D0000000A

# TASCAM Multitrack Recording Console

# **OWNER'S MANUAL**



# **IMPORTANT SAFETY INSTRUCTIONS**

#### WARNING: TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

#### For U.S.A.

Trade Name TASCAM

**Declaration of Conformity** Model Number: Model 12



Responsible party: TEAC AMERICA, INC.

Address: 10410 Pioneer Blvd. Suite #1 Santa Fe Springs, California 90670, U.S.A.

Telephone number: 1-323-726-0303

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

#### **INFORMATION TO THE USER**

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures.

- a) Reorient or relocate the receiving antenna.
- b) Increase the separation between the equipment and receiver.
- c) Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- d) Consult the dealer or an experienced radio/TV technician for help.

#### CAUTION

Changes or modifications to this equipment not expressly approved by TEAC CORPORATION for compliance could void the user's authority to operate this equipment.

#### For Canada

THIS CLASS B DIGITAL APPARATUS COMPLIES WITH CANADIAN ICES-003.

CET APPAREIL NUMERIQUE DE LA CLASSE B EST CONFORME A LA NORME NMB-003 DU CANADA.

Ce

This product complies with the European Directives request and the other Commission Regulations.

- **1.** Read these instructions.
- 2. Keep these instructions.
- **3.** Heed all warnings.
- 4. Follow all instructions.
- 5. Do not use this apparatus near water.
- **6.** Clean only with dry cloth.
- 7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- 8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- **9.** Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- **10.** Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- **11.** Only use attachments/accessories specified by the manufacturer.
- 12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.



- **13.** Unplug this apparatus during lightning storms or when unused for long periods of time.
- **14.** Refer all servicing to qualified service personnel. Servicing isrequired when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
- The apparatus draws nominal non-operating power from the AC outlet with its POWER or STANDBY/ON switch not in the ON position.
- The mains plug is used as the disconnect device, the disconnect device shall remain readily operable.
- Caution should be taken when using earphones or headphones with the product because excessive sound pressure (volume) from earphones or headphones can cause hearing loss.
- If you are experiencing problems with this product, contact TEAC for a service referral. Do not use the product until it has been repaired.

#### WARNING

 To prevent possible hearing damage, do not listen at high volume levels for long periods.

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#### CAUTION

- Do not expose this apparatus to drips or splashes.
- Do not place any objects filled with liquids, such as vases, on the apparatus.
- Do not install this apparatus in a confined space such as a book case or similar unit.
- The apparatus should be located close enough to the AC outlet so that you can easily grasp the power cord plug at any time.
- If the product uses batteries (including a battery pack or installed batteries), they should not be exposed to sunshine, fire or excessive heat.
- CAUTION for products that use replaceable lithium batteries: there is danger of explosion if a battery is replaced with an incorrect type of battery. Replace only with the same or equivalent type.

#### For European Customers

#### Disposal of electrical and electronic equipment and batteries and/or accumulators

- (a) All electrical/electronic equipment and waste batteries/ accumulators should be disposed of separately from the municipal waste stream via collection facilities designated by the government or local authorities.
- (b) By disposing of electrical/electronic equipment and waste batteries/accumulators correctly, you will help save valuable resources and prevent any potential negative effects on human health and the environment.
- (c) Improper disposal of waste electrical/electronic equipment and batteries/accumulators can have serious effects on the environment and human health because of the presence of hazardous substances in the equipment.
- (d) The Waste Electrical and Electronic Equipment (WEEE) symbols, which show wheeled bins that have been crossed out, indicate that electrical/ electronic equipment and batteries/accumulators must be collected and disposed of separately from household waste.





(e) Return and collection systems are available to end users. For more detailed information about the disposal of old electrical/electronic equipment and waste batteries/ accumulators, please contact your city office, waste disposal service or the shop where you purchased the equipment.

# For China

"仅适用于海拔2000m以下地区安全使用"

◎ "仅适用于非熱带气候条件下安全使用"

⑩ "環境保護使用年限"

#### 产品有毒有害物质或元素的名称及含量

机利	机种: Model 12 有毒有害物质或元素						
	品名	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr6+)	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
1	CHASSIS部份	0	0	0	0	0	0
2	FRONT PANEL部份	0	0	0	0	0	0
3	螺丝部份	0	0	0	0	0	0
4	线材部份	0	0	0	0	0	0
5	PCB Assy部份	×	0	0	0	0	0
6	电源部份	×	0	0	0	0	0
7	附属品部份	×	0	0	0	0	0
8	LABEL部份	0	0	0	0	0	0
9	包装部份	0	0	0	0	0	0

〇:表示该有毒有害物质在该部件所有均质材料中的含有量均在 GB/T26572 标准规定的限量要求以下。

×:表示该有毒有害物质至少在该部件的某一均质材料中的含量超出 GB/T26572标准规定的限量要求。

(针对现在代替技术困难的电子部品及合金中的铅)

# Compliance of radio transmitter and interference

This product has the function of broadband transmitter using 2.4GHz Band.

Use frequency range: 2400 MHz - 2480 MHz

Maximum output power: Bluetooth® Class 2 (less than 2.5 mW) Please use only in the country where you purchased the product. Depending on the country, restrictions on the use of Bluetooth wireless technology might exist.

# **Model for USA**

#### **Declaration of Conformity**

Responsible party: TEAC AMERICA, INC. Address: 10410 Pioneer Blvd. Suite #1 Santa Fe Springs, California 90670, U.S.A. Telephone number: 1-323-726-0303



This device complies with Part.15 of FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Labeling of authorization FCC ID: XEG-MODEL12

#### **Model for Canada**

Compliance of radio transmitter

This device complies with Industry Canada's licence-exempt RSSs.

Operation is subject to the following two conditions:

- 1) This device may not cause interference
- 2) This device must accept any interference, including interference that may cause undesired operation of the device.

Labeling of authorization IC: 1559C-MODEL12

#### Modèle pour le Canada

Conformité de l'émetteur radio

Ce dispositif est conforme à la norme CNR-210 d'Industrie Canada applicable aux appareils radio exempts de licence. Son fonctionnement est sujet aux deux conditions suivantes:

- 1) Le dispositif ne doit pas produire de brouillage préjudiciable,et
- 2) Ce dispositif doit accepter tout brouillage reçu, y compris un brouillage susceptible de provoquer un fonctionnement indésirable.

Étiquetage d'autorisation IC: 1559C-MODEL12

#### **Compliance of interference**

This Class B digital apparatus complies with Canadian ICES-003. This equipment complies with FCC/IC radiation exposure limits set forth for an uncontrolled environment and meets the FCC radio frequency (RF) Exposure Guidelines and RSS-102 of the IC radio frequency (RF) Exposure rules. This equipment has very low levels of RF energy that it deemed to comply without maximum permissive exposure evaluation (MPE). But it is desirable that it should be installed and operated keeping the radiator at least 20 cm or more away from person's body (excluding extremities: hands, wrists, feet and ankles). Cet équipement est conforme aux limites d'exposition aux rayonnements énoncées pour un environnement non contrôlé et respecte les règles les radioélectriques (RF) de la FCC lignes directrices d'exposition et d'exposition aux fréquences radioélectriques (RF) CNR-102 de l'IC. Cet équipement émet une énergie RF très faible qui est considérée conforme sans évaluation de l'exposition maximale autorisée. Cependant, cet équipement doit être installé et utilisé en gardant une distance de 20 cm ou plus entre le dispositif rayonnant et le corps (à l'exception des extrémités : mains, poignets, pieds et chevilles).

#### Conformité de brouillage

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

Marquage d'autorisation CAN ICES-3(B)/NMB-3(B)

# Model for EEA (European Economic Area)

Hereby, TEAC Corporation declares that the radio equipment type is in compliance with Directive 2014/53/EU., and the other Directives, and Commission Regulations.

The full text of the EU declaration of conformity is available at the following internet address: Please contact us by e-mail.

http://tascam.eu/en/kontakt.html EU Importer: TEAC Europe GmbH Bahnstrasse 12, 65205 Wiesbaden-Erbenheim, Germany

## **Radiation Exposure requirements**

This equipment meets the regulation, which is recognized internationally, for the case of human exposure to radio waves generated by the transmitter.

#### **Statement of compliance**

#### Model for USA

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment and meets the FCC radio frequency Exposure Guidelines.

#### **Model for Canada**

This equipment complies with IC RSS-102 radiation exposure limits set forth for an uncontrolled environment.

#### Model for USA/Canada

This Class B digital apparatus complies with Canadian ICES-003. This equipment complies with FCC/IC radiation exposure limits set forth for an uncontrolled environment and meets the FCC radio frequency (RF) Exposure Guidelines and RSS-102 of the IC radio frequency (RF) Exposure rules. This equipment has very low levels of RF energy that it deemed to comply without maximum permissive exposure evaluation (MPE). But it is desirable that it should be installed and operated keeping the radiator at least 20 cm or more away from person's body (excluding extremities: hands, wrists, feet and ankles).

#### Model for EEA (European Economic Area)

This equipment complies with EN.62311; Assessment of electronic and electrical equipment related to human exposure restrictions for electromagnetic fields; the harmonised standard of DIRECTIVE 2014/53/EU.

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# **1 - Introduction**

Thank you very much for purchasing the TASCAM Model 12 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 (http://teac-global.com/).

# Features

- TASCAM Ultra-HDDA mic preamps built-in (for channels 1–6)
- 10 input digital mixer with 10 line and 8 mic inputs
- Multitrack recording and playback with 12-track recording (input channels 1–6, 7/8, 9/10 and MAIN MIX L/R bus channels 11–12)
- USB audio interface functions built-in
  - 12 tracks (10 input channels and MAIN MIX L/R bus) can be input to the computer
  - 10 track outputs and computer outputs can be assigned to channel inputs (channels 1–6, 7/8, 9/10)
  - Supports USB 2.0 audio with resolutions up to 24-bit and 48kHz sampling frequency
- Digital compressors included on channel 1–6, 7/8 and 9/10 inputs
- 60mm faders enable precise adjustments
- MIC/LINE (BAL)/INST TRS input jacks support high impedance (Hi-Z) on every channel
- Channel inserts (INSERT) on channels 1-2
- Multiple buses include stereo main (MAIN MIX L/R bus), sub (SUB L/R bus) and AUX (AUX 1 and AUX 2/FX)
- 2 AUX sends (AUX 1/AUX 2)
- Input channels have 3-band semi-parametric EQs with adjustable mid frequencies
- 4-band semi-parametric equalizer for output
- 16 TASCAM preset effects can be used for a variety of applications
- Multitrack recording and playback possible using SD cards
- Bluetooth<sup>®</sup> audio playback and recording supported
- Punching in and out function per track (including punching in and out automatically and with footswitches)
- SD/SDHC cards and SDXC cards (Class 10 or more)
- Multiple footswitch functions available (select play/pause, effect muting or punch in/out)
- 2 built-in PHONES outputs (level adjustment and SOLO L/R bus monitoring can be enabled separately)
- DAW control with HUI/MCU emulation supported by major DAWs
- CLICK output that supports TAP TEMPO
- MIDI input and output connectors enable connection with keyboards and other MIDI devices

# Items included with this product

This product includes the following items.

Take care when opening the package to avoid damaging the items. Keep the packing materials for transportation in the future. Please contact the store where you purchased this unit if any of these items are missing or have been damaged during transportation.

- Main unit .....x 1
- AC adaptor (TASCAM PS-M1524A).....x 1
- Cord for AC adapter (JAPAN USA/EUROPE/AUSTRALIA) .........x 3
- Owner's Manual (this document) including warranty ......x 1

#### ATTENTION

Always use the included AC adapter (PS-M1524A) and AC adapter power cord with this unit. Never use the included AC adapter or AC power cord with any other device. Doing so could cause damage, fire or electric shock.

# **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 MERK 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".
- As necessary, additional information is provided under TIP, NOTE and CAUTION headings.

#### 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.

#### 

Failure to follow these instructions could result in injury.

# Trademarks

- TASCAM is a registered trademark of TEAC Corporation.
- SDXC Logo is a trademark of SD-3C, LLC.



- The Bluetooth<sup>®</sup> word mark and logo are the property of Bluetooth SIG, Inc. and are used by TEAC Corporation with permission.
- Microsoft and Windows are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.
- Apple, Mac, macOS, App Store and iTunes are trademarks of Apple Inc. in the United States and other countries.
- ASIO is a trademark of Steinberg Media Technologies GmbH.



• Other company names, product names and logos in this document are the trademarks or registered trademarks of their respective owners.

Information is given about products in this manual only for the purpose of example and does not indicate any guarantees against infringements of third-party intellectual property rights and other rights related to them. TEAC Corporation will bear no responsibility for infringements on third-party intellectual property rights or their occurrence because of the use of these products.

Properties copyrighted by third parties cannot be used for any purpose other than personal enjoyment and the like without the permission of the right holders recognized by copyright law. Always use this equipment properly. TEAC Corporation will bear no responsibility for rights infringements committed by users of this product.

# Precautions for placement and use

- The operating temperature range of this unit is 5 35 °C.
- Do not install this unit in the following types of locations. Doing so could make the sound quality worse or cause malfunction.
  - Places with significant vibrations
  - Next to a window or in another location exposed to direct sunlight

Near heaters or other extremely hot places

Extremely cold places

Very humid or poorly ventilated places

- Very dusty places
- To enable good heat dissipation, do not place anything on top of the unit.
- Do not place the unit on top of a power amplifier or other device that generates heat.

# **Beware of condensation**

Condensation could occur if the unit is moved from a cold place to a warm place, it is used immediately after a cold room has been heated or it is otherwise exposed to a sudden temperature change.

To prevent this, or if this occurs, let the unit sit for one or two hours at the new room temperature before using it.

# **Cleaning the unit**

Use a dry soft cloth to wipe the unit clean. Do not wipe with chemical cleaning cloths, thinner, alcohol or other chemical agents. Doing so could damage the surface or cause discoloration.

# **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. Please access to a product page of this product from the TEAC Global Site (http://teac-global.com) to find the list or contact the TASCAM customer support service.

# **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.

# **Using the TEAC Global Site**

You can download updates for this unit from the TEAC Global Site:

#### http://teac-global.com/

In the TASCAM Downloads section, select the desired language to open the Downloads website page for that language.

# **Product registration**

Customers in the USA, please visit the following TASCAM website to register your TASCAM product online.

https://tascam.com/us/

# About TASCAM customer support service

TASCAM products are supported and warrantied only in their country/region of purchase.

To receive support after purchase, on the TASCAM Distributors list page of the TEAC Global Site (http:// teac-global.com/), search for the local company or representative for the region where you purchased the product and contact that organization.

When making inquiries, the address (URL) of the shop or web shop where it was purchased and the purchase date are required.

Moreover, the warranty card and proof of purchase might also be necessary.

# 2 - Names and Functions of Parts

# Top panel



#### (A) Input channel mixing section-1

Use this section to adjust the input levels of each channel.

#### **B** 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, SOLO L/R, AUX1, AUX2/FX, SUB L/R). (see "Input channel mixing section-2" on page 13)

#### **©** Equalizer section

Use this section to connect headphones and adjust the output equalizer. (see "Equalizer section" on page 14)

#### **D** Screen operation section

Use this section to operate the meter, home and MENU screens shown on the display. (see "Screen operation section" on page 14)

#### **(E)** Monitoring section

Switch Bluetooth device input destinations, switch monitoring destinations, and adjust AUX OUTPUT AUX 1/2 jack output levels. (see "Monitoring section" on page 15)

#### **(F)** Analog output adjustment section

Adjust the output levels of the built-in effects, and the MAIN OUTPUT and SUB OUTPUT jacks. (see "Analog output adjustment section" on page 16)

# Input channel mixing section-1



#### (1) GAIN knobs and SIG indicators (1-6, 7/8-9/10)

Use the GAIN knobs to adjust the input levels of each channel.

its SIG indicator will light green when a signal is input (-40dB or higher).

If a SIG indicator stays lit red continuously, lower the GAIN knob.

#### 2 LOW CUT switches (1-6, 7/8-9/10)

Turn this switch on (pushed in) to enable low cut filters that cut noise and other sounds at low frequencies.

#### ③ INST switches (1-6, 7/8-9/10)

Set according to the MIC/LINE (BAL)/INST TRS input jack input sources.

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



#### ④ MODE switches (1-6, 7/8-9/10)

Use these to select the input source for each channel. (see "Setting the MODE switch" on page 31)

#### (5) COMP knobs and indicators (1-6, 7/8-9/10)

Use these knobs to adjust the compression thresholds for the signals input to each channel.

When compression is activated, the COMP indicators light.

#### 6 EQ knobs (1-6, 7/8-9/10)

• Use these to boost and attenuate the HIGH, MID and LOW bands of each channel.

Setting range: ±15 dB

• The central frequencies of the MID bands can be set.

Setting range: 100 Hz - 8 kHz (default: 600Hz)

#### 7 AUX 1 knobs (1-6, 7/8-9/10)

Use these to adjust the levels of signals sent to the AUX 1 bus.

#### **8 POST indicator (shared by all channels)**

When this indicator is lit, signals are sent to the AUX 1 bus after the channel faders. (see "Changing the positions that signals are sent to the AUX 1 bus from each channel" on page 46)

#### **9** AUX2/FX knobs (1-6, 7/8-9/10)

Use to adjust the levels of the signals sent to the AUX2/FX bus.

#### 10 PAN knobs (1-6, 7/8-9/10)

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 buses.
- 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.

- (1) **REC buttons and indicators (1-6, 7/8-9/10)** Use these to select the channels to record to the SD card.
- WUTE switches and indicators (1-6, 7/8-9/10) When these switches are on (pushed in, MUTE indicator lit), those channels are muted.
- (3) Channel faders (1-6, 7/8-9/10) Use these to adjust the send levels of channel signals.
- MAIN switches (1-6, 7/8-9/10) Turn these switches on (pushed in) to send channel signals to the MAIN MIX L/R bus.
- (15) SUB switches (1-6, 7/8-9/10)

Turn these switches on (pushed in) to send channel signals to the SUB L/R bus.

16 SOLO switches (1-6, 7/8-9/10)

Turn these switches on (pushed in) to send channel signals to the SOLO L/R bus.

When these switches are on, the sound of their channels can be heard through the SOLO L/R bus with headphones. When the SOLO MODE screen setting is INPLACE SOLO, the signals of channels that are not on will be muted. (see "Setting the solo function for all channels" on page 46)

# **Equalizer section**



#### 17 MASTER SECTION EQ knobs

This 3-band semi-parametric equalizer affects signals output from the MAIN OUTPUT and AUX OUTPUT AUX 1/2 jacks.

#### 18 **人** / **八** switch

This sets the acuteness of the MID band of the semiparametric equalizer.

Button	Meaning
On ( 🔼 )	The band is acute, making it affect a narrower frequency band.
Off ( <b>Л</b> )	The band is less acute, making it affect a broader frequency band.

#### (1) PHONES jack (1/2)

Use this standard stereo jack to connect stereo headphones. Use an adapter to connect headphones with a mini plug. Use these to monitor signals from the MAIN MIX L/R, AUX 1, AUX 2/FX and SOLO L/R buses. (see "Block diagram" on page 65)

#### **20 PHANTOM +48V switch and indicator**

Use this switch to supply +48V phantom power to the 1–6, 7/8 and 9/10 XLR jacks on the back of the unit. The indicator lights when the PHANTOM +48V switch is set to on (pushed in). (see "Setting phantom power" on page 31)

#### **21** SD card slot

Insert SD cards in this slot. (see "Inserting and removing SD cards" on page 24)

#### 22 AUX 1/2/MAIN MIX switch

Set which output signals are affected by the equalizer.

AUX 1/2: Equalizer is applied to signals sent from the AUX 1 and AUX 2/FX buses.

MAIN MIX: Equalizer is applied to signals sent from the MAIN MIX L/R bus.

#### NOTE

Also set the EQ IN/BYPASS switch to "EQ IN".

#### **23 EQ IN/BYPASS switch**

When this switch is EQ IN, the equalizer will affect the output signals set with the AUX 1/2/MAIN MIX switch. When set to BYPASS, the equalizer will not be applied regardless of the AUX 1/2/MAIN MIX switch setting.

#### Screen operation section



#### 24 Display

Shows a variety of information.

#### 25 USB indicator

This lights when the USB connection is working.

#### 26 PFL/AFL indicator

This indicator lights when at least one channel SOLO switch is on or when the AFL switch for the AUX 1 or AUX 2 knob or the FX fader is on.

#### Tunction 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.

#### 28 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" on page 35)
- When a MENU Screen is open, turn to select items and change setting values. (see "Basic MENU screen operations" on page 21)

#### **Button function**

- Press when the Home Screen is open to designate a locate point. (see "Locate function" on page 35)
- When a Menu Screen is open, press to confirm selections and settings (ENTER button function).

#### **29 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 SOLO L/R bus.

#### **30 ◄**/►► 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)" on page 50)

#### **31 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" on page 20) and (see "Basic MENU screen operations" on page 21)

#### 32 **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.

#### 33 ► / II button/indicator

Press this button to start playback. This button lights during playback and recording. This button blinks when paused.

#### **34** ● button/indicator

Press this button to start recording.

This button lights during recording.

Press this button during playback to start recording (Manual punch in).

#### **Monitoring section**



#### **35 MUTE switch/indicator (AUX 1/AUX 2)**

When MUTE switches are on (MUTE indicators lit), signals to the AUX OUTPUT AUX 1/2 jacks are muted.

#### 36 AFL switches (AUX 1/AUX 2)

When these switches are on (pushed in), the AUX OUTPUT AUX 1/2 jack output signals are sent to the SOLO L/R bus. When these switches are on, the sound of the SOLO L/R bus can be heard through headphones.

#### **37 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" on page 24)

#### **38 ASSIGN switch**

Sound from the Bluetooth device is sent to channels 9/10 when this switch is set to "9/10" or the MAIN MIX L/R bus when it is set to "MAIN".

#### 39 AUX 1/AUX 2 knobs

Use to adjust the output levels of the AUX OUTPUT AUX 1/2 jacks.

#### 40 PFL/AFL MASTER knob

Use this to adjust the send level from the SOLO L/R bus.

#### **41 SD MAIN MIX RETURN switch**

When this switch is on (pushed in), playback of stereo master files recorded on the SD card is output from the MAIN OUTPUT jacks.

#### ATTENTION

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

#### **42 PHONES knob (1/2)**

Use this to adjust the headphone output level.

#### **A**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.

#### 43 AUX 1/2 /MAIN switch

Turn these switches on to monitor signals from the AUX 1 and AUX 2/FX buses.

## Analog output adjustment section



#### **44** 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.

#### 45 MUTE switches and indicators (SUB, MAIN)

When MUTE switches are on (MUTE indicators lit), signals to the SUB OUTPUT/MAIN OUTPUT jacks are muted.

#### **46 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" on page 41)

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

#### **47** CLICK button

- 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" on page 33)
- When the TAP TEMPO screen is open, tap this button repeatedly at the desired tempo to set the metronome. (see "Making metronome settings" on page 42)
- 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" on page 43)

#### 48 FX fader

Use to adjust the levels of signals sent from the built-in effect to the following buses.

- MAIN MIX L/R bus
- SOLO L/R bus
- AUX1 bus
- SUB L/R bus

#### 49 TO AUX 1 knob

Use these to adjust the levels of signals sent from the built-in effects to the AUX1 bus.

#### **50 SELECT button**

Open the EFFECT Screen and make built-in effect settings. (see "Using the built-in effects" on page 33) The built-in effect return signal is sent to the following buses.

- MAIN MIX L/R bus
- SOLO L/R bus
- AUX1 bus
- SUB L/R bus

#### (51) MAIN switch (FX)

When this switch is on, signals from the built-in effect are sent to the MAIN MIX L/R bus.

#### 52 SUB switch (FX)

When this switch is on, signals from the built-in effect are sent to the SUB L/R bus.

#### 53 AFL switch (FX)

When this switch is on, signals from the built-in effect are sent to the SOLO L/R bus. When this switch is on, the sound of the SOLO L/R bus can be heard with headphones.

#### **54 POST REC switch**

Select the send position of the signal recorded to the SD card.

When this switch is on, signals from after the MAIN fader are recorded to the SD card.

#### 55 AUX 1 switch (FX)

When this switch is on, signals from the built-in effect are sent to the AUX1 bus.

#### 56 MAIN switch (SUB)

When this switch is on (pushed in), the SUB OUTPUT jack output signal is sent to the MAIN MIX L/R bus.

#### 57 SUB fader

Use to adjust the output level of the SUB OUTPUT jacks.

#### 58 MAIN fader

Use to adjust the output level of the MAIN OUTPUT jacks.

# **Rear panel**



#### **59 USB port**

This is a USB Type-C port. Use a USB cable (Type-A to Type-C) to connect the unit to a computer. (see "Connecting with a Computer" on page 51)

#### ATTENTION

The unit should be connected directly to the computer, not through a USB hub. Moreover, noise could be picked up if the cable is too long.

#### 60 MAIN OUTPUT L/R jacks

These analog outputs are XLR jacks.

XLR (1: GND, 2: HOT, 3: COLD)

#### 61 MUSIC/TALK jack (9/10, 4-pole mini jack)

This is a 4-pole mini input/output jack.

By using a cable with a 4-pole mini plug, the signals output from the MAIN OUTPUT jacks can be sent to the smartphone while simultaneously receiving input from the smartphone.

#### 62 MIC/LINE (BAL)/INST input jacks (7/8-9/10)

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. The TRS jacks are for standard TRS stereo line input. If only the L jack in a pair is connected, the same signal was be sent to both left and right channels.

When directly connecting a guitar, bass or other instrument, set the INST switch to on (pushed in).

#### NOTE

Activating the INST switch only affects the L jack.

#### 63 MIC/LINE (BAL)/INST input jacks (1-6)

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. The TRS jacks are for standard TRS mono line input. When directly connecting a guitar, bass or other instrument, set the INST switch to on (pushed in).

#### 64 DC IN 15V connector

Connect the included AC adapter (PS-M1524A) here. (see "Connecting the power" on page 23)

#### **65 STANDBY switch**

Press to turn the unit on and off.

#### 

Before turning the unit on, lower the volumes of connected equipment to their minimum levels.

Failure to do so might cause sudden loud noises, which could harm your hearing or result in other trouble.

#### NOTE

Do not do this when the unit is operating (including recording, playing back or writing data to an SD card). Doing so could cause proper recording to fail and recorded data to be lost.

#### 66 SUB OUTPUT L/R jacks

These standard TRS jacks are analog outputs.

• TRS (Tip: HOT, Ring: COLD, Sleeve: GND)

#### 67 AUX OUTPUT AUX 1/2 jacks

These standard TRS jacks are analog outputs.

• TRS (Tip: HOT, Ring: COLD, Sleeve: GND)

#### ATTENTION

When the AUX OUTPUT AUX 2 jack is in use, the built-in effects cannot be used. (see "Using the built-in effects" on page 33)

#### **68 CLICK jack**

This outputs the metronome click sound. (see "Setting the click sound" on page 41)

#### 69 FOOTSWITCH jack

This standard TRS jack is for connecting a footswitch.

• TRS (Tip: FOOTSW1, Ring: FOOTSW2, Sleeve: GND)

#### NOTE

- This unit was designed to be used with unlatched (momentary) footswitches that have to be pushed to function (shorted when pushed). (see "Setting the footswitch polarity" on page 47)
- By using a commercially-available splitter cable, two footswitches can be used.

#### 1 MIDI OUT connector

This 5-pin DIN is a standard MIDI output connector. This outputs MIDI signals sent from the computer. If the MIDI TIMECODE or MIDI CLOCK/SPP items are set to ON on the MIDI screen, those will also be output. (see "MIDI functions" on page 44)

#### **(7) MIDI IN connector**

This 5-pin DIN is a standard MIDI input connector. MIDI signals input through this connector will be sent to the computer.

#### 1 INSERT jacks (1-2, standard)

Use these standard TRS jacks to connect external devices (effects).

• TRS (Tip: SEND, Ring: RETURN, Sleeve: GND)

# **Home Screen**

When the Meter Screen is open, press the MENU button to open the Home Screen.



#### 1 Repeat playback status

An icon appears when the repeat playback function is on. (see "Repeat playback function" on page 35)

#### **2** Song format

This shows the current song file format.

44/16 44.1kHz, 16bit 44/24 44.1kHz, 24bit 48/16 48kHz, 16bit 48/24 48kHz, 24bit

#### NOTE

If no song is loaded, the operation format of the unit will be shown like 44/24 or 48/24.

#### **③** Automatic punch in/out function on/off status

The **A-PUNCH** icon appears when the automatic punch in/ out function is on. (see "Automatic punch in/out function" on page 36)

#### (4) SD card present status

When an SD card is loaded, the D icon appears. When an SD card is protected, the D icon appears. Since system files cannot be updated when the D icon appears, automatic punch in/out settings will not be retained and previously loaded songs will not be loaded when the unit is turned on again.

#### **(5) USB connection status**

During USB connection, the 💠 icon appears.

#### 6 Song name

This shows the name of the current song. If a song is protected, an i icon appears before the file name. (see "Protecting/unprotecting songs" on page 29) If a song has unsaved marks, an i icon appears before the file name. (see "Adding marks" on page 40)

#### 7 Transport status

This icon shows the recorder operation status.

Indicator	Meaning
	Stopped at the beginning of the file
11	Paused
•	Recording
	Playback

#### **8** Playback position

The current playback position is shown by a bar.

#### (9) Automatic punch in/out point setting status

When the automatic punch in/out function is on, these show the status of automatic punch in/out point setting.

- Punch in point
- Punch out point

#### 10 Remaining time

The remaining time available for recording on the SD card is shown (in hours: minutes: seconds).

#### NOTE

The remaining recordable time on an SD card depends on the number of recording channels and SD card capacity.

#### 1 Built-in effect status

When a built-in effect is on, the number of the effect in use is shown.

When the built-in effect is off, the **FXMUTE** icon appears. When the built-in effect cannot be used, the **FXMZE** icon appears. (see "Using the built-in effects" on page 33)

#### 12 Recorder time counter

This shows the elapsed time from the beginning of the song.

#### **13 Mark indicators**

An icon is shown at each mark.

#### (14) Song length

This shows the length of the current song (in hours: minutes: seconds).

#### **15** Function button functions

This shows the functions assigned to the function button on the Home Screen.

- F1 METR button: This opens the Meter Screen.
- F2 RPT button: This turns the repeat playback function on/off.
- F3 UNDD button: This returns to the state before the previous operation.
- F3 REDD button: This restores the state after the previous operation.
- F4 MARK button: This adds/deletes marks.
- F4 CLIC button: Open the METRONOME screen where metronome functions can be set. (see "Function button setting" on page 43)

#### NOTE

- The F3 button UNDO and REDO indicators appear when those operations are possible.
- Set the **F4** button function on the KEY FUNCTION screen. (see "Using mark functions" on page 40) and (see "Function button setting" on page 43)

# **Meters Screen**

This shows the levels of the signals being input to the unit.



#### 1 Transport status

This icon shows the recorder operation status.

**(2)** Recorder time counter

This shows the elapsed time from the beginning of the song.

#### **3 Track level meters**

These show the signal levels of each channel.

#### NOTE

The MAIN channels show the MAIN MIX L/R bus levels.

#### **④** Level meter guide

This provides guidance for level adjustment. The guide is shown at the -12dB level.

#### **(5)** Function button functions

This shows the functions assigned to the function button on the Meter Screen.

- F1 SEL. Press to change the input sources shown on the Meter Screen.
- F2 1-8 Press to show the level meters for channel 1-8 signals on the Meter Screen.
- F3 9-12 Press to show the level meters for channel 9/10 and MRIN signals on the Meter Screen.

#### **Meter Screen details**

When the Meter Screen is open, press the **F1** SEL. button to change the signal sources shown by the meters.

#### **Channel input level screens**

The levels of signals input on each channel are shown depending on their MODE switch settings.

-	
1 2 3 4 5 6 7/8	ľ
SEL. 1-8 9-12	

#### **LIVE INPUT Screen**

This shows the levels of signals being input to the input jacks.



#### **PC RETURN Screen**

This shows the levels of signals output from a computer when used as a USB audio interface.

PC RETURN
1 2 3 4 5 6 7/8
SEL. 1-8 9-12

#### NOTE

Output from the computer, including from Windows Media Player and iTunes, is sent to channels 1-2.

#### **MTR RETURN Screen**

This shows the playback signal levels of songs recorded on SD cards.



1 2 3 4 Channels that have recording data in the song 1 2 3 4 Channels that do not have recording data in the song

# Menu structure

When the Home Screen is open, press the MENU button to open the MENU Screen. The various menu items are as follows.

Menu item			Function	Page
SONG			SONG Work with songs on an SD card	page 28
SETTING			Set click sound operation and output destination	page 41
CLICK	METRONOME		Make specific metronome settings	page 42
	COUNT IN		Set the count in function	page 43
		TRACK CLEAR	Clear specific tracks or all tracks	page 38
	TRACK EDIT	IMPORT	Import chosen WAV files to song tracks	page 38
MTR		TRACK SWAP	Swap song recording files	page 39
MIK	AUTO PUNCH		Set the auto punch in/out function	page 36
	A.PUNCH PRE RO	CH PRE ROLL  Set the bre-ro    ME CODE  Set the MIDI t	Set the pre-roll point	page 36
	MIDI TIME CODE		Set the MIDI time code	page 44
	MIDI CLOCK/SPP		Set MIDI clock and song position pointer	page 44
	MTR/USB SEND P	POINT	Set when input signals are sent	page 45
	PHASE		Set the phase of each channel	page 45
MIXER	AUX1 SEND		Set the signal sent to the AUX 1 bus	page 46
	SOLO MODE		Set the solo operation	page 46
STEREO MIX EXPORT			Use stereo mix export function	page 39
SD PLAY			Play WAV files on an SD card	page 50
STORAGE			SD cards can be accessed from a computer	page 51
DAW CONTROLLER			Set the DAW controller mode	page 47
INFORMATION			View SD card information, song information and the firmware version	page 48
	DATE/TIME		Date and time settings	page 25
	SONG NAME		Set the song name format	page 48
	DISPLAY		Adjust the display	page 26
SYSTEM			Sat the function of the function button	page 40
0.0.2	KEY FUNCTION			page 43
	FOOTSW		Make footswitch settings	page 47
	USB AUDIO		Make USB audio settings	page 57
	INITIALIZE		Restore factory default settings	page 49
	MEDIA FORMAT		Format the SD card	page 49

#### NOTE

The settings for all menu items are retained even when the unit is turned off.

# 2 - Names and Functions of Parts

# **Basic MENU screen operations**

After using the MENU button to open the MENU Screen, it can be operated in the following manner.

This is an overview of basic operations. Function button assignments differ according to the screen shown on the display.

#### Selecting items (moving vertically on a page):

Turn the MULTI JOG dial.

#### Opening a submenu from a page:

Press the MULTI JOG dial.

#### Confirming a selected item:

Press the MULTI JOG dial (ENTER button function).

#### Returning to the previous screen without

confirming the selected item:

Press the F1 EXIT button.

#### NOTE

Some menu items are confirmed as soon as they are selected.

#### Going back one step in a menu:

Press the **F1 EXIT** button.

# Returning to the Home Screen from a MENU Screen:

Press the F1 HOME button.

#### Menu operation procedures

This explanation uses an example of setting the pre-roll point.

**1.** Press the MENU button to open the Home Screen.



2. Press the MENU button to open the MENU Screen.

ME	NU.	
SONG		
CLICK		
MTR		
HOME		

#### NOTE

Press the F1 HOME button to return to the Home Screen.

3. Turn the MULTI JOG dial to select different menu items.

	ME	NU	
SONG			
CLICK			
MTR			
HOME			

4. Press the MULTI JOG dial to open a settings screen.



5. Turn the MULTI JOG dial to select the menu item to set.



A.PUNCH PRE ROLL selected

**6.** Press the MULTI JOG dial to open the settings screen.



A.PUNCH PRE ROLL Screen open

**7.** Turn the MULTI JOG dial to change the setting.

#### NOTE

To cancel a setting change, press the **F1 EXIT** button.

- **8.** To set another item on the same screen, press the MULTI JOG dial to move the cursor to the next setting.
- 9. Repeat steps 3 to 8 as necessary to set other items.
- 10. Press the F1 EXIT button to return to the MENU Screen.

# **3 - Preparation**

# Connecting the power supply and other equipment

This is an example of Model 12 connections.

#### **Precautions before making connections**

- Carefully read the operation manuals of the devices to be connected and then connect them correctly.
- Before making connections, turn this unit and all equipment to be connected off (standby).
- Install all connected devices, including this unit, so that they are powered from the same line. When using a power strip or similar device, be sure to use one that has high current capacity (thick cable) in order to minimize fluctuations in power voltage.
- Before connecting audio equipment, set the following knobs and faders to their lowest values. Failure to do so could cause sudden loud noises from monitoring equipment, and this could damage the equipment or harm hearing.
  - GAIN knobs (channels 1-6, 7/8-9/10)
  - Channel faders (channels 1-6, 7/8-9/10)
  - SUB fader
  - AUX 1/AUX 2 knobs
  - MAIN fader
  - PHONES knob
- Set the PHANTOM +48V switch to off.



Examples of connections to a Model 12

## **Connecting the power**

Use the included AC adapter (TASCAM PS-M1524A) to connect a power supply to the unit as shown below.



TASCAM PS-M1524A (included)

- 1. Connect the included AC adapter (TASCAM PS-M1524A) to the DC IN 15V connector on the back of the unit.
- **2.** Turn the nut on the DC plug to secure it to the DC IN 15V connector.

#### ATTENTION

Always connect the included AC adapter (PS-M1524A) and AC adapter power cord. Use of a different adapter could cause malfunction, fire or electric shock.

## **Connecting microphones**

#### **Dynamic mics**

Connect to MIC/LINE (BAL)/INST input jacks.

#### **Condenser mics**

When using a condenser microphone that requires phantom power, connect it to a MIC/LINE (BAL)/INST input jack and then turn the PHANTOM +48V switch on (pushed in). (see "Setting phantom power" on page 31)

The PHANTOM +48V indicator lights when the PHANTOM +48V switch is on (pushed in).

# Connecting guitars, basses and similar instruments

--When connecting a guitar, bass or other instrument with high impedance output (Hi-Z) directly to this unit, use the MIC/LINE (BAL)/INST TRS input jacks, and turn the INST switch on (pushed in) for that jack.

#### NOTE

When connecting an instrument with active output or when the sound passes through an effects unit, for example, that is connected to this unit, the INST switch does not need to be set to on.

# Connecting electronic devices and other audio equipment

Use the following inputs to connect electronic devices and other audio equipment.

• MIC/LINE (BAL)/INST input jacks (1-6, 7/8-9/10)

#### NOTE

When an INST switch is on (pushed in), input through the MIC/LINE (BAL)/INST TRS input jacks will be unbalanced.

# Connecting smartphones/portable audio players

Use the MUSIC/TALK jack to connect a smartphone or portable audio player.

By using a cable with a 4-pole (TRRS) mini plug to connect a smartphone, the signals output from the MAIN OUTPUT jacks can be sent to the smartphone while simultaneously receiving audio signals from the smartphone on channels 9/10.

#### ATTENTION

- Connecting a cable to the MUSIC/TALK jack disables signals input on channels 9/10 from the MIC/LINE jacks.
- Depending on the specifications of the connected device, normal input and output of sound signals might not be possible.

#### NOTE

- When signals output from the MAIN OUTPUT jacks are returned to the smartphone, echo will not occur on the smartphone because the sound from the smartphone itself is not included in those output signals.
- When using a stereo mini plug cable, only audio signal input is possible.

# **Connecting monitor speakers**

Connect monitor speakers (powered speakers or an amplifier and speaker system) to the SUB OUTPUT jacks. Use the SUB fader to adjust the speaker volume.

# **Connecting headphones**

Connect headphones to the PHONES jack (standard stereo). The following signals can be monitored according to the SOLO and AFL switch settings.

- Signals output from the MAIN OUTPUT connectors
- Signals output from the SOLO L/R bus
- Signals output from the AUX 1 bus
- Signals output from the AUX 2/FX bus

#### 

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.

#### **Connecting a computer**

Use a commercially-available Type-A-Type-C USB cable to connect the unit to a computer USB 2.0 port. When the USB connection is working, the USB indicator in the screen operation section lights.

#### ATTENTION

The unit should be connected directly with the computer instead of via a USB hub. Moreover, noise could be picked up if the cable is too long.

#### **Connecting with Bluetooth devices**

This unit can input sound from a computer, portable audio device or other equipment that supports Bluetooth (A2DP).

#### Pairing

Follow the procedures below to enable communication with a Bluetooth device.

#### NOTE

Pairing also requires operation of the Bluetooth device. Refer to the operation manual of the Bluetooth device for procedures.

- 1. Set the ASSIGN switch to "9/10" or "MAIN".
- **2.** Confirm that the PAIRING indicator on this unit is blinking. If it is unlit, press the PAIRING button.



#### NOTE

When the unit is turned on, it automatically becomes ready for pairing. If 2 minutes pass in pairing mode, it will end. Press this button to reactivate pairing mode when it is disabled.

**3.** Select "Model 12" (this unit) on the other Bluetooth device. When pairing succeeds, the PAIRING indicator will stop blinking and remain lit, and connection with the other device will be complete.

#### NOTE

- Some older Bluetooth devices require the input of a passkey. Enter "0000" in such cases.
- Pairing will automatically end if connection is not confirmed within two minutes.
- When this unit is turned on, it will automatically try to connect with the Bluetooth device to which it was previously connected. At this time, pairing will automatically end after five minutes if connection is not possible because that Bluetooth device is not turned on or its Bluetooth function is turned off.

#### Unpairing

The Bluetooth device that is currently connected can be unpaired from the unit.

- 1. Press and hold the PAIRING button for at least two seconds.
- **2.** This ends the pairing. The PAIRING indicator will start blinking and the unit will be ready to pair.

# Inserting and removing SD cards

#### **Inserting SD cards**

Insert an SD card into the SD card slot on the top of the unit to enable playback and recording by this unit.

#### NOTE

SD cards can be inserted whether or not the unit is on or off.

- 1. Open the SD card slot cover.
- 2. The SD card should be inserted with its label facing left.
- 3. Close the SD card slot cover.

## **Removing SD cards**

Turn the unit off or stop operation before removing an SD card.

#### 

Never remove an SD card when the unit is operating (including recording, playing back, or writing data to the SD card). Doing so could cause proper recording to fail, data to be lost, and sudden loud noises from monitoring equipment, which might damage the equipment, harm hearing or cause other trouble.

- 1. Press the SD card in gently to make it to come up.
- 2. Pull the SD card out.

#### SD card write protection switches

SD cards have write-protection switches that prevent writing new data to them.



If you slide the write-protection switch to the "LOCK" position, writing will not be possible. Move the write-protection switch to the unlocked position in order to record, erase and otherwise edit data on the card.

# Turning the power on and off

#### 

- Turn down the volume of the sound system connected to the unit before starting up or shutting down the unit.
- Do not wear connected headphones when turning the unit on and off. Loud noises could damage the speakers or harm your hearing.

#### Before turning the power on

- 1. Make the following settings on the top of the unit.
  - Other knobs all the way left
  - Faders all the way down
  - Switches off (not pushed in)
- 2. Minimize the output levels of audio sources and input levels of amplifiers connected to this unit.

#### Turning the power on

**1.** Use the STANDBY switch on the back of the unit to turn its power on.



<u>1-8 9-12</u> Meter Screen

1 2 3 4 5 6 7/8

After the unit starts and the Startup Screen is shown, the Meter Screen will open.

#### NOTE

- Press the MENU button to open the Home Screen.
- After the unit is turned on, the PAIRING indicator will blink for a set amount of time.
- 2. Turn connected input audio source devices on.
- 3. Finally turn amplifiers on.

#### Turning the power off

Before turning the power off, minimize the levels of output faders and knobs, and then follow the procedures above in reverse.

Failure to follow the correct order could result in clicking noises, for example, that might damage equipment.

#### 

Do not disconnect the power cord when the unit is operating (including recording, playing back, or writing data to an SD card). Doing so could cause proper recording to fail, recorded data to be lost, and sudden loud noises from monitoring equipment, which might damage the equipment, harm hearing or cause other trouble.

#### NOTE

When the unit is started up for the first time (or when the built-in clock is reset after being left unused without power for a long time), the DATE/TIME Screen appears before the Startup Screen to allow the date and time of the built-in clock to be set. (see "Setting the built-in clock date and time" on page 25)

# Setting the built-in clock date and time

Using its internal clock, this unit includes the date and time when a file is recorded.

1. When the recorder is stopped, select DATE/TIME on the SYSTEM Screen, and open the DATE/TIME Screen. (see "Menu operation procedures" on page 21)



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.

#### NOTE

- Use the F2 <--- and F3 <-> buttons to move the cursor.
- **3.** Change the year, month, day, hour and minute in order, and complete the date and time setting.
- 4. Press the F4 EXIT button to confirm the setting and return to the SYSTEM Screen.

#### NOTE

- When making a setting, you can press the **F1 EXIT** button to cancel the changes and return to the SYSTEM Screen.
- When setting the time, the time display will be stopped.
- By setting the TYPE item to "DATE" on the SONG NAME Screen, the date and time set here can be used for song names. (See "Setting the song name format" on page 46)

# Adjusting the display

The display contrast and brightness can be adjusted.

## Adjusting the display contrast

1. When the recorder is stopped, select DISPLAY on the SYSTEM Screen, and open the DISPLAY Screen. (see "Menu operation procedures" on page 21)

DIS	PLAY
CONTRAST:	28 ᅌ
DIMMER :	HIGH
EXIT	

2. Adjust the display contrast.

Options: 10-40 (default: 28)

- **3.** Press the MULTI JOG dial to confirm the setting.
- **4.** Press the **F1 EXIT** button to return to the SYSTEM Screen.

# Adjusting the display brightness

- 1. When the recorder is stopped, select DISPLAY on the SYSTEM Screen, and open the DISPLAY Screen. (see "Menu operation procedures" on page 21)
- **2.** Press the MULTI JOG dial to move the cursor to the DIMMER item.



**3.** Adjust the display brightness.

Options: HIGH (default), LOW

- 4. Press the MULTI JOG dial to confirm the setting.
- 5. Press the F1 EXIT button to return to the SYSTEM Screen.

# Preparing an SD card for use

In order to make an SD card usable in this unit, whether for recording or playback, this unit must be used to create a system file on it first.

#### ATTENTION

In order to record, this unit must be used to format it first. (see "Formatting SD cards" on page 49)

- 1. "No sys file. Make sys file. Are you sure?" appears in a pop up when a new card or a card formatted by another device is inserted into the unit.
- 2. Press the MULTI JOG dial to create a system file. When system file creation is complete, the Home Screen will reopen.

This recorder treats each recording data group as one song and manages data by song.

For one song, WAV files are saved for 10 tracks and a stereo master file.

To record or produce music, a song that has already been created needs to be loaded or a new song needs to be created. This chapter describes functions that range from basic operations such as procedures for loading songs and creating new songs to various song management functions.

#### NOTE

The maximum recording time for a single song is 23:59:59.

# Viewing the song list

To open a list of songs saved on an SD card, select SONG on the MENU Screen, and press the MULTI JOG dial to open the SONG Screen. (see "Menu operation procedures" on page 21)



On the SONG Screen, the following functions are assigned to the function buttons.

- Press the F1 EXIT button to return to the MENU Screen.
- Press the **F2 DATE** button to show the date on the SONG Screen.
- Press the **F3 SIZE** button to show the size on the SONG Screen.
- Press the F4 NEW button to open the NEW Screen where you can create a new song. (see "Creating a New Song" on page 27)

# **Song Operation**

Select the desired song file on the SONG Screen and press the MULTI JOG dial to open a pop-up menu list with possible song operations.



To use a song operation, turn the MULTI JOG dial to select the desired item, and press the MULTI JOG dial.

# LOAD/SAVE

Loads the selected song.

When the selected song is the current song, SAVE will appear and information about it will be saved.

#### INFORMATION

View information about the selected song.

#### CLR ALL MARKS

Clear all marks in the song.

#### DELETE

Deletes the selected song.

#### PROTECT

Protect the selected song.

#### UNPROTECT

Stop protection of the selected song.

#### RENAME

Edits the name of the selected song.

# **Creating a New Song**

To record or play with this unit, you must create and load a song. The following procedure can be used to create a new song.

- 1. Open the SONG Screen when the recorder is stopped. (see "Menu operation procedures" on page 21)
- 2. Press the F4 NEW button to open the NEW Screen.



- Turn the MULTI JOG dial to select the recording file format.
  Options: 44.1kHz 16bit (default), 44.1kHz 24bit, 48kHz 16bit, 48kHz 24bit
- Edit the name of the song as necessary. To edit the name of the song, press the F2 NEME button to open the NAME EDIT Screen.



For details about how to edit song names, see "Editing text" on page 29.

#### TIP

The song name can also be edited later using the RENAME Screen.

Press the F4 OK button to save the currently loaded song and create a new song.
 When song creation completes, the SONG Screen reopens.

#### NOTE

- To cancel song creation, press the **F1 EXIT** button.
- A maximum of 100 songs can be created on a single SD card.
- Songs are created in the "MTR" folder on the SD card.
- When new songs are created, the tempo is set to 120 and the time signature is set to 4/4. (see "Making metronome settings" on page 42)

# **Loading Songs**

Use the following procedure to load the song you want.

1. Open the SONG Screen when the recorder is stopped. (see "Menu operation procedures" on page 21)

#### NOTE

The + icon appears for a song currently being loaded. An  $\triangle$  icon will appear before protected songs.

- **2.** Select the song that you want to load and press the MULTI JOG dial to open the menu list pop-up.
- **3.** Select LOAD, and press the MULTI JOG dial. After the selected song loads, the SONG Screen will reopen.

# Saving the current song

Song information, including marks added during playback of the current song as well as deleted marks, can be saved.

- 1. Open the SONG Screen when the recorder is stopped. (see "Menu operation procedures" on page 21)
- **2.** Select the current song, and press the MULTI JOG dial to open the menu list pop-up.



**3.** Select SAVE, and press the MULTI JOG dial. This saves the song information.

#### ATTENTION

After saving, undoing or redoing the previous operation will no longer be possible.

# **Viewing song information**

You can check the song name (title), sampling frequency, bit rate, size, and date and time last written.

- 1. Open the SONG Screen when the recorder is stopped. (see "Menu operation procedures" on page 21)
- **2.** Select the song with information that you want to check and press the MULTI JOG dial to open the menu list popup.
- **3.** Select INFORMATION, and press the MULTI JOG dial. The INFORMATION Screen will open.



The song name, sampling frequency, bit rate, size, date and time last written will be shown.

4. After checking, press the F1 EXIT button to return to the SONG Screen.

# **Clearing all marks**

This operation clears all marks added to the selected song.

- 1. Open the SONG Screen when the recorder is stopped. (see "Menu operation procedures" on page 21)
- **2.** Select the song with the marks that you want to delete and press the MULTI JOG dial to open the menu list pop-up.
- **3.** Select CLR ALL MARKS, and press the MULTI JOG dial. The CLR ALL MARKS Screen will open.

CLR ALL MARKS	
SONG	
190515_0002	
Are you sure?	
NO YE:	5

**4.** Press the **F4 YES** button to confirm deletion of marks. When mark deletion completes, the SONG Screen reopens.

#### ATTENTION

Deleted marks cannot be restored.

# **Deleting songs**

You can delete songs.

Deleting unnecessary songs when the SD card space is low can create more open space.

- 1. Open the SONG Screen when the recorder is stopped. (see "Menu operation procedures" on page 21)
- **2.** Select the song that you want to delete and press the MULTI JOG dial to open the menu list pop-up.
- **3.** Select DELETE, and press the MULTI JOG dial. The DELETE Screen will open.



**4.** Press the **F4 YE5** button to confirm deletion. When song deletion completes, the SONG Screen reopens.

#### ATTENTION

Deleted songs cannot be restored.

#### NOTE

- To cancel song deletion, press the **F1 NO** button.
- The current song cannot be deleted. To delete the current song, load another song first.

# Protecting/unprotecting songs

By protecting a song, you can disable editing, recording and deletion operations for that song.

You can protect and stop protecting songs.

- 1. Open the SONG Screen when the recorder is stopped. (see "Menu operation procedures" on page 21)
- **2.** Select the song that you want to protect or unprotect and press the MULTI JOG dial to open the menu list pop-up.
- **3.** Select PROTECT or UNPROTECT, and press the MULTI JOG dial.

The PROTECT or UNPROTECT screen will open.



4. Press the F4 YES button to protect or unprotect the song.

#### NOTE

To cancel protection or unprotection, press the **F1** NO button.

**5.** When song protection or unprotection completes, the SONG Screen reopens.

#### NOTE

- a icons appear before songs that are protected in the song list shown for copying, deletion and other operations.
- If you try to execute a prohibited operation (editing, recording, deletion) on a protected song, "Song is protected." will appear in a pop-up message on the display.

## **Editing song names**

- 1. Open the SONG Screen when the recorder is stopped. (see "Menu operation procedures" on page 21)
- 2. Select the song with name that you want to change and press the MULTI JOG dial to open the menu list pop-up.
- **3.** Select RENAME, and press the MULTI JOG dial. The RENAME Screen will open.



 Edit the song name. For details about how to edit song names, see "Editing text" below.

#### NOTE

To cancel song name editing, press the **F1 EXIT** button.

 When finished editing the song name, press the F4 OK button to confirm the song name.
 When song name editing is complete, the SONG Screen reopens.

# **Editing text**

Use these operations to edit text.

#### Changing the cursor (editing point) position:

Use the **F2** and **F3** buttons. You can also press the MULTI JOG dial to move to the next character.

#### Deleting the character at the cursor position:

Turn the MULTI JOG dial. You can input up to 11 characters, including symbols, numbers, and uppercase and lowercase letters.

#### Leaving a single space open:

Turn the MULTI JOG dial to select a blank space at the left end of any row, and press the MULTI JOG dial.

#### **Canceling edits:**

Press the **F1 EXIT** button.

#### **Confirming the changes:**

Press the F4 OK button.

# Loading songs created on different TASCAM Model series products

Songs created on TASCAM Model series products with different channel counts can be loaded on this unit.

Use the following procedure to load the song you want.

1. Open the SONG Screen when the recorder is stopped. (see "Menu operation procedures" on page 21)



 Select the song that you want to load and press the MULTI JOG dial to open the menu list pop-up.
 The name of the product used to create the song will be shown next to the LOAD item if it is different from this unit.



Loading a song made on a Model 24

**3.** Select LOAD, and press the MULTI JOG dial. After the selected song loads, the SONG Screen will reopen.

# Loading a song from a unit with fewer channels on a unit with more channels

When loading a song from a unit with fewer channels on a unit with more channels, empty tracks will be created for the additional channels and the song will be converted for use with the model with more channels before loading.

Example: Loading a song from a Model 12 to a Model 24

Source song	Song after loading
Tracks 1–10	Tracks 1–10 are loaded.
-	Empty tracks are created for tracks 11–22.
Track 11 (MAIN MIX L)	This is loaded as track 23 (MAIN MIX L).
Track 12 (MAIN MIX R)	This is loaded as track 24 (MAIN MIX R).

#### NOTE

- If the SD card is write-protected, the song will be loaded without conversion. See "SD card write protection switches" on page 24 for details about SD card write protection.
- If a song is protected, it will be loaded without conversion. It will automatically be converted if protection is disabled. See "Protecting/unprotecting songs" on page 29 for details about song protection.

# Loading a song from a unit with more channels on a unit with fewer channels

When loading a song from a unit with more channels on a unit with fewer channels, some tracks will not be available for recording and playback.

The unit will load tracks up to its number of channels from the song in order from the first.

MAIN MIX L/R tracks will be loaded as MAIN MIX L/R tracks. The song will not be converted.

Example: Loading a song from a Model 24 to a Model 12

Source song Song after loading	
Tracks 1–10	Tracks 1–10 are loaded.
Tracks 11–22	These are not loaded.
Track 23 (MAIN MIX L)	This is loaded as track 11 (MAIN MIX L).
Track 24 (MAIN MIX R)	This is loaded as track 12 (MAIN MIX R).

# Selecting the input source

This unit has 10 input jacks (8 combo mic/line and 2 TRS line). The MIC/LINE (BAL)/INST TRS input jacks support high impedance input, including direct guitar input. Turn the INST switch on (pushed in) when connecting an guitar or similar instrument directly.

#### TIP

Set the INST switch to off, when connecting an electricacoustic guitar with a built-in preamp or an active electric guitar, as well as when the signal passes through an effect sound between the guitar and this unit.

# Setting the MODE switch

Using the MODE switch settings of each channel to select their input sources individually.

- LIVE: Use the signal from the input jack as the input source.
- PC: Use a signal from a computer connected to the USB port as the input source.
- MTR: Use a playback signal from the SD card as an input source.

When a MODE switch is set to "MTR", the signal from the input jack on that channel will be recorded.

This function is useful when recording and playing back repeatedly because the monitored sound is automatically switched according to the recording or playback status.

#### Sounds on channels when in MTR mode

Transport status	<b>REC button off</b>	<b>REC button on</b>
Stop	Muted	Sound from input jack
Playing back	Playback sound only	Playback sound only + sound from input jack
Recording	Playback sound only	Sound from input jack

# Setting phantom power

When connecting a condenser mic that requires phantom power, press the PHANTOM +48V switch when the recorder is stopped to turn phantom power on/off.

When phantom power is turned on, the PHANTOM +48V indicator lights and a pop-up message appears on the display to confirm turning it on.



Press the MULTI JOG dial to provide phantom power to the MIC/ LINE (BAL)/INST (1-6, 7/8 and 9/10) XLR connectors. If you set the PHANTOM +48V switch to OFF while the confirmation pop-up message is open, the message will close and phantom power will not be enabled.

#### 

Set the following knobs and faders to their minimum values before changing the PHANTOM +48V switch on/off setting. Depending on the connected mics, sudden loud noises from monitoring equipment could occur, and this could damage the equipment or harm hearing.

- GAIN knobs
- Channel faders
- SUB fader
- AUX1/AUX2 knobs
- MAIN fader
- PHONES knob (1/2)

#### ATTENTION

- Before connecting condenser mics, turn this unit and all equipment to be connected off (standby).
- The PHANTOM +48V switch turns it on/off for the input channels (1-6,7/8-9/10) simultaneously. Do not turn the PHANTOM +48V switch on (pushed in) when connecting a mic that does not require phantom power.
- Do not connect or disconnect mics when the PHANTOM +48V switch is on (pushed in). Doing so could cause a loud noise and might damage this unit and connected equipment.
- Turn the PHANTOM +48V switch on (pushed in) only whenusing a condenser microphone that requires phantom power. Turning the PHANTOM +48V switch on (pushed in) when a dynamic mic or other mic that does not require it is connected could damage this unit and connected equipment.
- When using condenser mics that require phantom power and dynamic mics together, be sure to use balanced dynamic mics. Unbalanced dynamic mics cannot be used when phantom power is enabled.
- Supplying phantom power to some ribbon mics could break them. If you are unsure, do not supply phantom power to a ribbon mic.

# Monitoring

Monitoring is important when recording and mastering. With this unit, monitoring is possible using an external monitoring system (powered monitor speakers or an amp and speakers) or using stereo headphones.

Use the SUB fader and PHONES knob to adjust the level of the monitoring system.

# SIG indicators and level meters

The channel 1-6, 7/8-9/10 SIG indicators and level meters shown on the Meter Screen can be used to check the levels of this unit's audio signals.

The level meters are for visually checking signal levels and can also be used to check whether or not signals are being input to this unit.

For example, even if nothing can be heard when monitoring, if the Meter Screen level meters are moving, signals are being input to this unit.

The SIG indicators light green when signals (of at least -40 dB) are input through their channels.

If a SIG indicator lights red, the input source signal is too loud or the GAIN knob is turned up too far.

If the SIG indicator lights red even when the GAIN knob is turned all the way to the left, the input source signal is to loud. Lower its volume.

	- 00	)h (	30m	42	s	
				<u> </u>	_	
	_					
1	2	3	4	5	6	7/8
SEL		1-	8	9.	- 12	

#### Track level meters (1-6, 7/8-9/10)

The show track playback signal or track input signal levels. Channels for which the MODE switch is set to "MTR" will show the following signal levels according to the operation status.

<b>REC button</b>	Transport status	Level meter display
Unlit	PLAY	Track playback signal
Blinking (recording standby)	PLAY	Playback signal Track input + playback signal
	Stop	Track input signal
Blinking (recording)	Record	Track input signal

#### NOTE

When the playback signal is shown, the level of the recorded signal on the track is being shown, so the levels of the level meters cannot be changed.

When the input signal is shown, adjusting channel 1-6, 7/8-9/10 GAIN knobs will change the levels of the level meters.

#### TIP

Please see "Meter Screen details" on page 19 for details about the Meter Screen.

#### MAIN MIX L/R level meters (MAIN)

These show the MAIN MIX L/R bus levels.

# Recording

This unit can simultaneously record up to 12 tracks, including 10 channel inputs and the MAIN MIX L/R bus.

The following recording operations assume that mics, guitars and other things to record have been connected to the unit, input signals have been assigned as track recording sources, monitoring equipment has been connected and a song has been loaded.

 Press the REC buttons for channel to record. Press the REC button to start recording standby. It will blink red.

When a MODE switch is set to "MTR", the signal from the input jack on that channel will be recorded. (see "Setting the MODE switch" on page 31)

#### NOTE

- The MAIN MIX L/R bus does not have a REC button, but it is always in recording standby. The signals of the MAIN MIX L/R bus will always be recorded if the button is pressed.
- When the REC buttons of tracks that already have recordings is blinking, press them to make them unlit.
- 2. Set the recording levels.

Use the GAIN knobs of each channel to adjust their input levels.

Watch the SIG indicators above and to the right of the GAIN knobs, and set the levels suitably.

At the same time, check that the sound heard through headphones or a monitoring system is not distorted and that an unintended effect has not been set.

#### NOTE

If an input is too loud, the SIG indicator will light red. If the SIG indicator lights red even when its GAIN knob is turned all the way to the left, lower the volume of the input source.

**3.** Press the ● button.

Recording will start and the  $\bullet$  and  $\blacktriangleright/II$  buttons will light.

The REC buttons for tracks to record will stop blinking and stay lit.

- **4.** When recording has completed, press the button.
- 5. Use the ◀◀/►► buttons and button, for example to locate to a position you want to check.

#### TIP

For details about the locate function, see "Locate function" on page 35.

 Press the ►/II button to play the recorded tracks. Use the channel and MAIN faders to adjust the playback levels.

Use the volume of the monitoring system to adjust the final monitoring level.

Use the PAN knobs of each channel to set the position of each track signal between left and right speakers.

#### NOTE

- The channel PAN knobs and channel faders control the playback output signals of already recorded tracks or the monitoring volume of input signals. They do not control signals to be recorded.
- If you are not satisfied with a recording, repeat the above procedure from the beginning.

# **Undoing operations**

If you make a mistake operating the unit or want to do a recording over, for example, the operation last conducted can be undone. Editing, recording and other operations can be undone. The following types of operations can be undone.

- Recording operations
- Auto punch in/out operations
- Track clearing operations

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

#### NOTE

Files used for undoing are temporarily saved on the SD card. If you want to delete those files to make more space on the SD card, reload the current song on the SONG Screen.

#### Undoing the previous operation

1. When the Home Screen is open, press the F3 UNDO button.



The following confirmation pop-up message will appear.



2. Press the F4 YES button to return to the state before the previous operation.

#### NOTE

To cancel undoing, press the **F1** NO button.

#### **Redoing an undone operation**

1. After undoing, when the " REDO " appears on the Home Screen, press the F3 REDO button.

The following confirmation pop-up message will appear.



2. Press the F4 YES button to restore the previous operation and return to the state before undoing.

#### NOTE

To cancel redoing, press the **F1** NO button.

# Using the built-in effects

This unit has built in effects, so you can apply effects without an external effect device.

Channels 1-6 and 7/8-9/10 can have an effect applied. Their signals are sent to the built-in effect by the AUX2/FX bus. The return signal is sent to the following buses.

- MAIN MIX L/R bus
- SOLO L/R bus
- AUX1 bus
- SUB L/R bus

#### ATTENTION

When the AUX OUTPUT AUX 2 jack is in use, **FX**. **N**/**A** appears on the Home Screen and the built-in effects cannot be used.

- 1. Use the AUX 2/FX knobs of each channel to adjust the levels of signals sent to the AUX2/FX bus.
- 2. Use the EFFECT Screen to select the type of effect. (see "Setting the built-in effect" on page 33)
- **3.** Use the FX fader and TO AUX 1 knob to adjust the return levels for each bus.

## Setting the built-in effect

1. Press the SELECT button to open the EFFECT Screen.

	EF	FECT	
LIB.:	1		ON
TYPE:	1.HF	ALL1	<b>^</b>
TIME	[s]:	1.50	
EXIT	OFF		INI

2. Turn the MULTI JOG dial, and set the built in effect type.

Options: 1.HALL1 (default), 2.HALL2, 3.ROOM1, 4.ROOM2, 5.PLATE, 6.STUDIO, 7.LIVE, 8.DELAY1, 9.DELAY2, 10.PING PONG, 11.CHORUS, 12.FLANGER, 13.DELAY+HALL1, 14.DELAY+HALL2, 15.CHORUS+HALL1, 16.CHORUS+HALL2

**3.** Press the MULTI JOG dial to select the PARAMETER item. The parameter item is dependent on the selected effect.

# 5 - Basic recording

**4.** Turn the MULTI JOG, and adjust the set effect. You can check the effect as you change it.

EFFECT
LIB.: 1 ON
TYPE: 1.HALL1
TIME [≤]: 1.50¢
EXIT OFF INI

#### NOTE

- Turn the MULTI JOG dial to change the **F4** button function from **INI** to **UNDO**. Press the **F4 UNDO** button to return to the state before turning the MULTI JOG dial.
- Press the **F4 INI** button to set a parameter value to its default.
- "TRP" appears for effects that include delay. When the parameter item is selected, the CLICK button can be pressed repeatedly at the desired speed to set the tempo.

EFF	ECT
LIB.: 1	ON
TYPE: 8.DE	LAY1
TIME [ms]:	100¢ (TAP)
EXIT OFF	INI

- When the footswitch setting is "TAP", the footswitch can be used instead of the CLICK button for TAP delay input. (see "Setting up the footswitch" on page 47)
- Press the F2 OFF button to turn the built-in effect on/off. The A item on the EFFECT screen shows the built-in effect status.



Status	Meaning
ON (default)	The built-in effect is on.
OFF	The built-in effect is off.
N/A The built-in effect cannot be used (because the AUX 2 jack is in use).	

#### NOTE

When the built-in effect is off, the icon appears on the **FX.MUTE** Home Screen.

6. Press the F1 EXIT button to return to the Home Screen.

## Using the library

This unit has a library function that allows up to 10 built-in effect settings to be saved.

#### Saving effects settings in the library

- 1. Press the SELECT button to open the EFFECT Screen.
- 2. Press the MULTI JOG dial to select the LIB item.



- **3.** Turn the MULTI JOG dial to select the library number to save.
- Follow the procedures in "Setting the built-in effect" to set the built-in effect. This saves the effect setting in the library.

#### Using an effect setting saved in the library

- **1.** Press the SELECT button to open the EFFECT Screen.
- 2. Press the MULTI JOG dial to select the LIB item.
- **3.** Turn the MULTI JOG dial to select the library number with the saved effect setting you want to use. This applies the saved effect setting.

# 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.
- Press the ► / II 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.

 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.
- Punch in recording is not possible when the REC button is on for eight or more channels.
- 3. Start playback before the part to be replaced.
- When the part to be replaced is reached, press the button, and perform the part. Recording will start (punch in).
- 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

By connecting the recommended TASCAM RC-1F footswitch (sold separately) to the FOOTSWITCH jack on the top of the unit, you can use it to punch in/out.

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" on page 47)

F	OOTSW
FOOTSW1	PUNCH I/O
FOOTSW2	OFF
EXIT	

At step **4** above, press the footswitch instead of the  $\bullet$  button, and at step **5** press it again instead of the  $\blacksquare$  button.





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