Manual for
RockBoard® MOD 4

All-in-One Wireless System Receiver + Patchbay for Pedalboards

RockBoard MOD 4

2.4 GHz Guitar Wireless Receiver + TRS Patchbay

RockBoard MOD 4 & U2 Transmitter

2.4 GHz Guitar Wireless Receiver, Transmitter + TRS Patchbay
(XVive U2 Transmitter included)

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Introduction

Thank you for purchasing a **RockBoard®** MOD 4 - the new wireless gateway to your effects setup!

The **RockBoard®** MOD 4 - All-in-One Wireless System Receiver + Patchbay for Pedalboards offers an easy-to-use wireless connection between your instrument and your pedalboard, featuring digital wireless technology that delivers incredible audio quality, a simple setup procedure, and reliable use for any gigging musician. The wireless system works in the 2.4 GHz ISM band for unlimited worldwide use and offers a full 20 Hz - 20 kHz frequency range with only 5 ms of latency.

The patchbay module is designed to route connections from underneath your pedalboard to its front, giving you a central access point and tidying up your connections.

Precautions

Power Supply

The **RockBoard®** MOD 4 is powered by an optional 9V DC power supply with 2.1 x 5.5 mm barrel plug, polarity (-) center, using the DC input on the back of the unit. For a safe and stable operation, at least 500 mA are required. Unplug the AC power adapter when not in use or during electrical storms.

The XVive U2 Transmitter is powered by a rechargeable 3.7V, 650 mA Li-Ion battery which lasts up to 5 hours. The battery is charged via USB wall adapter or the USB Type A charge output on the front of the **RockBoard®** MOD 4. In emergency power can be supplied during use of the transmitter directly via USB adapter, but this will reduce the battery life.

Charging Time	Battery Life
15 minutes	30 minutes
30 minutes	1 hour
1 hour	2 hours
2 hours	5 hours

Please remember to store all units at room temperature. When storing the unit, please check the battery state regularly and charge if necessary.

CAUTION: Please only use power adapters with correct specifications to avoid overheating and damage to the unit.

Connections

Always turn off the power to all other equipment before connecting or disconnecting. This will help to prevent malfunction and damage to any of the devices used.

Radio Frequency Interference Statement

Radios and televisions placed nearby may experience reception interference. Operate this unit at a suitable distance from radios and televisions. This transmitter must not be located near or operated in conjunction with any other antenna or transmitter.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of FCC Rules in addition to the Canadian ICES-003. 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 instructions, may cause harmful interference to radio communications.

Cleaning
Clean only with a soft, dry cloth.

Handling
Do not apply excessive force to the switches or controls. Do not let paper, metal, dirt or other objects come into contact with the device or its connections. Take care not to drop the device and do not subject it to shock or excessive pressure. To avoid deformation, discoloration, or other serious damage, do not expose this unit to any of the following conditions:

- Direct sunlight
- Strong magnetic fields
- Excessively dusty or dirty environments
- Strong vibration or shock
- Heat sources
- Extreme temperature
- High humidity or moisture

Risk of Electric Shock
To reduce the risk of fire or electric shock, do not remove the screws. The **RockBoard®** MOD 4 has no user-serviceable parts inside. Only allow qualified service personnel to service. Do not expose the units to rain or moisture.

FCC Certification
This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

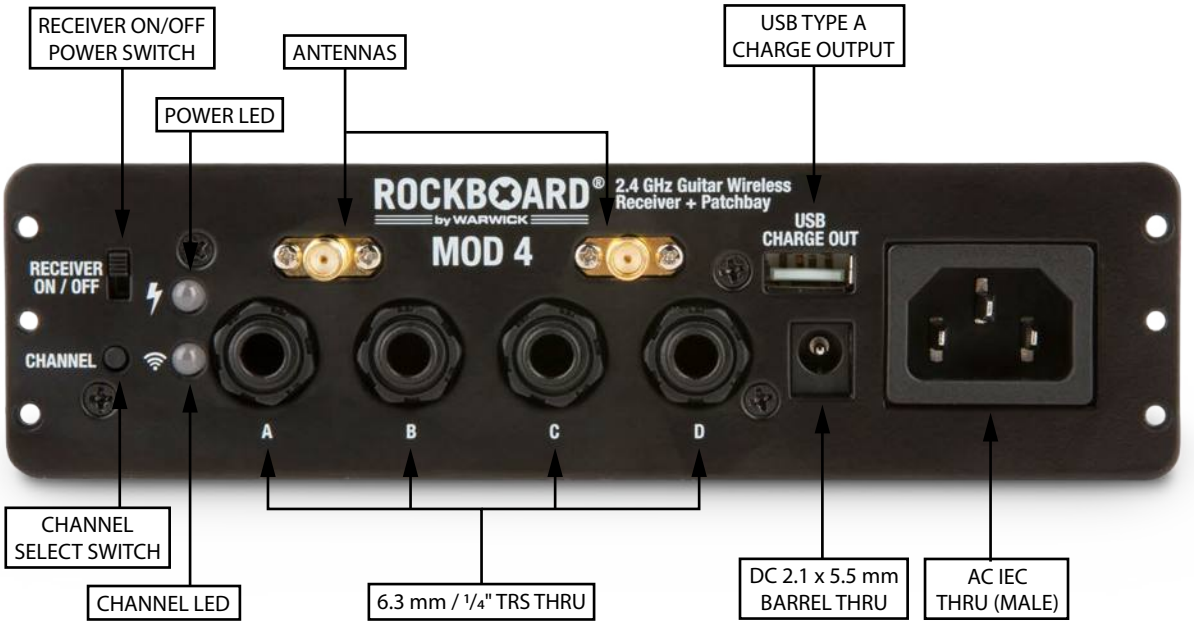
- This device may not cause harmful interference.
- This device must accept any interference received, including interference that may cause undesired operation.

Radio Approvals
FCC Part 15.249, RSS-210 (Canada), EN 300 440 (Europe), EN 301.489 (Europe), Japan Radio 2.4GHz Band (Japan), MIC ARIB STD-T66 (Japan)

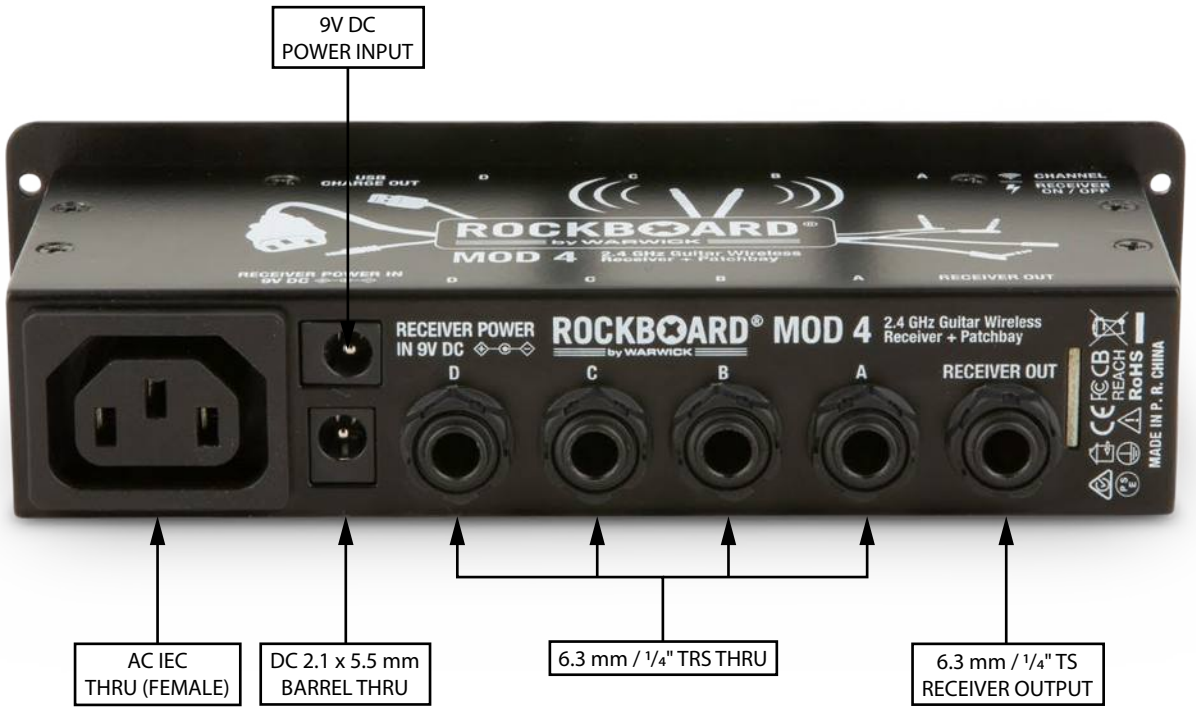
Main Features

- Wireless System Receiver + Patchbay for Pedalboards
- Compatible with XVive U2 Guitar Wireless System
- 2.4 GHz ISM band for worldwide use
- 30 m / 100 ft. approx. range (without obstacles)
- 24 bit / 48 kHz uncompressed digital transmission
- Dynamic Range: > 103 dB
- RF Sensitivity: - 85 dBm
- Total Harmonic Distortion: 0.2%
- 4 selectable channels

Front



Back



Transmitter

Mounting

There are multiple options to mount your new MOD 4 onto a **RockBoard®** pedalboard. You can mount it directly into the MOD slot (available on all RockBoard® pedalboards except the DUO Series) or detach the MOD's front plate and mount it on top or underneath your pedalboard.

Mounting on a RockBoard® pedalboard

Please follow the steps below to mount your MOD into the MOD slot of your **RockBoard®** pedalboard.

STEP 1

Remove the rubber frame of your **RockBoard®**'s MOD slot.

STEP 2

Turn the **RockBoard®** pedalboard upside down.

STEP 3

MOD mounting screws are self-tapping, they will cut their own threads into the pre-drilled mounting holes in the **RockBoard®'**s front. Use a TX10 screwdriver to screw the mounting screws in and cut the threads. In case you do not possess a TX10 screwdriver, a wrench is included with the MOD. For the first couple of rotations the screws will be screwing with difficulty, as they have to cut the threads into the surrounding material. Please be careful not to screw them in at an angle.

STEP 4

Once the tips of the screws are sticking out on the other side of the holes and the screws become easier to turn, the threads have been cut properly. Now remove the screws again.

STEP 5

Next, load your chosen MOD from the front into the slot and screw in the mounting screws until the MOD's front plate sits flush with the face of the board.

STEP 6

For added security, screw on the counter nut on the back. Now the MOD is ready to be connected to your setup!

*A simple solution to mount heavier MOD patchbays to your **RockBoard®** pedalboard in a safe and secure fashion is the **RockBoard®** MOD Brace (sold separately). The **RockBoard®** MOD Brace is designed to provide additional support for your MOD by reinforcing the connection to your **RockBoard®** pedalboard. For further information, please visit our website **www.rockboard.net***

Detaching the MOD 4's front plate

To mount the **RockBoard®** MOD 4 - All-in-One Wireless System Receiver + Patchbay on top or underneath your pedalboard, you must detach the front plate, so it will fit flush onto/under the board surface.

Remove the marked screws to release the front plate from your MOD using a PH2 Phillips head screw driver. The mounting nuts of the jack sockets do not have to be removed!

Mounting on a non-RockBoard® pedalboard

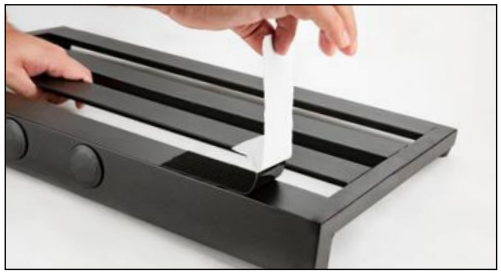
There are multiple ways to mount your MOD 4 on a non-**RockBoard®** pedalboard. You can either mount it directly to the board surface using hook & loop tape or another reusable fastener. In addition, **RockBoard®** offers the MOD Rack (sold separately) to mount your MOD 4 in various ways onto, into or underneath the pedalboards of other manufacturers. To mount your MOD 4 using the **RockBoard®** MOD Rack, please refer to the MOD RACK manual. Please follow the steps below to mount your MOD 4 on top of your non-**RockBoard®** pedalboard.

STEP 1

Detach the MOD's front plate by removing the marked screws.

STEP 2

Apply self-adhesive hook tape or another reusable fastener to the bottom of the MOD 4 housing.



STEP 3

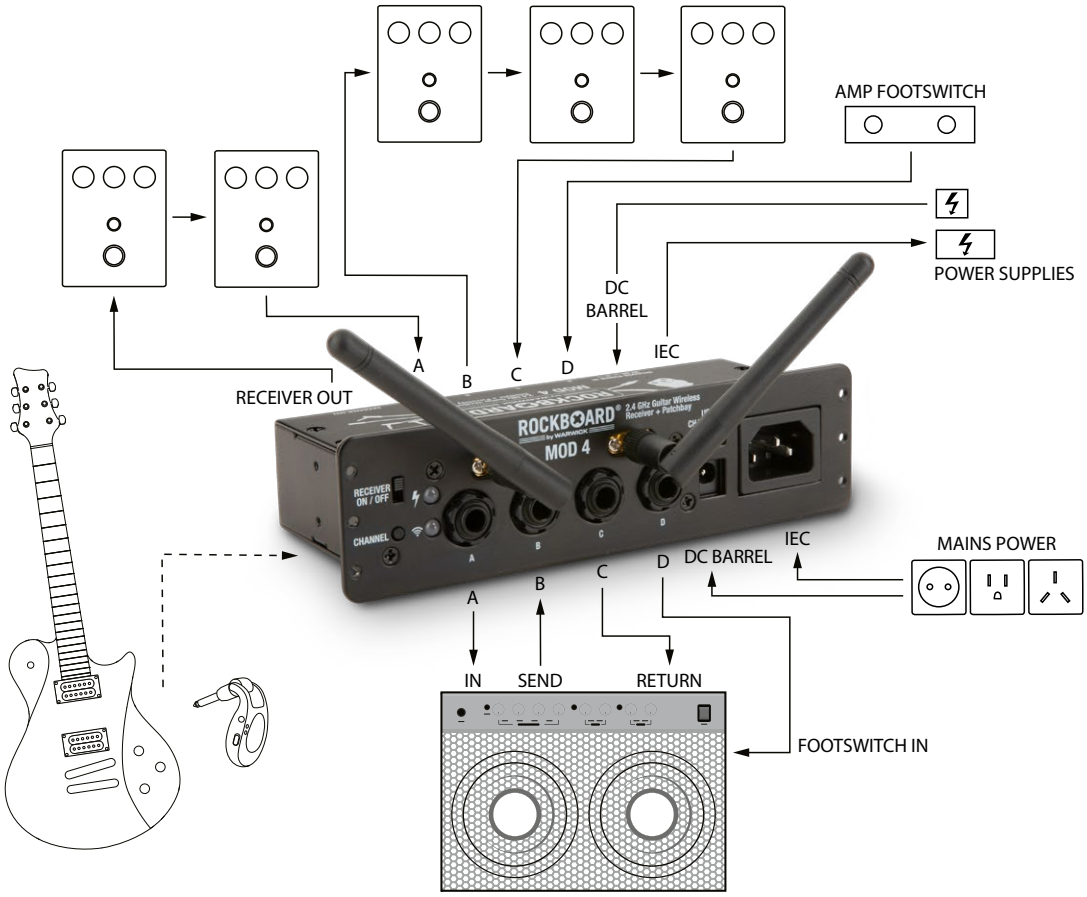
Apply self-adhesive loop tape or another reusable fastener to the position on top or underneath your pedalboard where you want to place your MOD 4.

STEP 4

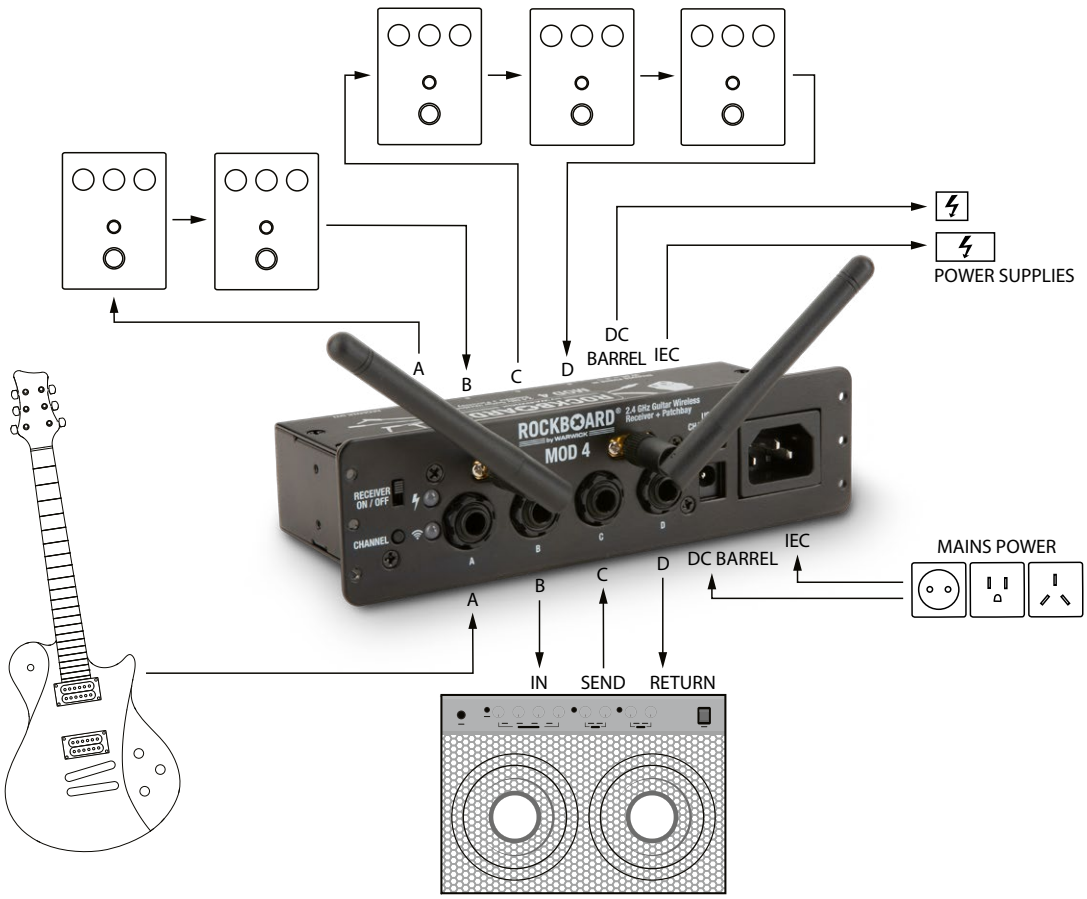
Bring the two sides of hook & loop tape or your other reusable fastener together to attach your MOD 4 to the pedalboard. Now the MOD 4 is ready to be connected to your setup!

Setup & Operation

Setup Example as Wireless System



Setup Example as pedalboard patchbay



Thru-Connections
The **RockBoard®** MOD 4 - All-in-One Wireless System Receiver + Patchbay for Pedalboards is designed to act as central access point to your effects setup. The A, B, C, and D TRS sockets are wiring thru-connections from the front of MOD 4 to the corresponding sockets on the back. This allows you to connect your pedals permanently underneath the board, so you only have to connect cables to and from the front of the board, instead of having to route underneath it when setting it up for a gig.

All four thru-connections can be used in either direction and for control as well as mono or stereo audio signals. There are many different setup possibilities for the A, B, C, and D sockets. Please find an example of the 4-cable setup under the Setup Example section. Many other ways of using the A, B, C, and D sockets are possible, depending on your effects rig. Feel free to experiment, in accordance with the specifications and intended use of other equipment you use with the MOD 4.

Wireless System
The **RockBoard®** MOD 4 features a completely independent wireless system that can be used with the patchbay module. To use the wireless system, follow the quick start instructions:

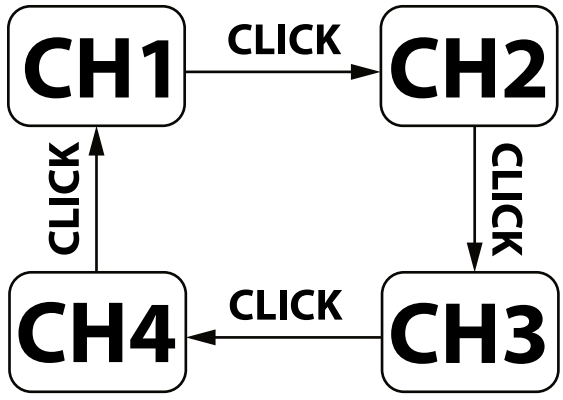
- Connect a 9V DC power supply with 2.1 x 5.5 mm barrel plug, polarity (-) center, min. 500 mA to the power input of the MOD 4 and switch the MOD on.
- Connect your amp, effects pedals etc. to the 6.3 mm / ¼" TS Receiver Output.
- Plug the XVive U2 Transmitter into the output jack of your instrument.
- Turn the XVive U2 Transmitter on and check the blue LED light flashing times and make sure the blue LED lights show the same flashing pattern. This means transmitter and receiver are both in the same channel. After a successful connection the blue channel LED light up permanently.
- Start playing!

1. Basic Operation and Status LEDs
The XVive U2 Transmitter has two status LEDs, a red power / battery LED and a blue channel / signal indicator LED. A permanent red LED indicates that the power is on, a flashing red LED indicates that the battery needs to be charged. While charging, the red LED will stop flashing and turn off when the transmitter is completely charged. When the power is on, the blue LED will flash to indicate the set channel. If you use the channel select function, the blue LED will flash to indicate the channel:

Channel 1 – The channel / signal indicator LED will flash once.
Channel 2 – The channel / signal indicator LED will flash twice.
Channel 3 – The channel / signal indicator LED will flash three times.
Channel 4 – The channel / signal indicator LED will flash four times.

The blue channel LED on the MOD 4 will light up permanently when the transmitter and the receiver are connected. If the blue LED on the MOD 4 starts to blink, the signal is weak or disturbed.

2. Channel Select
Double click the channel select switch to activate the channel select function. Follow the diagram below to set up the channel, meanwhile the channel / signal indicator LED will flash to indicate the selected channel.



3. Channel Overview and Wireless Performance

The **RockBoard®** MOD 4 - All-in-One Wireless System Receiver + Patchbay for Pedalboards and the XVive U2 Transmitter operate within the 2.4 GHz ISM band (which is also utilized by Wi-Fi, Bluetooth, and other wireless devices). 2.4 GHz is an open band and, as such, does not require a license to be used worldwide.

4. Tips and methods to improve wireless system performance:

- Keep more than 3 meters distance between the **RockBoard®** MOD 4 and other Wi-Fi transmitters such as routers or boosters.
- Change channels to avoid interference with other Wi-Fi products.
- In case of environmental interference from other Wi-Fi systems, shorten the distance between the MOD 4 wireless receiver and the transmitter units.

5. 2.4 GHz frequency table:

Channel 1 – 2402 MHz, 2480 MHz, 2482 MHz
Channel 2 – 2408 MHz, 2472 MHz, 2474 MHz
Channel 3 – 2420 MHz, 2456 MHz, 2458 MHz
Channel 4 – 2432 MHz, 2448 MHz, 2450 MHz

Specifications

- All-in-One Wireless System Receiver + Patchbay for Pedalboards
- 2.4 GHz ISM band for worldwide use
- 30 m / 100 ft. approx. range (without obstacles)
- 24 bit / 48 kHz uncompressed digital transmission
- Dynamic Range: > 103 dB
- RF Sensitivity: - 85 dBm
- Total Harmonic Distortion: 0.2%
- 20 Hz - 20 kHz frequency range
- 5 ms latency
- 4 switchable channels
- Fits MOD slots on **RockBoard®** pedalboards
- Compatible with a wide variety of other pedalboards
- Holds all connections to and from your setup in one place
- Acts as central access point to your effects setup
- Establishes clean cable paths
- Detachable front plate for mounting on top or underneath pedalboards
- Compatible with XVive U2 Guitar Wireless System
- Includes two antennas, USB charging cable, mounting screws and counter nuts
- Power supply via optional 9V DC adapter, 2.1 x 5.5 mm barrel plug, polarity (-) center
- Current draw 500 mA
- **Dimensions (L x W x H):**
  175 x 85 x 47 mm / 6 7/8" x 3 3/8" x 3 15/16" (with front plate)
  160 x 85 x 33 mm / 6 5/16" x 3 3/8" x 1 5/16" (without front plate)
- **Weight**:
  500 g / 1.1 lbs
- **Connections**:
  4x 6.3 mm / 1/4" stereo thru (TRS)
  1x 6.3 mm / 1/4" mono receiver audio output (TS)
  1x DC 2.1 x 5.5 mm barrel thru
  1x AC IEC thru
  1x USB Type A charge output

Note: The manufacturer reserves the right to change these specifications without notice.

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