

This Help Guide describes the WD-01 Antenna Divider.

[Overview](#)

[Usage Notes](#)

Name and Function of Parts

[Front Panel](#)

[Rear Panel](#)

Typical Connection

[When Connecting 16 DWR-R03D Units](#)

[Mounting in a Rack](#)

[Specifications](#)

## Overview

---

The WD-01 Antenna Divider is an antenna divider for TV white space band wireless microphone systems.

### Antenna output can be distributed to up to six receivers

The unit is equipped with two circuits that divides the signal received by a Sony antenna for up to six receivers. A multi-channel diversity receiving system can be configured by connecting Sony DWX units (such as the DWR-R03D). The divider output connectors of the unit have a built-in 50  $\Omega$  terminator. Unused divider connectors do not require connection of a 50  $\Omega$  terminator.

### Antenna signal cascade output connector

Multiple WD-01 units can be connected in a cascade connection.

### 2-system antenna input connectors

The unit is equipped with two antenna input connectors for each system. This allows you to extend the range of your wireless microphone by connecting up to four antennas.

### 9 V/THRU/12 V booster switchable voltage power delivery

Supplies power to a booster amplifier for a connected antenna. The front panel switch can be switched between 9 V/THRU/12 V, depending on the operating voltage of your antenna or antenna booster. When the drive voltage is set to THRU, the booster gain setting can be changed by changing the output voltage in response to the antenna voltage setting from the receiver.

#### Note

- If the output voltage from the receiver is 0 V, it will be 0 V. When supplying power at various voltages to multiple channels, the highest voltage has precedence.

### EIA standard 19-inch rack mount (1U size)

TP1001803120

## Usage Notes

---

- Always verify that the unit is operating properly before use. SONY WILL NOT BE LIABLE FOR DAMAGES OF ANY KIND INCLUDING, BUT NOT LIMITED TO, COMPENSATION OR REIMBURSEMENT ON ACCOUNT OF THE LOSS OF PRESENT OR PROSPECTIVE PROFITS DUE TO FAILURE OF THIS UNIT, EITHER DURING THE WARRANTY PERIOD OR AFTER EXPIRATION OF THE WARRANTY, OR FOR ANY OTHER REASON WHATSOEVER.
- SONY WILL NOT BE LIABLE FOR CLAIMS OF ANY KIND MADE BY USERS OF THIS UNIT OR MADE BY THIRD PARTIES.
- SONY WILL NOT BE LIABLE FOR THE TERMINATION OR DISCONTINUATION OF ANY SERVICES RELATED TO THIS UNIT THAT MAY RESULT DUE TO CIRCUMSTANCES OF ANY KIND.

### Coaxial cables

When connecting an antenna to a receiver or antenna divider, use a 50  $\Omega$  5D-2V or higher coaxial cable. Use a low-loss coaxial cable that is as short as possible. The loss increases with the length of the cable.

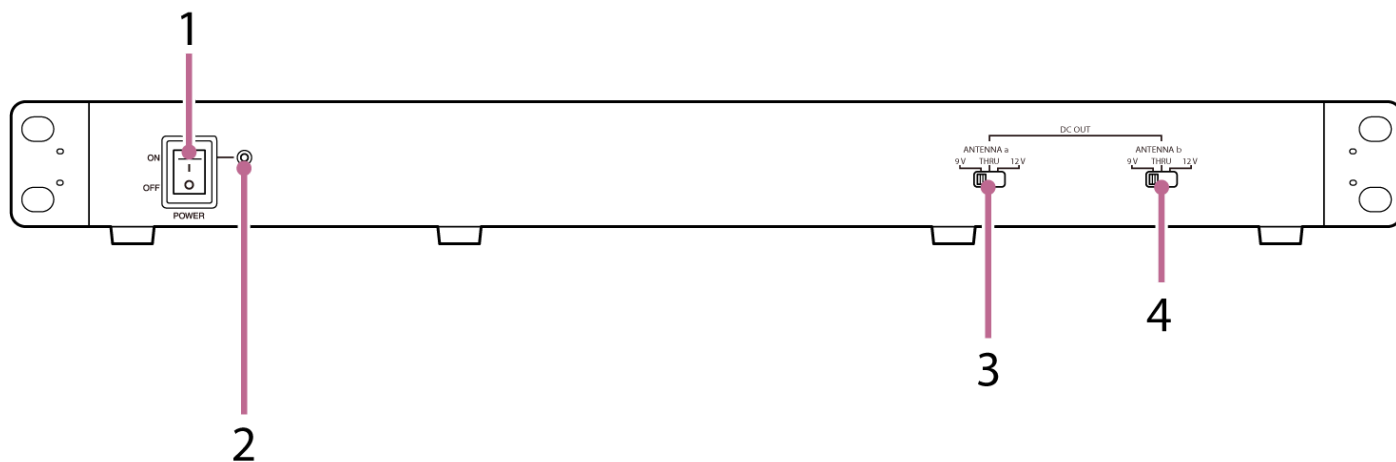
75  $\Omega$  coaxial cables are not recommended as they may cause large losses, depending on the impedance mismatch and operating frequency.

### Usage locations

Use the unit within a temperature range of 0 °C to 50 °C (32 °F to 122 °F).

TP1001803121

## Front Panel



### 1. POWER switch

Press this switch to turn the unit ON/OFF.

### 2. Power indicator

Lit when the unit is turned ON.

### 3. ANTENNA a DC OUT (antenna a output voltage) selector switch

Switches the power supply to the antennas connected to the ANTENNA a IN/DC OUT1 and 2 connectors on the rear panel between 9 V/THRU/12 V.

### 4. ANTENNA b DC OUT (antenna b output voltage) selector switch

Switches the power supply to the antennas connected to the ANTENNA b IN/DC OUT1 and 2 connectors on the rear panel between 9 V/THRU/12 V.

## ANTENNA a/b DC OUT selector switch power settings

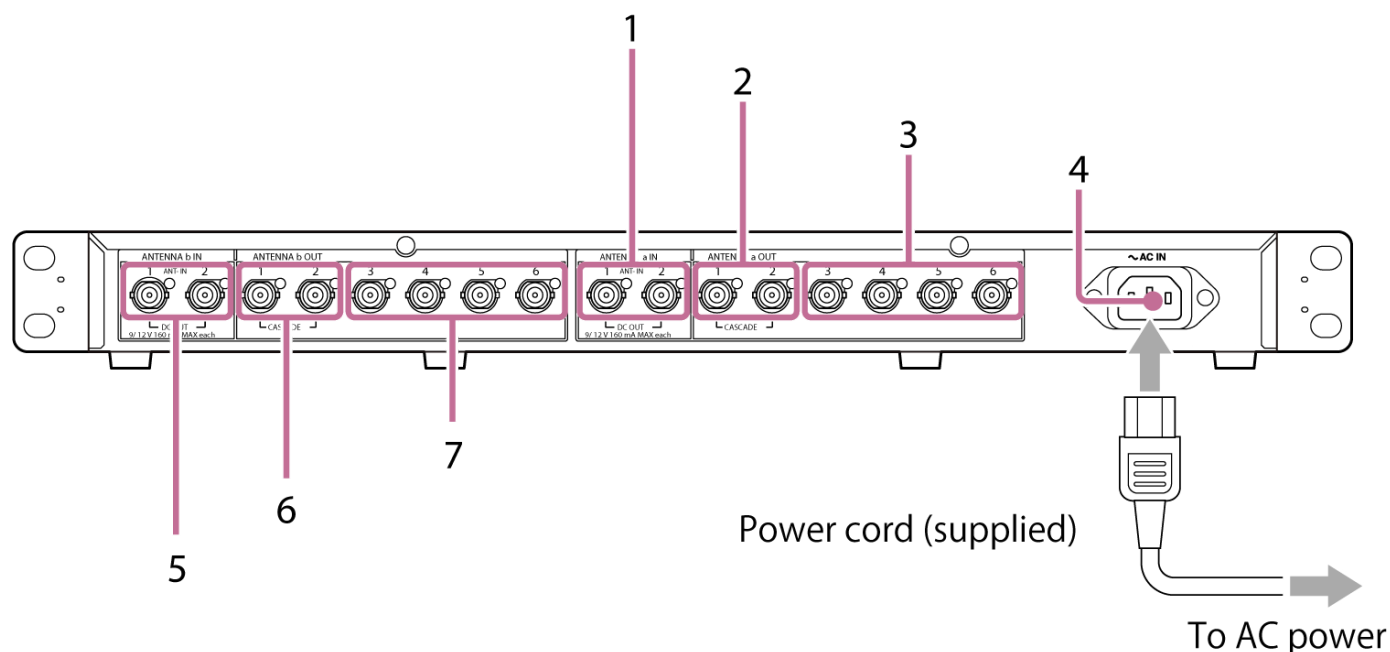
Powered device	Switch position
AN-57	THRU
WB-01	9 V or 12 V
AN-820	9 V
AN-01	9 V or 12 V

### Note

- When connecting an AN-57 ground plane antenna, turn the DC power delivery setting to OFF in the UTILITY menu of the receiver.



## Rear Panel



### ANTENNA a block

#### 1. ANTENNA a IN/DC OUT1, 2 (antenna a input/DC power outputs 1, 2) connectors

Inputs the signal from the antenna via a coaxial cable and simultaneously supplies power to the antenna side to drive the antenna booster. Use the ANTENNA a DC OUT switch on the front panel to switch between 9 V/THRU/12 V. You can connect up to two antennas according to the range of your wireless microphone.

#### 2. ANTENNA a OUT1, 2 (CASCADE) (antenna a divider outputs 1, 2 (cascade dual use)) connectors

To use two dividers simultaneously, connect to the ANTENNA a IN/DC OUT1, 2 connectors of the second divider.

#### 3. ANTENNA a OUT3 to 6 (antenna a divider outputs 3 to 6) connectors

Connect to the ANTENNA a IN connector on the receiver side. Connect such that ANTENNA a OUT connects to ANTENNA a IN.

### Power supply block

#### 4. AC IN (AC power input) connector

Connect to AC power cord.

### ANTENNA b block

#### 5. ANTENNA b IN/DC OUT1, 2 (antenna b input/DC power outputs 1, 2) connectors

Inputs the signal from the antenna via a coaxial cable and simultaneously supplies power to the antenna side to drive the antenna booster. Use the ANTENNA b DC OUT switch on the front panel to switch between 9 V/THRU/12 V. You can connect up to two antennas according to the range of your wireless microphone.

#### 6. ANTENNA b OUT1, 2 (CASCADE) (antenna b divider outputs 1, 2 (cascade dual use)) connectors

To use two dividers simultaneously, connect to the ANTENNA b IN/DC OUT1, 2 connectors of the second divider.

## 7. ANTENNA b OUT3 to 6 (antenna b divider outputs 3 to 6) connectors

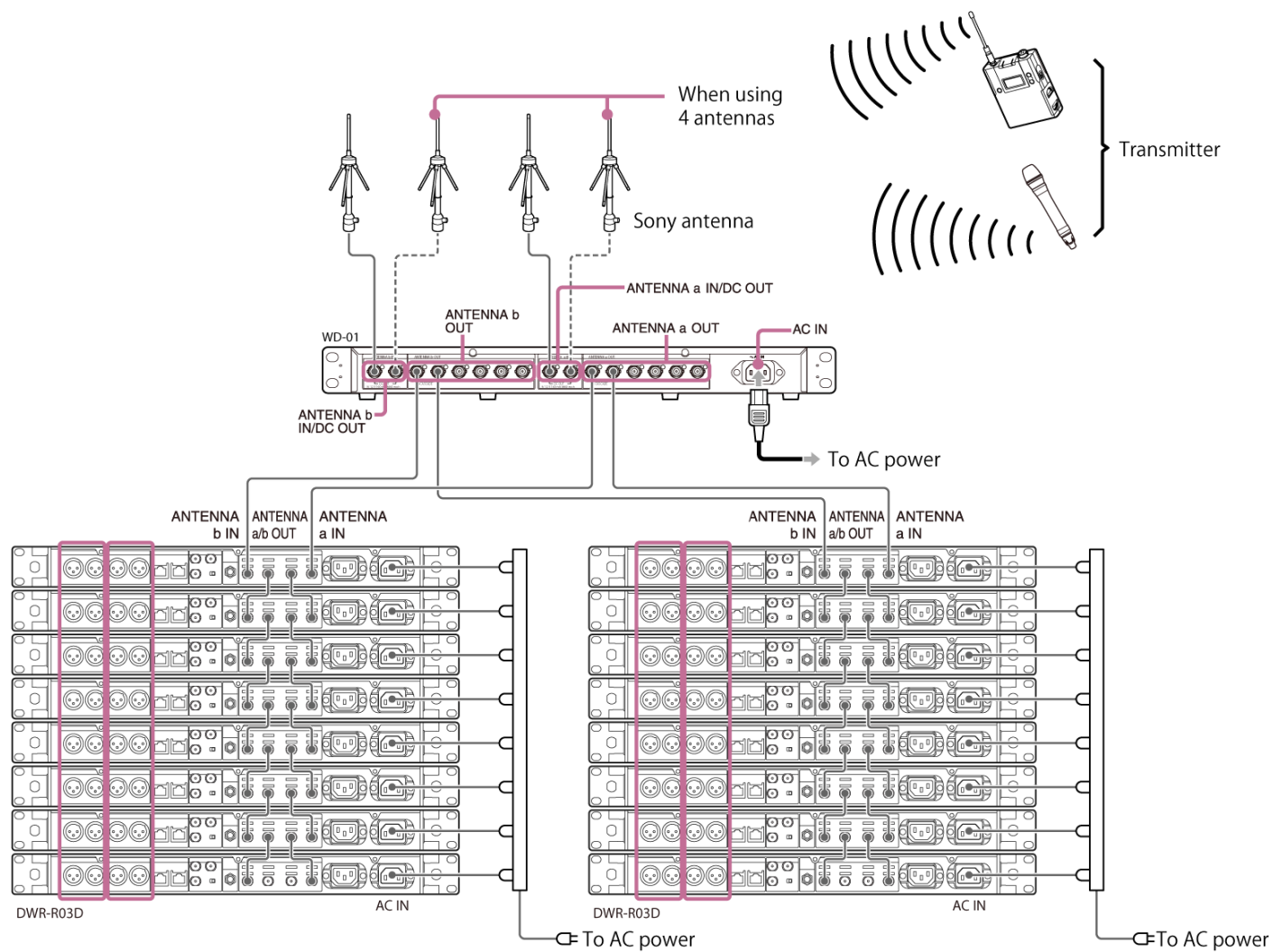
Connect to the ANTENNA b IN connector on the receiver side. Connect such that ANTENNA b OUT connects to ANTENNA b IN.

TP1001803123

5-063-334-11(1) Copyright 2024 Sony Corporation

## When Connecting 16 DWR-R03D Units

Two DWR-R03D units are directly connected to this unit, and 14 more are connected using the cascade output of the DWR-R03D units.



TP1001803124

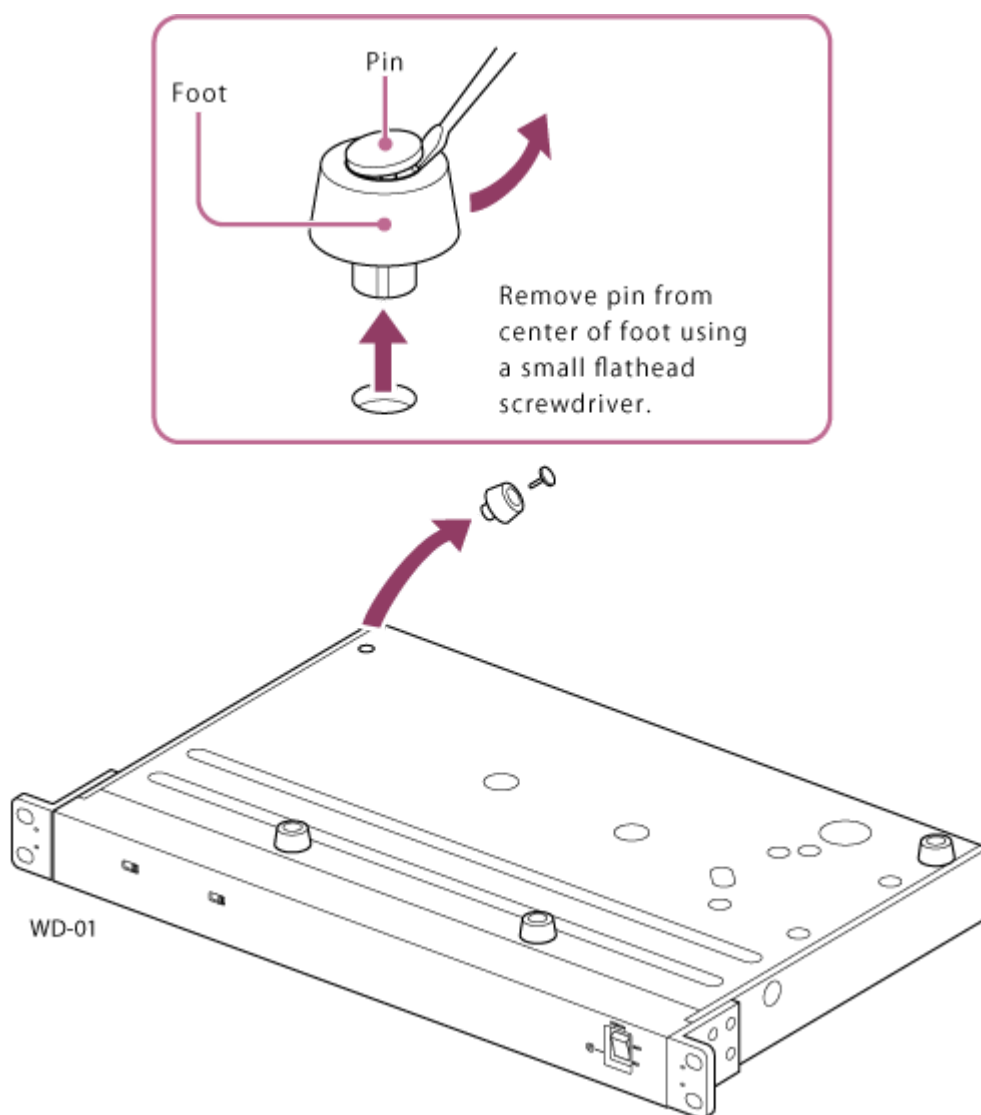


## Mounting in a Rack

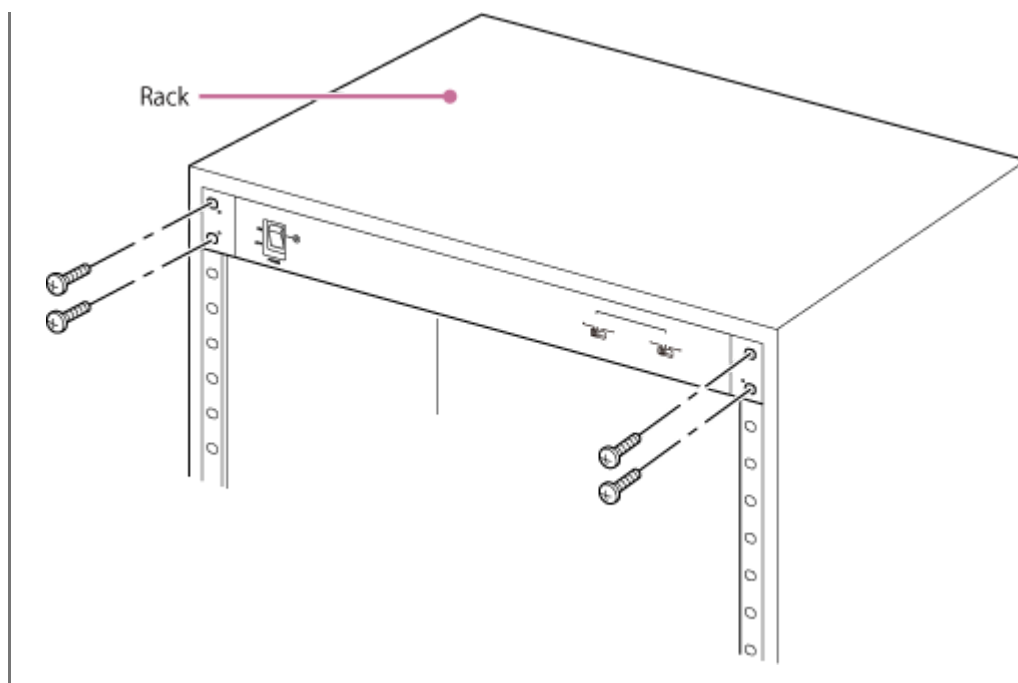
### Note

- When mounting the unit in a rack, take care not to pinch your fingers between the unit and the rack.

- 1 Turn the unit over and remove all four feet from the bottom.

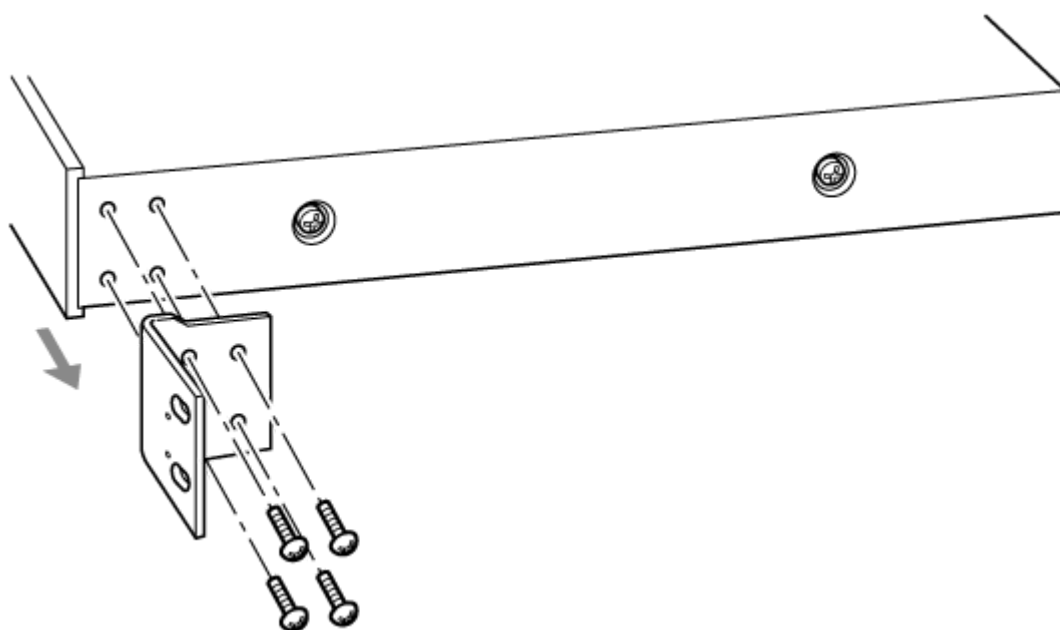


- 2 Attach the unit to the rack using screws (effective length 10 mm or longer) that match the screw diameter of the rack.



### When removing from a rack

Remove the rack mount brackets.



TP1001803125

Antenna Divider  
WD-01

## Specifications

---

### Supported frequency range

- US and Canada models: 470 MHz to 616 MHz
- European model: 470 MHz to 714 MHz

### Input/output impedance

- 50  $\Omega$

### Input/output connectors

- BNC-R type

### Antenna input connectors

- 2-channel (a, b)  $\times$  2-input

### Divider output connectors

- 2-channel (a, b)  $\times$  6-output

### Transmission loss

- Within +3 dB/−6 dB (between antenna input and divider output)

### Coupling loss between connectors

- 15 dB or higher

### Rated voltage

- US and Canada models: AC 120 V
- European model: AC 220 V to 240 V

### Rated power consumption

- 18 W (when supplying 160 mA to antenna booster)

### Booster power supply

- DC 9 V/THRU/12 V switchable (output from antenna input connector)

### Operating temperature

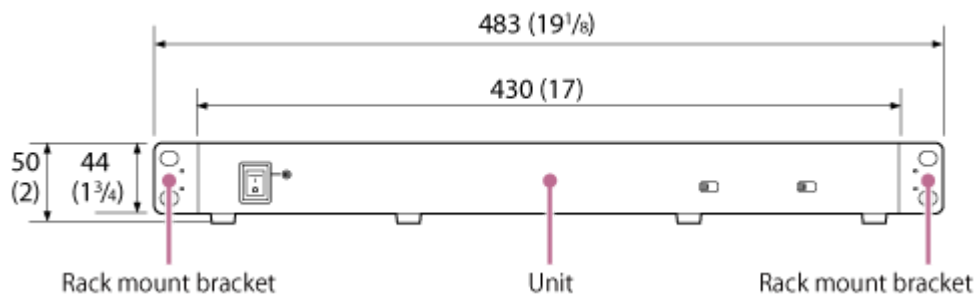
- 0 °C to 50 °C (32 °F to 122 °F)

### Storage temperature

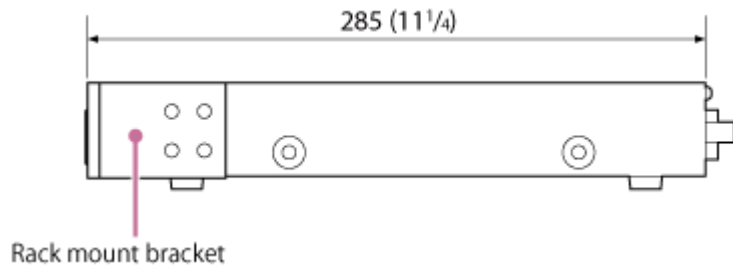
- −20 °C to +60 °C (−4 °F to +140 °F)

### Dimensions

#### Front view



#### Rear view



#### Mass

- Approx. 3.3 kg (7 lb 4.4 oz)

#### Supplied accessories

- Power cord (1)
- Before Using This Unit (1)
- Warranty booklet (1)

Design and specifications are subject to change without notice.

TP1001803126

5-063-334-11(1) Copyright 2024 Sony Corporation