SONY®

Remote Control Unit

Operating Instructions

Before operating the unit, please read this manual thoroughly and retain it for future reference.

RMU-01

DWX
DIGITAL WIRELESS

⟨X⟩ Cross Remote

Table of Contents

Overview

The RMU-01 Remote Control Unit can be used for a network remote control (referred to as "NT remote," hereafter) of the Sony wireless microphone system.

- By connecting this unit through the LAN cable and placing at appropriate location, the transmitters can be controlled remotely and the NT remote system operation that is capable of controlling up to 82 transmitters is highly utilized. Up to nine RMU-01 units can be used with one system.
- This unit accepts PoE (Power over Ethernet) that makes long-distance LAN connections easy. The power to this unit can also be provided from the supplied AC adapter.
- Inside a solid structure, a 1/4 wavelength monopole antenna is built into this unit. The smooth surface of this unit is designed to match various installation locations. This unit can easily be attached to the microphone stand. With the supplied brackets, this unit can also be attached on the wall, poles, lighting battens, catwalk, etc.

Notes

- Using more of this unit in the network system does not necessarily increase the number of controllable transmitters. The maximum number of controllable transmitters in the system is 82, regardless of the number of this unit.

For details on installation location, installation intervals, and cables for connections, see "Important Notes on Operation" on page 25.

- If you plan to use a PoE hub or PoE power supply unit, purchase it on the market.

For details on how to connect the receivers, PoE devices, hub, etc., refer to the operation manual supplied with the applicable device.

What is the PoE (Power over Ethernet)?

The PoE is a technology to supply power through the Ethernet cable used for LAN connection. With LAN cables carrying both signal and power, operation in a situation where the power supply is difficult to reserve becomes easy.
The power can be supplied to this unit from the connected PoE hub that conforms to IEEE802.3af standards, or from the PoE power supply device connected to this unit through the hub.

Parts Identifications

Front side

Bottom side
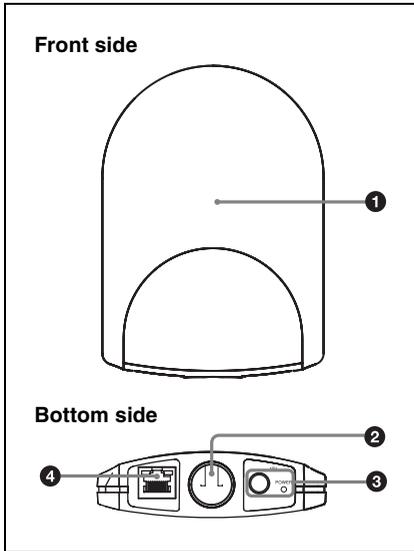
❶ **Antenna storage section**

❷ **Hole for attaching the microphone stand**

Can be attached to the microphone stand (PF $^1/_2$-inch thread) with this hole.
To attach an NS $^5/_8$-inch or a W $^3/_8$-inch microphone stand, use the supplied screw adapter.

❸ **AC adapter connector and POWER indicator**

Connect the supplied AC adapter to the AC adapter connector to supply power to this unit.
The POWER indicator lights up green while the power is supplied from the AC power connector or the LAN connector.

For details on power supply to this unit, see "Connecting to Power Supply and Other Devices" on page 20.

❹ **LAN connector (RJ-45)**

This is a 10Base-T/100Base-TX connector for network connection. Communication speed automatically changes according to the connected device.
Connect to a receiver such as DWR-R01D, Windows PC, or hub.
When a PoE device including PoE hub is connected, the power is supplied through this connector.

Making Use of the NT Remote Function

To use the NT remote function fully and with stability, note the following.

- 2.4GHz-band radiowave has the strong tendency to travel in a straight line. When there is an obstacle between this unit and the transmitter, signal strength drops rapidly. To avoid this, be sure to install this unit so that this unit is in direct view from where the transmitters are placed.
- In order to avoid signal interference and to maintain stable 2.4GHz-band transmission, it is recommended to use at least two RMU-01 units in the network. When installing multiple RMU-01 units, install them so that they keep distance of 10 m to 20 m (11 yards to 22 yards) from one another.
- Up to nine RMU-01 units can be connected to a system. Under less favorable environment where the signal is weak due to signal interference, consider adding more RMU-01 units to reinforce the signal transmission, if necessary.
- When operating outdoors where less signal reflection occurs than indoors, operating area of this unit may be narrowed. For outdoor use, install this unit at the same height as the transmitters to shorten the signal transmission distance.
- In every operating environment, the internal antenna of this unit attains efficient performance with the side with connectors facing downward. However, when this unit is installed close to the ceiling, better performance can be obtained by facing the front side (the side with SONY logo) downward.
- Signal transmission status varies depending on the structure and material of the building where this unit is installed. It is recommended to install this unit so that the wireless remote control condition level indications on the transmitters and receivers (Shows the quality of 2.4-GHz wireless signal. For details, refer to the Operating Instructions supplied with the wireless microphone, transmitter, or the receiver.) are stable at ⇆📶 or ⇆📶.
- When the total operation area is wide by putting together the areas that two or more RMU-01 units cover, the transmitter may change the RMU-01 unit to communicate with from one to another (roaming). Even when the areas that the RMU-01 units cover are completely adjacent with no gaps, the communication between the transmitter and the receiver is cut whenever the roaming occurs on the transmitter. Note that the communication is cut for several seconds.

## About the characteristics of the built-in antenna

The antenna inside the casing of this unit emits the strong radiowave concentrically from the center of the antenna. Placing the transmitter inside the radiowave circle is important for taking advantage of the system.

Antenna (inside the casing)

1) Radius: approx. 10 m (33 feet)
2) Front side (the side with SONY logo)
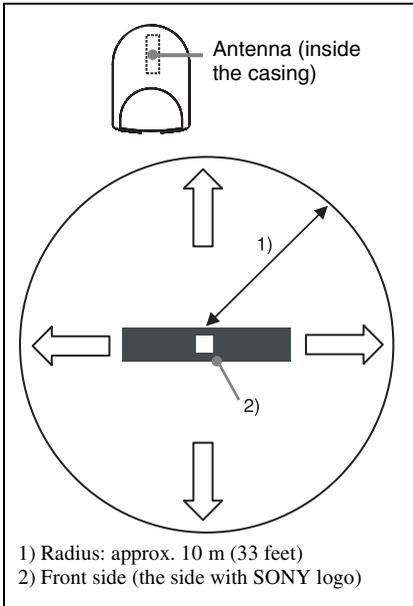
Emitted radiowave is strong in the area inside the radius of approximately 10 m (33 feet). When installing multiple RMU-01 units, place them so that strong signal area touches that of adjacent RMU-01 unit.

Installation example 1 (plane view)

When two RMU-01 units are installed to control the body-pack transmitter that is worn around the waist of a person, it is recommended that the RMU-01 units be placed across the body-pack transmitter so that there is no obstacle between the transmitter and at least one of the RMU-01 units.

1) RMU-01
2) Transmitter worn around the waist of a person
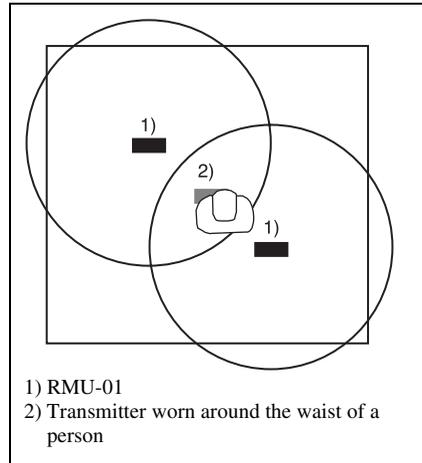
Installation example 2 (plane view)

To increase the total operation area by putting the areas that multiple RMU-01 units cover together, place them so that the area that one RMU-01 covers touches those on others, completely adjacent and with no gaps.

1) RMU-01
2) Transmitter
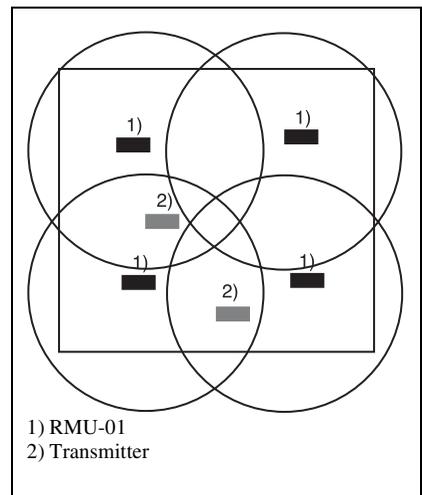
Installation example 3 (section view)

This is an example when this unit is installed to the microphone stand.

Indoors: Because the signal is reflected from the walls, floor, and ceiling, there are no conditions for the installation height of this unit.
Outdoors: Install this unit at the same height as the transmitters.
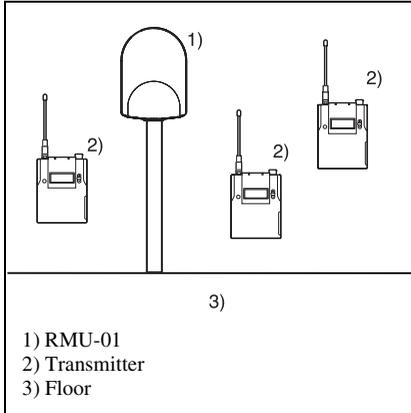

1) RMU-01
2) Transmitter
3) Floor

Installation example 4 (section view)

This is an example when this unit is installed on the wall.
Indoors: Because the signal is reflected from the walls, floor, and ceiling, there are no conditions for the installation height of this unit.
Outdoors: Install this unit at the same height as the transmitters.

1) RMU-01
2) Transmitter
3) Wall
4) Floor
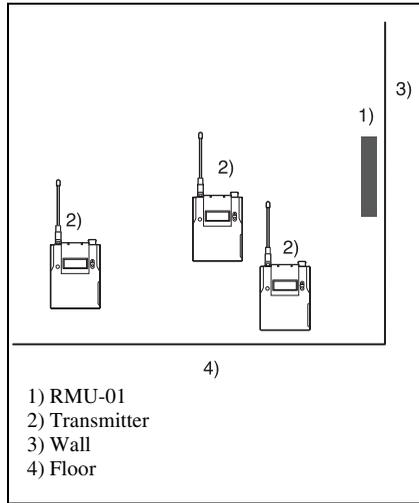
Installation example 5 (section view)

This is an example when this unit is installed indoors, near the ceiling.

1) RMU-01
2) Transmitter
3) To make the most of the signal emission characteristics, install facing the front side (the side with SONY logo) downward.
4) Ceiling
5) Wall
6) Floor
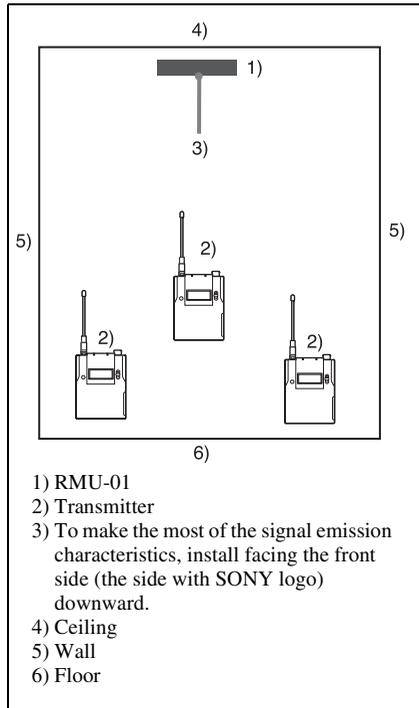
Installations

Attaching to the Microphone Stand

1 Attach the cable holder to this unit.

Rear side of this unit

Cable holder (supplied)
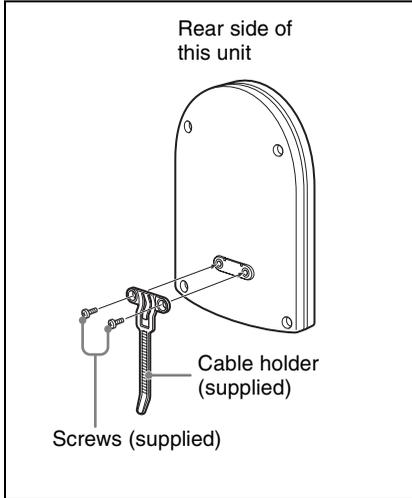
Screws (supplied)

2 When attaching to an NS $^5/_8$-inch or a W $^3/_8$-inch microphone stand, screw in the supplied screw adapter into the hole for attaching the microphone stand.

Screw adapter (supplied)
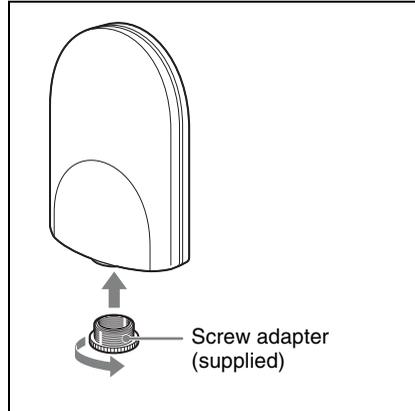
3 Insert the tip of the microphone stand into the hole, and turn this unit to securely attach to the microphone stand.

Microphone stand
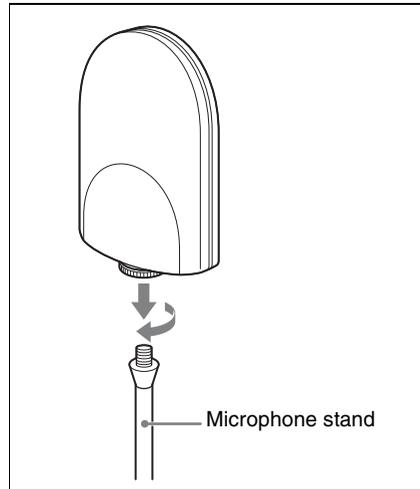
4 Connect the cables.

For details on connections, see "Connecting to Power Supply and Other Devices" on page 20.

5 Bring the cables together with the cable holder.

Cable holder
(supplied)
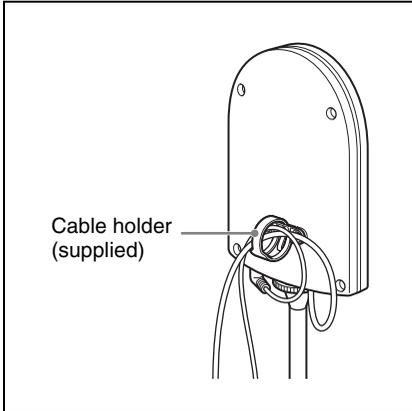
Attaching on the Wall

Note

Do not touch the LAN connector directly with your hand. If you do, electrostatic discharge may damage the internal components. To prevent this unit from electrostatic damage, grounding the supplied brackets, safety wire, etc., by attaching them to metallic object is recommended.

1 Attach the bracket Ⓐ on the wall securely with screws.

Bracket Ⓐ (supplied)

2 Attach the bracket Ⓑ and the cable holder to this unit.

Rear side of this unit

Bracket Ⓑ
(supplied)

Cable holder
(supplied)

Screws (supplied)
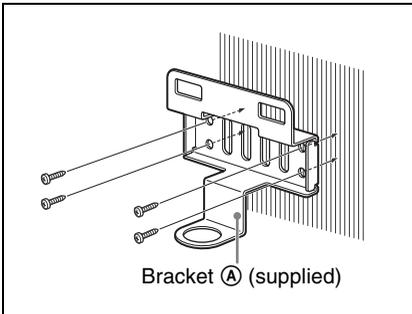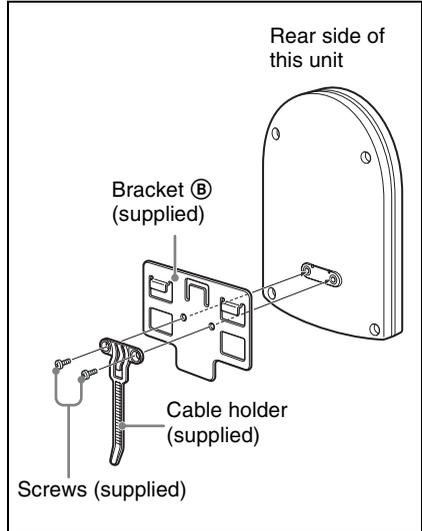
3 Make connections and bring the cables together with the cable holder.

For details on connections, see "Connecting to Power Supply and Other Devices" on page 20.

4 Wrap the supplied safety wire around the bracket Ⓑ.

Safety wire (supplied)
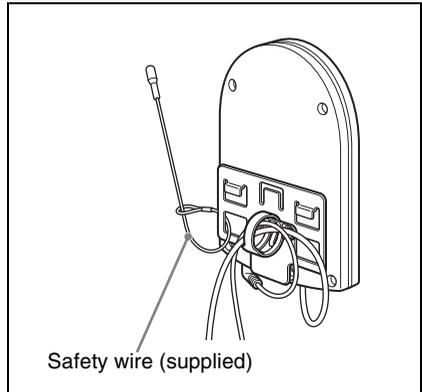
5 Join the brackets by pressing down the two hooks on the bracket Ⓑ against the two square holes on the bracket Ⓐ,

until the upper edges of the brackets align.

Take care not to catch the cables between the brackets.

Bracket Ⓑ (supplied)
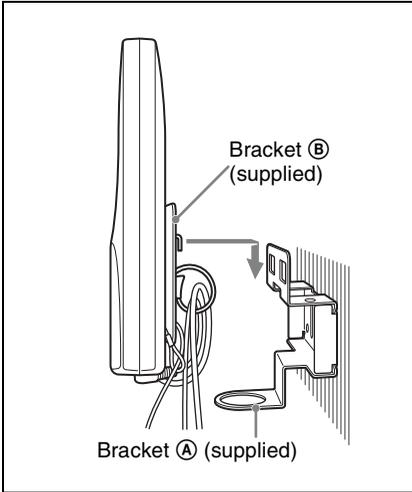
Bracket Ⓐ (supplied)

6 Fix the end of the safety wire to the wall with a screw.

Safety wire (supplied)
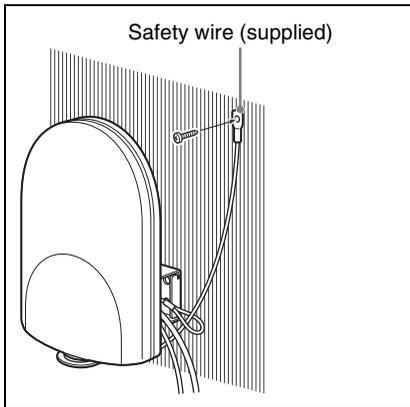
7 Screw in the supplied screw adapter into the hole for attaching the microphone stand to secure the bracket Ⓐ to this unit.

Bracket Ⓐ (supplied)

Screw adapter (supplied)
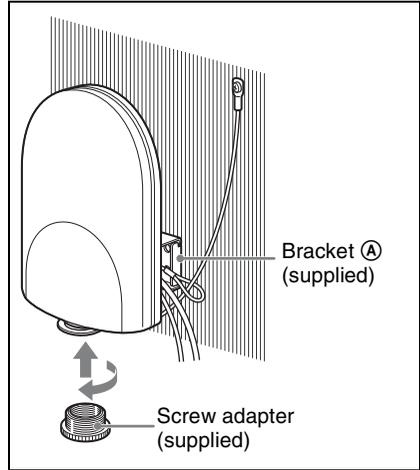
Attaching to the Catwalk, Pole, or a Lighting Battens

1 Attach the bracket Ⓐ to the location where this unit is attached by using banding bands.
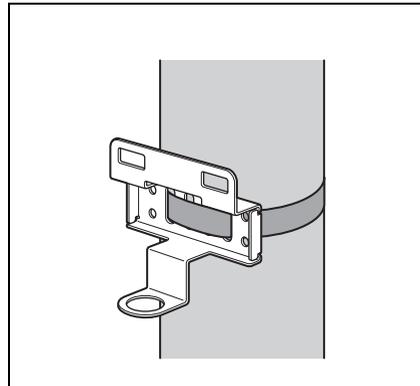
2 Do steps **2** to **7** in "Attaching on the Wall" on page 9.

Preparations of Operation

Do the procedure below to prepare the operation in NT remote system.

1 Install the RMU-01 Setting Tool software on the PC.

For details, see "Installing the Software" on page 13.

2 Connect this unit to the PC with the RMU-01 Setting Tool installed with a LAN cable.

At this point, the connection to the DWR-R01D is unnecessary.

3 Set the IP address of this unit by using the RMU-01 Setting Tool software.

For details, see "Using the RMU-01 Setting Tool" on page 11.

4 Connect the PoE hub or PoE power supply unit and the DWR-R01D, etc., to this unit.

For details on the power supply to the unit, see "Connecting to Power Supply and Other Devices" on page 20.

For details on system configuration examples, refer to the Operating Instructions supplied with the DWR-R01D.

Using the RMU-01 Setting Tool

Note

Depending on the PC environment, an attempt to start up the RMU-01 Setting Tool software may be blocked by the firewall. When the firewall is activated for the RMU-01 Setting Tool software, LAN communication necessary for the NT remote function is blocked, resulting in the operational failure of this unit. To prevent this from happening, set the firewall so that the RMU-01 Setting Tool software is unblocked.

This section explains the use of the Setting Tool software supplied with the RMU-01 Remote Control Unit.

Notations Used in This User's Guide

- Clicking a menu or button and then selecting a sub-menu is expressed as follows: Select "Menu (or button) > (sub-menu name)".
  Example: Select "File menu>New".
- Holding down one key on the keyboard while pressing another is indicated by a "+" sign between the two keys.
  Example: Press Ctrl + C.

About the Window Displays

The window displays that appear in this section may differ from those on your PC, due to differences in the operating system being used.

Operating Conditions of the Software

RMU-01 Setting Tool software is designed to run on the PC that satisfies the following requirements:

Item	Requirements
Operating system	Windows Vista (service pack 2 or higher)/ Windows 7 (32 bits/ 64 bits)/Windows 8 (32 bits/64 bits)/ Windows 10 (32 bits/ 64 bits)
CPU/RAM	Equivalent to or higher than the specifications required for the OS that you use
Available hard disk space	At least 100 MB
Monitor	At least 1024 × 768 pixel resolution (recommended)
Other requirements	Displaying English, 100Base-TX or 10Base-T LAN card, CD-ROM drive

Windows is registered trademark of Microsoft Corporation in the United States and/or other countries.

Preparations

Connections

Connect the RMU-01 to the PC with a LAN cable.
For connections, use a category 5 or superior LAN cable with a maximum length of 100 m (330 ft).

The type of LAN cable for the connection differs depending on how to connect the RMU-01 to the PC, as follows:

To connect the PC directly: cross cable
To connect the PC through the hub: straight cable

For details on how to connect the RMU-01 to other devices, see "Connecting to Power Supply and Other Devices" on page 20.

Settings up the network

Make network settings on the RMU-01 and the PC.
For the PC to recognize other devices on the network, host name, IP address, and subnet mask must be specified to all the devices to be connected to the network.
The following table shows the setting examples for connecting two RMU-01 units and the PC.

Device	IP address	Subnet mask
PC	192.168.0.200	255.255. 255.0 [2]
First RMU-01	192.168.0.100 [1]	
Second RMU-01	192.168.0.101 [1]	

1) The IP addresses of the RMU-01 units do not need to be consecutive.

2) Normally, specify "255.255.255.0".

Note

Make sure not to use an IP address that is already assigned to another device on the network. If you do, the devices with the same IP address may not pe recognized.

PC network settings

The following procedure explains the setting operations using the Windows 7 operating system.

For details on how to make network settings with other operating systems, refer to the help of the operating system that you use.

1 Select "Start>Control Panel>Network and Internet".

2 Click "Network and Sharing Center".

3 Click "Change adapter settings".

4 Right-click the local area connection icon and then click "Properties".

The properties window of the local area connection opens up.

5 Double-click "Internet Protocol Version 4 (TCP/IPv4)".

The internet protocol (TCP/IP) properties window opens up.
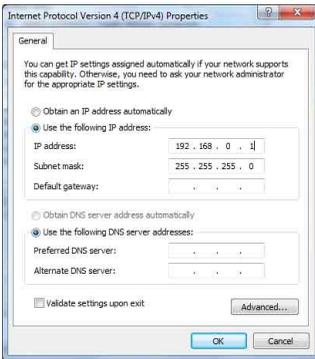
6 Click "Use the following IP address", and then enter the IP address in the IP address field.

> **Note**
>
> Make sure not to use an IP address that is already assigned to another device on the network.

7 Enter "255 255 255 0" into the Subnet Mask field.

8 Click "OK" to close the internet protocol (TCP/IP) properties window.

9 Click "Close" to close the local area connection properties window.

Installing the Software

Note

The installation procedure below describes the operation on the PC that runs Windows 7. Note that the procedure may vary according to the operating system.

Notes on installation

- If the older version of RMU-01 Setting Tool is already installed in the PC, uninstall it *(see page 14)*.
- Quit all applications before installing the software,
- Be sure to log in as the administrator.

1 Insert the CD-ROM in your CD-ROM drive.

2 Click "Start" and then click "Run".

3 Click "Browse" and then select the CD-ROM drive.

4 Select "setup.exe" and click "Open".

This activates the CD-ROM and the message "Welcome to the InstallShield Wizard for RMU-01 Setting Tool" appears.
If the older version of software is already installed, uninstall it and start the procedure over again.

For details on uninstallation, see "To uninstall the software" on page 14.

5 Click "Next".

A message "Destination Folder" appears.

6 Verify and if necessary, change the location where the software is installed.

To change the location, click "Change" and specify the location in the dialog that appears when you click "Change".

7 Click "Next".

8 Click "Install".

Installation starts.
When all application files has been copied to the PC, a message "InstallShield Wizard Completed" appears.

9 Click "Finish".

To uninstall the software

Click and select "Add or Remove Programs" in the Windows Control Panel, then select "RMU-01 Setting Tool" from the list, and then delete it.

Opening the Installed Files

Click "Start", then "All programs","Sony", and then click "Digital Wireless Microphone System". And then, click the file that you want to open.
RMU-01 Setting Tool: RMU-01 Setting Tool software
Operating Instructions for RMU-01: Operating Instructions in PDF format

Starting Up and Exiting the Software

To start up the software

Select "Start> All Programs> Sony> Digital Wireless Microphone System> RMU-01 Setting Tool" to start up the software.

To exit the software

Click the Close button (×) in the top-right corner of the window.

Parts Identification

In this section, parts of the main display of this software are explained.

① Search Devices button

② Setting button

③ Option button

④ Name setting display

⑤ MAC address display

⑥ IP Address setting display

⑦ Subnet Mask setting display

⑧ Location setting display

⑨ Target TX setting display

⑩ Remote CH setting display

⑪ Version display
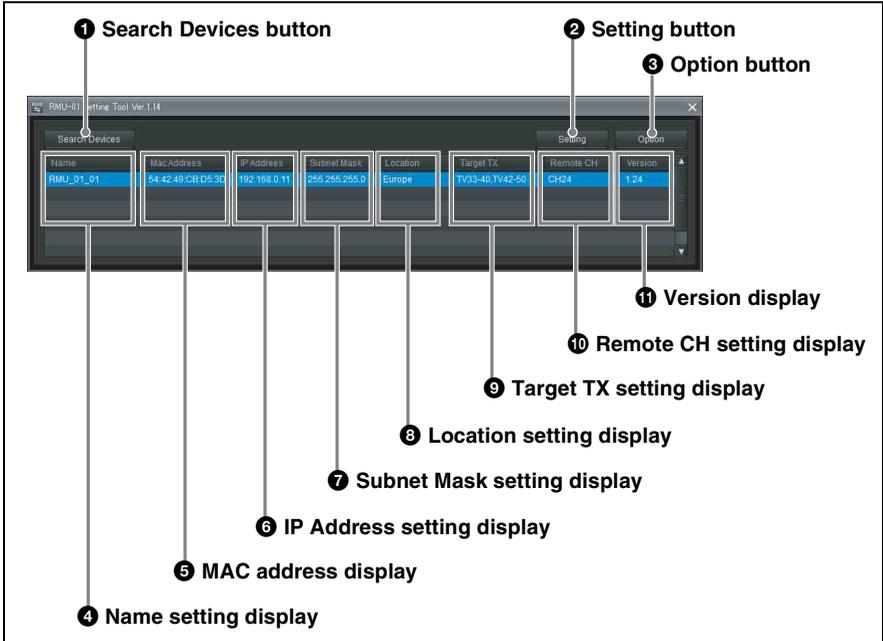
① **Search Devices button**
Click to detect the RMU-01 units on the network.

For details, see "Detecting the RMU-01 Units on the Network Automatically" on page 16.

② **Setting button**
Click to change the device name, IP address, and subnet mask settings of the device.

For details, see "Changing the Settings of the RMU-01" on page 17.

③ **Option button**
Click to activate additional functions.

④ **Name setting display**
Shows the names configured for the RMU-01 units on the network.

A 16-character name is given to each RMU-01 at the factory. With this software, the RMU-01 units can be renamed.

For details, see "Changing the Settings of the RMU-01" on page 17.

⑤ **MAC address display**
Shows the MAC addresses of the RMU-01 units on the network.
Unique MAC addresses are given to each device and cannot be changed.

⑥ **IP Address setting display**
Shows the IP addresses configured for the RMU-01 units on the network.

Initially, the factory-set value (192.168.0.2) is displayed for all RMU-01 units. Be sure to configure a unique IP address for each device connected to the network. If two or

more devices share the same IP address, they will not be recognized properly on the network.

For details, see "Changing the Settings of the RMU-01" on page 17.

❼ Subnet Mask setting display
Shows the subnet masks configured for the RMU-01 units on the network.

Initially, the factory-set value (255.255.255.0) is displayed for all RMU-01 units. With this software, the settings can later be changed.

For details, see "Changing the Settings of the RMU-01" on page 17.

❽ Location (region of use) setting display
This function appears when version 1.23 or later of the RMU-01 software is used with version 1.12 or later of the Setting Tool software.

This shows the region of use setting. Configure this setting according your region of use.
Initially, the factory-set value is displayed for all RMU-01 units, but the setting can be changed using this software.

For details, see "Changing the Settings of the RMU-01" on page 17.

❾ Target TX (target transmitter for control) setting display
This function appears when version 1.10 or later of the RMU-01 software is used with version 1.10 or later of the Setting Tool software.
In addition, when version 1.23 or later of the RMU-01 software is used with version 1.12 or later of the Setting Tool software, you can select multiple transmitters as targets for control.

Configure this setting according to the transmitter that will be remote controlled by the RMU-01.

For details, see "Changing the Settings of the RMU-01" on page 17.

❿ Remote CH (remote channel) setting display
This function appears when version 1.10 or later of the RMU-01 software is used with version 1.10 or later of the Setting Tool software.

This shows the channel configured to be used by the RMU-01 for remote control. Initially, the factory-set channel is displayed for all RMU-01 units, but the setting can be changed using this software.

For details, see "Changing the Settings of the RMU-01" on page 17.

⓫ Version display
This function appears when version 1.10 or later of the RMU-01 software is used with version 1.10 or later of the Setting Tool software.

This shows the software versions of the RMU-01 units on the network.

Detecting the RMU-01 Units on the Network Automatically

Click the Search Devices button to initiate the automatic detection of RMU-01 units on the network.
While the automatic detection is in progress, the progress bar window appears. When the detection finishes, information on the detected RMU-01 units is listed in the main window.

With some PC's equipped with multiple LAN ports (wired and wireless), the RMU-01 units connected to a LAN port may not be automatically detected even when you click the Search Devices button.

If this happens, invalidate all ports including LAN and IEEE1394 ports with "Network Connections" on the OS, then validate only the LAN port to which the RMU-01 units are connected. And then, restart the RMU-01 Setting Tool software to perform automatic detection.

Changing the Settings of the RMU-01

On the list of detected RMU-01 units in the main display, click the name of the device whose settings you want to change and click the Setting button.

The Setting window for the device appears.
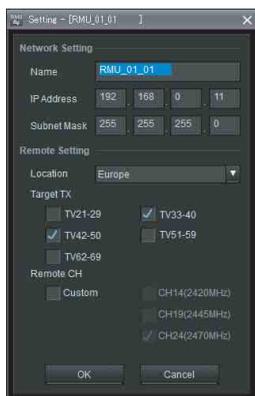
Changing the network settings

To change the RMU-01's name

Enter a new name in the Name box. Up to 16 characters can be entered.

The following characters and a space can be used.

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
0 1 2 3 4 5 6 7 8 9 ! # & $ @ + - = _ ( ) [ ]

To change the IP address

Enter a new IP address in the IP Address boxes. Up to three digits can be entered in each box.

To change the subnet mask

Enter a new subnet mask in the Subnet Mask boxes. Up to three digits can be entered in each box.

Changing the remote control settings

This function appears when version 1.10 or later of the RMU-01 software is used with version 1.10 or later of the Setting Tool software.

In addition, when version 1.23 or later of the RMU-01 software is used with version 1.12 or later of the Setting Tool software, you can select multiple transmitters as targets for control.

To change the region of use setting

This function appears when version 1.23 or later of the RMU-01 software is used with version 1.12 or later of the Setting Tool software.

Use the Location setting to select the region of use. Configure this setting according your region of use.

Changing the target transmitter for control

Use the Target TX setting to select the model number of the transmitter that will be controlled by the RMU-01. Refer to the list of transmitter model numbers in the following tables, and change the setting according to the transmitter you want to use.

In addition, when version 1.23 or later of the RMU-01 software is used with version 1.12 or later of the Setting Tool software, you can select multiple transmitters as targets for control.
Model number CE21 of the transmitter can be controlled with version 1.14 or later of the software.

US models

Model No. (Frequency range)	Frequency band	Frequency
U14, U1424 (TV14-25)	TV14-17	470.125 - 493.875 MHz
	TV18-21	494.125 - 517.875 MHz
	TV22-25	518.125 - 541.875 MHz
U30, U3040 (TV30-41)	TV30-33	566.125 - 589.875 MHz
	TV34-46	590.125 - 607.875 MHz
	TV37	Not available
	TV38-41	614.125 - 637.875 MHz
U42, U4250 (TV42-51)	TV42-45	638.125 - 661.875 MHz
	TV46-49	662.125 - 685.875 MHz
	TV50-51	686.125 - 697.875 MHz

European models

Model No. (Frequency range)	Frequency band	Frequency
CE21 (TV21-29)	TV21-23	470.025 - 494.000 MHz
	TV24-26	494.025 - 518.000 MHz
	TV27-29	518.025 - 542.000 MHz

Model No. (Frequency range)	Frequency band	Frequency
CE33 (TV33-40)	TV33-35	566.025 - 590.000 MHz
	TV36-37	590.025 - 606.000 MHz
	TV38-40	606.025 - 630.000 MHz
CE42 (TV42-50)	TV42-44	638.025 - 662.000 MHz
	TV45-47	662.025 - 686.000 MHz
	TV48-50	686.025 - 710.000 MHz
CE51 (TV51-59)	TV51-53	710.025 - 734.000 MHz
	TV54-56	734.025 - 758.000 MHz
	TV57-59	758.025 - 782.000 MHz
CE62 (TV62-69)	TV62-64	798.025 - 822.000 MHz
	TV65-66	Not available
	TV67-69	838.025 - 862.000 MHz

Changing the remote control channel settings

The optimal channel for remote control of the transmitter selected with the Target TX setting will be automatically selected and displayed under Remote CH.

You can select the Custom setting to enable selection of remote control channels.
By selecting Custom and selecting a remote control channel, you may be able to prevent interference that may occur between the RMU-01 and other wireless LAN systems during remote control.

Note

When the Custom setting is used, the automatically selected optimal remote control channel for the transmitter you are using will be ignored. In such cases, signals sent from the transmitter may have an effect on remote control. Be sure to confirm operation before using the setting.

After changes are made, click OK to enter the new settings and revert to the main display.
If the new settings are valid, a message indicating that setting is complete will appear. If the settings are invalid, an error message appears. Follow the instructions in the error message to correct the settings.

To change settings of the RMU-01 again

Click the Search Devices button to update the list of detected RMU-01 units. Then, click the name of the device that you want to change the settings.

To resume the main display without changing the settings

Click the Cancel button.

Additional Functions

Two additional functions are available with this software.
POWER indicator flasher: When multiple RMU-01 units are connected to the network, use this function to easily distinguish the particular unit by operate the POWER indicator on that unit to flash.
Self-check function: If an RMU-01 unit does not work properly even when connections and settings are correct, perform self-check on the hardware of that device.

On the list of detected RMU-01 units in the main display, click the name of the device to apply an additional function, and then click the Option button.
The Option window for the device appears.

To flash the POWER indicator of the selected device

Click the Start button at the right of the "Power LED Blink" indication.
The POWER indicator of the selected device flashes at 0.1-second intervals for about five seconds.

For details on the status of this unit and the POWER indicator status, see "On the Status of This Unit and the Lighting Status of the POWER Indicator" on page 24.

To perform self-check for the selected device

Click the Start button at the right of the "Self Check" indication.
The check starts and the results of the following four items (① to ④) are displayed.

Item	Meanings
① EEPROM test	EEPROM check
② Flash ROM test	Flash ROM check

Item	Meanings
③ RM module test	2.4-GHz transmission/ reception module check [1]
④ Power Source is	Shows the power source. **PoE**: PoE **AC**: AC adapter

1) When the 2.4-GHz wireless communication is busy, self-check may not be performed properly. In this case, "NG!" may be displayed as the results. It is recommended that you perform the check again after turning off the transmitters and the receivers or after disconnecting them from the network.

If results of any of the item from ① to ③ in the table above are "NG!", the hardware of the RMU-01 may be malfunctioning. If this happens, consult your Sony service representative or nearest dealer.

When a time-out error occurs in LAN communication, "NG!(ErrCode 0xFF)" appears as the results. This may be caused by improper connection of the LAN cable or inappropriate connection between this unit and the power source. If this happens, check the connection and the power source, then perform the check again.

To resume the main display

Click the Close button (×) in the top-right corner of the window.

Connecting to Power Supply and Other Devices

Notes

- For connections, use a category 5 or superior LAN cable.
- Use a LAN cable with a maximum length of 100 m (330 ft) for connecting the devices (PoE hub, receivers, etc.).
- When the PoE power supply unit that does not have the repeater function is connected between this unit and the DWR-R01D or the hub, keep the total cable length at 100 m (330 ft) or shorter.
- Using self-made LAN cables may result in network connection failure. Use commercially available LAN cables, instead.
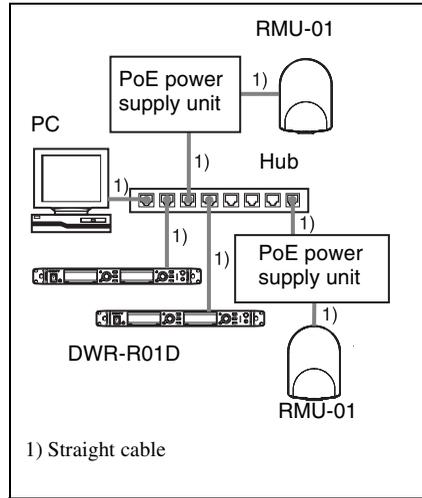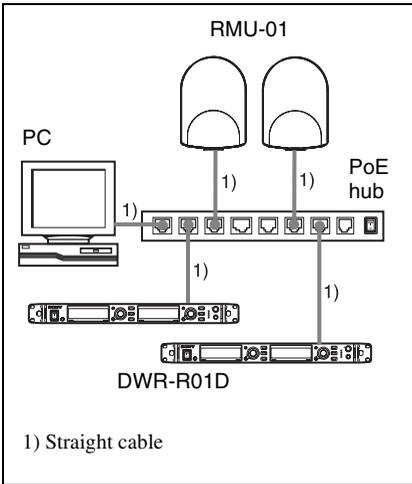
Connections and the type of LAN cables depend on the power supply method to this unit.
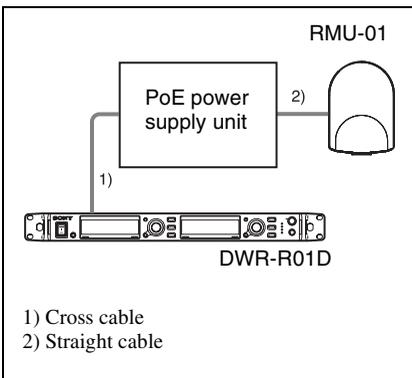
Supplying Power From the PoE Device

The examples of connections when the power is supplied from the PoE device to this unit are shown below.

To supply power from the PoE hub

RMU-01

PC

PoE hub

1) 1) 1)

1) 1)

DWR-R01D

1) Straight cable
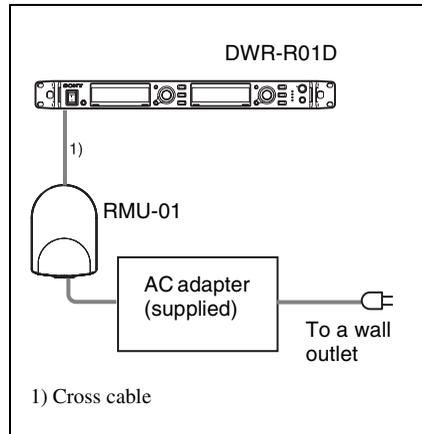
To supply power from the PoE power supply unit

• When only one receiver (such as the DWR-R01D) or the PC is connected to this unit and the power is supplied to this unit from the PoE power supply unit

RMU-01

PoE power supply unit

2)

1)

DWR-R01D

1) Cross cable
2) Straight cable

• When multiple devices including this unit and the receivers are connected and the power is supplied to this unit from the PoE power supply unit

RMU-01

PoE power supply unit

1)

PC

1)

1)

Hub

1)

1)

PoE power supply unit

1)

DWR-R01D

RMU-01

1) Straight cable

Supplying Power From the AC Adapter

• When only one receiver (such as the DWR-R01D) or the PC is connected to this unit and the power is supplied to this unit from the supplied AC adapter

DWR-R01D

1)

RMU-01

AC adapter (supplied)

To a wall outlet

1) Cross cable
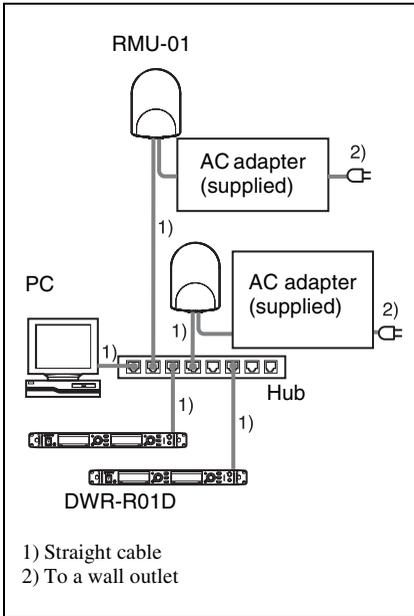
• When multiple devices including this unit and the receivers are connected and the power is supplied to this unit from the supplied AC adapter

RMU-01

AC adapter
(supplied)

2)

1)

PC

AC adapter
(supplied)

2)

1)

1)

Hub

1)

1)

DWR-R01D

1) Straight cable
2) To a wall outlet

Troubleshooting

If you encounter a problem using this unit, use the following checklist to find a solution. If the problem persists, consult your Sony dealer.

Symptom	Cause	Remedy
Wireless remote control cannot be performed.	Pairing is not established between the transmitter and the receiver.	Carry out pairing. *For details on pairing procedure, refer to the Operating Instructions supplied with the transmitter/receiver.*
	The transmitter is out of the radio communication range.	Check the condition level of the transmitter. If the level is low, bring the transmitter closer to this unit.
	IP address on one (or more) RMU-01 unit(s) is (are) not set properly.	Use the supplied Setting Tool software to set the IP address of all the RMU-01 units properly.
	LAN cables are not connected properly.	Check the LAN cable connections, making sure that the appropriate type of cable is used for each connection.
	The target transmitter for control is not configured properly.	Use the supplied Setting Tool software to set the model number of the transmitter that will be remote controlled by the RMU-01.
	There is radio interference from other wireless LAN systems, etc.	Use the supplied Setting Tool software to specify the remote control channel of the RMU-01.
When multiple RMU-01 units are used in the network, wireless remote control fails at times.	A certain RMU-01 unit is out of order.	Use the supplied Setting Tool software to check that all the RMU-01 units are recognized. And, perform self-check on all the RMU-01 units to see if any hardware error is detected.
The RMU-01 units on the network cannot be detected automatically.	With some PC's equipped with multiple LAN ports (wired and wireless), the RMU-01 units on the network may not be automatically detected unless you change the port setting on "Network Connections" on the OS.	With "Network Connections" on the OS, invalidate all ports on the PC, then validate only the LAN port to which the RMU-01 units are connected. And then, restart the RMU-01 Setting Tool software to perform automatic detection *(see page 16).*

On the Status of This Unit and the Lighting Status of the POWER Indicator

Status of this unit	Status of the POWER indicator
① Starting up	Flashes at 0.2-second intervals
② In normal operation	Lights up
③ "Power LED Blink" is conducted on the RMU-01 Setting Tool software	Flashes at 0.1-second intervals
④ RM module initialization is failed.	Flashes at 2-second intervals
⑤ Unexpected error	Flashes at 1-second intervals

The hardware of this unit is reset right after the IP address of the unit is changed on the RMU-01 Setting Tool software. In this case, the POWER indicator also flashes at 0.2-second intervals. When the POWER indicator is flashing as described in item ④ or ⑤ in the table above, the RMU-01 hardware may be malfunctioning. If this happens, consult your Sony service representative or nearest dealer.

Important Notes on Operation

On Power Supply

- To supply power to this unit through the LAN cable (Power over Ethernet), be sure to use the power supply unit (PoE hub or PoE power supply unit) that conforms to IEEE802.3af standards.

  For details on how to use the PoE hub and the power supply unit, refer to the operation manual supplied with the applicable device.

- When the power is supplied to this unit from the supplied AC adapter and the connected PoE power supply at the same time, the power from the PoE power supply takes priority.

On Installation

- When using multiple RMU-01 units, install them so that they keep the distance of 10 m (33 feet) or more from one another. Also, keep the wireless LAN access point that uses 2.4-GHz-band as far as possible from this unit.
- Do not install this unit in the following places:
  - behind the interior material, such as ceiling and wall
  - near a window, electric appliance (lighting equipment, electric motor, elevator, electric switchboard, etc.)
  - where the moving equipment may knock over and damage this unit
- Do not touch the LAN connector directly with your hand. If you do, electrostatic discharge may damage the internal components. To prevent this unit from electrostatic damage, grounding the supplied brackets, safety wire, etc., by attaching them to metallic object is recommended.

On Operation

- This unit does not work by itself. To change the settings for the transmitters in Sony digital wireless microphone system (e.g., DWT-B01, DWT-P01, DWM-01), connect this unit to the receiver that is compatible with the NT remote system, such as the DWR-R01D.
- In NT remote system operation, transmitter settings can be changed from the front panel of the receiver.

On Using and Storing Environment

- This unit must be used within a temperature range of 0 °C to 50 °C (32 °F to 122 °F). (When the power is supplied from the supplied AC adapter, use this unit within the temperatures of 0 °C to 45 °C (32 °F to 113 °F).)
- Operating this unit near electrical equipment (motors, transformers, or dimmers) may cause it to be affected by electromagnetic induction. Keep this unit as far from such equipment as possible.
- The presence of the lighting equipment may produce electrical interference over the entire frequency range. Position this unit so that interference is minimized.

On Cleaning

- If this unit is used in a very humid or dusty place or in a place subject to an active gas, clean its surface as well as the connectors with a dry, soft cloth soon after use. Lengthy use of this unit in such places or not cleaning it after its use in such places may shorten its life.

• Clean the surface and the connectors of this unit with a dry, soft cloth. Never use thinner, benzene, alcohol or any other chemicals, since these may mar the finish.

Specifications

Radio system
>	Conforms to IEEE802.15.4

Frequency range of transmission/reception
>	2405 MHz to 2480 MHz

Antenna gain
>	2 dB

Antenna power
>	1 mW

Remote control distance
>	10 m (33 feet) at maximum (per unit)

LAN transmission speed
>	10 Mbps/100 Mbps (automatic detection)

Connectors
>	LAN connector: RJ45-type, eight-pin (accepts PoE power)
>	AC adapter connector: EIAJ-type4

Supply voltage
>	When the PoE device is used:
>	48 V DC
>	When the AC adapter is used:
>	12 V DC

Current consumption
>	When the PoE device is used:
>	50 mA or less
>	When the AC adapter is used:
>	100 mA or less

PoE power reception
>	Conforms to IEEE802.3af (supports mode A and B)

Operation temperature
>	When the PoE device is used: 0 °C to 50 °C (32 °F to 122 °F)
>	When the AC adapter is used: 0 °C to 45 °C (32 °F to 113 °F)

Storage temperature
>	–20 °C to +60 °C (–4 °F to +140 °F)

Dimensions
>	107 × 151 × 30 mm
>	($4\,^1/_4 \times 6 \times 1\,^3/_{16}$ in.) (w/h/d)

Mass   Approx. 300 g (11 oz)

Supplied accessories
AC adapter (1)
Bracket (2)
Screw adapter (2)
Screws (1 set)
Safety wire (1)
Before Using this Unit (1)
CD-ROM (1)
Warranty booklet (1)

Recommended power cord
For U.S.A. and CANADA only
        Part No. 1-757-562-1X
For Europe only
        Part No. 1-575-131-8X

Design and specifications are subject to change without notice.

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.
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