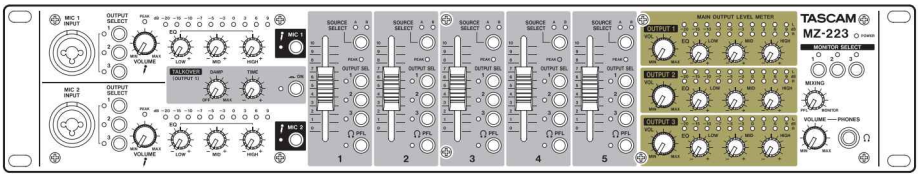
TASCAM

LX223G0002

MZ-223

MIXER



OWNER'S MANUAL — ENGLISH

MODE D'EMPLOI — FRANÇAIS

MANUAL DEL USUARIO — ESPAÑOL

BEDIENUNGSANLEITUNG — DEUTSCH

MANUALE DI ISTRUZIONI — ITALIANO

取扱説明書 — 日本語

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OWNER'S MANUAL

IMPORTANT SAFETY PRECAUTIONS

	CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.
	The lightning flash with arrowhead symbol, within equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.
	The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

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

For U.S.A.

Declaration of Conformity

Model Number: MZ-223

Trade Name: TASCAM

Responsible party: TEAC AMERICA, INC.

Address: 1834 Gage Road, Montebello, California, 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.

IN USA/CANADA, USE ONLY ON 120 V SUPPLY.

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.

CE Marking Information

EN55103-2

a) Applicable electromagnetic environment: E1, E2, E3, E4

IMPORTANT SAFETY INSTRUCTIONS

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 is required 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.

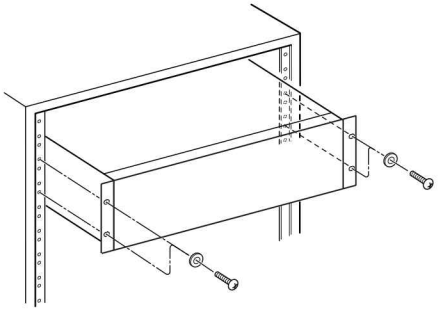
- The mains plug is used as the disconnect device, the disconnect device shall remain readily operable.
- Caution should be taken when using earphones or headphones with the product because excessive sound pressure (volume) from earphones or headphones can cause hearing loss.
- If you are experiencing problems with this product, contact TEAC for a service referral. Do not use the product until it has been repaired.
- Do not remove the external cases or cabinets to expose the electronics. No user serviceable parts are inside.
- If you are experiencing problems with this product, contact the store where you purchased the unit for a service referral. Do not use the product until it has been repaired.
- Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

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.

RACK-MOUNTING THE UNIT

Use the supplied rack-mounting kit to mount the unit in a standard 19-inch rack, as shown below.



CAUTION

- Leave 1U of space above the unit for ventilation.
- Allow at least 10 cm (4 in) at the rear of the unit for ventilation.

Disposal of electrical and electronic equipment

(a) All electrical and electronic equipment should be disposed of separately from the municipal waste stream via designated collection facilities appointed by the government or the local authorities.

(b) By disposing of the electrical and electronic equipment correctly, you will help save valuable resources and prevent any potential negative effects on human health and the environment.

(c) Improper disposal of waste equipment can have serious effects on the environment and human health as a result of the presence of hazardous substances in electrical and electronic equipment.

(d) The crossed out wheeled dust bin symbol indicates that electrical and electronic equipment must be collected and disposed of separately from household waste.

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

For European Customers

For China

“仅适用于海拔2000m 以下地区安全使用”

“仅适用于非熱帯气候条件下安全使用”

“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

机种: MZ-223		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	○	○	○	○	○	○
2	FRONT PANEL 部份	○	○	○	○	○	○
3	螺丝部份	○	○	○	○	○	○
4	线材部份	○	○	○	○	○	○
5	PCB Assy 部份	×	○	○	○	○	○
6	电源部份	○	○	○	○	○	○
7	附属品部份	×	○	○	○	○	○
8	LABEL 部份	○	○	○	○	○	○
9	包装部份	○	○	○	○	○	○

○：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)

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Thank you very much for purchasing the TASCAM MZ-223.

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

- Rackmount mixer that enables routing input channels to multiple outputs as desired
- Mic and line inputs can be mixed for output
- Talkover function automatically lowers background music volume according to mic volume
- Five input channels are equipped with gain controls, signal LEDs, and faders
- Two mic input channels are equipped with volume controls, LED level meters and three-band equalizers
- Three zone main outputs are equipped with volume controls, LED level meters and three-band equalizers
- Headphone output with volume control can be used for pre-fader monitoring of selected input channels and the main output
- Monitoring output is independent from main outputs
- 2U rackmount size

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 ..... × 1
- AC adapter (TASCAM PS-M1524) ..... × 1
- Cord for AC adapter (JAPAN USA/EUROPE) ..... × 2
- Rackmount screw kit ..... × 1
- Owner's Manual (this document) including warranty ..... × 1

CAUTION

Always use the included AC adapter (TASCAM PS-M1524) when using this unit. Never use the included AC adapter 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 names of switches, connectors and other physical parts of this unit are written using a bold font like this: **POWER** switch.
- Additional information is provided as necessary as tips, notes and cautions.

TIP

These are tips about how to use the unit.

NOTE

These provide additional explanations and describe special cases.

CAUTION

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

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 cause malfunction.

  Places with significant vibrations

  Near windows or other places exposed to direct sunlight

  Near heaters or other extremely hot places

  Extremely cold places

  Places with bad ventilation or high humidity

  Very dusty locations
- 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

If the unit is moved from a cold to a warm place, or used after a sudden temperature change, there is a danger of condensation; vapor in the air could condense on the internal mechanism, making correct operation impossible.

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

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

User registration

Customers in the USA, please visit the TASCAM website to register as a user online.

https://tascam.jp/jp/login

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.

http://tascam.com/

About TASCAM customer support service

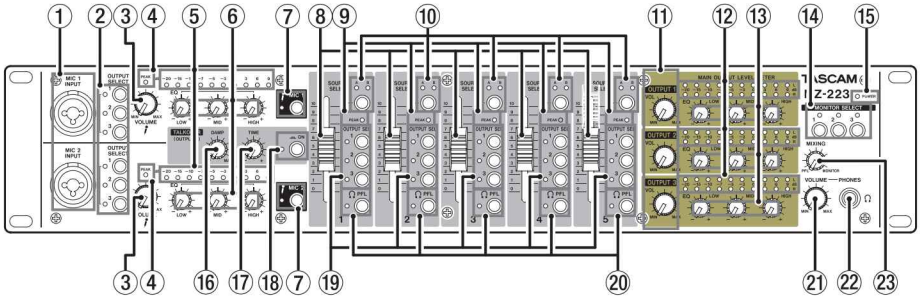
TASCAM products are supported and warrantied only in their country/region of purchase.

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.

Front panel



① **MIC 1–2 INPUT jacks**
These XLR/TRS combo jacks are for mic input.

② **OUTPUT SELECT switches**
Use these to select outputs for audio input through the **MIC 1–2 INPUT** jacks (①).

③ **MIC 1–2 INPUT VOLUME knobs**
Use to adjust the mic input level from the **MIC 1–2 INPUT** jacks (①).

④ **PEAK indicators**
These are mic input peak level indicators for the **MIC 1–2 INPUT** jacks (①).
When adjusting the **MIC 1–2 INPUT VOLUME** jack knobs (③), these light just before the mic input signals distort.

⑤ **MIC 1–2 INPUT indicators**
These are mic input level indicators for the **MIC 1–2 INPUT** jacks (①).

⑥ **MIC 1–2 INPUT EQ knobs**
These 3-band (HIGH/MID/LOW) equalizers adjust the mic input sounds.

⑦ **MIC 1–2 switches/indicators**
Press to turn mic input from the **MIC 1–2 INPUT** jacks (①) on/off.
The **MIC 1–2** indicators light when mic input is on.

⑧ **Channel faders**
Use these to adjust the send levels of channel signals.

⑨ **PEAK indicators**
These indicators show the input peak levels of input channels.
When adjusting the 1-5 **GAIN** knobs (㉗) on the back of the unit, these light just before the input channel signals distort.

⑩ **SOURCE SELECT switches/indicators**
Use these to set the **LINE A** or **B** input jacks (㉟) on the back of the unit as the input sources.
The indicators for the selected inputs light.

⑪ **OUTPUT VOL knobs**
Use these to adjust the output levels of the **MAIN OUTPUTS 1–3 (UNBALANCED)** (㉞) and **MAIN OUTPUTS 1–3 (BALANCED)** (㉝) jacks on the back of the unit.

⑫ **Output level indicators**
These indicators show the output levels of the **MAIN OUTPUTS 1–3 (UNBALANCED)** (㉞) and **MAIN OUTPUTS 1–3 (BALANCED)** (㉝) jacks on the back of the unit.

⑬ **OUTPUT EQ knobs**
Use these 3-band (HIGH/MID/LOW) equalizers to adjust the sounds of the **MAIN OUTPUTS 1–3 (UNBALANCED)** (㉞) and **MAIN OUTPUTS 1–3 (BALANCED)** (㉝) jackson the back of the unit.

⑭ **MONITOR SELECT switches**
Use these to select the signals output from the **MONITOR OUT** (㉜) jacks.
The indicators for the selected outputs light.

⑮ **POWER indicator**
This shows the status of the unit.
When the **POWER** (㉔) switch on the back of the unit is on, the **POWER** indicator lights.

⑯ **TALKOVER DAMP knob**
Use this to adjust the attenuation level of the talkover function.

⑰ **TALKOVER TIME knob**
Use this to adjust the response time of the talkover function.

⑱ TALKOVER ON switch/indicator

Press to turn the talkover function on/off.

When the talkover function is on, the **TALKOVER ON** indicator lights, and the levels of all input channels are lowered automatically when sound is input from a mic.

Use the **TALKOVER DAMP** (⑯) and **TALKOVER TIME** (⑰) knobs to adjust the attenuation level and response time (**MIC 1** only).

⑲ OUTPUT SEL switches

Use these to select the output channel stereo buses (1–3) that receive the input signals of each channel.

⑳ PFL switches/indicators

When a **PFL** switch is on (**PFL** indicator lit), the pre-fader signal (signal before fader adjustment) can be monitored through headphones.

㉑ PHONES VOLUME knob

Use this to adjust the headphone output level.

㉒ PHONES jack

Use this standard stereo jack to connect stereo headphones.

Use an adapter to connect headphones with a mini plug.

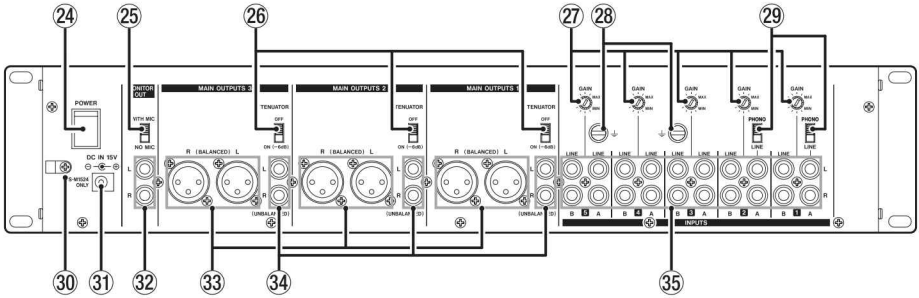
When **PFL** switches (⑳) are on, the PFL signal can be monitored.

㉓ MIXING knob

Use this to mix the pre-fader and monitoring signals output to the headphones.

- Turn all the way to the **PFL** side to monitor channels that have their **PFL** (⑳) switches pressed in.
- Turn all the way to the **MONITOR** side to monitor the monitoring signal.

Rear panel



㉔ POWER switch

Press to turn the unit on and off.

When on, the **POWER** (⑮) indicator lights on the front of the unit.

㉕ MONITOR OUT mic mix switch

This sets whether or not the input signals from mics connected to the **MIC 1–2 INPUT** (①) jacks on the front of the unit are sent to and mixed with the monitoring output.

To mix the input signals from mics connected to the **MIC 1–2 INPUT** (①) jacks with the monitoring output, set the **MONITOR OUT** mic mix switch to **WITH MIC**.

㉖ ATTENUATOR switches

These switch the output levels from the **MAIN OUTPUTS 1–3 (UNBALANCED)** (㉞) and **MAIN OUTPUTS 1–3 (BALANCED)** (㉝) jacks.

Set them to **OFF** if the destination amplifier receives high gain, and set it to **ON (-6dB)** if the destination amplifier receives low gain.

㉗ GAIN knobs

Use these to adjust the levels of each input channel.

NOTE

Use a small flathead screwdriver to adjust these.

㉘ ⏚ (GND) connectors

If a record player is connected to the **LINE A** input (㉟) jacks of channel 1–2, also connect its grounding wire to this.

NOTE

If a humming noise occurs when connecting a device other than a record player, connecting a grounding wire from the metal frame of that device (or the rack frame if rackmounted) to this could reduce the noise.

㉙ LINE/PHONO input selection switches

For channels 1–2, if the output of a CD player or similar device is connected to LINE **A** input (㉟) jacks, set this to **LINE**. If a record player output is connected, set it to **PHONO**.

㉚ **Cord holder**
Attach the power cord of the included AC adapter (TASCAM PS-M1524) here to prevent accidental disconnection. (See "Connecting other equipment" on page 10.)

㉛ **DC IN 15V connector**
Connect the DC plug of the included AC adapter (TASCAM PS-M1524) here.

㉜ **MONITOR OUT jacks**
These RCA pin jacks are analog monitoring outputs.

㉝ **MAIN OUTPUTS 1–3 (BALANCED) jacks**
These analog outputs are XLR jacks. (1: GND, 2: HOT, 3: COLD)
Use the **ATTENUATOR** (㉖) switches to change the output levels.

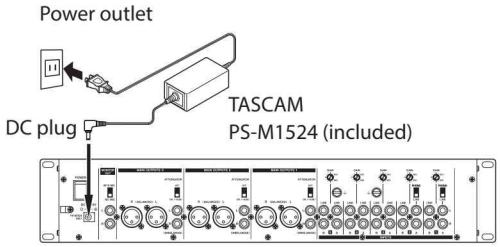
㉞ **MAIN OUTPUTS 1–3 (UNBALANCED) jacks**
These RCA pin jacks are analog outputs.
Use the **ATTENUATOR** (㉖) switches to change the output levels.

㉟ **LINE A/B input jacks**
These RCA pin jacks are analog line outputs.
Record players can be connected to the **LINE A** input jacks of channels 1–2. When connecting a record player to these jacks, also connect its grounding wire to the ⏚ (GND) jack (㉘), and set the **LINE/PHONO** input selection switch (㉙) to **PHONO**.

Preparation

Connecting the power

Use the included AC adapter (PS-M1524) to connect a power supply to the unit as shown below.



CAUTION

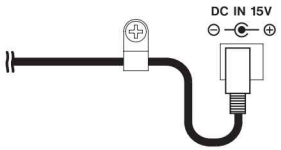
Always use the AC adapter (PS-M1524) that was shipped with the unit. Using a different AC adapter could cause malfunction, overheating, fire or other problems.

NOTE

The AC adapter for the unit includes two types of adapter cords. Attach the type of AC adapter cord that matches the power outlet that you are using.

Attaching the cord

In order to prevent the cord from becoming disconnected during use, attach it to the cord holder (㉚) when connecting it to the unit.



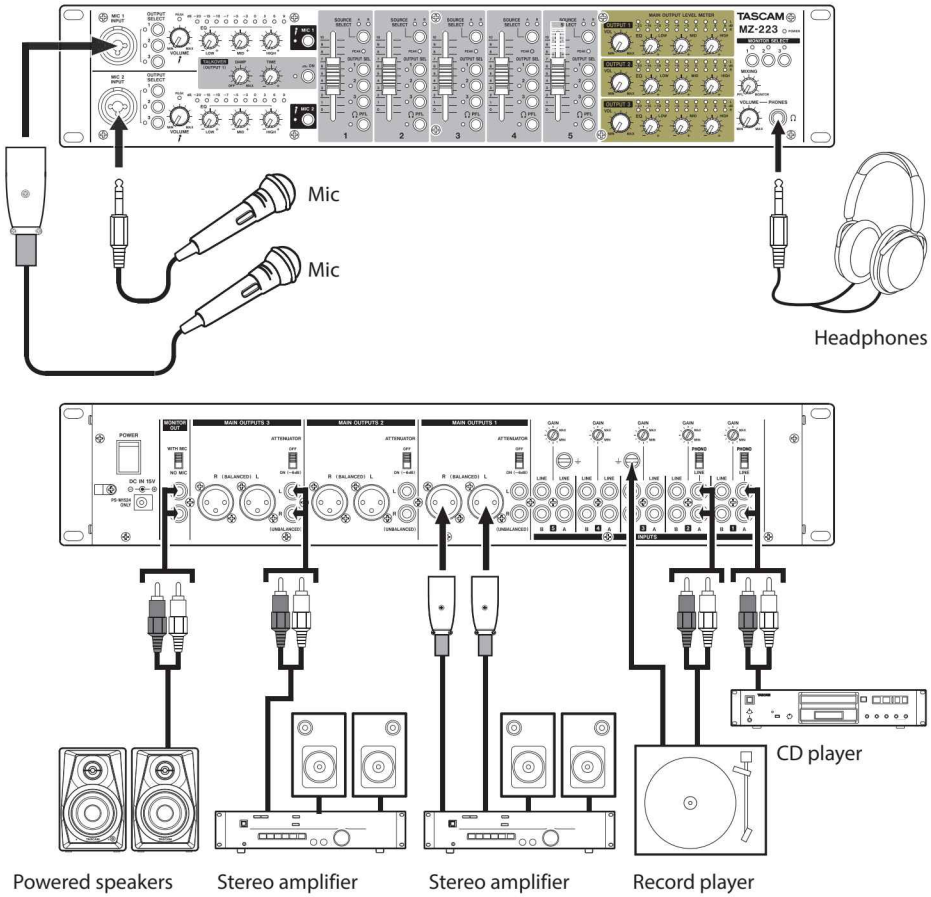
1. Remove the cord holder (㉚) screw.
2. Place the cord in the cord holder (㉚).
3. Tighten the cord holder (㉚) screw.

Connecting other equipment

This is an example of MZ-223 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.
- When connecting audio devices, minimize the channel 1-5 **GAIN** knobs (㉗) and faders (⑧), and the **OUTPUT VOL** (⑪) and **PHONES VOLUME** (㉑) knobs. Failure to do so could cause sudden loud noises from monitoring equipment, and this could damage the equipment or harm hearing.



Examples of connections to an MZ-223

Connecting microphones

Use the **MIC 1–2 INPUT** jacks (①) on the front of the unit to connect mics.

Connecting electronic devices and other audio equipment

When connecting an electronic device or other audio equipment, connect it to channel 1-5 **LINE A** or **B** jacks (㉟).

When connected to channel 1–2 **LINE A** input jacks, set the **LINE/PHONO** (㉙) input switch to **LINE**.

Connecting record players

When connecting a record player, connect it to channel 1–2 **LINE A** (㉟) jacks, and set the **LINE/PHONO** (㉙) input switch to **PHONO**.

Connect the grounding wire from the record player to the ⏚ (GND) (㉘) connector.

Connecting monitor speakers

Connect monitor speakers (powered speakers or an amplifier and speaker system) to the **MONITOR OUT** (㉜) jacks.

To mix in the mic input signals from the **MIC 1–2 INPUT** (①) jacks, and output them from the monitor speakers, set the **MONITOR OUT** (㉕) mic mix switch to **WITH MIC**.

NOTE

- You can make selections with the **MONITOR SELECT** switches (⑭), and monitor signals before outputting them from the **MAIN OUTPUTS 1–3 (UNBALANCED)** (㉞) and **MAIN OUTPUTS 1–3 (BALANCED)** (㉝) jacks.
- Monitored sounds are affected by the output equalizers.

Connecting headphones

Connect headphones to the **PHONES** (㉒) jack (standard stereo).

You can monitor input channel pre-fader signals and signals before they are sent to the stereo output bus.

Use the **MONITOR SELECT** (⑭) switches to select the outputs that you want to monitor.

CAUTION

Before connecting headphones, minimize the volume with the **PHONES VOLUME** (㉑) knob. Failure to do so could result in a sudden loud noise that could harm hearing, for example.

NOTE

Sounds output from headphones are affected by the output equalizers.

Connecting stereo amplifiers

When connecting a stereo amplifier, connect it to the **MAIN OUTPUTS 1–3 (UNBALANCED)** (㉞) or **MAIN OUTPUTS 1–3 (BALANCED)** (㉝) jacks.

TIP

- When connecting 2 or more amplifier and speaker systems, including main and sub, main and monitoring, or front and rear combinations, using the **MAIN OUTPUTS 1–3 (UNBALANCED)** (㉔) and **MAIN OUTPUTS 1–3 (BALANCED)** (㉝) jacks could be convenient. Moreover, the outputs of the jacks are independent and have their own dedicated output knobs, so you can set the output levels separately with this unit.
- By connecting a recorder to **MONITOR OUT** (㉜) jacks, the signal output to amplifier/speaker systems can be recorded.

Turning the power on and off

CAUTION

- 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 front of the unit.
   - EQ knobs → center values
   - Other knobs → all the way left (**MIN** side)
   - 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 **POWER** (㉔) switch on the back of the unit to turn its power on.
   The **POWER** (⑮) indicator on the front of the unit will light when on.
2. Turn connected input audio source devices on.
3. Finally turn amplifiers on.

Turning the power off

Follow the procedures above in reverse when turning the power off.

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

Operation procedures

After turning the power on, adjust the levels of the input signals.

Adjusting line input channels (1–5)

1. Set the channel 1–5 **GAIN** knobs (㉗) to their center positions.
2. Press the channel 1–5 **SOURCE SELECT** switches (⑩), so that the **SOURCE SELECT** indicator (**A**/**B**) lights.
3. Press the channel 1–5 **OUTPUT SEL** switches (⑲) to select the output channel stereo buses (1–3) that receive the input signals of each channel.
4. When connecting an audio device to channel 1–2 **LINE A**/**B** (㉟) input jacks, set the **LINE**/**PHONE** switch (㉙) to **LINE**.
5. Set the **OUTPUT VOL** (⑪) knob levels low.
6. Start playback on the connected audio device.
   Use the **GAIN** knobs (㉗) to adjust the levels so that the channel 1–5 **PEAK** indicators (⑨) do not light red.
7. Follow the above procedures to adjust other line input channels with connected audio devices.

Adjusting the inputs of mics connected to the MAIN MIC 1–2 INPUT jacks

1. Connect a mic to a **MIC 1–2 INPUT** jack (①), and press the **MIC 1–2** switch (⑦) so that the **MIC 1–2** indicator (⑦) lights.
2. Press **OUTPUT SELECT** switches (②) to select outputs for signals input through the **MIC 1–2 INPUT** jacks (①).
3. While checking the **MIC 1–2 INPUT** (⑤) and **PEAK** (④) indicators, use the **MIC 1–2 INPUT VOLUME** knobs (③) to adjust the mic input levels.
4. Use the **MIC 1–2 INPUT EQ** knobs (⑥) to adjust the 3-band (HIGH/MID/LOW) equalizers.

Output channels

Output signals can be sent to the following jacks from the stereo output bus after the output equalizer.

- **MAIN OUTPUTS 1–3 (UNBALANCED)** (㉞) and **MAIN OUTPUTS 1–3 (BALANCED)** (㉝) jacks
- **MONITOR OUT** jacks (㉜)

NOTE

The output level from the **MONITOR OUT** (㉜) jacks cannot be adjusted.

Adjusting the levels output from the MAIN OUTPUTS 1–3 (UNBALANCED) and MAIN OUTPUTS 1–3 (BALANCED) jacks

While checking the output level indicators (⑫), use the channel faders (⑧) and **OUTPUT VOL** (⑪) knobs to adjust the output levels. The optimal output level adjustment is usually when the output level indicators (⑫) light around 0 dB.

When an amplifier is connected to the **MAIN OUTPUTS 1–3 (UNBALANCED)** (㉞) or **MAIN OUTPUTS 1–3 (BALANCED)** (㉝) jacks, set the **ATTENUATOR** (㉖) switch to **OFF** if it accepts high gain or **ON (-6dB)** if it accepts low gain.

Use the **OUTPUT EQ** knobs (⑬) to adjust the 3-band (HIGH/MID/LOW) equalizers for the output sound.

Using the talkover function

When the talkover function is turned on by pressing the **TALKOVER ON** switch (⑱), the levels of channels 1 will be automatically lowered when sound is input from a mic connected to a **MIC 1–2 INPUT** (①) jack, making the mic signal easier to hear.

To turn the talkover function off, press the **TALKOVER ON** (⑱) switch to disable it (**TALKOVER ON** (⑱) indicator becomes unlit).

Use the **TALKOVER DAMP** (⑯) and **TALKOVER TIME** (⑰) knobs to adjust the attenuation level and response time.

Listening to channel pre-fader signals

By pressing the **PFL** (⑳) switches of channels to turn them on, you can enable headphone monitoring of individual channels 1–5, even when their faders (⑧) are set at minimum values.

1. **Press PFL** (⑳) switches so that their **PFL** indicators light, and turn the **MIXING** (㉓) knob to **PFL**.
   To monitor the signal before it is sent to the stereo output bus, turn the **MIXING** (㉓) knob to **MONITOR**.
2. Use the **PHONES VOLUME** (㉑) knob to adjust the monitoring output level.

Troubleshooting

If you are having trouble with the operation of this unit, please try the following before seeking repair.

If these measures do not solve the problem, please contact the store where you purchased this unit or TASCAM customer support service.

The unit will not turn on.

- Confirm that the AC adapter (TASCAM PS-M1524) is securely connected to both the outlet and the DC jack.

Sound is not output from speakers connected via the MAIN OUTPUTS 1–3 jacks.

- Check the settings and volume of the connected amplifier.
- Confirm that channel faders (⑧) are raised.
- Confirm that the input sound source is connected properly.

The volume is low even when faders are raised.

- Confirm that the **GAIN** (㉗) knobs for channels 1–5 are set properly.

The sound is distorted.

- Confirm that the channel 1–5 **GAIN** knobs (㉗) are set properly.
- Confirm that the EQ is not set too high.
- Confirm that the channel 1–5 faders (⑧) and **OUTPUT VOL** knobs (⑪) are not set too high.

Sound from a record player is strange.

- Confirm that it is connected to channel 1–2 **LINE A** jacks and that the **LINE/PHONO** input switch (㉙) is set to **PHONO**.
- Confirm that the grounding wire from the record player is connected to the ⏚ (GND) connector (㉘).

A connected device is making a humming noise.

- Connect a grounding wire from the metal frame of the connected device to the ⏚ (GND) connector (㉘) on this unit.

No sound is output from headphones.

- Use the **MONITOR SELECT** (⑭) switches to select the outputs.

No sound is output from the monitoring system connected to the MONITOR OUT jacks.

- Check the settings of the connected monitoring system.
- Confirm that the channel 1–5 **GAIN** knobs (㉗) and channel faders (⑧) are raised.

Specifications

Audio inputs

MIC 1–2 INPUT (BALANCED) jacks

Connectors:
XLR-3-31 (1: GND, 2: HOT, 3: COLD)
6.3mm (1/4") standard TRS jacks (Tip: HOT, Ring: COLD, Sleeve: GND)
Input impedance: 33 kΩ
Nominal input level: -65 dBu (**VOLUME** knob at **MAX**)
Nominal input level: -30 dBu (**VOLUME** knob at **MIN**)

INPUTS: LINE (UNBALANCED) jacks

Connectors: RCA pin jacks
Nominal input level: -10 dBV
Maximum input level: 10 dBV
Input impedance: 22 kΩ

- 0 dBu=0.775 Vrms, 0 dBV=1 V

Audio outputs

MAIN OUTPUTS (UNBALANCED) jacks

Connectors: RCA pin jacks
Rated output level: -10 dBV
Maximum output level: 6 dBV
Output impedance: 200 Ω

MAIN OUTPUTS (BALANCED) jacks

Connectors: XLR-3-32 (1: GND, 2: HOT, 3: COLD)
Rated output level: 4 dBu
Maximum output level: 24 dBu
Output impedance: 200 Ω

MONITOR OUT jacks

Connectors: RCA pin jacks
Rated output level: -16 dBV
Maximum output level: 0 dBV
Output impedance: 200 Ω

PHONES jack

Connectors: 6.3mm (1/4") standard stereo jack
Maximum output: 50 mW + 50 mW (into 32 Ω load)

- 0 dBu=0.775 Vrms, 0 dBV=1 V

Audio performance

Frequency response
20 Hz–20 kHz (INPUTS LINE to MAIN OUTPUTS)

Distortion
0.03% or less (INPUTS LINE to MAIN OUTPUTS)

S/N ratio
80 dB or more (INPUTS LINE to MAIN OUTPUTS)

Crosstalk
65 dB or more (INPUTS LINE to MAIN OUTPUTS)

General

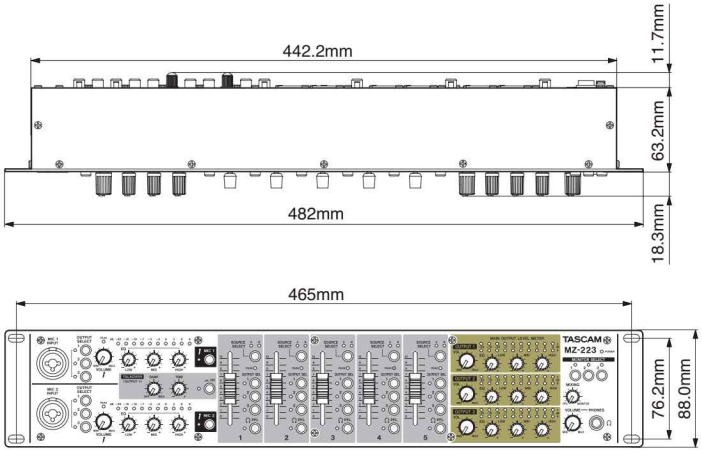
Power
Dedicated AC adapter (PS-M1524)
Input voltage: AC 100–240V ~, 50/60Hz
Output voltage: DC 15V ⎓
Output current: 2.4 A

Power consumption
35 W

Dimensions
482.0 × 88.0 × 93.2 mm
(width × height × depth, including protrusions)

Weight
2.5kg

Dimensional drawings



- Illustrations in this manual might differ in part from the actual product.
- Specifications and external appearance might be changed without notification to improve the product.

Block diagrams