AMS-44
AUDIO I/F for MUSIC & STREAMING

Operation Manual
You must read the Usage and Safety Precautions before use.

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Proper display is not possible on grayscale devices.
Notes about this Operation Manual

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Overview of MUSIC and STREAMING modes

Set this according to the use of the USB audio signal path.

**MUSIC mode**

The MUSIC mode setting is good for making music with a DAW, for example.

Set [MUSIC • STREAMING] to MUSIC.

This mode is useful for recording a guitar and vocals simultaneously to separate tracks, for example. Input sounds are handled as separate signals by the computer, smartphone or tablet in the same way as with an ordinary audio interface.

Different sounds can be output from the computer, smartphone or tablet through headphone jacks A and B. This enables recording while a person operating the computer and a person performing listen to different sounds.

Use example

→ Use example: Making music
STREAMING mode

The STREAMING mode setting is good for web streaming. Set to STREAMING.

This mode is useful for streaming solo performances of vocals accompanied by guitar, for example. Input sounds can be mixed like using an audio mixer and then sent to the computer, smartphone or tablet. Since the sound from the computer, smartphone or tablet (USB OUTPUT 1/2) is output from both OUTPUT A and B, this can also be used to record podcasts while two people monitor the same sound.

When the AMS-44 Stereo Link switch is on, Input 3 (left) and Input 4 (right) function as a stereo input. (→ Stereo link overview)

Use examples
→ Use example: Web streaming using a computer
→ Use example: Web streaming using a smartphone/tablet
Functions of parts

Top and bottom

1. **POWER indicator**
   This lights when the power is on. This blinks when the remaining battery charge is low.

2. **Input type switch**
   Set this according to the equipment connected to Input 1.

3. **Stereo Link switch**
   Turn this on when inputting a stereo signal through Inputs 3–4. Input 3 will become the left signal while Input 4 will become the right signal. When the Stereo Link switch is on, the input gain for both Inputs 3 and 4 is controlled by Gain knob 3. (→ Stereo link overview)

4. **Gain knobs**
   Use these to adjust input signal levels. (→ Adjusting the input gain)

5. **Level indicators**
   These indicators show signal levels after gain knob adjustment. The indicator colors change according to the signal levels.
   - Lit green: Input signal is present. (−48 dBFS or higher)
   - Lit red: Input signal is clipping. (−1 dBFS or higher)

6. **MUSIC/STREAMING switch**
   This switches between MUSIC and STREAMING modes. Set it to MUSIC when using the AMS-44 to make music with a DAW, for example. Set it to STREAMING when using it to stream on the web, for example. (→ MUSIC mode, STREAMING mode)
7 **OUTPUT A knob**
Use this to adjust the volumes of signals output from the OUTPUT A standard phone jacks and the Headphone A jack. (→ Adjusting OUTPUT A volume)

8 **OUTPUT B knob**
Use this to adjust the volume of signals output from the Headphone B jack. (→ Adjusting OUTPUT B volume)

9 **Battery cover**
Slide this to remove it when loading batteries. (→ Using batteries)

### Left and right sides

<table>
<thead>
<tr>
<th>Left side</th>
<th>Right side</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.png" alt="Left side" /></td>
<td><img src="image2.png" alt="Right side" /></td>
</tr>
</tbody>
</table>

1 **BATTERY switch**
Set this to ON to use battery power. Set this to OFF to use USB bus power or an external power supply.

2 **48V switch**
This turns +48V phantom power ON/OFF. Set this to ON when connecting condenser mics. Phantom power is supplied to Inputs 1–4 simultaneously.

3 **DIRECT MONITOR switch**
Set this to ON to directly monitor sounds from the INPUT jacks before they pass through the computer. (→ Using direct monitoring)

4 **LOOPBACK switch**
Set this to ON to send a mix of the sounds played by the computer and input through the AMS-44 back to the computer. (→ Enabling the loopback function)
Front and back

**Front**

1. **Input jacks 1–4**
   These input jacks have built-in mic preamps. Connect mics, keyboards, guitars and other audio sources to them. These can be used with both XLR and standard phone (balanced or unbalanced) plugs. (→ Connecting instruments and mics)

   ![XLR connections]
   
   1: GND
   2: HOT
   3: COLD

2. **Headphone output jacks A–B**
   These output stereo signals. Connect headphones to these.

3. **OUTPUT A standard phone jacks**
   These output the left (L) and right (R) channels of stereo signals. Connect these to speakers with built-in amplifiers, for example.

4. **USB port (Type-C)**
   Use this USB port to connect computers, smartphones and tablets. (→ Connecting to a computer, Connecting smartphones and tablets)

5. **DC 5V port (Type-C)**
   Use this power supply USB port to connect an AC adapter or mobile battery. (→ Using an external power supply)
Connecting to a computer

The AMS-44 is compatible with USB bus power, so power can be supplied to it from a computer through a USB cable. In addition to USB bus power, it can also be operated using an external power supply (dedicated AC adapter or mobile battery) or batteries. (→ Using an external power supply, Using batteries)

1. Install the dedicated driver before using an AMS-44 to record for the first time with a DAW application on a Windows computer. (→ Installing the driver on Windows computers)

   **NOTE:**
   A driver is not necessary when using a Mac.

2. Minimize the volume before connecting speakers, headphones or other output devices to the AMS-44. (→ Adjusting the volume)

3. Use a USB cable to connect the AMS-44 USB port (Type-C) to a USB port on the computer.

   **NOTE:**
   Use a USB cable that supports data transfer.

4. To use USB bus power, set **BATTERY** to OFF.
5. Confirm that the POWER indicator is lit red.

Installing the driver on Windows computers

The dedicated driver must be installed on a Windows computer before using a DAW app on it to record.

1. Download the “ZOOM AMS-44 Driver” from zoomcorp.com to the computer.

   **NOTE:**
   The latest “ZOOM AMS-44 Driver” can be downloaded from the above website.

2. Launch the installer and follow the instructions to install the “ZOOM AMS-44 Driver”.

   **NOTE:**
   • Do not connect the AMS-44 to the computer during installation.
   • See the Installation Guide included in the driver package for detailed installation procedures.
Connecting smartphones and tablets

During use with a smartphone or tablet, an external power supply or batteries must be used.

1. Minimize the volume before connecting speakers, headphones or other output devices to the AMS-44.  
   (→ Adjusting the volume)

2. Connect an external power supply or use batteries. (→ Using an external power supply, Using batteries)

   **NOTE:**
   Power must be provided before connecting a smartphone or tablet to the AMS-44.

3. Use a USB cable to connect the AMS-44 USB port (Type-C) to the smartphone/tablet.

   ![USB Connection Diagram]

To connect smartphones and tablets, prepare USB cables and adapters that match their connectors as necessary.

Use a USB cable that supports data transfer.

<table>
<thead>
<tr>
<th>Connector type</th>
<th>Necessary USB cable/adapter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lightning connector</td>
<td>USB Type-A to Type-C cable, Lightning to USB 3 Camera Adapter</td>
</tr>
<tr>
<td>Type-C connector</td>
<td>USB Type-C to Type-C cable</td>
</tr>
</tbody>
</table>
Supplying power

Using an external power supply

A dedicated AC adapter (ZOOM AD-17) or a commercially-available USB mobile battery can be used.

1. Connect the USB connector of the dedicated AC adapter to the DC 5V port (Type-C), and plug the AC adapter into an outlet.

[HINT:]
To use a USB mobile battery, connect its USB cable to the DC 5V port (Type-C).

2. Set \( \text{BATTERY} \) to OFF.

3. Confirm that the POWER indicator is lit red.
Using batteries

Prepare two AA batteries.

1. Slide open the battery cover on the bottom of the AMS-44 and install the batteries.

2. Slide the battery cover to close it.

3. Set \( \text{BATTERY} \) to ON.

4. Confirm that the POWER indicator is lit red.

NOTE:
- Use only one type of battery (alkaline, NiMH or lithium) at a time.
- The POWER indicator will blink when the battery charge becomes low. Replace the batteries with new ones.
Connecting instruments and mics

Always set [ ] to 0 and [ ] to OFF before connecting instruments and mics.

Connecting instruments

1. Connect an instrument to the AMS-44.
   - Use an instrument cable to connect a guitar or bass, for example, to the Input 1 jack.
   - For stereo input, connect to the Input 3–4 jacks using instrument or TRS cables.
2. Set **MIC LINE** and **GUITAR** according to the connected device.

### Input jack 1

<table>
<thead>
<tr>
<th>Switch position</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MIC LINE</strong> GUITAR</td>
<td>Use this setting when connecting a passive guitar or bass. Set this to GUITAR to support high-impedance (Hi-Z) input. This does not need to be set to GUITAR when connecting an active guitar or bass.</td>
</tr>
<tr>
<td><strong>MIC LINE</strong> GUITAR</td>
<td>Use this setting when connecting a mic or keyboard, for example.</td>
</tr>
</tbody>
</table>

### Input jacks 3–4

When connecting a keyboard or other equipment with stereo output, turn **∞** on. ([Stereo link overview](#))

**NOTE:**
- Phantom power (48 V) is not supplied to the standard phone (TRS) connectors.
- When **MIC LINE** GUITAR is set to GUITAR, phantom power (48 V) to the Input 1 jack is disabled. When connecting a condenser mic to the Input 1 jack and using phantom power (48 V), set **MIC LINE** GUITAR to **MIC/LINE**.
Connecting mics

1. Use mic cables to connect dynamic and condenser mics to the Input 1–4 jacks.

2. When connecting a mic to the Input 1 jack, set MIC/LINE to MIC/LINE.

3. Use the 48V [1-4] switch to set phantom power according to the connected mics. Phantom power is supplied to all XLR connectors of Inputs 1–4.

<table>
<thead>
<tr>
<th>Switch position</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>48V [1-4]</td>
<td>Use this to supply phantom power to condenser mics.</td>
</tr>
<tr>
<td>OFF ON</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Switch position</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>48V [1-4]</td>
<td>Use this when connecting dynamic mics.</td>
</tr>
</tbody>
</table>

| OFF ON |
NOTE:
Do not set to ON when connecting equipment that is not compatible with phantom power. Doing so could damage the equipment.

Stereo link overview

When direct monitoring in STREAMING mode, the stereo link controls the positions of the INPUT 3/4 sounds that are input to USB INPUT 1/2.

Turning on the stereo link enables stereo input with sound from Input 3 to the left and Input 4 to the right. When connecting a keyboard or other equipment with stereo output, turn on the Stereo Link switch.

<table>
<thead>
<tr>
<th>Switch status</th>
<th>Direct monitoring and USB Inputs 1/2 (when in STREAMING mode)</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFF</td>
<td>Inputs 3 and 4 are mono.</td>
</tr>
<tr>
<td></td>
<td>L: Inputs 1, 2, 3 and 4</td>
</tr>
<tr>
<td></td>
<td>R: Inputs 1, 2, 3 and 4</td>
</tr>
<tr>
<td>ON</td>
<td>Inputs 3 and 4 are stereo.</td>
</tr>
<tr>
<td></td>
<td>L: Inputs 1, 2 and 3</td>
</tr>
<tr>
<td></td>
<td>R: Inputs 1, 2 and 4</td>
</tr>
</tbody>
</table>

NOTE:
When the Stereo Link switch is on, the input gain for both Inputs 3 and 4 is controlled by Gain knob 3. (→ Adjusting the input gain)
Adjusting the input gain

The input sensitivity of Inputs 1–4 can be adjusted.

1. Use to adjust the input signals while inputting sound from instruments and mics.

   Level indicators
   - Green: Input signal present. (−48 dBFS or higher)
   - Red: Input signal is clipping. (−1 dBFS or higher)

   ![Level Indicators Diagram]

   ![Input Knobs Diagram]

   NOTE:
   - Set these so that their level indicators do not light red.
   - To minimize noise, set the gain for any input jack not being used to 0.
   - When the Stereo Link switch is on, the input gain for both Inputs 3 and 4 is controlled by Gain knob 3. (→ Stereo link overview)
Using direct monitoring

When direct monitoring is turned on, sound input to the AMS-44 can be directly monitored using headphones, for example, before it passes through the computer. This enables monitoring without latency.

1. Set DIRECT MONITOR to ON.

HINT:
When the Stereo Link switch is on, sounds from Inputs 3 and 4 can be monitored in stereo. (→ Stereo link overview)
Adjusting the volume

The volume output from speakers and headphones connected to the AMS-44 can be adjusted. The connected jacks have different knobs to adjust their volumes.

**NOTE:**
Set the AMS-44 volume to 0 before connecting speakers or headphones. Failure to do so could result in unexpected loud sounds, causing harm to hearing, for example.

### Adjusting OUTPUT A volume

Turn \( \circ \) to adjust the volume for the Headphone A output jack on the front of the unit and OUTPUT A standard phone jacks on the back of the unit.

### Adjusting OUTPUT B volume

Turn \( \circ \) to adjust the volume for the Headphone B output jack on the front of the unit.
Enabling the loopback function

By turning the LOOPBACK function ON, sound input through the AMS-44 Input 1–4 jacks and sound output from the computer can be mixed and then input to the computer again (looped back). This is convenient for mixing background music played on the computer with sound input through the AMS-44 and streaming it live, for example.

1. Mic and instrument sounds are input to the AMS-44.
2. BGM from the computer is input to the AMS-44.
3. The mic and instrument sounds and the BGM from the computer are mixed and output to the computer.

1. Set LOOPBACK to ON.
NOTE:

- When is set to ON, disable AMS-44 monitoring in the DAW or streaming application. If enabled, a feedback loop could be generated, which might cause loud noise to be output.
- The USB OUTPUT 3/4 sound will not be looped back.
Use example: Making music

To make music using a DAW app to record guitar and vocals at the same time, for example, set the AMS-44 to MUSIC mode. The audio from the guitar and vocals can be recorded to separate tracks.

1. Set to MUSIC mode. (→ MUSIC mode)

2. Supply power if using a smartphone or tablet. (→ Supplying power)

NOTE:
Power must be provided before connecting a smartphone or tablet to the AMS-44.
3. Connect the AMS-44 and the computer, smartphone or tablet. (→ Connecting to a computer, Connecting smartphones and tablets)

4. Connect the mic and instrument and set the switches. (→ Connecting instruments, Connecting mics)

5. Adjust the input gain. (→ Adjusting the input gain)
6. Adjust the output volume. (→ Adjusting the volume)

7. Launch the DAW app on the computer, smartphone or tablet, and select the AMS-44 as the audio interface.

8. Create recording tracks in the DAW app, and start recording.

NOTE:
Refer to the DAW app manual for how to use it.
Use example: Web streaming using a computer

When connecting with a computer for web streaming or podcast recording, set the AMS-44 to STREAMING mode.

1. Set to STREAMING mode. (STREAMING mode)
2. Connect the AMS-44 and the computer. (→ Connecting to a computer)

3. Connect the mic and instrument and set the switches. (→ Connecting instruments, Connecting mics)

4. Adjust the input gain. (→ Adjusting the input gain)

5. Select the AMS-44 as the computer input and output device.
6. To enable the loopback function, set to ON. (→ Enabling the loopback function)

7. Adjust the output volume. (→ Adjusting the volume)

8. Launch the streaming app on the computer, smartphone or tablet, and select the AMS-44 as the “audio” or “input/output” device.


**NOTE:**
- Use BGM with permission from its creators.
- Refer to the streaming app manual for how to use it.
Use example: Web streaming using a smartphone/tablet

When using a smartphone/tablet for web streaming or podcast recording, set the AMS-44 to STREAMING mode.

1. Set to STREAMING mode. (→ STREAMING mode)

2. Supply power. (→ Supplying power)

**NOTE:**
Power must be provided before connecting a smartphone or tablet to the AMS-44.
3. Connect the AMS-44 and smartphone/tablet. (→ Connecting smartphones and tablets)

4. Connect the mic and instrument and set the switches. (→ Connecting instruments, Connecting mics)

5. Adjust the input gain. (→ Adjusting the input gain)
6. Adjust the output volume. (→ Adjusting the volume)

7. Launch the streaming app on the smartphone/tablet and start streaming.

NOTE:
Refer to the streaming app manual for how to use it.
Mixer diagram

AMS-44

[Diagram of AMS-44 mixer]
Terms used in this manual

**USB audio interface**
This is a device that can input sound from mics and instruments, for example, to a computer, smartphone or tablet as well as output sound from such a device to speakers and headphones.

**Dynamic mic**
These mics do not require phantom power and are tough and durable.

**Condenser mic**
These mics usually have high sensitivity and can capture sound with high quality. These require phantom power supply for use.

**Phantom power (48 V)**
This is a function that supplies power to devices that require an external power supply, including some condenser mics.
+48 V is standard.
Troubleshooting

**Cannot select or use the AMS-44 device**

- Confirm that the AMS-44 has been connected correctly on the computer. (→ Connecting to a computer)
- Quit all software that is using the AMS-44. Then, disconnect and reconnect the USB cable connected to the AMS-44.
- If using a USB hub, stop using it. Connect the AMS-44 directly to a USB port on the computer.
- When connecting to a Windows computer, installing the dedicated driver can resolve problems with applications other than DAWs. (→ Installing the driver on Windows computers)
- Reinstall the dedicated driver.

**The sounds of devices connected to input jacks are distorted, too quiet or silent**

- When using a condenser mic, set 48V [1-4] to ON.
- Confirm that the level indicator is not lighting red. If it is lighting red, use the Gain knob to lower the input gain.
- Use the Gain knobs to adjust the signal levels.
- Use OUTPUT A and OUTPUT B knobs to adjust the volume.

**Cannot play or record**

- Confirm that “ZOOM AMS-44” is selected in the “Sound” setting of the computer being used.
- Confirm that AMS-44 is set for input and output in the software being used.
- Quit all software that is using the AMS-44. Then, disconnect and reconnect the USB cable connected to the AMS-44.
Playback sound cannot be heard or is quiet

- Check the connections and volume settings of the speakers.
- Use OUTPUT A and OUTPUT B knobs to adjust the volume.

Recorded audio is too loud, too quiet or silent

- Use the Gain knobs to adjust the signal levels.

A smartphone or tablet cannot be used

- Confirm that the external power supply is connected or that batteries are loaded correctly. (→ Using an external power supply, Using batteries)
- When using batteries, turn on. (→ Using batteries)

Sound skips during playback or recording

- If the audio buffer size of the software being used can be adjusted, increase it.
- Turn off the automatic sleep function and other computer power saving settings.
- If using a USB hub, stop using it. Connect the AMS-44 directly to a USB port on the computer.
## Specifications

<table>
<thead>
<tr>
<th>Input and output channels</th>
<th>Number of input channels</th>
<th>Mono (MIC/LINE)</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of output channels</td>
<td>Stereo (TRS)</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Stereo (PHONES)</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

### Connectors

<table>
<thead>
<tr>
<th>INPUT 1-4</th>
<th>Type</th>
<th>XLR/TRS combo jacks (XLR: 2 HOT, TRS: TIP HOT)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Input gain</td>
<td>$-\infty - +58 \text{ dB} / -\infty - +50 \text{ dB}$ (when set to GUITAR)</td>
</tr>
<tr>
<td></td>
<td>Input impedance</td>
<td>XLR: 2.7 kΩ</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TRS: 18 kΩ / 330 kΩ (when set to GUITAR)</td>
</tr>
<tr>
<td></td>
<td>Maximum input level</td>
<td>XLR: +6 dBu</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TRS: +22 dBu / +8.5 dBu (when set to GUITAR)</td>
</tr>
<tr>
<td></td>
<td>Phantom power</td>
<td>+48 V</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OUTPUT A (standard phone jacks)</th>
<th>Type</th>
<th>TRS phone jacks (impedance balanced)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Maximum output level</td>
<td>+10 dBu (at 0 dBFS)</td>
</tr>
<tr>
<td></td>
<td>Output impedance</td>
<td>100 Ω</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OUTPUT A–B (headphone jacks)</th>
<th>Type</th>
<th>3.5mm stereo mini jacks 30 mW + 30 mW (32 Ω load)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Output impedance</td>
<td>10 Ω</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>USB</th>
<th>Type</th>
<th>USB Type-C (audio interface function)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>• Use a USB cable that supports data transfer. USB bus power is supported.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DC 5V</th>
<th>Type</th>
<th>USB Type-C (for power supply)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency response</td>
<td></td>
<td>44.1 kHz: ±1 dB (20 Hz – 20 kHz) 96 kHz: ±1.5 dB (20 Hz – 40 kHz)</td>
</tr>
<tr>
<td>Equivalent input noise</td>
<td></td>
<td>-120 dBu or less (IHF-A) at +58 dB/150Ω input</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Audio interface</th>
<th>Input and output channels</th>
<th>Recording: 4 channels</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sampling frequencies</td>
<td>96 kHz, 88.2 kHz, 48 kHz, 44.1 kHz</td>
</tr>
<tr>
<td></td>
<td>24-bit</td>
<td></td>
</tr>
<tr>
<td>---------------</td>
<td>------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Bit depth</td>
<td>24-bit</td>
<td></td>
</tr>
<tr>
<td>Interface</td>
<td>USB 2.0</td>
<td></td>
</tr>
<tr>
<td>Class</td>
<td>USB Audio Class 2.0</td>
<td></td>
</tr>
<tr>
<td>Power</td>
<td>2 AA batteries (alkaline, lithium, or rechargeable NiMH)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>AC adapter (ZOOM AD-17): DC 5 V/1 A</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• USB bus power is supported.</td>
<td></td>
</tr>
<tr>
<td>Rated current</td>
<td>USB/AC adapter (5 V): 350 mA</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Batteries (2.4 V): 560 mA</td>
<td></td>
</tr>
<tr>
<td>Estimated</td>
<td>44.1 kHz, 48 V off, with 32Ω headphone load</td>
<td></td>
</tr>
<tr>
<td>continuous</td>
<td>Alkaline batteries: about 3 hours</td>
<td></td>
</tr>
<tr>
<td>operation</td>
<td>NiMH batteries (1900 mAh): about 4.5 hours</td>
<td></td>
</tr>
<tr>
<td>time using</td>
<td>Lithium batteries: about 8.5 hours</td>
<td></td>
</tr>
<tr>
<td>batteries</td>
<td>• The above values are approximate.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Continuous battery operation times were determined using in-house</td>
<td></td>
</tr>
<tr>
<td></td>
<td>testing methods. They could vary greatly according to use conditions.</td>
<td></td>
</tr>
<tr>
<td>Power</td>
<td>5 W maximum</td>
<td></td>
</tr>
<tr>
<td>Dimensions</td>
<td>129.0 mm (W) × 74.0 mm (D) × 46.0 mm (H)</td>
<td></td>
</tr>
<tr>
<td>Weight (unit</td>
<td>177 g</td>
<td></td>
</tr>
<tr>
<td>only)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weight (including batteries)</td>
<td>223 g</td>
<td></td>
</tr>
</tbody>
</table>

Note: 0 dBu = 0.775 Vrms