PROCESSOR functions" for details about the MASTER BUS PROCESSOR.

㉝ **MASTER BUS PROCESSOR compressor adjustment knobs**
Use these to adjust the MASTER BUS PROCESSOR compressor.

㉞ **MASTER BUS IN switch and indicator**
When this switch is on, audio that has passed through the MASTER BUS PROCESSOR will be output from the MAIN OUTPUT jacks. The indicator lights when this switch is on.

㉟ **EQ IN button/indicator**
Use this to set the MASTER BUS PROCESSOR equalizer. (see "Setting the MASTER BUS PROCESSOR equalizer (master section equalizer)")

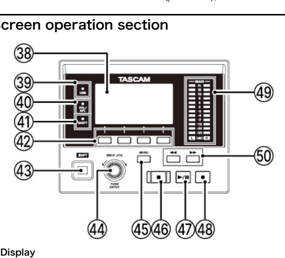
㊱ **COMP IN button/indicator**
Use this to set the MASTER BUS PROCESSOR compressor. (see "Setting the MASTER BUS PROCESSOR compressor (master section compressor)")

㊲ **SD MAIN MIX RETURN button/indicator**
Use this to switch on/off the SD MAIN MIX RETURN function.

ATTENTION

Be aware that when this switch is on (pushed in), the sound of the MAIN MIX L/R bus is not output.

Screen operation section



㊳ **Display**
Shows a variety of information.

㊴ **USB indicator**
This lights when the USB connection is working.

㊵ **PFL/AFL indicator**
This indicator lights when a PFL switch is on for at least one channel or when an PFL switch for AUX 1–5 or the FX fader is on.

㊶ **SHIFT indicator**
The SHIFT indicator lights when the SHIFT function is on.

㊷ **Function buttons**
The functions of these buttons change depending on the screen shown on the display. The functions shown at the bottom of the display are the currently assigned functions.

NOTE

For convenience, the four buttons under the display are called the function buttons in this manual. From left to right, they are called the F1, F2, F3 and F4 buttons.

㊸ **SHIFT button**
To use an alternate function of a function button or other control, press and hold this button while operating that control.
SHIFT lock status, which is the same as continuously pressing the SHIFT button, can be activated by briefly pressing the SHIFT button by itself.

㊹ **MULTI JOG dial**
This dial functions as a dial when turned and as a button when pressed.

Dial functions
- Turn when the Home Screen is open to move the file playback position. (see "Locate function")
- When a MENU Screen is open, turn to select items and change setting values. (see "Basic MENU screen operations")

Button function
- Press when the Home Screen is open to designate a locate point. (see "Locate function")
- When a Menu Screen is open, press to confirm selections and settings (ENTER button function).

㊺ **MENU button**
- When the Meter Screen is open, press to open the Home Screen.
- When the MENU Screen or a menu item settings screen is open, press to return to the Home Screen.
- When the Home Screen is open, press to open the MENU Screen. (See "Menu structure" and "Basic MENU screen operations".)

㊻ **■ button/indicator**
Press to stop playback or recording.
This button lights when stopped.
Press this button when paused to return to the beginning of the song or file.

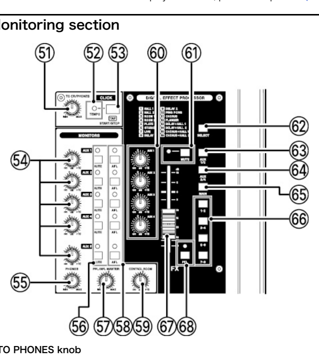
㊼ **►/❚❚ button/indicator**
Press this button to start playback.
Press to pause when playing.
This button lights during playback and recording.
This button blinks when paused.

㊽ **● button/indicator**
Press this button to start recording.
This button lights during recording.
Press this button during playback to start recording (Manual punch in).

㊾ **Output level indicators**
These show the output levels of the MAIN OUTPUT jacks.
When the PFL/AFL indicator is lit, these show the output levels from the PFL/AFL L/R bus.

㊿ **◄◄/►► buttons**
- When stopped and during playback, press and hold these buttons to search backward/forward.
- When the Home Screen is open, press the ◄◄ button to locate to the beginning of the current song (00:00:00, which is the zero point).
- When the Home Screen is open, press the ►► button to locate to the end of the current song.
- If the current song has auto punch in or out points set, you can also locate to those points.
- If the current song has marks set, these can also be used to locate to them.
- While pressing the ■ button, press the ◄◄ button to locate to the point where recording last started.
- While pressing the ■ button, press the ►► button to locate to the point where recording last stopped.
- When the SD PLAY Screen is in playback state, press to skip a file. (see "Playing WAV files on SD cards (SD PLAY mode)")

Monitoring section



(51) **TO PHONES knob**
Use this to adjust the level of the click sound sent to the headphone outputs.

(52) **TEMPO indicator**
- This lights green when a song that has click sound output set is loaded.
- When the metronome is operating, it lights or blinks as follows. (see "Metronome functions")

Indicator color	Meaning
Red	This color lights on the first beat of the setting
Green	This blinks at the set tempo

(53) **CLICK button**
- Press this button when the metronome is stopped to start it at the set tempo. Press this button when the metronome is on to stop it. (see "Starting and stopping the metronome manually")
- When the TAP TEMPO screen is open, tap this button repeatedly at the desired tempo to set the metronome. (see "Making metronome settings")
- When the EFFECT screen is open, tap this button repeatedly at the desired speed to set the delay of the built-in effect. (see "Setting the built-in effect")

(54) **AUX 1–5 knobs**
Use these to adjust the output levels of the 1–5 AUX OUTPUT jacks.

(55) **PHONES knob**
Use this to adjust the headphone output level.

⚠ CAUTION

Before connecting headphones, minimize the volume with the PHONES knob. Failure to do so could result in a sudden loud noise that could harm hearing, for example.

NOTE

The output levels of the 1 and 2 PHONES jacks cannot be adjusted individually.

(56) **MUTE switches and indicators (AUX 1–5)**
When these switches are on (indicators lit), signals to the corresponding AUX OUTPUT (1–5) jacks are muted.

(57) **PFL/AFL MASTER knob**
Use this to adjust the send level from the PFL/AFL L/R bus.

(58) **AFL switches and indicators (AUX 1–5)**
When these switches are on (indicators lit), the output signals of the AUX OUTPUT jacks (1–5) are sent to the PFL/AFL L/R bus.

NOTE

When these switches are on, the sound of the PFL/AFL L/R bus can be monitored with headphones.

(59) **CONTROL ROOM knob**
Use to adjust the output levels of the CONTROL ROOM L/R jacks.

(60) **AUX knobs (FX)**
Use these to adjust the levels of signals sent from the built-in effect processor to each AUX bus.

(61) **MUTE switch and indicator (FX)**
When the MUTE switch are on (pushed in, MUTE indicator lit), the signal from the built-in effect is muted.

(62) **SELECT button**

(1) SD card slot and protection switches

SD card for recording/playback. Insert the card with the label side facing up.

Turning the power on and off

Before turning the power on

1. Press the Standby/Power switch on the rear of the unit.
   (Power indicator lit: ● of the rear left)
2. Turn the power on the connected equipment.
   amplifier ● of the unit
3. Minimize the output levels of audio sources and input levels of amplifiers connected to the unit.

Turning the power on

1. Press the Standby/Power switch on the front of the unit to turn the power on.

Initial screen

Setup screen

Press the Setup button to open the Setup Screen. Use the Meter Screen set-ups.

Setup screen

- Press the MENU button to open the menu screen.
- Turn the Jog Dial to select the menu item.
- Press the Jog Dial or the Enter button to confirm the selected item.
- Press the MENU button to return to the MENU Screen.

3 - Preparation

Connecting the power supply and other equipment

This is an example of Model DVR0 connections.

Connecting the power supply and other equipment

- Carefully read the operation manuals of the devices to be connected and then connect them correctly.
- Connect the power supply cable of the unit to the AC outlet only after all connections are completed.
- Do not bundle the power supply cable of the unit together with other cables. When using a rack or similar device, be sure to use the high-current capacity black cable or equivalent. Failure to do so may cause sound distortion or hum.
- Use the high-current capacity black cable or equivalent for the power supply cable. Failure to do so could cause sudden blackouts.
- Connect the power supply cable of the equipment to hard flooring.
- Do not connect the power supply cable to:
  - Internal heaters (ceramic, i.e. 1.0 1.0 21.0)
  - Motors (i.e. 0.5 0.5 10.0 0.5 0.5)
  - HID, or fluorescent lamps
  - UPS
  - Inverters
  - Electronic ballasts
  - Electronic transformers
  - Electronic equipment
- Use the PHONES jack carefully.

Connection of connectors to a Model DVR0

Connecting microphones

Dynamic mics

- Connect to the MIC/LINE/PHONES and MIC/LINE input jacks on the top of the unit.

Condenser mics

- When using a condenser microphone that requires phantom power, connect it to a MIC/LINE/PHONES or MIC/LINE input jacks and then turn on the phantom power switch on the rear of the unit.
- Do not connect or disconnect the microphone while the phantom power is on.

Connecting guitars, basses and similar instruments

- Connect to the MIC/LINE/PHONES or MIC/LINE input jacks on the top of the unit.
- Use a DI (Direct Injection) Box when connecting a guitar or bass directly to the unit.

Connecting headphones

- Connecting headphones with extra output or when the unit passes through an effects unit, for example, that is connected to the unit, the MIX OUT jacks.
- When an MIX output is set to Pre-Fader through the MIX LEVEL/MUTE Pre/Post gain set-up.

Connecting electronic devices and other audio equipment

- Use the following ways to connect electronic devices and other audio equipment:
  - Use the Analog Input jacks on the rear of the unit.
  - Use the Digital Input jack on the rear of the unit.
  - Use the USB port on the front of the unit.

Connecting monitor speakers

- Connecting monitor speakers to the Analog Output jacks on the rear of the unit.
- Connecting monitor speakers to the Digital Output jack on the rear of the unit.
- Use the CONTROL PORTS jack to adjust the speaker volume.

Connecting headphones

- Connecting headphones to the Phones jack on the front of the unit.
- The following signals can be monitored through the PFL and AFL switch settings.
  - Channel signals (PFL)
  - Main mix signals (AFL)

CAUTION

- When using headphones, minimize the volume with the PHONES knob. Failure to do so could result in a sudden loud noise that could hurt hearing. Tip

Connecting a computer

- Use a USB cable to connect the unit to a computer and use a connection that matches the computer USB port on the rear and USB port (USB2.0/USB1.1) on the front of the unit.
- Turn the power on after connecting. For USB connection to the computer operation set-ups.

Tip

- Connecting the unit to the computer through a USB hub is not recommended.

Connecting with iOS devices

- Connecting with iOS devices using the Lightning connector, use a Lightning to USB Camera Adapter* (iOS 4.2.1 or later).
- To connect the unit and an iOS device that has a USB Type-C connector, use a USB-A/C cable.
- Connecting with iOS devices using the USB port on the front of the unit.

Connecting with Bluetooth devices

Pairing

- Pairing is necessary before to enable communication with a Bluetooth device.

Tip

- Pairing requires operation of the Bluetooth device.
- Refer to the operation manual of the Bluetooth device for procedures.
- Pairing is possible with up to 8 devices.
- Confirm that the PAIRING indicator on the unit is blinking.
  - PAIRING press the PAIRING button.

Tip

- While the unit is connected, or is attempting connection, the PAIRING indicator is lit. If multiple pairs is pairing mode, it will blink. Press the button to reactivate pairing mode.

Connection

- Connecting with a Bluetooth device, the PAIRING indicator will stop blinking and remain lit, and connection with the other device will be complete.

Tip

- Connection with the unit is possible from the connection method of a USB Audio Wireless Client (sold separately) or a Bluetooth adapter.

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Inserting SD cards

- Insert the SD card into the slot on the rear of the unit in a single sequence and monitoring the unit.

Tip

- Insert an formatted whether or not the card is on or off.

1. Open the SD card slot cover.
2. Insert the SD card into the slot (with the label facing left).
3. Close the SD card slot cover.

Removing SD cards

- Remove the SD card from the slot.

Tip

- Do not remove the SD card while the unit is operating (including recording, playback, or writing data to the SD card). Doing so could cause proper recording and playback to be impossible, or cause the unit to stop operating. Recording and playback which might damage the equipment, leaving no usable other than the unit.
- Do not remove the SD card while the unit is in the power off mode. Doing so could cause data loss or damage to the SD card. Doing so could cause proper recording and playback to be impossible, or cause the unit to stop operating. Recording and playback which might damage the equipment, leaving no usable other than the unit.

Turning the power on and off

Before turning the power on

1. Minimize the output levels of audio sources and input levels of amplifiers connected to the unit.

Turning the power on

1. Turn the power on the connected equipment.
2. Press the Standby/Power switch on the front of the unit to turn the power on.

Initial screen

Setup screen

- Press the Setup button to open the Setup Screen.
- Use the Meter Screen set-ups.

- Press the MENU button to open the menu screen.
- Turn the Jog Dial to select the menu item.
- Press the Jog Dial or the Enter button to confirm the selected item.
- Press the MENU button to return to the MENU Screen.

3 - Preparation

Connecting the power supply and other equipment

This is an example of Model DVR0 connections.

Connecting the power supply and other equipment

- Carefully read the operation manuals of the devices to be connected and then connect them correctly.
- Connect the power supply cable of the unit to the AC outlet only after all connections are completed.
- Do not bundle the power supply cable of the unit together with other cables. When using a rack or similar device, be sure to use the high-current capacity black cable or equivalent. Failure to do so may cause sound distortion or hum.
- Use the high-current capacity black cable or equivalent for the power supply cable. Failure to do so could cause sudden blackouts.
- Connect the power supply cable of the equipment to hard flooring.
- Do not connect the power supply cable to:
  - Internal heaters (ceramic, i.e. 1.0 1.0 21.0)
  - Motors (i.e. 0.5 0.5 10.0 0.5 0.5)
  - HID, or fluorescent lamps
  - UPS
  - Inverters
  - Electronic ballasts
  - Electronic transformers
  - Electronic equipment
- Use the PHONES jack carefully.

Connection of connectors to a Model DVR0

Connecting microphones

Dynamic mics

- Connect to the MIC/LINE/PHONES and MIC/LINE input jacks on the top of the unit.

Condenser mics

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- The following signals can be monitored through the PFL and AFL switch settings.
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CAUTION

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- Turn the power on after connecting. For USB connection to the computer operation set-ups.

Tip

- Connecting the unit to the computer through a USB hub is not recommended

3 - Setting Your Clock

Set the clock in order to change a value, and press the SELECT button to confirm and move the cursor to the next item.

Step 1

Set the **YEAR** value.
Use the ▲ and ▼ keys to set the year, then press the SELECT button to move the cursor.

Step 2

Set the **MONTH** value.
Use the ▲ and ▼ keys to set the month, then press the SELECT button to complete the date and time setting.

Step 3

Set the **DAYLIGHT SAVING** time, and press the SELECT button to confirm.
Use the ▲ and ▼ keys to set the DAYLIGHT SAVING time, then press the SELECT button to confirm.

Step 4

Set the **TIME** value.
Use the ▲ and ▼ keys to set the time, then press the SELECT button to complete the date and time setting.

Step 5

Set the **DAYLIGHT SAVING** time, and press the SELECT button to complete the date and time setting.
Use the ▲ and ▼ keys to set the DAYLIGHT SAVING time, then press the SELECT button to complete the date and time setting.

Step 6

Set the **TIME** value.
Use the ▲ and ▼ keys to set the time, then press the SELECT button to complete the date and time setting.

Step 7

Set the **DAYLIGHT SAVING** time, and press the SELECT button to complete the date and time setting.
Use the ▲ and ▼ keys to set the DAYLIGHT SAVING time, then press the SELECT button to complete the date and time setting.

NOTE

Set the date and time correctly, as the date and time are written at the factory.

WARNING

Incorrect date and time settings may cause the alarm function to operate improperly.

Adjusting the display contrast

1. When the controller is stopped, select DISPLAY on the SYSTEM Screen, and open the DISPLAY Screen. (see "Menu operation procedures")

Step 1

Adjust the display contrast.
Use the ▲ and ▼ keys to adjust the display contrast, then press the SELECT button to confirm the setting.

Step 2

Adjust the display contrast.
Use the ▲ and ▼ keys to adjust the display contrast, then press the SELECT button to confirm the setting.

Step 3

Adjust the display contrast.
Use the ▲ and ▼ keys to adjust the display contrast, then press the SELECT button to confirm the setting.

Step 4

Adjust the display contrast.
Use the ▲ and ▼ keys to adjust the display contrast, then press the SELECT button to confirm the setting.

Step 5

Adjust the display contrast.
Use the ▲ and ▼ keys to adjust the display contrast, then press the SELECT button to confirm the setting.

Step 6

Adjust the display contrast.
Use the ▲ and ▼ keys to adjust the display contrast, then press the SELECT button to confirm the setting.

Step 7

Adjust the display contrast.
Use the ▲ and ▼ keys to adjust the display contrast, then press the SELECT button to confirm the setting.

Step 8

Adjust the display contrast.
Use the ▲ and ▼ keys to adjust the display contrast, then press the SELECT button to confirm the setting.

Step 9

Adjust the display contrast.
Use the ▲ and ▼ keys to adjust the display contrast, then press the SELECT button to confirm the setting.

Step 10

Adjust the display contrast.
Use the ▲ and ▼ keys to adjust the display contrast, then press the SELECT button to confirm the setting.

Step 11

Adjust the display contrast.
Use the ▲ and ▼ keys to adjust the display contrast, then press the SELECT button to confirm the setting.

Step 12

Adjust the display contrast.
Use the ▲ and ▼ keys to adjust the display contrast, then press the SELECT button to confirm the setting.

Step 13

Adjust the display contrast.
Use the ▲ and ▼ keys to adjust the display contrast, then press the SELECT button to confirm the setting.

Step 14

Adjust the display contrast.
Use the ▲ and ▼ keys to adjust the display contrast, then press the SELECT button to confirm the setting.

Step 15

Adjust the display contrast.
Use the ▲ and ▼ keys to adjust the display contrast, then press the SELECT button to complete the setting.

Preparing an SD card for use

Prepare the SD card loaded in the unit, whether for recording or playback, the unit must be used to create a system for up to 1 file.

NOTE

Use a formatted SD card that has been used by Panasonic or Panasonic-compatible devices.

WARNING

Use a commercial mobile SD card with an accurate, and reasonably long operation time. Using a low-quality SD card may cause the unit to stop operating, or may cause the recorded data to be lost.

1. Tap on the Video icon, the "Are you sure?" appears in a pop-up when a new camera is a card formatted by another device is inserted into the unit.
2. Tap on the **YES** button to start formatting the SD card.

Wait for the system to complete the forms known of upper.

4 - Managing Sounds

The recorded movie and recording time can be changed and can be stored in the unit.
Recorded movie can be stored in the unit, and can be transferred to a PC.
Recorded movie can be deleted.
To record or remove movie, it is a long that the already been created needs to be loaded in a new song needs to be created.
The recorded movie can be transferred to a PC, and can be deleted from the unit. Recorded movie can be transferred to various song management software.

NOTE

Recorded movie cannot be deleted or otherwise edit individual files inside the "MP3" folder. Doing so could prevent playback from being a song and make proper playback impossible.

WARNING

Recorded movie recording time is a single song is 255MB.
Recorded movie files that have a size of 255MB or more separate files in a collapsible. Do not use the files or the SD card directly.

Viewing the song list

To make use of songs stored on an SD card, select DISPLAY on the MENU Screen, and press the SELECT button to open the SYSTEM Screen. (see "Menu operation procedures")

Step 1

Select the song.
Use the ▲ and ▼ keys to select the song, then press the SELECT button to open the SYSTEM Screen. (see "Menu operation procedures")

Step 2

Select the **SONG LIST** icon, and press the SELECT button to open the SONG LIST Screen.

Step 3

Select the **SONG LIST** icon, and press the SELECT button to open the SONG LIST Screen.

Step 4

Select the **SONG LIST** icon, and press the SELECT button to open the SONG LIST Screen.

**Step

Parameter name	Range
DELAY	0 – 99 ms
TIME	0.10 – 10.00 s
DIFFUSION	0 – 99

8. DELAY 1, 9. DELAY 2, 10. PING PONG

Parameter name	Range
TIME	1 – 1000 ms
LEVEL	–INF – –2.2 dB

11. CHORUS

Parameter name	Range
RATE	0.100 – 0.300 ms
DEPTH	5.5 – 33.0 ms
DELAY	0 – 99 ms
LEVEL	–INF – –10.1 ms

12. FLANGER

Parameter name	Range
RATE	0.10 – 5.00 Hz
DEPTH	1.00 – 8.00 ms

13. DELAY+HALL 1, 14. DELAY+HALL 2

Parameter name	Range
DELAY	1 – 1000 ms
LEVEL	–INF – –2.2 dB

15. CHORUS+HALL 1, 16. CHORUS+HALL 2

Parameter name	Range
CHORUS	0.100 – 0.300 ms
DEPTH	5.5 – 33.0 ms
DELAY	0 – 99 ms
LEVEL	–INF – –10.1 ms

6 - Recorder functions

Locate function

When the Home Screen is open, you can use the MULTI JOG dial to set the locate point.
On the Home Screen, the current position of the recorder is shown as a time in hours (h), minutes (m) and seconds (s).
By setting the time in this display area, you can change the current position of the recorder.

Changing the playback position

When the Home Screen is open and the recorder is stopped or playing back, you can use the MULTI JOG dial to set the locate point.

Using the direct locate function to locate

1. When the Home Screen is open and the recorder is stopped, press the MULTI JOG dial to enable direct locate mode. A cursor will appear at the location to be changed in the recorder counter.
2. Turn the MULTI JOG dial to change a value, and press the MULTI JOG dial to confirm it and move the cursor to the next item.
3. Change the seconds, minutes and hours in that order to move to that time as the current recorder position.
4. Press the ►/❚❚ button to start playback or the ● button to start recording from that position.

Repeat playback function

The repeat playback function can be used to play something over and over.
When the Home Screen is open, press the F2 RPT button to set the repeat playback function.

Nothing shown: The current song will keep playing regardless of whether the area is recorded or not.
S1: The current song will play and then stop.
⟲1: The current song will play repeatedly.

Punch in/out function

Punching in and out is a technique used to replace parts of already recorded tracks.
You can start playback of a recording, switch to recording when it reaches the part to be replaced (punch in), and then switch back to playback when the end of that part is reached (punch out) and stop after two seconds.

1. Determine the part you want to replace in advance.
   Select a point where the replacement audio can be combined well with the original track audio.
2. Press the REC button for the track with the part to be replaced to enter recording standby (REC button blinks).

NOTE

- Set the punch in and out points at least one second apart.
- Punching in can be used simultaneously with a maximum of 8 tracks. Press REC buttons to reduce the number of recording tracks to 8 or less.

3. Start playback before the part to be replaced.
4. When the part to be replaced is reached, press the ● button, and perform the part.
   Recording will start (punch in).
5. When the end of the part to be replaced is reached, press the ■ button.
   The unit will switch to playback and then stop after two seconds.

Using the footswitch to punch in/out

A footswitch can be used to punch in/out if the recommended TASCAM RC-1F footswitch (sold separately) is connected to the FOOTSWITCH jack on the rear panel.
To use a footswitch to punch in/out, you must set the foot switch function assignment to "PUNCH I/O" in advance. (see "Setting up the footswitch")

At step 4 above, press the footswitch instead of the ● button, and at step 5 press it again instead of the ■ button.

TASCAM RC-1F

NOTE

This unit was designed to be used with unlatched (momentary) footswitches that have to be pushed to function (shorted when pushed).

Automatic punch in/out function

Using the automatic punch in/out function, you can automatically record between punch in and out points set in advance.
To use the automatic punch in/out functions, start playback from a pre-roll point before the punch in point where recording will start.
Recording will stop when the punch out point is reached, but playback will continue for two seconds before stopping.

Setting the punch in/out points

1. When the recorder is stopped, select MTR on the MENU Screen, and open the MTR Screen. (see "Menu operation procedures")
2. Select AUTO PUNCH on the MTR Screen, and open the AUTO PUNCH Screen.
3. Press the ►/❚❚ button to start playback.
4. Press the MULTI JOG dial to set the punch in and out points.
   The set points are shown next to the IN and OUT items.

NOTE

- You can also turn the MULTI JOG dial to set the points.
- Set the punch in and out points at least one second apart.
- Press the F2 CLR button to clear set punch in and out points.
- Press the F3 I/O button to select either the punch in or out point. An ✱ icon will appear next to the selected item.

5. Press the ■ button to stop playback.
6. Press the F4 ON button to turn the automatic punch in/out function on.
   The A.PUNCH icon appears on the AUTO PUNCH Screen.
7. Press the F1 EXIT button to return to the MENU Screen.

TIP

- By setting only the punch in point, you can start recording with automatic punch in and then continue recording until you press the ■ button to stop.
- By setting only the punch out point, you can start recording by pressing the ● button and then stop recording with automatic punch out.

Setting a pre roll point

When using automatic punch in, the amount of playback time before the punch in point can be set (pre roll point).

1. When the recorder is stopped, select MTR on the MENU Screen, and open the MTR Screen. (see "Menu operation procedures")
2. Select A.PUNCH PRE ROLL on the MTR screen to open the A.PUNCH PRE ROLL screen.
3. Set the pre-roll point.

Option	Meaning
OFF	Do not locate to a point before the punch in point. Manually moving to somewhere before the punch in point beforehand will be necessary.
1sec. – 10sec. (default: 2sec.)	Locate to a pre roll point the set time before the punch in point and start playback.

4. Press the F1 EXIT button to return to the MTR Screen.

Rehearsing punching in and out

You can rehearse before punch in/out recording. In rehearsal, recording will not occur, but monitoring will be the same as if recording.

1. Press the MENU button when the recorder is stopped to open the Home Screen.
   Confirm that the A.PUNCH icon appears on the Home Screen.
2. Press the REC buttons for the tracks you want to record using automatic punch in/out.

NOTE

Punching in can be used simultaneously with a maximum of 8 tracks. Press REC buttons to reduce the number of recording tracks to 8 or less.

3. Press the ►/❚❚ button.
   Auto punch in/out rehearsal starts.
   - The transport starts playback from the pre-roll point. Both track playback and input source signals can be monitored. (see "Setting a pre roll point")
   - When the punch in point is reached, only input source signals will be monitored. The ● button will blink, showing that rehearsal mode is active.
   - When the punch out point is reached, both track playback and input source signals will be monitored. The ● button will become unlit.
   - Playback will automatically stop two seconds after the punch out point. The ►/❚❚ button will blink.

   Rehearsal can be repeated.

Using automatic punching in and out

Follow these procedures to punch in and out automatically and record.

1. Confirm that the A.PUNCH icon appears on the Home Screen.
2. Press the REC buttons for the tracks you want to record using automatic punch in/out.

NOTE

Punching in can be used simultaneously with a maximum of 8 tracks. Press REC buttons to reduce the number of recording tracks to 8 or less.

3. Press the ● button.
   - The transport starts playback from the pre-roll point. Both track playback and input source signals can be monitored. (see "Setting a pre roll point")
   - When the punch in point is reached, only the input source signal will be monitored. The ● button will light.
   - When the punch out point is reached, both track playback and input source signals will be monitored. The ● button will become unlit.
   - Playback will automatically stop two seconds after the punch out point. The ►/❚❚ button will blink.

7 - Track editing

Clearing tracks

The selected track will be cleared.

1. When the recorder is stopped, select MTR on the MENU Screen, and open the MTR Screen. (see "Menu operation procedures")
2. Select TRACK EDIT on the MTR Screen, and open the TRACK EDIT Screen.
3. Select TRACK CLEAR on the TRACK EDIT Screen, and open the TRACK CLEAR Screen.
4. Turn the MULTI JOG dial to select the track to clear, and press the MULTI JOG dial.
   A confirmation message will appear.

NOTE

Press the F2 ALL button to open a message asking to confirm that you want to clear all tracks.

5. Press the F4 YES button to clear the track(s).
   After clearing tracks completes, the TRACK CLEAR Screen will reopen.

NOTE

- To cancel clearing tracks, press the F1 NO button.
- Undoing is possible only for the last cleared track.

Importing tracks

You can import audio files that you have to tracks in the current song.
Files that can be imported to tracks must be WAV (BWF) format (".WAV" extension).
To import an audio file with a different format (.mp3, etc.) to this unit, it must be converted to a WAV file that matches the format of the song it will be imported into beforehand.

1. Connect this unit with a computer. (see "Connecting with a Computer")
2. Use the computer to copy WAV files on it to this unit's "MUSIC" folder.
3. Follow the proper disconnection procedures on the computer before disconnecting the USB cable. (see "Disconnecting")
4. When the recorder is stopped, select MTR on the MENU Screen, and open the MTR Screen. (see "Menu operation procedures")
5. Select TRACK EDIT on the MTR Screen, and open the TRACK EDIT Screen.
6. Select IMPORT on the TRACK EDIT Screen, and open the TRACK IMPORT Screen.
   WAV files in the "MUSIC" folder will be shown.
7. Select a WAV file to import.
   - Turn the MULTI JOG dial to select a WAV file.
   - Press the MULTI JOG dial when a folder is selected to show its contents.
   - Press the F1 EXIT button to return to the MENU Screen.
   - Press the F2 ← button to move up one level.
8. Press the F4 OK button.
   A confirmation message will appear if the bit length of the WAV file to be imported differs from the current song.

   Confirmation message example

   - Press the F1 NO button to return to the TRACK IMPORT screen.
   - Press the F4 YES button to continue to the TRACK IMPORT screen. In this case, the file will be imported and the bit length will be changed to match the current song.

NOTE

- If there are no openings for tracks to import, an "Import error. No track" pop-up message will appear.
- To cancel importing a track, press the F1 NO button.
- Importing is not possible under the following conditions.
  - Not enough open space is available on the SD card
  - There are no empty tracks
  - If the sampling frequency of the WAV file you are trying to import differs from the current song
    Example: Trying to import a 48 kHz WAV file when the current song is 44.1 kHz
- If there is no file that can be imported, a "No File" pop-up message will appear.

9. Select the track to import, and press the F4 YES button to import it.
   When importing completes, the TRACK IMPORT Screen reopens.

NOTE

- Press the F1 STOP button to cancel importing.
- The part of the track imported before canceling will remain; it will not be deleted.

Swapping tracks

Recorded tracks can be swapped with other tracks.

1. When the recorder is stopped, select MTR on the MENU Screen, and open the MTR Screen. (see "Menu operation procedures")
2. Select TRACK EDIT on the MTR Screen, and open the TRACK EDIT Screen.
3. Select TRACK SWAP on the TRACK EDIT Screen, and open the TRACK SWAP Screen.
4. Turn the MULTI JOG dial to select the source track to be swapped.
5. Press the MULTI JOG dial to move the cursor to the B item.
6. Turn the MULTI JOG dial to select the destination track to be swapped.
7. Press the F4 YES button to swap the track specified in the A and B items.

NOTE

This can be used as a basic bounce function by swapping the signals recorded on the MAIN tracks (the output from the MAIN OUTPUT connectors) to other tracks, and then clearing other tracks.

Normalization function

By using the normalization function, the maximum levels of tracks recorded by the MTR can be readjusted within a range of 0 to –20 dB.
Adjusting level differences between tracks makes mixing down easier. Imported tracks and MAIN MIX L/R bus recording files can also be normalized.

Using the normalization function

1. When the recorder is stopped, select MTR on the MENU Screen, and open the MTR Screen. (see "Menu operation procedures")
2. Select TRACK EDIT on the MTR Screen, and open the TRACK EDIT Screen.
3. On the TRACK EDIT Screen, select NORMALIZE and open the NORMALIZE Screen.
4. Turn the MULTI JOG dial to select a track to normalize.
5. Turn the MULTI JOG dial to select the normalization level.
   Options: 0 – –20 dB (default: 0 dB)
6. Press the F4 YES button to normalize the specified track.
   - During conversion, press the F1 STOP button to cancel processing. Normalization will not be conducted if canceled.

   A "Process done" message will appear after it completes.
7. Turning the MULTI JOG dial to change the track or level will restore the screen to its state in step **4** .
   To continue normalizing other tracks, repeat the procedures from step 4.

Reversing normalization

Tracks that have been normalized can be restored to their previous state by using the undo function. Moreover, after undoing to reverse normalization, the redo function can be used to restore it.

NOTE

If a song is loaded or the unit is turned off, information necessary for undoing and redoing will be lost, so undoing and redoing previous operations will no longer be possible.

- After normalizing, if the F3 function button shows UNDO on the Home Screen, the previous normalization operation can be reversed.
  If normalization was canceled or the maximum volume of the track before normalization was the same as the normalized level, the UNDO button will not be shown.

1. To undo the operation, press the F3 UNDO button.
   The following confirmation pop-up message will appear.
2. Press the F4 YES button to restore the track to the volume it had before normalization.

- After undoing, if the F3 REDO function button shows on the Home Screen, the previous undo operation can be reversed.

1. To redo the operation, press the F3 REDO button.
   The following confirmation pop-up message will appear.
2. Press the F4 YES button to restore the result of normalization that was undone, reverting to the normalized track volume.

Mixing down

A mixdown is when the volume, panning and other settings of individual track recordings are adjusted and combined into a well-balanced stereo mix.
The MAIN MIX L/R bus does not have a REC button, but it is always in recording standby. Pressing the ● button always records the signals on this bus. The MAIN MIX L/R bus signals are recorded as channel 23/24 tracks on the SD card.
Stereo mix files can be created after recording by readjusting as desired the balance of the tracks recorded on each channel and mixing them down.

1. Adjust the recorded sound and play it back.
   - Set the INPUT SEL switches of the recorded tracks to" MTR".
   - Turn on the MAIN switches of the recorded tracks. (Turn off the MAIN switches of unrecorded tracks.)
   - While using speakers or headphones, for example, to listen to the sounds of all the recorded tracks being output from the MAIN OUTPUT jacks, adjust the channel faders and EQ and PAN knobs.

   After confirming, stop playback and return to the beginning of the song.
2. Mix down the playback sound.
   - With the REC buttons off (unlit) on each channel, press the ● button to create a stereo mix from the playback sounds of all the recorded tracks.
   - During mixdown, all fader and EQ and PAN knob adjustments will be recorded from the time that the ● button is pressed and track playback is started until the ■ button is pressed to stop playback. This will overwrite the existing stereo file.

Stereo mix export function

MAIN MIX L/R bus recording files (mono) can be converted to a single stereo file.
Converted stereo files are saved in the "MUSIC" folder.
Saved files are named according to the song name. For example, the file name will be "181228_0002_2-MIX_01.wav" if the song name is "181228_0002".
If the size of the converted file would exceed 2 GB, multiple files will be created with numbers like "02" and "03" at their ends.

1. Load the song to be exported as a stereo mix in advance.
   For details about loading songs, see "Loading Songs".
2. When the recorder is stopped, select STEREO MIX EXPORT on the MENU Screen, and open the STEREO MIX EXPORT Screen. (see "Menu operation procedures")
3. Press the F4 YES button to start conversion.

NOTE

- If a converted file already exists, a message to confirm overriding appears.

  Press the F3 YES button to delete the existing file and start conversion. This operation cannot be undone.
- Conversion is not possible if no MAIN MIX L/R bus file has been recorded. The message shown below will appear.
- During conversion, press the F1 STOP button to cancel conversion. A file with the part converted before canceling will remain.

4. When conversion completes, the MENU Screen will reopen.

NOTE

Converted files can be played using this unit's SD PLAY mode.
For details about playback with the SD PLAY mode, see "Playing WAV files on SD cards (SD PLAY mode)".

8 - Mark functions

Marks can be used to cue for playback, for example.
In addition to use with this unit, mark information added to WAV files can be used with software, for example, that supports the BWF format.

Adding marks

When playing or recording, press the F4 MARK button to add a mark at the current point.
When a mark is added, a pull-up showing the mark number appears at the bottom of the display.

Mark ▙ icons appear below the playback position bar where marks are set.

- The [xx] in the mark name is a number given to all marks that is incremented in order.
- Marks added during recording will automatically be saved in the song when recording stops.
- Marks added during playback will not be automatically saved. Save song information after stopping playback to save mark data. (see "Saving the current song")

NOTE

If an ✱ icon appears at the beginning of a song name, it has unsaved mark data. Save the song information to save the mark data. (see "Saving the current song")

Moving between marks

When stopped, paused or playing back, press the ◄◄ or ►► button to move (skip) to the previous or next mark.
When skipping, the mark name appears in a pull-up at the bottom of the display.

Clearing individual marks

Marks can be cleared when stopped or paused.

1. Skip to a mark that you want to delete when stopped or paused. (see "Moving between marks")
2. Press the F4 MARK button to open the Mark Clear confirmation screen.
3. Press the F4 YES button to clear the mark.

NOTE

- Repeat steps 1 – 3 to clear multiple marks.
- To clear all marks in the current song, select the CLR ALL MARKS item from the menu list shown on the SONG Screen. (see "Clearing all marks")

9 - Other functions

Metronome functions

This unit has a built-in metronome.
Click sound and metronome settings can be made.

NOTE

Metronome function settings are saved in the current song. The settings saved in the song can be used the next time it is loaded.

Setting the click sound

The output can be set for the metronome click sound.
The setting procedures differ according to the output destination.

Setting the click sound output from the CLICK jack

1. When the recorder is stopped, select SETTING on the CLICK Screen, and open the CLICK SETTING Screen. (see "Menu operation procedures")
2. On the CLICK SETTING Screen, select CLICK OUT, and open the CLICK OUT Screen.
3. Select MODE on the CLICK OUT Screen, and open the MODE Screen.
4. Turn the MULTI JOG dial to select the click sound output mode.

Option	Meaning
OFF (default)	Click is not output with recording or playback
COUNT IN+REC	Click is output during count in and recording
REC	Click is output during recording
REC&PLAY	Click is output during recording and playback

5. Press the MULTI JOG dial to confirm the setting.
   The CLICK OUT Screen reopens.
6. Press the MULTI JOG dial to confirm the setting.
   The CLICK OUT Screen reopens.
   Starting recording or playback will cause the click to be output according to the setting.
   When the setting is enabled, the TEMPO indicator flashes in time with the metronome tempo.
   The metronome signal is not recorded even if set to work during recording.

NOTE

- When the metronome is working, you can monitor the sound of the metronome through connected external speakers. Note, however, in this case that the metronome sound could also be recorded if you are using a microphone to record in the same room.
- You can use the metronome as a click track to help keep time when recording rhythm guitar or bass, for example, as the first tracks of a song.
- If you want to use the metronome alone for practice, you can either turn each track's fader all the way down during playback or play a song that does not have any recordings.

Making metronome settings

Specific metronome settings can be made.

1. When the recorder is stopped, select CLICK on the MENU Screen, and open the CLICK Screen. (see "Menu operation procedures")
2. Select METRONOME on the CLICK Screen, and open the METRONOME Screen.
3. Turn the MULTI JOG dial to select a metronome setting item. Then, press the MULTI JOG dial.
   The corresponding setting item screen will open.

BAR DISP

This sets the display of the time counter on the Home Screen.

Options: OFF (default), ON

When ON, the time counter on the Home Screen switches to bars and beats, showing the tempo and time signature in the B area.
The maximum number of bars that can be shown is 10000.

TEMPO

This sets the tempo.
The setting range is from 20 to 250 (BPM). (Default: 120)

Turn the MULTI JOG dial to set the tempo.
The CLICK button can also be tapped repeatedly at the desired tempo to set it.
When the footswitch function is "TAP", the footswitch can also be used for input. (see "Setting up the footswitch")

NOTE

Press the F4 CLIC button to turn the click sound on/off during tempo setting.

SIGNATURE

Set the time signature to 4/4, 3/4, etc.
The setting range is from 1/1 to 12/8. (Default: 4/4)

SOUND

This sets the click sound.

Options: CLICK (default), STICK, BELL, KICK, SNARE, PEDAL HIHAT, OPEN HIHAT, CLOSE HIHAT

Press the **MENU** button to stop the clock source search.

Setting: OFF, LOW, MID, MIDHIGH, HIGH

Setting Time Input in function

When the clock source setting is set to CONTROL, setting is before recycling is possible.

Setting: Disabled, Enabled (Default setting: Disabled)

1. When the recorder is stopped, select CUE in the MENU screen, and then the CLOCK Screen. (see "Menu operation procedure")
2. Select the Time Input in function, Enabled, and again the CLOCK Screen.

Press the **MENU** button to exit the clock to be type.

REMAIN TIME	Displays the remaining time of the current recording.
TOTAL TIME	Displays the total time of the current recording.
CLOCK	Displays the current clock time.
CUE POINT	Displays the number of the current cue point.
CUE TIME	Displays the elapsed time from the current cue point.
TRACK	Displays the current track number.
TRACK TIME	Displays the elapsed time of the current track.
TRACK REM	Displays the remaining time of the current track.
TRACK NAME	Displays the name of the current track.
TRACK TITLE	Displays the title of the current track.
ARTIST	Displays the artist name.
ALBUM	Displays the album name.
GENRE	Displays the genre name.
COMMENT	Displays the comment.
TRACK NO	Displays the track number.
YEAR	Displays the year.
TOTAL TRACK	Displays the total number of tracks.
TOTAL REM	Displays the remaining time of the current recording.
TOTAL NAME	Displays the name of the current recording.
TOTAL TITLE	Displays the title of the current recording.
TOTAL ARTIST	Displays the artist name.
TOTAL ALBUM	Displays the album name.
TOTAL GENRE	Displays the genre name.
TOTAL COMMENT	Displays the comment.
TOTAL NO	Displays the total number of recordings.
TOTAL YEAR	Displays the year.
TOTAL TRACK	Displays the total number of tracks.

The CLOCK Screen appears.

Starting and stopping the metronome manually

Setting: Disabled, Enabled (Default setting: Disabled) (Only when the recorder is playing back or recording)

● Press the CLICK button when the metronome is off, to start.
● Press the CLICK button when the metronome is on, to stop.

Opening the METRONOME Screen with a function button

Setting: Disabled, Enabled (Default setting: Disabled)

1. Select the function button to be assigned to the METRONOME Screen. (see "Menu operation procedure")
2. Press the function button.

Home Screen opens the SHIFT function is pressed.

Press the **MENU** button to open the METRONOME Screen.

BEAT	Displays the beat.
TEMPO	Displays the tempo.
VOLUME	Displays the volume.
CLICK	Displays the click sound.

NOTE

The MIDI clock cable frame type and by this unit is 24 frames per second (non-drop).
● Press the MENU button to confirm the setting.
● Press the MENU button to cancel.

Setting MIDI SLOCK/CLOCK

The recorder can be set to operate as a slave or master in a sync during playback and recording.

Setting: Slave, Master (Default setting: Slave)

1. When the recorder is stopped, select MIDI SLOCK/CLOCK in the MENU screen, and open the MIDI SLOCK/CLOCK Screen. (see "Menu operation procedure")

MIDI SLOCK	Displays the current MIDI SLOCK setting.
MIDI CLOCK	Displays the current MIDI CLOCK setting.

NOTE

The MIDI SLOCK cable frame type and by this unit is 24 frames per second (non-drop).
● Press the MENU button to confirm the setting.
● Press the MENU button to cancel.

Setting MIDI SLOCK/CLOCK

The recorder can be set to operate as a slave or master in a sync during playback and recording.

Setting: Slave, Master (Default setting: Slave)

1. When the recorder is stopped, select MIDI SLOCK/CLOCK in the MENU screen, and open the MIDI SLOCK/CLOCK Screen. (see "Menu operation procedure")

MIDI SLOCK	Displays the current MIDI SLOCK setting.
MIDI CLOCK	Displays the current MIDI CLOCK setting.

NOTE

The MIDI SLOCK cable frame type and by this unit is 24 frames per second (non-drop).
● Press the MENU button to confirm the setting.
● Press the MENU button to cancel.

Mixer functions

Selection of a mixer position of recording signals from the MAIN MIX LR bus

The panel mixer signals and panel line MIXER MAIN LR bus to be recorded on the SD card can be selected.

1. When the recorder is stopped, select MIXER in the MENU Screen, and open the MIXER Screen. (see "Menu operation procedure")

MIXER	Displays the current MIXER setting.

NOTE

The panel mixer signals are recorded on the SD card in a stereo signal.
● Press the MENU button to confirm the setting.
● Press the MENU button to cancel.

Setting the mixer position of the MIC/LINE IN 1, 2, 13/14 / 19/20

The signals that are sent from each channel for recording to the SD card can be set to be before the compressor or after the equalizer.

CH Before compressor

CH After equalizer

MIC/LINE IN 1, 2, 13/14, 19/20	Sets the mixer position of the MIC/LINE IN 1, and MIC/LINE IN 2 and 13/14 and 19/20 signals of channel as follows.

MIC/LINE IN 1, 2, 13/14, 19/20	Sets the mixer position of the MIC/LINE IN 1, and MIC/LINE IN 2 and 13/14 and 19/20 signals of channel as follows.
PRE	Sets the signals before the compressor.
POST	Sets the signals after the equalizer.

NOTE

● Audio sent to the computer will also be the same as the MAIN MIX POSITION Screen setting.
● The MIC/LINE IN 1, 2, 13/14, 19/20 signals are recorded on the SD card in stereo. It is possible to signals recorded to the SD card. Audio signals output to the MAIN OUTPUT jacks will not be affected.
● The MAIN MIX POSITION Screen setting is shared between the MIXER and the USB.

MIC/LINE IN 1, 2, 13/14, 19/20 signals

The signals that are sent from each channel for recording to the SD card can be set to be before the compressor or after the equalizer.

CH Before compressor

CH After equalizer

MIC/LINE IN 1, 2, 13/14, 19/20	Sets the mixer position of the MIC/LINE IN 1, and MIC/LINE IN 2 and 13/14 and 19/20 signals of channel as follows.

MIC/LINE IN 1, 2, 13/14, 19/20	Sets the mixer position of the MIC/LINE IN 1, and MIC/LINE IN 2 and 13/14 and 19/20 signals of channel as follows.
PRE	Sets the signals before the compressor.
POST	Sets the signals after the equalizer.

NOTE

● Audio sent to the computer will also be the same as the MAIN MIX POSITION Screen setting.
● The MIC/LINE IN 1, 2, 13/14, 19/20 signals are recorded on the SD card in stereo. It is possible to signals recorded to the SD card. Audio signals output to the MAIN OUTPUT jacks will not be affected.
● The MAIN MIX POSITION Screen setting is shared between the MIXER and the USB.

Footswitch functions

Setting up the footswitch

Setting: Disabled, Enabled (Default setting: Disabled)

● Connect the optional footswitch to the FOOTSWITCH jacks. Only the FOOTSWITCH jacks are used. Other jacks are not supported by open footswitch.

NOTE

● Connecting a footswitch disrupts without using a footswitch. Disable the FOOTSWITCH setting will be used in this case, set FOOTSWITCH to OFF.

TIP

● Use optional Footswitches with standard TRS plugs can also be used.

1. Select the function to assigned, select FOOTSWITCH on the SYSTEM Screen, and open the FOOTSWITCH Screen. (see "Menu operation procedure")

FOOTSWITCH	Displays the current FOOTSWITCH setting.

NOTE

● Press the MENU button to confirm the setting.
● Press the MENU button to cancel.

2. Select the function to assigned, press the MENU button.

OFF	No function is assigned on the footswitch.
CUE / PAUSE	Switches between cue point playback and pause. Pause is cancel when pressed.
CUE/PLAY	Plays when recording is paused and cue point playback.
PAUSE	Pauses playback and recording.
CUE POINT	Sets the current cue point.
CUE POINT	Sets the current cue point.
CUE NEXT	Sets a track to the next.
CUE PREV	Sets a track to the previous.
CUE NEXT / PREV	Sets a track to the next / previous.
FOOTSWITCH	Displays the current FOOTSWITCH setting.

The FOOTSWITCH Screen appears.

Setting the footswitch polarity

The polarity of the unit can be changed according to the polarity of the footswitch being used.

1. Select FOOTSWITCH POLARITY on the SYSTEM Screen, and open the FOOTSWITCH POLARITY Screen. (see "Menu operation procedure")
2. Select FOOTSWITCH POLARITY, and open the FOOTSWITCH POLARITY Screen.

FOOTSWITCH POLARITY	Displays the current FOOTSWITCH POLARITY setting.

NOTE

● Press the MENU button to confirm the setting.
● Press the MENU button to cancel.

DAW CONTROL

The unit has USB control functions. By setting to DAW control mode, the control of this unit can be used for basic operation of the DAW application. The functions that can be controlled are transport, track arm, track mute, track solo, track fader, track pan, and marker.

● Connect the USB port on the rear panel to the computer. Cables, the USB port on the rear panel, and the USB port on the computer are required.

TIP

● For details about DAW control mode, download the DAW Control Mode Manual from the page for this product on the TEAC Global site (https://teac-global.com/).

Quick song creation function

The unit has a function that allows you to create a new song quickly and easily. Up to 99 songs can be created using this function.

● Press the **MENU** button for about 2 seconds, hold down to open, and the QUICK SONG CREATE Screen appears. (see "Menu operation procedure")

QUICK SONG CREATE	Displays the current QUICK SONG CREATE setting.

NOTE

● Press the **MENU** button to confirm the setting.
● Press the **MENU** button to cancel.

MASTER BUS PROCESSOR functions

The unit has a function that allows you to create a new song quickly and easily. Up to 99 songs can be created using this function.

● Connect headphones or speakers to the MASTER BUS PROCESSOR jacks.

TIP

● Headphones or speakers can be used to use, signal will be output from the MAIN OUTPUT jacks after passing through the MASTER BUS PROCESSOR. The compressor can be used.

Here are the drivers and software provided:

- This unit appears on the computer as an external drive named "RIGOPAL SP" (the exact name formatted by the unit).
- The drive contains the Windows and Mac installers, the "RIGOPAL SP Manual.pdf", and "LICENSE".

Windows

Double-click the installer.

Mac

- Double-click the installer, delete it, or otherwise after installation.
- Drag the "RIGOPAL SP" icon to the trash.

Disconnecting

- Eject the drive in the usual way (right-click → Eject / Eject "RIGOPAL SP").
- Once the drive disappears, it is safe to disconnect the USB cable.

Loading WAV files from a computer

Connect the unit to your computer with a USB-C cable (data-capable, not charge-only).

- The unit appears as a USB mass storage device named "RIGOPAL SP".
- Drag and drop WAV files into the root of the drive.

Rules

- Only 16-bit PCM WAV files are accepted.
- The FILLTY1 folder is used when operating the unit standalone.
- Files are sorted by filename when the unit plays them in "FILLTY1" folder. Doing so could prevent loading data as a song and make proper playback impossible.

Recommended

- Keep the total number of "WAV" or "BEAT" folders from the computer.
- Place per-scale subfolders in the "BEAT" folder as in the second tree for use with the unit. The firmware (SD card) recognizes sub-folders and the located at the first level (one in total).

12 - USB audio interface functions

Installing the dedicated software

To use the unit as a USB audio interface with a Windows computer, dedicated driver software must be installed.

Download the latest software from the product page on the Boss website (https://boss.global/).

Install the software according to the following procedure.

Notes

- Do not connect the unit to your computer before installing the driver software.
- If you have uninstalled the driver software, reinstall it using the same procedure as when you first installed it.

Windows dedicated software installation procedures

1. Download the Windows dedicated driver software from the "BOSS Global Site (https://boss.global/)" and save it on the computer to be used with the unit.
2. Unzip the downloaded driver software, double-click the "setup.exe" file in the folder created, and follow the on-screen prompts to launch the installation software.

Notes

- If a dialog appears that says "Do you allow this program to make changes to your computer?", click "Yes".
- If a dialog appears that says "Windows can't verify the publisher of this driver software. Do you want to install this driver software anyway?", click "Install this driver software anyway".

Installing the Mac dedicated software

Notes

- Do not connect the unit to the computer before installing the software.
- Install the Mac dedicated software using a user account with administrator privileges.

Mac dedicated software installation procedures

1. Download the Mac dedicated driver software for the operating system you are using from the "BOSS Global Site (https://boss.global/)" and save it on the computer to be used with the unit.
2. Double-click the downloaded file, open the installer, and click "continue" and "install" in the usual dialogs.
3. Restart the computer.

Notes

- Depending on the computer's settings, the screenshot on the right may not have been uncompressed automatically. In this case, uncompress the zip file first and then run the installer.
- When the installer starts, click the "Continue" button.

- Next, select the desired language and click the "Continue" button.

- Click the "Install" button and check the contents of the Software License Agreement. If you agree to the contents of the license, click the "Agree" button.

- Next, click the "Install" button to start installation.

Notes

- If a dialog appears that says "Do you allow this program to make changes to your computer?", click "Yes".
- If a dialog appears that says "Boss Driver" wants to install a new helper tool. Enter the Mac administrator password and click "Install".

Working with Gatekeeper

- If a dialog appears that says "Boss Driver" wants to install a new helper tool. Enter the Mac administrator password and click "Install".

When the Gatekeeper setting is "Allow applications downloaded from the Mac App Store"

- The following security warning appears when you first start up the unit.
"Boss Driver.app" can't be opened because it was not downloaded from the Mac App Store.

- In this case, click the "OK" button to close the message. Then, control-click (or right-click) the file and click "Open" in the menu.
- The following message appears. Click the "Open" button. Because it was not downloaded from the Mac App Store, this you are just need to "open" security warning message appears. Click the "Open" button.

- The warning message might also appear when the Gatekeeper setting is something other than "Allow applications downloaded from the Mac App Store". In this case, control-click (or right-click) the file, and then select "Open" from the menu. Because it was not downloaded from the Mac App Store, this you need to "open" security warning message appears. Click the "Open" button.

When the Gatekeeper setting is "Allow applications downloaded from the Mac App Store"

- The following security warning appears when you first start up the unit. Because it was not downloaded from the Mac App Store, this you are just need to "open" security warning message. In this case, click the "Open" button.

Changing the Gatekeeper setting

- The Gatekeeper setting can be changed using the "Allow applications downloaded from" item on the "General" page of the "System & Privacy" area of the "System Preferences".
- To change this, you must make the "lock" icon on the lower-left area unlocked, and then unlock it.

- The setting will not again when you close the System Preferences by clicking the **x** button (or typing command-Q). For example, when you click "Boss Driver" and start up the unit.

Notes

- Gatekeeper security settings could result in security risks.
- Please change the Gatekeeper settings at your own risk.
- If you have changed the Gatekeeper settings, please return the settings back to the original setting after updating the Boss driver software.

Uninstalling the dedicated software

Notes

- Uninstallation is required to complete the dedicated software. If these three procedures if a problem occurs or you no longer intend to use the unit with the computer.

Uninstalling the Windows dedicated software

1. Open the "Uninstall or change a program" screen using the procedures for the operating system being used (Windows 7/Windows 10).
2. Select "Boss Driver" and click the "Uninstall" button to start uninstallation.
3. Follow the instructions that appear on the screen.

Uninstalling the Mac dedicated software

Delete "Boss Driver.app" from the Applications folder to uninstall.

Opening the Settings Panel

Open the Settings Panel in the following manner.

Windows

- **●** Click the "Boss" menu, select "TASCAM WaveRider", and "Show Settings".

Mac

- **●** Click the "Boss" menu, select "TASCAM WaveRider", and "Show Settings".
- **●** Click the "Dock" icon, select "TASCAM WaveRider", and "Show Settings".

Settings Panel overview

Settings Panel WDM Screen

Screen selection buttons

Tap these buttons to switch the Settings Panel screen shown.

Button	Function
Main	Tap this button to switch to the main screen.
Input Monitor	Tap this button to switch to the input monitor screen.
Output Monitor	Tap this button to switch to the output monitor screen.
Other Settings	Tap this button to switch to the other settings screen.

Input meters

The meters show the input levels.

Output meters

The meters show the output levels of the software.

Input Monitor Mode

Button	Function
Off	Turns the input monitor function off.
Mono	Sets the input monitor function to mono.
Stereo	Sets the input monitor function to stereo.

Input Monitor Volume

Button	Function
Slider	Sets the level of the input monitor.
Mute	Mutes the input monitor.

Buffer Size (Sample)

Button	Function
Slider	Sets the amount of buffer used to handle the audio input and output signals (sampling) to and from the computer.

Increasing the sampling buffer size lowers the load on the computer's processing and improves the stability of the playback.
If the processing cannot keep up, for example, due to other system operations, clicking and popping noises might occur and the audio signal might be interrupted.
Decreasing the sampling buffer size lowers the latency and improves the responsiveness of the audio signal, but the audio signal and the computer are more susceptible to the above problems.

The unit uses the slider on the panel to adjust the buffer size for this and according to the sample rate.

Sample rate	Buffer size
44.1 kHz	16 to 512 (the default is 256)
48 kHz	16 to 512 (the default is 256)

PCM-M2U setting buttons

Button	Function
Reset	Resets the PCM-M2U settings to the factory settings.
Save	Saves the current settings.
Load	Loads the saved settings.
Delete	Deletes the saved settings.
Import	Imports settings from a file.
Export	Exports settings to a file.
Load Mixer	Loads the mixer settings from the PCM-M2U.
Save Mixer	Saves the mixer settings to the PCM-M2U.

Channel level meters

The meters show the channel levels (pre-fader) of all channels selected with WATCH SELECT buttons.
Left meters are shown at the bottom of the screen, the right meters are shown at the top, and they are individually cleared by clicking around these meters.

Channel

Sets the channel to be shown on the meters. Also the PCM-M2U button states of the unit changes.
WATCH SELECTS selected, Blue: Blue WATCH SELECTS selected, Off: Off

The colors of the channel numbers indicate the following states.

Color	Meaning
Blue	The WATCH SELECTS selected.
Green	The Mute function is enabled.
Red	The Solo function is enabled.
Orange	The Mute and Solo functions are enabled.
Gray	The WATCH SELECTS selected, but the channel is paused for the meters, since it is scrolling.

Channel Mute

Switches to mute the signals shown in the channel meters.

Button	Function
Mute	Switches the channel between the muted and unmuted states.

Channel Solo

Switches to solo the channel. Multiple channels can be solo'd simultaneously.

Button	Function
Solo	Switches the channel between the solo'd and unsolo'd states.
Clear Solo	Clears all channels solo'd.

Channel level meters

The meters show the channel levels (pre-fader) of all channels selected with WATCH SELECT buttons.
Left meters are shown at the bottom of the screen, the right meters are shown at the top, and they are individually cleared by clicking around these meters.

Channel

Sets the channel to be shown on the meters. Also the PCM-M2U button states of the unit changes.
WATCH SELECTS selected, Blue: Blue WATCH SELECTS selected, Off: Off

The colors of the channel numbers indicate the following states.

Color	Meaning
Blue	The WATCH SELECTS selected.
Green	The Mute function is enabled.
Red	The Solo function is enabled.
Orange	The Mute and Solo functions are enabled.
Gray	The WATCH SELECTS selected, but the channel is paused for the meters, since it is scrolling.

Channel Mute

Switches to mute the signals shown in the channel meters.

Button	Function
Mute	Switches the channel between the muted and unmuted states.

Channel Solo

Switches to solo the channel. Multiple channels can be solo'd simultaneously.

Button	Function
Solo	Switches the channel between the solo'd and unsolo'd states.
Clear Solo	Clears all channels solo'd.

Notification function

The Settings Panel can be set to be minimized to the tray/dock. For more information about unit firmware and software, for example, can be shown when the Settings Panel is minimized.

Boss

Clicking on the "Boss" icon shows the same message upon clicking to prevent the same message from being shown the next time it is launched.

Setting Sound Properties

Open the OS Control Panel.

Windows 7

Click the "Start" button and then "Control Panel".

Windows 10

Click the "Start" button, "Windows System" folder, and then "Windows Tools" and "Control Panel".

Windows 11

Click the "Start" button, "All apps", "Windows Tools" and then "Windows System" select "Control Panel".

Mac

Click "System Preferences" and "Sound".

Sound Control Panel can be set to be viewed as icons, or "Sound" icon will appear.
In the "Playback" page, select "Boss WDM Driver" and "Set as Default Device" in the pop-menu that appears.
Once you do this, the green check mark appears next to the selected device.

Sound Control Panel

Notes

- Do not change settings other than those specified in the Sound Control Panel.
- Do not change the sampling rate of the Boss WDM Driver.
- Do not change the Boss WDM Driver's other settings.
- Do not change the Mixer Volume, other than the Boss WDM Driver.

Simultaneous ASIO/WDM playback

Boss WDM Driver supports ASIO and WDM simultaneous playback. Use ASIO and WDM output from Windows Media Player, for example. The sample rate of both sources must be set to the same rate for simultaneous playback to be possible. Moreover, the sample rate must also be set to the same rate for both sources, otherwise playback will not be possible.

When the sample rate are the same

- Example Windows WDM44.1 and ASIO 44.1kHz, all 44.1kHz

Simultaneous playback of both ASIO sound and mixed audio playback.

When the sample rates are different

- Example Windows WDM44.1 and ASIO 48.0kHz

Only sound from ASIO and other WDM sound are muted.
Sound from WDM44.1 is muted when ASIO sound is playing.
Other WDM sound is muted, for example, and simultaneous ASIO sound and mixed audio playback from Windows Media Player and other WDM sound will be muted.

Make USB audio settings

Setting the USB audio mode

- Connect the unit to your computer using a USB cable and switch to also the WDM-MIC-LR (four-input) to be sent to communication applications and streaming software.
- Select "Boss WDM Driver" (Windows) or "Boss USB Audio" (Mac) as the WDM Driver, as seen from the USB AUDIO Screen. (see "Mixer operation and settings")

Notes

- Switch to "Boss WDM Driver" or "Boss USB Audio" when using the unit as a USB audio interface.

Setting the USB input channel function

- Set the USB input channel function to the same as the USB output channel function.

Setting	Meaning
Stereo	Sets the input of channels 1-2 to the analog input of the WDM-MIC-LR (four-input) to USB channels 1-2.
Multi-track	Sets the input of channels 1-2 to the analog input of the WDM-MIC-LR (four-input) to USB channels 1-2.

Setting the USB return channel function

- Set the USB return channel function to the same as the USB return channel function.

Setting	Meaning
Stereo	Sets the output of channels 1-2 to the analog output of the WDM-MIC-LR (four-input) to USB channels 1-2.
Multi-track	Sets the output of the WDM-MIC-LR (four-input) to USB channels 1-2.

Setting the USB return channel function

- Set the USB return channel function to the same as the USB return channel function.

Notes

- Switching the USB input channel function and the USB return channel function to "Multi-track" allows the unit to be used as a multi-channel audio interface for recording and playback.
- Setting the USB input channel function to "Stereo" allows the analog input of the WDM-MIC-LR (four-input) to be sent to communication applications and streaming software.
- Setting the USB return channel function to "Stereo" allows the analog output of the WDM-MIC-LR (four-input) to be sent to communication applications and streaming software.
- Setting the USB input channel function to "Multi-track" allows the analog input of the WDM-MIC-LR (four-input) to be sent to communication applications and streaming software.
- Setting the USB return channel function to "Multi-track" allows the analog output of the WDM-MIC-LR (four-input) to be sent to communication applications and streaming software.

Setting the USB AUDIO Screen

- Set the USB AUDIO Screen as follows.

Notes

- Switching the USB AUDIO Screen allows the USB return channel function to be set to "Stereo" or "Multi-track".

Setting procedures for use with USB audio and other streaming applications

- Set the WAVE1, USB USB audio mode to STANDARD. (see "Setting the USB audio mode")
- Set the WAVE1, USB USB input channel function to "Stereo" or "Multi-track". (see "Setting the USB input channel function")
- Set the WAVE1, USB USB return channel function to "Stereo" or "Multi-track". (see "Setting the USB return channel function")
- Set the WAVE1, USB USB AUDIO Screen. (see "Setting the USB AUDIO Screen")
- Set the WDM-MIC-LR (four-input) to "Stereo" or "Multi-track". (see "Setting the USB input channel function")
- Set the WDM-MIC-LR (four-input) to "Stereo" or "Multi-track". (see "Setting the USB return channel function")
- Set the WDM-MIC-LR (four-input) to "Stereo" or "Multi-track". (see "Setting the USB AUDIO Screen

11. Launch your recording application, and begin recording your audio with streaming and other functions.
12. After completing streaming, restore the settings to multichannel to use multiple channels with other applications as necessary.
- Open the Control Panel, and select "Sound".
- Click on "Manage the Audio Devices" in the "Hardware and Sound" section.

13 - USB OUTPUT DELAY function

Delay is the technical terminology for delay, which adjusts audio that is different around from the camera video. Sony uses output delay because the camera video and audio are output from the camera at different times, and this function allows the camera video and audio to be synchronized and output to the USB port.
Output delay could be applied using the streaming application, this function is useful because applying offset delay using the Motion DVD can reduce the load on the computer.

1. When the recorder is stopped, select OUTPUT DELAY on the SYSTEM Screen, and open the OUTPUT DELAY screen. See: Menu operation
2. Select ON or OFF on the OUTPUT DELAY Screen, and open the DELAY Screen.

ON

OFF

3. Set the MULTI, USB and the HDMI delay values on the OUTPUT DELAY function that applies delay to USB audio.

Source	Delay
Disabled (default)	Do not use the OUTPUT DELAY function
Multi (default)	Apply the OUTPUT DELAY function
USB (default)	Apply the OUTPUT DELAY function
HDMI (default)	Apply the OUTPUT DELAY function

- The OUTPUT DELAY Screen requires.
- Tap the **RETURN** button to return to the SYSTEM Screen.

NOTE

- Delay values on the Home Screen when the OUTPUT DELAY function is set (enabled).

OUTPUT DELAY
0 SECONDS
0 SECONDS
0 SECONDS

Setting the delay time of the OUTPUT DELAY function.

1. When the recorder is stopped, select OUTPUT DELAY on the SYSTEM Screen, and open the OUTPUT DELAY Screen.
2. Select DELAY TIME on the OUTPUT DELAY Screen, and open the DELAY TIME Screen.

DELAY TIME
0 SECONDS

3. Turn the SELECT JOG dial to set the delay time.
- Delay time can be set between 0 - 2000 in 1 ms steps.

NOTE

- Delay time **RESET** restores change the delay time 1/10ms steps rather than in 1ms steps. They do not decrease/increase the delay time 1/10ms (1ms).
- Tap the **RESET** button to confirm the setting.
- The OUTPUT DELAY Screen will open.
4. Press **RETURN** button to return to the SYSTEM Screen.

14 - MIDI Implementation Chart

MIDI Implementation Chart

		Transmitted	Recognized
Basic channel	Default	1	1
	Changed	Variable	Variable
Mode	Default	Mode 3	Mode 3
	Messages	Mode 3	Mode 3
	Altered	**********	**********
Note number		0 - 127	0 - 127
		0 - 127	0 - 127
Velocity	Note on	Fixed	Fixed
	Note off	Fixed	Fixed
Aftertouch	Polyphonic	**********	**********
	Channel	**********	**********
Pitch bend		**********	**********
Control change		Variable	Variable
		Fixed	Fixed
Program change		Fixed	Fixed
System exclusive		Fixed	Fixed
System common	Song position	**********	**********
	Song select	**********	**********
	Tune	**********	**********
System real time	Clock	**********	**********
	Commands	**********	**********
Aux messages	Local on/off	**********	**********
	All notes off	**********	**********
	Active sense	**********	**********
	Reset	**********	**********

Notes:
1. Fixed message when MIDI TIMECODE is ON
2. Fixed MIDI TIMECODE is ON.
3. Fixed MIDI TIMECODE is ON.

Mode 1: OMNI ON, POLY Mode 2: OMNI ON, MONO Mode 3: OMNI OFF, MONO Mode 4: OMNI OFF, POLY Mode 5: OMNI OFF, MONO X: YES O: YES Fixed: Fixed

15 - Messages

The following is a list of messages that appear in your screen.
Refer to SELECT JOG dial of Press button operation for details on Reset (HOD and you need to Check the Manual) to determine a proper response.

Message	Meaning and response
Disk Error	The SD card cannot be recognized properly. Replace the SD card.
Disk Full	The SD card has no more available space. Replace the SD card.
Fan Error	Fan is not operating properly. Contact your local Sony dealer.
File Error	The file cannot be opened. Check the file and delete it.
No Ch Ms	The system file is missing. This unit requires a system file for operation.
No Sys Ms	The system file is missing. This unit requires a system file for operation.
Not Ready	Time codes are not being received. Check the time code generator.
Overload	Something might be wrong with the SD card. Change the SD card.
SD Full Stop!	Is the OUTPUT DELAY Screen, the time between the punch in and out point is too short. Set them with at least 1 second between them.
SD Error	Is the SD card not formatted properly or has the card been damaged? Check the SD card. Is the SD card formatted properly? Check the SD card. Is the SD card damaged? Check the SD card. Is the SD card damaged? Replace the SD card. Is the SD card formatted? Format the SD card. Is the SD card damaged? Replace the SD card.
Time Error	Time code is not being received properly. Check the time code generator.
Time Out	The file format is not supported. Please see "Playing MXF files on SD cards (OUTPUT mode)" for file formats that this unit supports.
Card Protected	The SD card is write-protected. Disable SD card write-protection.
Card Error	Something might be wrong with the SD card. Check the SD card. Replace the SD card. Reformat the SD card.
Card Full	The SD card is full. Replace the SD card.
Card Busy	The current song cannot be deleted. To delete the current song, load another song first.
Card Protected	The current song cannot be deleted. To delete the current song, disable the write-protection.
Card Error	Something might be wrong with the SD card. Check the SD card. Replace the SD card. Reformat the SD card.
Card Full	Does the automatic punch operation from a take point.
Write error	Writing to the SD card failed. Check the SD card. Replace the SD card. Reformat the SD card.
REC stop: SD card full	Writing to the SD card failed and, and recording stopped. Check the SD card. Replace the SD card. Reformat the SD card.
Write protect	Writing to the SD card failed. Disable the write-protection.
Sample rate mismatch	Is the sampling frequency of the WAV file not matching the current sampling frequency? Select a WAV file with the same sampling frequency as the current song or convert the sampling frequency before recording.
Sample rate error	Is the sampling frequency of the WAV file not supported? Select a WAV file with a supported sampling frequency. Stereo uncompressed files in Interleaved format are supported.
Sample rate error	Is the sampling frequency of the WAV file not supported? Select a WAV file with a supported sampling frequency. Stereo uncompressed files in Interleaved format are supported.
Song is full	The song is loaded. Delete unnecessary songs and load a song.
Song is full	The maximum number of songs can be created or all 100 slots in 100 slots are occupied. Delete unnecessary songs.
Song protected	The song is set to protected. Disable the protection.
Song protected	The song is set to protected. Disable the protection.
SD card is busy	Recording is not possible because the SD card slot is in use. Wait for the current operation to finish, or eject the SD card and then format it with this unit.
SD card error	Recording is not possible because the SD card slot is in use.
Recording in progress	Recording is not possible because the SD card slot is in use.
Insert card	Change the track selection on the TRACK SWAP screen. See "Swapping tracks"
Card is protected	Change the track selection on the TRACK SWAP screen.
Recording in progress	The selected song is already checked out.
Recording in progress	Recording is not possible because the recording is in progress.
Insufficient divisions	Insufficient divisions of the recording. Insufficient divisions of the recording. Insufficient divisions of the recording. Insufficient divisions of the recording. Insufficient divisions of the recording. Insufficient divisions of the recording.
Insufficient divisions	The song is in a protected state. Disable the protection.
Insufficient divisions	The song is in a protected state. Disable the protection.
SD CARD WRITE PROTECT	Write protection is set on the SD card. Disable the write-protection.
SD CARD ERROR	Something might be wrong with the SD card. Check the SD card. Replace the SD card. Reformat the SD card.
SD CARD FULL	The SD card is full. Replace the SD card.
SD CARD BUSY	Recording is not possible because the SD card slot is in use. Wait for the current operation to finish, or eject the SD card and then format it with this unit.
SD CARD ERROR	Something might be wrong with the SD card. Check the SD card. Replace the SD card. Reformat