# SONY

# Wireless Microphone Package

### **Operating Instructions**

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

UWP-D11/D12/D16

### **Table of Contents**

Configuration of the Packages3
UWP-D11
UWP-D12
UWP-D16
Models available separately
Features7
UWP-D11
UWP-D12
UWP-D16
Name and Function of Parts8
Body-pack transmitter (UTX-B03) 8
Hand-held microphone (UTX-M03)9
Plug-on transmitter (UTX-P03)11
Portable diversity tuner (URX-P03) 12
Power Supply14
Inserting the batteries14
Supplying power from a USB connector 15
Charging nickel metal hydride batteries 16
Attaching Accessories16
Attaching accessories to the body-pack
transmitter (UTX-B03)16
Attaching accessories to the hand-held
microphone (UTX-M03) 17
Attaching accessories to the plug-on
transmitter (UTX-P03)17
Attaching accessories to the portable
diversity tuner (URX-P03)
Operation
If noise is generated
Tuner Settings20
Menu structure and operation
Setting the receive channel
Searching for available channels within a group (Clear Channel Scan)
Searching for active channels within a group
(Active Channel Scan)
Adjusting the monitor audio level 22
Configuration menu
Transmitter Settings25
Menu structure and operation
Setting the transmit channel
Configuration menu 27
System Configuration Examples30
Error Messages

Troubleshooting	32
Important Notes on Use	
Usage and storage	34
Cleaning	34
Specifications	34
Transmitter (UTX-B03/M03/P03)	34
Tuner	36

### **Configuration of the Packages**

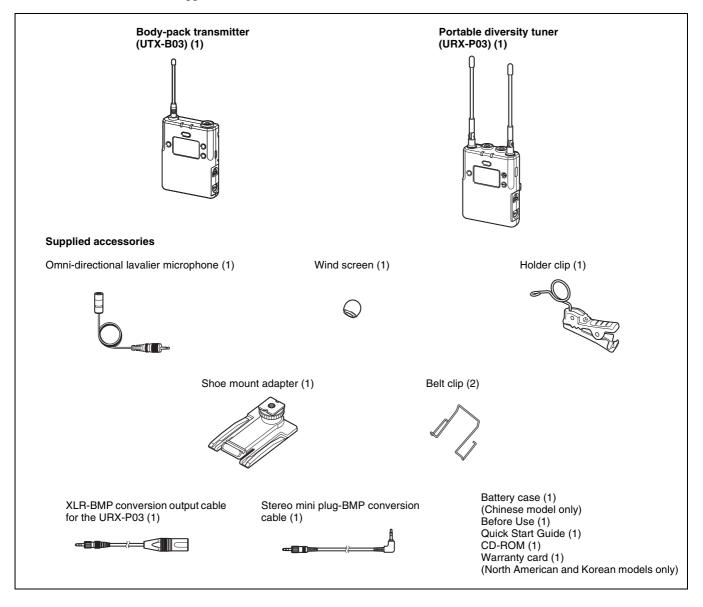
This manual is for the UWP-D11/D12/D16 Wireless Microphone Packages. The contents of each package are described below.

#### Note

Some of the packages may not be available in certain countries or areas. For details, consult your Sony dealer.

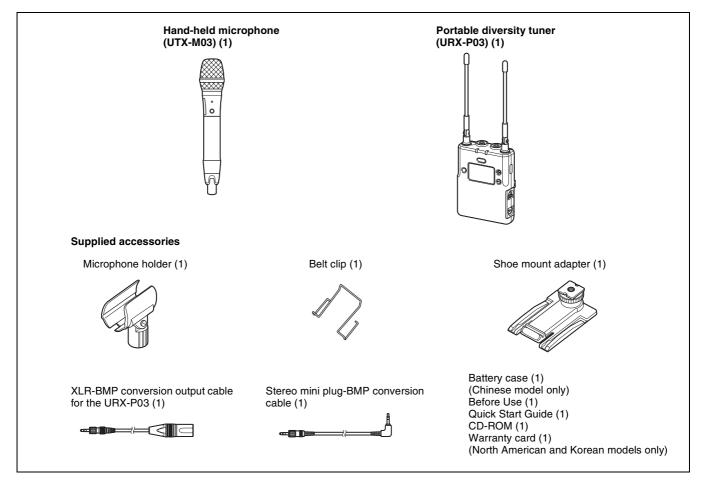
#### UWP-D11

The package consists of a body-pack transmitter (UTX-B03), a portable diversity tuner (URX-P03), and their accessories. When used in conjunction with a compact camcorder, a mobile system for ENG (Electronic News Gathering) or EFP (Electronic Field Production) applications can be constructed.



#### UWP-D12

The package consists of a hand-held microphone (UTX-M03), a portable diversity tuner (URX-P03), and their accessories. When used in conjunction with a compact camcorder, a mobile system for ENG (Electronic News Gathering) or EFP (Electronic Field Production) applications can be constructed.

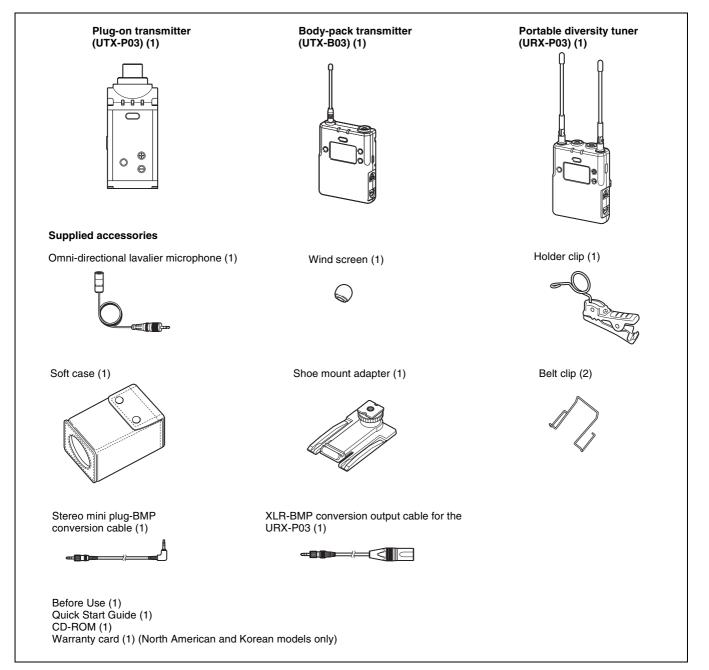


#### UWP-D16

The UWP-D16 consists of a plug-on transmitter (UTX-P03), a body-pack transmitter (UTX-B03), a portable diversity tuner (URX-P03), and their accessories. When used in conjunction with a compact camcorder, a mobile system for ENG (Electronic News Gathering) or EFP (Electronic Field Production) applications can be constructed.

#### Note

The UWP-D16 model is not available in China.



#### Models available separately

The transmitter and tuner in each package are available for purchase separately. The components provided with each product are given below.

#### UTX-B03

- Body-pack transmitter (UTX-B03) (1)
- Omni-directional lavalier microphone (1)
- Wind screen (1)
- Holder clip (1)
- Belt clip (1)
- Battery case (1) (Chinese model only)
- Before Use (1)
- CD-ROM (1)
- Warranty card (1) (North American and Korean models only)

#### UTX-M03

- Hand-held microphone (UTX-M03) (1)
- Microphone holder (1)
- Before Use (1)
- CD-ROM (1)
- Warranty card (1) (North American and Korean models only)

#### UTX-P03

#### Note

The UTX-P03 model is not available in China.

- Plug-on transmitter (UTX-P03) (1)
- Soft case (1)
- Before Use (1)
- CD-ROM (1)
- Warranty card (1) (North American and Korean models only)

#### URX-P03

- Portable diversity tuner (URX-P03) (1)
- Shoe mount adapter (1)
- Belt clip (1)
- XLR-BMP conversion output cable for the URX-P03 (1)
- Stereo mini plug-BMP conversion cable (1)
- Battery case (1) (Chinese model only)
- Before Use (1)
- CD-ROM (1)
- Warranty card (1) (North American and Korean models only)

### **Features**

The UWP-D11/D12/D16 (UWP-D series) Wireless

Microphone Packages comprise a transmitter (body-pack transmitter (UTX-B03), hand-held microphone (UTX-M03), or plug-on transmitter (UTX-P03)) and a receiver (portable diversity tuner (URX-P03)). In combination with a compact camcorder or interchangeable-lens digital camera, the packages can be used for various purposes, such as ENG (Electronic News Gathering), EFP (Electronic Field Production), sports events, and weddings.

They are equipped with a DSP for transmission of highquality sound using digital compander processing. They can be used in combination with current Sony analog wireless microphone systems (UWP series, WRT series, WRR series, WRU series) by switching the compander mode.

The frequency and compander mode set on the tuner can be sent to the transmitter using an infrared

communications link. Used in combination with the Clear Channel Scan function of the tuner, this greatly reduces the time required to set channels.

The contents of each package are described below.

#### UWP-D11

#### Body-pack transmitter (UTX-B03)

This transmitter is a lightweight, compact transmitter that employs a crystal-controlled PLL synthesizer. It is equipped with a muting function and a BMP-type microphone input connector. The RF power output can be switched between high and low. It is also equipped with a MIC/LINE input switching function to support a variety of input levels.

#### Portable diversity tuner (URX-P03)

This tuner employs a true diversity method featuring little signal dropout and an angle-adjustable antenna. It comes with an adapter for mounting on a compact camcorder (HXR-NX3, etc.). It also features a Clear Channel Scan function to search for available channels automatically.

#### UWP-D12

#### Hand-held microphone (UTX-M03)

This microphone features a robust, metallic body. It has a muting function and attenuator adjustment function to support a wide audio input level range.

It can be used in diverse applications simply by changing the microphone capsule. It has a built-in antenna.

\* Microphone unit mounting dimensions: 31.3 mm diameter, 1.0 mm pitch

#### Portable diversity tuner (URX-P03)

This tuner employs a true diversity method featuring little signal dropout and an angle-adjustable antenna. It comes with an adapter for mounting on a compact camcorder (HXR-NX3, etc.). It also features a Clear Channel Scan function to search for available channels automatically.

#### UWP-D16

#### Plug-on transmitter (UTX-P03)

This transmitter is a lightweight, compact plug-on type transmitter that employs a crystal-controlled PLL synthesizer. It has a muting function and an XLR-type microphone input connector that can supply +48 V power for connecting a wide range of microphones. It is also equipped with a MIC/LINE switching function to support a variety of input levels.

#### Body-pack transmitter (UTX-B03)

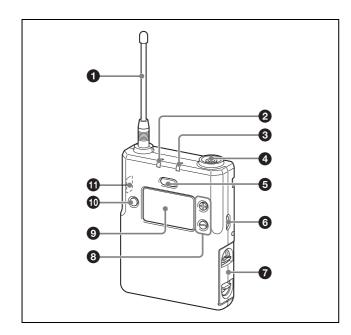
This transmitter is a lightweight, compact transmitter that employs a crystal-controlled PLL synthesizer. It is equipped with a muting function and a BMP-type microphone input connector. The RF power output can be switched between high and low. It is also equipped with a MIC/LINE input switching function to support a variety of input levels.

#### Portable diversity tuner (URX-P03)

This tuner employs a true diversity method featuring little signal dropout and an angle-adjustable antenna. It comes with an adapter for mounting on a compact camcorder (HXR-NX3, etc.). It also features a Clear Channel Scan function to search for available channels automatically.

# Name and Function of Parts

#### Body-pack transmitter (UTX-B03)



#### Antenna

#### **2** POWER indicator

Displays the battery level and charging status.

Indicator display	Status
On (green)	Sufficient battery level
Flashing (green)	Battery is getting low
On (orange)	Charging (when nickel metal hydride rechargeable batteries are inserted and power is turned off)
Off	Power is off or battery is empty

#### **3** AUDIO (audio input level) indicator

Turns on or off according to the audio input level as follows.

**On (red):** Audio input level is too high. If the sound is distorted, adjust the attenuation level to decrease the audio input level (*page 27*).

On (green): Audio input level is appropriate.

**Off:** There is no audio input or the input level is too low. **Flashing (orange):** Audio is muted (i.e., disabled).

#### Audio input connector (BMP type)

Connect to the supplied lavalier microphone.

#### Notes

- When the audio input level is set to MIC, a voltage for the lavalier microphone power supply is applied to the audio input connector. Special electrical wiring is used inside the audio input connector for this purpose.
- If a lavalier microphone other than the one supplied is connected, the proper performance may not be obtained.

#### POWER/MUTING button

Turns the power on/off. You also use this button to turn the muting function on/off.

Function	Operation
Supply ON	Press button for one second or longer
Supply OFF	Press button until the indicator turns off
Muting ON	Press button
Muting OFF	

#### **G** USB connector (Micro B type)

Connect to a commercially available USB portable power supply.

When a USB portable power supply is connected while the power is turned on, the unit automatically operates with power supplied by the USB portable power supply. When a USB portable power supply is connected while nickel metal hydride batteries are inserted and the power is turned off, the batteries are charged by the USB portable power supply.

#### Note

Alkaline batteries and lithium batteries cannot be recharged.

#### Battery compartment

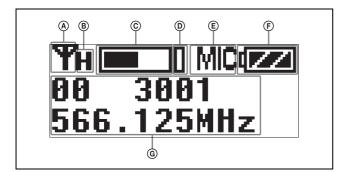
Accepts two AA batteries (alkaline, nickel metal hydride, or lithium batteries).

For details on how to insert batteries, see "Power Supply" (page 14).

#### 3 + or – button

Selects functions or values shown on the display.

#### Display section



#### **(A)** RF transmission indicator

Displays the current transmission status.

- : Transmission stopped

#### **B** RF transmission power indicator

Indicates the current transmission power setting. You can change the setting with the RF transmission power setting function.

For details on the RF transmission power setting function, see "Setting the transmit output level (RF POWER)" (page 27).

#### © Audio input level meter

Displays the audio input level.

#### **D** Peak indicator

Lights up when the signal is 3 dB below the level at which distortion begins as a warning of excessive input level.

#### **(E)** Input level indicator

Displays the input level status. MIC : Microphone input LINE : Line input

#### **(F)** Battery level indicator

Displays the battery level. Displays "EXT" when power is supplied from the USB connector.

For details, see "Battery level indicator" (page 15).

#### **(G)** Menu display section

Displays various functions. Press the + or – button to switch functions.

For details, see "Configuration menu" (page 23).

#### SET button

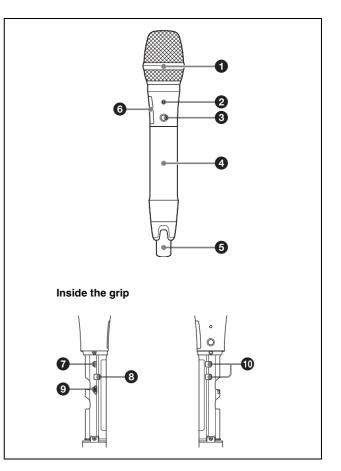
Adjusts displayed function settings and enters the displayed value.

Holding down the SET button while turning on the power turns the transmitter on without transmitting a signal (transmission stopped mode).

#### Infrared detector

Receives the frequency and compander mode set on the tuner.

#### Hand-held microphone (UTX-M03)



#### Microphone unit

The standard-equipped microphone unit can be interchanged with another microphone unit having a diameter of 31.3 mm and a pitch of 1.0 mm.

For details on attaching and removing the microphone unit, see "Replacing the microphone unit" (page 17).

#### **2** POWER indicator

Displays the battery level, charging status, and audio muting (i.e., audio enabled or disabled) status.

Indicator display	Status
On (green)	Sufficient battery level
Flashing (green)	Battery is getting low
On (orange)	Charging (when nickel metal hydride rechargeable batteries are inserted and power is turned off)
Off	Power is off or battery is empty
Flashing (orange)	Audio is muted (i.e., disabled)

#### **③** POWER/MUTING button

Turns the power on/off. You also use this button to turn the muting function on/off.

Function	Operation
Supply ON	Press button for one second or longer
Supply OFF	Press button until the indicator turns off
Muting ON	Press button
Muting OFF	

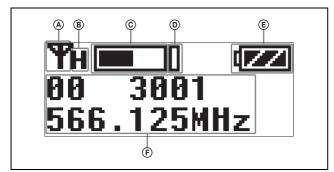
#### Battery compartment

Accepts two AA batteries (alkaline, nickel metal hydride, or lithium batteries).

For details on how to insert batteries, see "Power Supply" (page 14).

#### Antenna section

#### **6** Display section



#### **(A)** RF transmission indicator

Displays the current transmission status.

- $\Psi$ : Transmitting
- : Transmission stopped

#### **B** RF transmission power indicator

Indicates the current transmission power setting. You can change the setting with the RF transmission power setting function.

For details on the RF transmission power setting function, see "Setting the transmit output level (RF POWER)" (page 27).

#### © Audio input level meter

Displays the audio input level.

#### **D** Peak indicator

Lights up when the signal is 3 dB below the level at which distortion begins as a warning of excessive input level.

#### **(E)** Battery level indicator

Displays the battery level.

For details, see "Battery level indicator" (page 15).

#### (F) Menu display section

Displays various functions. Press the + or – button to switch functions.

For details, see "Configuration menu" (page 23).

#### **7** Infrared detector

Receives the frequency and compander mode set on the tuner.

#### SET button

Adjusts displayed function settings and enters the displayed value.

Holding down the SET button while turning on the power turns the transmitter on without transmitting a signal (transmission stopped mode).

#### **O** USB connector (Micro B type)

Connect to a commercially available USB portable power supply.

When a USB portable power supply is connected while nickel metal hydride batteries are inserted and the power is turned off, the batteries are charged by the USB portable power supply.

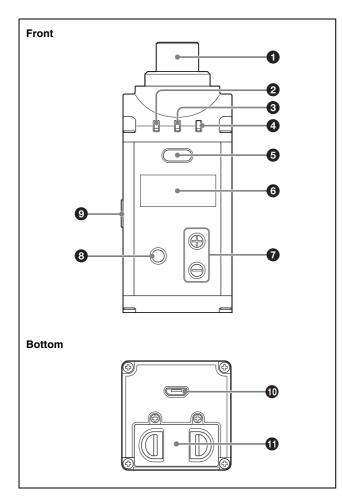


Alkaline batteries and lithium batteries cannot be recharged. Also, power cannot be supplied from a USB portable power supply.

#### + or – button

Selects functions or values shown on the display.

#### Plug-on transmitter (UTX-P03)



#### Audio input connector (XLR type)

Connect to a microphone or the line output of an audio mixer or other device.

#### 2+48V (+48 V supply) indicator

Lights up when the unit is set to LINE input and is supplying power to the connected microphone.

#### **③** POWER indicator

Displays the battery level and charging status.

Indicator display	Status
On (green)	Sufficient battery level
Flashing (green)	Battery is getting low
On (orange)	Charging (when nickel metal hydride rechargeable batteries are inserted and power is turned off)
Off	Power is off or battery is empty

#### **4** AUDIO (audio input level) indicator

Turns on or off according to the audio input level as follows.

**On (red):** Audio input level is too high. If the sound is distorted, adjust the attenuation level to decrease the audio input level (*page 27*).

**On (green):** Audio input level is appropriate. **Off:** There is no audio input or input level is too low.

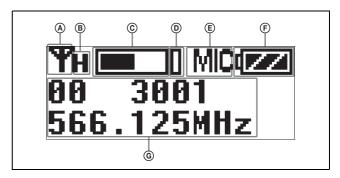
Flashing (orange): Audio is muted (i.e., disabled).

#### POWER/MUTING button

Turns the power on/off. You also use this button to turn the muting function on/off.

Function	Operation
Supply ON	Press button for one second or longer
Supply OFF	Press button until the indicator turns off
Muting ON	Press button
Muting OFF	

#### **6** Display section



#### **(A)** RF transmission indicator

Displays the current transmission status.

- $\Psi$ : Transmitting
- Transmission stopped

#### **B** RF transmission power indicator

Indicates the current transmission power setting. You can change the setting with the RF transmission power setting function.

For details on the RF transmission power setting function, see "Setting the transmit output level (RF POWER)" (page 27).

#### © Audio input level meter

Displays the audio input level.

#### **D** Peak indicator

Lights up when the signal is 3 dB below the level at which distortion begins as a warning of excessive input level.

#### (E) Input level indicator

Displays the input level status. MIC: Microphone input LINE: Line input

#### **(F)** Battery level indicator

Displays the battery level. Displays "EXT" when power is supplied from the USB connector.

For details, see "Battery level indicator" (page 15).

#### **(G)** Menu display section

Displays various functions. Press the + or – button to switch functions.

For details, see "Configuration menu" (page 23).

#### 7 + or – button

Selects functions or values shown on the display.

#### SET button

Adjusts displayed function settings and enters the displayed value.

Holding down the SET button while turning on the power turns the transmitter on without sending a signal (transmission stopped mode).

#### Infrared detector

Receives the frequency and compander mode set on the tuner.

#### USB connector (Micro B type)

Connect to a commercially available USB portable power supply.

When a USB portable power supply is connected while the power is turned on, the unit automatically operates with power supplied by the USB portable power supply. When a USB portable power supply is connected while nickel metal hydride batteries are inserted and the power is turned off, the batteries are charged by the USB portable power supply.

#### Note

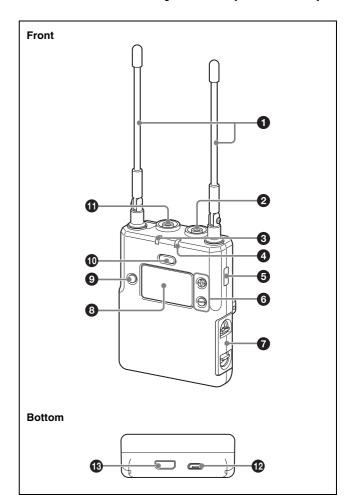
Alkaline batteries and lithium batteries cannot be recharged.

#### Battery compartment

Accepts two AA batteries (alkaline, nickel metal hydride, or lithium batteries).

For details on how to insert batteries, see "Power Supply" (page 14).

#### Portable diversity tuner (URX-P03)



#### Antenna

# PHONES (monitor) connector (3.5-mm diameter, stereo mini jack)

Connect to headphones to monitor the audio output.

#### Note

Do not connect headphones with a monaural mini jack. This may short-circuit the headphone outputs, resulting in distorted sound output.

#### **3** POWER indicator

Displays the battery level and charging status.

Indicator display	Status
On (green)	Sufficient battery level
Flashing (green)	Battery is getting low
On (orange)	Charging (when nickel metal hydride rechargeable batteries are inserted and power is turned off)
Off	Power is off or battery is empty

#### AF (radio frequency input) indicator

Displays the RF input level using the following colors. On (green): Input level is 25 dBµ or more. On (red): Input level is 15 to 25 dBµ. Off: Input level is 15 dBµ or lower.

\* 0 dB $\mu$  = 1  $\mu$ V<sub>EMF</sub>

#### **Infrared transmitter port**

Sends the set frequency and compander mode to the transmitter.

#### 6 + or – button

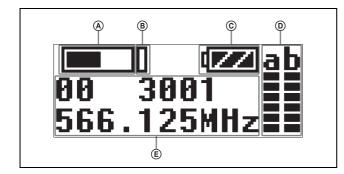
Selects functions or values shown on the display.

#### Battery compartment

Accepts two AA batteries (alkaline, nickel metal hydride, or lithium batteries).

For details on how to insert batteries, see "Power Supply" (page 14).

#### B Display section



#### Audio input level meter

Displays the audio input level.

#### **B** Peak indicator

Lights up when the signal is 3 dB below the level at which distortion begins as a warning of excessive input level.

#### © Battery level indicator

Displays the battery level. Displays "EXT" when power is supplied from the USB connector.

For details, see "Battery level indicator" (page 15).

#### **D** RF level (reception level) indicator

Indicates the current reception level.

#### (E) Menu display section

Displays various functions. Press the + or – button to switch functions.

For details, see "Configuration menu" (page 23).

#### SET button

Adjusts displayed function settings and enters the displayed value.

Holding down the SET button while turning on the power turns the transmitter on without sending a signal (transmission stopped mode).

#### **OPOWER** button

Turns the power on/off.

Function	Operation
Supply ON	Press button for one second or longer
Supply OFF	Press button until the indicator turns off

### **(i)** OUTPUT (audio output) connector (3.5-mm diameter, stereo mini jack)

Connect one end of the supplied XLR-BMP conversion output cable for the URX-P03 or the stereo mini plug-BMP conversion cable here and the other end to the microphone input on a camcorder, mixer, or amplifier. If the microphone input connector on the connected device is a stereo mini jack, connect the straight (BMP) plug to the tuner and the L-shaped (stereo mini) plug to the microphone input connector on the device.

#### Note

To prevent damaging the tuner, do not apply a voltage to this connector from a microphone external power supply or other source.

#### USB connector (Micro B type)

Connect to a commercially available USB portable power supply.

When the power is turned on, the unit operates with power supplied by the USB portable power supply. When nickel metal hydride batteries are inserted and the power is turned off, the battery is charged by the USB portable power supply.

#### Note

Alkaline batteries and lithium batteries cannot be recharged.

#### Auxiliary connector

Used to connect external accessories.

### **Power Supply**

This section describes the power supply of each device and the charging of nickel metal hydride batteries.

### Body-pack transmitter (UTX-B03) and plug-on transmitter (UTX-P03)

The unit operates using power supplied from two AA batteries (alkaline, nickel metal hydride, or lithium batteries) or from a supply connected to the USB connector. If power is supplied simultaneously from batteries and from a supply connected to the USB connector, power from the USB connector has precedence. For details about inserting batteries in each device and displaying the battery level, or supplying power from a supply connected to the USB connector, see the following sections.

#### Hand-held microphone (UTX-M03)

The unit operates from two AA batteries (alkaline, nickel metal hydride, or lithium batteries). For details about inserting batteries and displaying the battery level, see the following sections.

#### Portable diversity tuner (URX-P03)

The unit operates from two AA batteries (alkaline, nickel metal hydride, or lithium batteries), power supplied from a supply connected to the USB connector, or power supplied from the auxiliary connector. The power supply that has precedence when both AA battery power and an external power supply via the USB connector or auxiliary connector are available can be specified using the POWER SEL (external power selection) function. Under the factory default setting, the power supplied from inserted AA batteries has precedence. For details about inserting batteries and displaying the battery level, or supplying power from supply connected to the USB connector, see the following sections.

For details on the POWER SEL function setting, see "Selecting the preferred power supply (POWER SEL)" (page 24).

#### Note

The use of manganese batteries will result in poor performance. Do not use manganese batteries.

#### Inserting the batteries

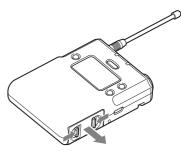
#### Notes

- Always use sets of the same type of battery. Do not use batteries of different types or batteries with different charge level together.
- Replacing the batteries during operation may generate a large noise. Be sure to turn off the unit before replacing the batteries.

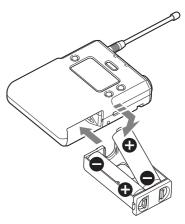
#### Body-pack transmitter (UTX-B03) / plugon transmitter (UTX-P03) / portable diversity tuner (URX-P03)

The following describes the procedure using illustrations for the body-pack transmitter (UTX-B03). Batteries can be inserted in the plug-on transmitter (UTX-P03) and portable diversity tuner (URX-P03) in the same manner.

- Press and hold the POWER/MUTING button to turn the power off.
- **2** Slide the two catches inward (as indicated) and pull the battery compartment out.



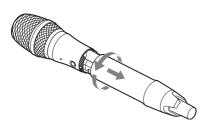
3 Insert two new AA batteries into the battery compartment with ⊕ and ⊖ polarities in the correct orientation, and close the compartment.



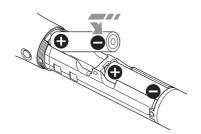
Make sure that the battery compartment is locked securely.

#### Hand-held microphone (UTX-M03)

- Press and hold the POWER/MUTING button to turn the power off.
- **2** Turn the grip in the direction of the arrow, and pull the grip down until the battery compartment is visible.



3 Insert two new AA batteries into the battery compartment with ⊕ and ⊖ polarities in the correct orientation.



4 Close the grip, turning it in the reverse direction of step 2.

#### **Battery level indicator**

Press and hold the POWER button for 1 second or longer to display the battery level on the display.

Immediately replace both batteries with new batteries if the indicator starts flashing (indication 5 below). If using new alkaline batteries, use after checking the recommended time limits.

	Battery level indicator	Battery status
1		Good
2	Lights	Less than 70% charge remaining
3	Lights	Less than 40% charge remaining
4	Lights	Less than 20% charge remaining
5	Flashes	Almost empty



- When BATTERY is set to TYPE1, the battery level is indicated based on the use of new LR6 (size AA) Sony alkaline batteries. The battery level may not be displayed correctly when different kinds of batteries, different brand of batteries, or old batteries are used. If using batteries other than size AA alkaline batteries, select the battery type using the BATTERY function.
- If you plan to use the transmitter continuously for a long period of time, it is recommended that you replace the batteries with brand new ones.

For details on the BATTERY function setting, see "Setting the battery type (BATTERY)" (page 24).

#### **Battery precautions**

Batteries may leak or explode if mistreated. Be sure to follow these instructions.

- Insert batteries in the correct  $\oplus$  and  $\ominus$  polarity orientation.
- Always replace the two batteries together with new ones.
- Do not use different types of batteries or old and new ones together.
- Dry cells are not rechargeable.
- When not using the device for a long period of time, remove the batteries. If the batteries leak for any reason, consult your Sony service representative.

# Supplying power from a USB connector

The transmitter (UTX-B03/P03) and tuner (URX-P03) can operate from a commercially available USB-output type AC adapter or portable power supply connected to the USB connector.

When supplying power using a USB-output type AC adapter or portable power supply, use a unit that satisfies the following conditions.

- Output connector: USB micro B type
- Rated voltage: 5 V
- Output current: 200 mA or higher

Displays "EXT" when power is supplied from the USB connector.

#### Note

The UTX-M03 hand-held microphone cannot be supplied using a USB connector.

# Charging nickel metal hydride batteries

You can charge nickel metal hydride batteries inserted in the transmitter (UTX-B03/M03/P03) and tuner (URX-P03).

When charging nickel metal hydride batteries, turn the power off and connect a commercially available USBoutput type AC adapter or portable power supply to the USB connector.

The POWER indicator is lit orange while charging batteries. When charging is finished, the POWER indicator goes off.

When charging batteries using a USB-output type AC adapter or portable power supply, use a unit that satisfies the following conditions.

- Output connector: USB micro B type
- Rated voltage: 5 V
- Output current: 1 A or higher

#### Notes

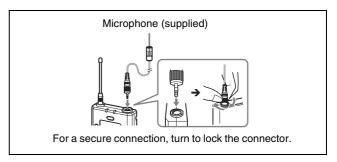
- Charging may not be supported, depending on the connected AC adapter, portable power supply, or computer port.
- Nickel metal hydride batteries are not charged while the transmitter or tuner is turned on.

### **Attaching Accessories**

This section describes how to attach the supplied accessories to each device.

#### Attaching accessories to the bodypack transmitter (UTX-B03)

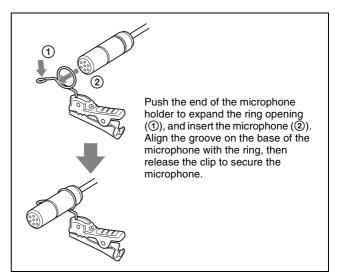
#### Connecting the microphone



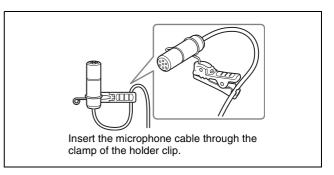
#### Note

Be sure to attach or remove the microphone after turning off the transmitter.

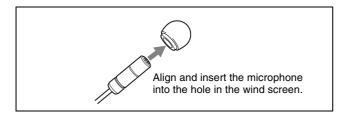
# Attaching the holder clip to the microphone



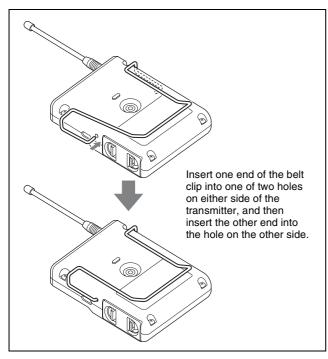
#### To secure the microphone cable



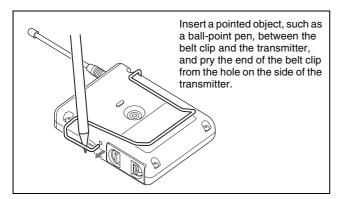
# Attaching the wind screen to the microphone



#### Attaching a belt clip

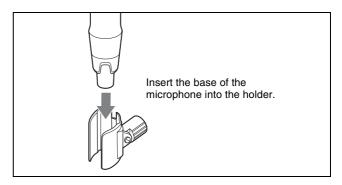


#### To remove a belt clip



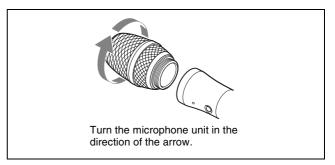
#### Attaching accessories to the handheld microphone (UTX-M03)

#### Attaching the microphone holder



#### Replacing the microphone unit

#### Removing the microphone unit

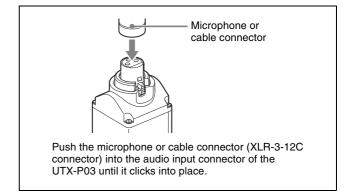


#### Attaching the microphone unit

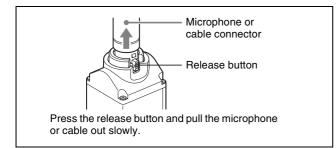
Turn the microphone unit in the opposite direction from when you removed it, and make sure that the unit is securely attached to the microphone.

#### Attaching accessories to the plugon transmitter (UTX-P03)

#### Attaching a microphone or cable

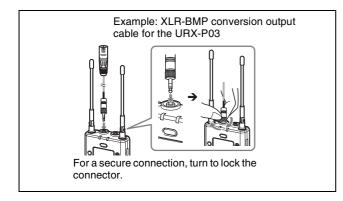


#### Disconnecting a microphone or cable



# Attaching accessories to the portable diversity tuner (URX-P03)

### Connecting the conversion cable to the OUTPUT connector



#### Attaching a belt clip

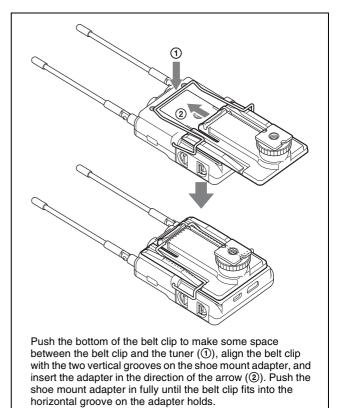
See "Attaching a belt clip" (page 17).

#### Attaching the shoe mount adapter

Attach the belt clip before attaching the shoe mount adapter (*page 17*).

#### Note

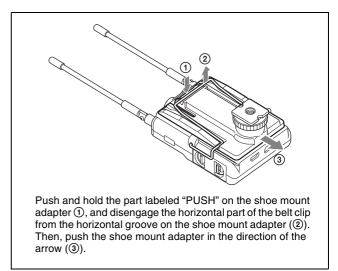
Attach belt clips upside-down if planning to attach the shoe mount adapter.



#### Note

If attaching a camcorder, bend the URX-P03 antenna down so that the antenna is not reflected on the display.

#### To remove the shoe mount adapter



### Operation

#### Procedure for UWP-D series devices (UTX-B03/ M03/P03 and URX-P03)

**1** Connect the tuner as required.

For details about example connections, see "System Configuration Examples" (page 30).

- **2** Press and hold the POWER button for at least one second on the tuner to turn the power on.
- **3** Use the + or button to display the AUTO SET screen on the tuner.



**4** Press and hold the SET button on the tuner for at least one second.

"YES" flashes on the display.



**5** Press the SET button on the tuner.

Clear Channel Scan starts searching for an available channel.

When Clear Channel Scan finishes, the channel with the least noise and interference will be set.

When the channel is set, infrared transmission starts automatically.

#### Note

Some noise may occur when power is turned on. Accordingly, turn down the audio input level of devices connected to the tuner when turning the power on.

**6** Press and hold the SET button on the transmitter and press the POWER/MUTING button to turn the power on.

**7** Place the infrared transmitter port on the tuner near the infrared detector on the transmitter.

Information about the channel set on the tuner is sent to the transmitter, and a prompt appears on the transmitter display asking if you want to change to that frequency.



**8** Use the + or – button to select YES, then press the SET button on the transmitter.

This sets the transmit channel.

#### Notes

- The infrared transmission from the tuner in step **5** continues for about ten seconds. Perform steps **6** and **7** within those ten seconds. If ten seconds have elapsed, you can reestablish the infrared link using the SYNC menu on the tuner.
- Place the tuner and transmitter within about 20 cm (8 in.) of each other.
- If five seconds elapse without any user input after the prompt appears on the transmitter display, the transmitter returns to its previous state without changing the frequency.
- Communications using the infrared link may be adversely affected, depending on the surrounding environment. If this occurs, use the SYNC menu on the tuner to reestablish the link.

#### If noise is generated

Depending on the environment where the devices are installed, external noise or radio waves may disrupt transmission on certain channels. When selecting a channel under these circumstances, turn off the transmitter. Then, on the tuner, select a channel for which the RF indicator does not light up (i.e., a channel free from noise or radio wave interference). Set the same channel on the transmitter.

#### Notes

To prevent interference or noise, take the following precautions.

- Do not use two or more transmitters on the same channels.
- When operating two or more UWP-D series packages simultaneously, set each package to a different channel within the same channel group.
- Keep the antennas on the tuner and transmitter separated by at least 3 meters (about 10 feet).

• When operating two or more UWP-D series packages simultaneously with different channel groups, make sure that they are at least 100 meters (330 feet) apart if they are used within clear sight of each other (actual distance may vary depending on the circumstances).

### **Tuner Settings**

#### Menu structure and operation

#### Procedure for portable diversity tuner (URX-P03)

There are two menu display modes that can be selected according to the application.

#### Simple mode

This mode displays only the required settings for the tuner and audio output.

You can enable simple mode by setting MENU MODE (menu display mode) to SIMPLE.

#### **Configuration menus**

- GP/CH (group/channel) select
- PHONES (monitor audio) setting
- AUTO SET (auto channel setting) function
- BAND (frequency band) select (Not available on Japanese and Korean models)
- CLR SCAN (clear channel scan) function
- OUT LEVEL (audio output level) setting
- SYNC (infrared transmitter) function
- TIME (accumulated running time) display
- MENU MODE (menu display mode) setting

#### Extended mode

This mode displays all configuration menus. You can enable extended mode by setting MENU MODE (menu display mode) to ADVANCED.

#### Note

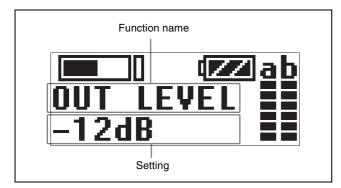
The existing settings configured in extended mode are active even when using simple mode.

#### **Configuration menus**

- GP/CH (group/channel) select
- PHONES (monitor audio) setting
- AUTO SET (auto channel setting) function
- BAND (frequency band) select (Not available on Japanese and Korean models)
- CLR SCAN (clear channel scan) function
- OUT LEVEL (audio output level) setting
- SYNC (infrared transmitter) function
- TIME (accumulated running time) display
- MENU MODE (menu display mode) setting
- COMPANDER (compander mode) setting
- POWER SEL (external power selection) setting
- ACT SCAN (active channel scan) function
- PWR LOCK (POWER button lock) function
- BATTERY (battery type) setting
- CONTRAST (display text contrast) setting
- RESET (factory default setting) function
- VERSION (software version) display

#### **Basic menu operation**

The basic menu operation is the same in simple mode and extended mode.



- Press the + or button to display the function to be set.
- **2** Press and hold the SET button until the setting starts flashing.
- **3** Press the + or button to change the setting.
- **4** Press the SET button to enter the setting.

#### Notes

- If no operation is performed for ten seconds on a function menu other than GP/CH, the display will automatically return to the GP/CH screen.
- If no operation is performed for five seconds, the backlight will turn off. Pressing any button will turn the backlight on again.

#### Setting the receive channel

#### Procedure for portable diversity tuner (URX-P03)

For details about the channel groups and channels that can be selected, refer to the "Frequency List" on the CD-ROM.

- Use the + or button to display the GP/CH menu.
- **2** Press and hold the SET button for one second or longer.

The channel group display starts flashing.



**3** Use the + or – button to select the desired group name, then press the SET button.

The channel group is set, and the channel number display starts flashing.



**4** Use the + or – button to select the desired channel number, then press the SET button.

The displays stops flashing and the desired channel is set.

#### Notes

- If there is no user input within ten seconds after the channel group display or channel number display starts flashing, the displayed setting that is flashing is saved. The same applies when setting other parameters.
- The frequency indicator changes in response to the channel number.
- The tuner continues to receive, even when setting the receive channel.
- Do not remove the batteries while setting the receive channel. If they are removed, re-insert them and repeat the procedure from the beginning.
- Make sure that the same channel is set on the transmitter and tuner within the same system.

# Searching for available channels within a group (Clear Channel Scan)

#### Procedure for portable diversity tuner (URX-P03)

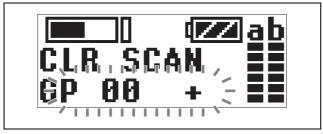
You can search for available channels within the specified channel group.

Before performing this procedure, select the channel group.

For details, see "Setting the receive channel" (page 21).

- **1** Use the + or button to display the CLR SCAN menu.
- **2** Press and hold the SET button for one second or longer.

Press and hold until the channel group and "+" display starts flashing.



#### **3** Press the + button.

The tuner starts to scan through the selected channel group. When available channels are found, the first channel number among the available channels starts flashing on the display.

#### **To display the next available channel number** Press the + button.

#### To cancel searching

Press the – button. The display returns to the CLR SCAN menu.

**4** Press the SET button when the desired channel number starts flashing.

The search for available channels finishes and the displayed channel is set.

The channel setting is transmitted from the infrared transmission port for about ten seconds after setting the channel. During this interval, place the infrared detector on the transmitter (with the power turned on) near the tuner to transfer the channel setting from the tuner to the transmitter.

# To scan channels automatically when power is turned on

With the tuner power off, press and hold the SET button and press the POWER button for at least one second to turn the power on and to automatically start a clear channel scan.

#### Searching for active channels within a group (Active Channel Scan)

#### Procedure for portable diversity tuner (URX-P03)

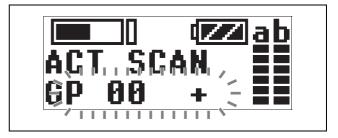
You can search for channels in use within the specified channel group. This is useful when using more than one tuner in combination with a single transmitter. Before performing this procedure, select the channel group.

For details, see "Setting the receive channel" (page 21).

**1** Use the + or – button to display the ACT SCAN menu.

**2** Press and hold the SET button for one second or longer.

Press and hold until the channel group and "+" display starts flashing.



#### **3** Press the + button.

The tuner starts to scan for active channels in the selected channel group. When active channels are found, the first channel number among the active channels starts flashing on the display.

#### **To display the next active channel number** Press the + button.

#### To cancel searching

Press the – button. The display returns to the ACT SCAN menu.

**4** Press the SET button when the desired channel number starts flashing.

The search for active channels finishes and the displayed channel is set.

#### Adjusting the monitor audio level

#### Procedure for portable diversity tuner (URX-P03)

You can set the monitor audio level within the range 1 to 16.

Use the + or – button to display the PHONES menu.

The current monitor audio level is displayed.



**2** Press and hold the SET button for at least one second.

Press and hold until the monitor audio level flashes.

**3** Use the + or – button to set the desired monitor audio level, then press the SET button.

The setting value is stored. The setting is retained even after the power is turned off.

#### **Configuration menu**

#### Procedure for portable diversity tuner (URX-P03)

This section describes each function and configurable items.

Underlined entries are factory default values.

#### Selecting group/channel (GP/CH)

The factory default setting varies depending on the model.

For details, see "Setting the receive channel" (page 21).

# Adjusting the monitor audio level (PHONES)

Adjusts the monitor audio level for the headphones. The factory default setting is 12.

For details, see "Adjusting the monitor audio level" (page 22).

### Setting an available channel automatically (AUTO SET)

Automatically searches for and sets an available channel, and starts infrared transmission to the transmitter.

For details, see "Operation" (page 19).

#### Selecting the frequency band (BAND)

Selects the receive frequency band.

#### Note

This menu is not available on Japanese and Korean models. On these models, the frequency band cannot be selected.

For details about the groups and channels in each frequency band, refer to the "Frequency List" on the CD-ROM.

### Searching for and selecting available channels (CLR SCAN)

Searches for available channels.

For details, see "Searching for available channels within a group (Clear Channel Scan)" (page 21).

### Setting the audio output level (OUT LEVEL)

Sets the audio output level. You can set the level in 3 dB increments in the range -12 dB to +12 dB. The factory default setting is 0 dB.

#### Note

The monitor output level does not change when you change the output level in the OUT LEVEL menu. The monitor output level is adjusted separately.

For details about adjusting the monitor audio level, see "Adjusting the monitor audio level" (page 22).

#### Using infrared transmission (SYNC)

Transfers the frequency and compander mode set on the tuner to a transmitter using an infrared transmitter.

- Use the + or button to display the SYNC menu.
- **2** Press and hold the SET button for one second or longer.

A confirmation screen appears.

- **3** Use the + or button to display "YES."
- **4** Turn the transmitter power on, and place the infrared transmitter port on the tuner near the infrared detector on the transmitter.

A prompt appears on the transmitter display asking you whether to change the frequency.

- **5** Use the + or button on the transmitter to select YES.
- **6** Press the SET button on the transmitter.

The frequency and compander mode for use on the transmitter are set.

#### Notes

- When using the infrared link, place the tuner and transmitter within about 20 cm (8 in.) of each other.
- After the infrared transmission starts, place the tuner near the transmitter within ten seconds. After ten seconds have elapsed, the infrared transmission finishes and the display returns to the previous menu.
- After the prompt appears on the transmitter, you can select NO or do nothing for about five seconds to return to the previous menu screen automatically, and the information received over the infrared link is discarded.

### Displaying the accumulated running time (TIME)

Displays the accumulated running time of the tuner as a guide to total usage time.

The factory default setting is 00:00. Up to 99:99 can be displayed.

#### To reset the time display

**1** Press and hold the SET button until the time display starts flashing.

**2** Press the – button to display "00:00 CLR" and press the SET button.

Pressing the + button when "00:00 CLR" is displayed causes the time display to start flashing. You can press the SET button in this state to cancel the reset of the accumulated running time.

# Setting the menu display mode (MENU MODE)

Sets the menu display mode. **<u>SIMPLE</u>**: Displays only the required settings. **ADVANCED**: Displays all settings.

### Setting the compander mode (COMPANDER)

Sets the operating mode of the compander. <u>UWP-D</u>: High speech quality mode supported in combination with UWP-D series devices.

**UWP:** Mode supported in combination with Sony UWP-series transmitters.

**WL800:** Mode supported in combination with Sony 800-series transmitters.

#### Notes

- This function is displayed in extended mode only.
- No audio is output if the tone signal frequency is different due to the use of a combination of devices with different compander mode settings.

# Selecting the preferred power supply (POWER SEL)

Specifies whether the power supply from the batteries inserted in the unit or from an external USB portable power supply or accessory connected to the USB connector or auxiliary connector has precedence. **BATTERY:** Batteries inserted in the unit have precedence.

**EXTERNAL:** Power supplied from a USB connector or externally connected sources have precedence.

#### Notes

- When power from the preferred source is cut off, the power supply automatically switches to the other source.
- When only one power supply is available, that power supply will be used regardless of the POWER SEL setting.
- Nickel metal hydride batteries are not charged, even if they are inserted, while the tuner is turned on.

# Setting the frequency to an active channel (ACT SCAN)

Searches for channels already in use. This is useful when using more than one tuner in combination with a single transmitter.

#### Note

This function is displayed in extended mode only.

For details, see "Searching for active channels within a group (Active Channel Scan)" (page 22).

#### Locking the POWER button (PWR LOCK)

You can lock the POWER button to prevent the power being turned off inadvertently during reception.

**<u>UNLOCK</u>**: Press and hold the POWER button to turn the power on/off.

**LOCK:** The power does not turn off, even after pressing the POWER button.

#### To release the lock state

To release the lock state, either set the PWR LOCK menu to UNLOCK or use the following procedure.

1 When the button is in the LOCK state, press and hold the POWER button.

A prompt appears asking you whether to release the lock state.

**2** Use the + or – button to select YES, then press the SET button.

The lock state is released.

#### Notes

- This function is displayed in extended mode only.
- The POWER button lock state does not change after switching to simple mode after setting the button to LOCK in extended mode.
- If the batteries are removed and reinserted while the POWER button is set to LOCK, the power will turn on automatically but the lock state of the POWER button does not change.

#### Setting the battery type (BATTERY)

You can set the type of battery being used in order to provide a more accurate battery level indication.

**<u>TYPE1</u>:** Recommended setting when using alkaline LR6 (size AA) batteries. Indicates the battery level based on the characteristics of new Sony alkaline LR6 (size AA) batteries.

**TYPE2:** Recommended setting when using rechargeable nickel metal hydride batteries.

**TYPE3:** Recommended setting when using lithium batteries.

#### Notes

- This function is displayed in extended mode only.
- The characteristics of batteries change according to battery type and environmental conditions. It is recommended that you understand the characteristics of batteries before using them.

#### Setting the display contrast (CONTRAST)

You can adjust the contrast of text and icons on the display in the range 1 to 10. The configurable values are given below. (Light) **1 2 3 4 5 <u>6</u> 7 8 9 10** (Dark)

#### Note

This function is displayed in extended mode only.

# Restoring factory default settings (RESET)

Restores all parameters to their factory default settings. Press and hold the SET button. A prompt appears asking you whether to restore factory default settings. Press the + or - button to select YES, then press the SET button. The tuner parameters are restored to their factory default settings.

#### Notes

- This function is displayed in extended mode only.
- After a reset, the audio output level and monitor output level are also restored to their factory default settings. Note that this may cause the volume on connected devices and in headphones to suddenly change.

### Displaying the software version (VERSION)

Displays the software version of the tuner.

#### Note

This function is displayed in extended mode only.

### **Transmitter Settings**

#### Menu structure and operation

#### Procedure for all transmitters (UTX-B03/M03/ P03)

There are three menu display modes that can be selected according to the application.

#### Simple mode

This mode displays only the required settings for transmitting audio.

You can enable simple mode by setting MENU MODE (menu display mode) to SIMPLE.

#### **Configuration menus**

- GP/CH (group/channel) select
- BAND (frequency band) select (Not available on Japanese and Korean models)
- RF POWER (RF transmit output level) select
- ATT (attenuator) setting
- LCF (low-cut filter) setting
- IN LEVEL (audio input level) select (UTX-B03/P03 only)
- +48V (+48 V supply) setting (UTX-P03 only)
- TIME (accumulated running time) display
- MENU MODE (menu display mode) setting

#### Notes

The following configuration menus cannot be modified during transmission. Set these menus in transmission stopped mode.

• GP/CH (group/channel) select

The following configuration menus do not appear and cannot be modified during transmission. Set these menus in transmission stopped mode.

- BAND (frequency band) select (Not available on Japanese and Korean models)
- RF POWER (RF transmit output level) select

#### **Extended mode**

This mode displays all configuration menus. You can enable extended mode by setting MENU MODE (menu display mode) to ADVANCED.

#### Note

The existing settings configured in extended mode are active even when using simple mode.

#### **Configuration menus**

- GP/CH (group/channel) select
- BAND (frequency band) select (Not available on Japanese and Korean models)
- RF POWER (RF transmit output level) select
- ATT (attenuator) setting
- LCF (low-cut filter) setting

- IN LEVEL (audio input level) select (UTX-B03/P03 only)
- +48V (+48 V supply) setting (UTX-P03 only)
- TIME (accumulated running time) display
- MENU MODE (menu display mode) setting
- COMPANDER (compander mode) setting
- PWR LOCK (POWER button lock) function
- MUTING (muting function) setting
- PHASE (phase switching) setting (UTX-B03 only)
- BATTERY (battery type) setting
- CONTRAST (display text contrast) setting
- RESET (factory default setting) function
- VERSION (software version) display

#### Note

The following configuration menus cannot be modified during transmission. Set these menus in transmission stopped mode.

• GP/CH (group/channel) select

The following configuration menus do not appear and cannot be modified during transmission. Set these menus in transmission stopped mode.

- BAND (frequency band) select (Not available on Japanese and Korean models)
- RF POWER (RF transmit output level) select
- RESET (factory default setting) function

#### Transmission stopped mode

This mode allows settings to be modified when RF transmission has stopped.

Use this mode to make settings without risk of interrupting other wireless traffic when setting channels and other settings.

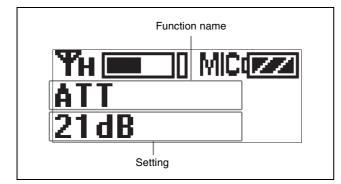
With the power off, press and hold the SET button and press the POWER/MUTING button for at least one second to turn the power on and to display the transmission stopped mode menu.

The following configuration menus can only be modified in transmission stopped mode.

- GP/CH (group/channel) select
- BAND (frequency band) select (Not available on Japanese and Korean models)
- RF POWER (RF transmit output level) select
- RESET (factory default setting) function

#### **Basic menu operation**

The basic menu operation is the same in simple mode, extended mode, and transmission stopped mode.



- Press the + or button to display the function to be set.
- **2** Press and hold the SET button until the setting starts flashing.
- **3** Press the + or button to change the setting.
- **4** Press the SET button to enter the setting.

#### Notes

- If no operation is performed for ten seconds on a function menu other than GP/CH, the display will automatically return to the GP/CH screen.
- If no operation is performed for five seconds, the backlight will turn off. Pressing any button will turn the backlight on again.

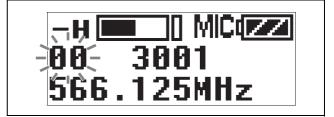
#### Setting the transmit channel

#### Procedure for all transmitters (UTX-B03/M03/ P03)

For details about the channel groups and channels that can be selected, refer to the "Frequency List" on the CD-ROM.

- Press and hold the SET button and press the POWER/ MUTING button to turn the power on.
- **2** Use the + or button to display the GP/CH menu.
- **3** Press and hold the SET button for one second or longer.

Press and hold until the channel group display starts flashing.



**4** Use the + or – button to select the desired group name, then press the SET button.

The channel group is set, and the channel number display starts flashing.



**5** Use the + or – button to select the desired channel number, then press the SET button.

The displays stops flashing and the desired channel is set.

#### Notes

- If there is no user input within ten seconds after the channel group display or channel number display starts flashing, the displayed setting that is flashing is saved. The same applies when setting other parameters.
- The frequency indicator changes in response to the channel number.
- Do not remove the batteries while making settings. If they are removed, re-insert them and repeat the procedure from the beginning.
- Make sure that the same channel is set on the transmitter and tuner within the same system.

#### **Configuration menu**

#### Procedure for all transmitters (UTX-B03/M03/ P03)

This section describes each function and configurable items.

Underlined entries indicate factory default settings.

#### Selecting group/channel (GP/CH)

The factory default setting varies depending on the model.

For details, see "Setting the transmit channel" (page 26).

#### Note

This function can be modified in transmission stopped mode only.

#### Selecting the frequency band (BAND)

Selects the transmit frequency band.

#### Notes

- This function can be modified in transmission stopped mode only.
- This menu is not available on Japanese and Korean models. On these models, the frequency band cannot be selected.

For details about the groups and channels in each frequency band, refer to the "Frequency List" on the CD-ROM.

### Setting the transmit output level (RF POWER)

Set the transmitted RF power to HIGH or LOW. The transmit power level varies depending on the model.

#### Note

This function can be modified in transmission stopped mode only.

# Adjusting the audio input attenuation level (ATT)

You can set the audio input attenuation level in 3 dB increments to reduce noise distortion. The factory default setting is 9 dB (UTX-B03) or 0 dB (UTX-M03 and UTX-P03).

#### Notes

- On the UTX-B03/P03, "---" is displayed if IN LEVEL is set to LINE, and the attenuation level cannot be modified (fixed at 0 dB).
- If the attenuation level is set too high, the noise level may increase. Set the level as close as possible to 0 dB if using a lavalier microphone attached to your torso.

#### Setting the low-cut filter (LCF)

You can set the low-cut filter to reduce noise caused by wind.

You can set the cutoff frequency to OFF/LOW/MID/ HIGH.

**OFF:** No filtering **LOW:** 100 Hz cutoff frequency **MID:** 150 Hz cutoff frequency **HIGH:** 200 Hz cutoff frequency

# Switching the audio input level (IN LEVEL) (UTX-B03/P03 only)

Sets the input level according to the audio input device. You can switch between MIC and LINE. The factory default setting is MIC.

#### Note

Do not switch this function to "MIC" when the audio input source is an audio mixer or other line level device. If an excessive audio level is input, it may cause noise distortion or damage the playback/recording equipment.

# Setting the microphone drive power supply (+48V) (UTX-P03 only)

You can supply power from the transmitter when using a microphone that requires an external power supply. When set to ON, power is supplied to the connected microphone and the +48 V indicator starts flashing. The factory default setting is OFF.

# Displaying the accumulated running time (TIME)

Displays the accumulated running time of the transmitter as a guide to total usage time.

The factory default setting is 00:00. Up to 99:99 can be displayed.

#### To reset the time display

- **1** Press and hold the SET button until the time display starts flashing.
- **2** Press the button to display "00:00 CLR" and press the SET button.

Pressing the + button when "00:00 CLR" is displayed causes the time display to start flashing. You can press the SET button in this state to cancel the reset of the accumulated running time.

### Setting the menu display mode (MENU MODE)

Sets the menu display mode. **<u>SIMPLE</u>**: Displays only the required settings. **ADVANCED**: Displays all settings.

### Setting the compander mode (COMPANDER)

Sets the operating mode of the compander. <u>UWP-D</u>: High speech quality mode supported in combination with UWP-D series devices.

**UWP:** Mode supported in combination with Sony UWP-series tuners.

**WL800:** Mode supported in combination with Sony 800-series tuners.

#### Notes

- This function is displayed in extended mode only.
- No audio is output if the tone signal frequency is different due to the use of a combination of devices with different compander mode settings.

### Locking the POWER/MUTING button (PWR LOCK)

You can lock the POWER/MUTING button to prevent the power being turned off inadvertently during transmission.

**<u>UNLOCK</u>**: Press and hold the POWER/MUTING button to turn the power on/off.

**LOCK:** The power does not turn off, even after pressing the POWER/MUTING button.

#### To release the lock state

To release the lock state, either set the PWR LOCK menu to UNLOCK or use the following procedure.

1 When the button is in the LOCK state, press and hold the POWER/MUTING button.

A prompt appears asking you whether to release the lock state.

2 Use the + or – button to select YES, then press the SET button.

The lock state is released.

#### Notes

- This function is displayed in extended mode only.
- The POWER/MUTING button lock state does not change after switching to simple mode after setting the button to LOCK in extended mode.
- If the batteries are removed and reinserted while the POWER/MUTING button is set to LOCK, the power will turn on automatically but the lock state of the POWER/MUTING button does not change.

#### Muting the output (MUTING)

Pressing the POWER/MUTING button while transmitting mutes the audio so that audio from the tuner is not output. Pressing the POWER/MUTING button again restores the audio output.

**ENABLE:** Pressing the POWER/MUTING button mutes the output.

**DISABLE:** The output is not muted even when the POWER/MUTING button is pressed.

#### Notes

- This function is displayed in extended mode only.
- In muting, the audio signal is not output but an RF signal is still transmitted.

### Switching the phase of the microphone (PHASE) (UTX-B03 only)

You can switch the phase of a connected microphone (excluding the supplied lavalier microphone) to output audio in reverse phase.

**NORMAL:** Phase is not reversed. Set to NORMAL when the supplied lavalier microphone is connected. **INVERT:** Reverses the phase within the transmitter.

#### Note

This function is displayed in extended mode only.

#### Setting the battery type (BATTERY)

You can set the type of battery being used in order to provide a more accurate battery level indication.

**<u>TYPE1</u>:** Recommended setting when using alkaline LR6 (size AA) batteries. Indicates the battery level based on the characteristics of new Sony alkaline LR6 (size AA) batteries.

**TYPE2:** Recommended setting when using rechargeable nickel metal hydride batteries.

**TYPE3:** Recommended setting when using lithium batteries.

#### Notes

- This function is displayed in extended mode only.
- The characteristics of batteries change according to battery type and environmental conditions. It is recommended that you understand the characteristics of batteries before using them.

#### Setting the display contrast (CONTRAST)

You can adjust the contrast of text and icons on the display in the range 1 to 10. The configurable values are given below. (Light) **1 2 3 4 5 <u>6</u> 7 8 9 10** (Dark)

#### Note

This function is displayed in extended mode only.

### Restoring factory default settings (RESET)

Restores all parameters to their factory default settings. Press and hold the SET button. A prompt appears asking you whether to restore factory default settings. Press the + or - button to select YES, then press the SET button. The transmitter parameters are restored to their factory default settings.

#### Notes

- This function can be used in transmission stopped mode only.
- After a reset, the audio input level is also restored to its factory default setting. Note that this may cause the volume on devices connected to the tuner and in headphones to suddenly change.

### Displaying the software version (VERSION)

Displays the software version of the transmitter.

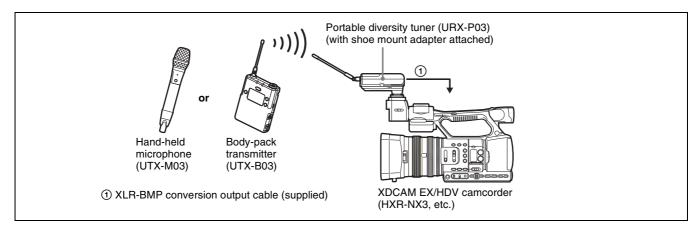
#### Note

This function is displayed in extended mode only.

### **System Configuration Examples**

The following are configuration examples for use with UWP-D series devices.

### Sample configuration for ENG (Electronic News Gathering) or EFP (Electronic Field Production) with a camcorder



### **Error Messages**

When a problem occurs, one of the following error messages may appear on the display.

Message	Meaning	Solution
EEP ERROR	An error has occurred in the backup memory data.	Contact your point of purchase or Sony service representative.
PLL ERROR	An error occurred in the PLL synthesizer circuit.	Restart the unit. If the message persists, contact your point of purchase or Sony service representative.

### Troubleshooting

If you have any problem, use the following checklist before asking for repairs. If the problem persists, contact your point of purchase or Sony service representative.

Symptom	Cause	Solution
The unit does not turn on.	The $\oplus$ and $\bigcirc$ polarity orientation of the batteries is incorrect.	Insert the batteries with the correct polarity orientation.
	The batteries are getting low.	Replace the batteries with new ones.
	The battery terminals are dirty.	Clean the $\oplus$ and $\ominus$ terminals with a cotton swab.
The unit does not turn off.	The POWER/MUTING button is locked.	Release the locked status in the PWR LOCK menu.
The batteries become	The batteries are getting low.	Replace the batteries with new ones.
drained quickly.	Manganese batteries are being used.	Use alkaline batteries. The battery life of a manganese battery is less than half that of an alkaline battery.
	The device is being used under cold conditions.	The batteries drain quickly under cold conditions.
The channel cannot be changed. <sup>1)</sup>	The unit is not in transmission stopped mode.	Turn off the unit, and then turn it on again while holding down the SET button to switch to transmission stopped mode.
There is no sound.	The channel setting on the transmitter is different from that on the tuner.	Use the same channel setting on both the transmitter and tuner.
	The transmitter is not transmitting signals, or the transmission output is weak.	Confirm that the transmitter is turned on. Alternatively, reduce the distance between the transmitter and tuner.
	The transmitter is set to line level input. <sup>2)</sup>	Switch to microphone input.
	The compander mode setting on the transmitter is different from that on the tuner.	Use the same compander mode setting on both the transmitter and tuner.
	The transmitter is muted. <sup>2)</sup>	Press the POWER/MUTING button on the transmitter to release the muted state.
The sound is weak.	The attenuation level on the transmitter is too high.	The input level of the transmitter is low. Set the attenuation of the transmitter to an appropriate level.
	The volume on the amplifier or mixer is low.	Adjust the volume to an appropriate level.
	The transmitter is set to line level input. <sup>2)</sup>	Switch to microphone input.
	The compander mode setting on the transmitter is different from that on the tuner.	Use the same compander mode setting on both the transmitter and tuner.
The sound is distorted.	The attenuation level on the transmitter is too low or is set to 0.	The input level is extremely high. Set the attenuation on the transmitter so that the audio is not distorted.
	The channel setting on the transmitter is different from that on the tuner.	Use the same channel setting on both the transmitter and tuner.
	Headphones with a monaural mini jack are being used. <sup>3)</sup>	Use headphones with a stereo mini jack.
	The compander mode setting on the transmitter is different from that on the tuner.	Use the same compander mode setting on both the transmitter and tuner.

Symptom	Cause	Solution
There is sound interruption or noise.	The channel setting on the transmitter is different from that on the tuner.	Use the same channel setting on both the transmitter and tuner.
	Two or more transmitters are set to the same channel.	Two or more transmitters cannot be used on the same channel. Refer to the frequency list stored on the supplied CD-ROM, and reconfigure the channel on each transmitter.
	The transmitters are not set to the channels within the same channel group.	The channel plan is set so that no signal interference occurs when two or more transmitters are used simultaneously. Set each transmitter to a different channel within the same channel group.
	Adjacent channels are being used.	Use the channels separated by at least two channels (250 kHz).
The RF indicator on the tuner lights up even when the transmitter is off.	Jamming radio waves are being received.	Set the channel on the tuner to a channel for which the RF indicator does not light, or use the Clear Channel Scan function to switch to a channel without interference. Then, set the transmitter to the same channel as the tuner. If using two or more transmitters, change to a channel group that is not affected.
The transmitter channel cannot be set with infrared transmission.	The infrared receptor on the transmitter is too far from the infrared transmission port on the tuner.	Reduce the distance between the infrared receptor on the transmitter and the infrared transmission port on the tuner to within about 20 cm (8 in.).
	Interference from infrared communications between other devices or from direct sunlight is present.	The transmitting distance is reduced when interference from strong sunlight, for example, is present. Place the transmitter and tuner as close to each other as possible.

1) Body-pack transmitter (UTX-B03) / hand-held microphone (UTX-M03) / plug-on transmitter (UTX-P03) only

2) Body-pack transmitter (UTX-B03) / plug-on transmitter (UTX-P03) only

3) Portable diversity tuner (URX-P03) only

### **Important Notes on Use**

#### Usage and storage

- Operating the UWP-D series devices near electrical equipment (motors, transformers, or dimmers) may cause interference due to electromagnetic induction. Keep the devices as far from such equipment as possible.
- The presence of lighting equipment may produce electrical interference over a wide frequency range. In this case, interference may fluctuate with the position of the tuner antenna and position of the transmitter. Position the devices so that interference is minimized.
- To avoid degradation of the signal to noise ratio, do not use UWP-D devices in noisy places or in locations subject to vibration, such as the following:
  - Near electrical equipment, such as motors, transformers, or dimmers
  - Near air conditioning equipment or places subject to direct air flow from an air conditioner
  - Near PA (public address) loudspeakers
  - Near equipment that might knock against the tuner

Keep devices as far from such equipment as possible or use buffering material.

#### Cleaning

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

#### To prevent electromagnetic interference

Some channels may be unable to be used due to noise generated due to the effects of external noise and/or radio interference. In this case, it is recommended to stop transmitting (turn the power off) or change to another frequency (change channel).

### To prevent electromagnetic interference from portable communication devices

The use of portable telephones and other communication devices near the devices may result in malfunction and interference with audio signals. It is recommended that portable communication equipment near the devices be turned off.

### **Specifications**

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.
- 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.

#### Transmitter (UTX-B03/M03/P03)

#### Items common to all transmitters

Oscillator type Crystal-controlled PLL synthesizer Carrier frequencies Models available in USA:

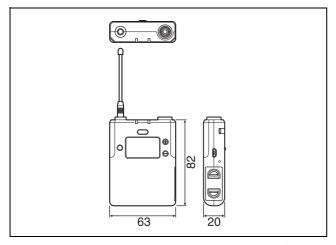
470 MHz to 542 MHz (UC14 model), 566 MHz to 608 MHz and 614 MHz to 638 MHz (UC30 model), 638 MHz to 698 MHz (UC42 model) Models available in Europe: 470 MHz to 542 MHz (CE21 model), 566 MHz to 630 MHz (CE33 model), 638 MHz to 694 MHz (CE42 model), 710 MHz to 782 MHz (CE51 model) Model available in China: 710 MHz to 782 MHz (CN38 model) Model available in Korea: 925 MHz to 937.5 MHz (KR Model) Model available in Thailand and Taiwan 794 MHz to 806 MHz (E model) Preemphasis 50 µs Reference deviation ±5 kHz (-60 dBV, 1 kHz input) 0.9% or less (-60 dBV, 1 kHz input) Distortion Signal-to-noise-ratio 60 dB or more Voice delay 0.35 ms

Tone signal frequency In UWP-D compander mode: 32.382 kHz In UWP compander mode: 32 kHz In WL800 compander mode: 32.768 kHz Supply voltage 3.0 V DC (two LR6/AA size alkaline batteries) 5.0 V DC (supplied from USB connector) Operating temperature 0 °C to 50 °C (32 °F to 122 °F) 0 °C to 35 °C (32 °F to 95 °F) when charging Storage temperature -20 °C to +55 °C (-4 °F to +131 °F)

#### Body-pack transmitter (UTX-B03)

 $1/4 \lambda$  wavelength wire antenna Antenna Audio input connector 3.5 mm diameter mini jack Reference audio input level -60 dBV (MIC input, 0 dB attenuation) RF output level 30 mW/5 mW selectable (for model available in USA, Europe, and China) 10 mW/2 mW selectable (for model available in Thailand, Taiwan, and Korea) Frequency response 40 Hz to 18 kHz 0 dB to 27 dB (3 dB steps) Attenuation AUDIO, POWER/MUTING Indicators Battery life (measured with two Sony LR6/AA size alkaline batteries at 25 °C (77 °F)) Approx. 8 hours with output power of 30 mW (for model available in USA, Europe, and China) Approx. 10 hours with output power of 10 mW (for model available in Thailand, Taiwan, and Korea)

Dimensions



 $63 \times 82 \times 20 \text{ mm} (2^{1}/_2 \times 3^{1}/_4 \times {}^{13}/_{16} \text{ in.})$ (Width / height / depth) (excluding antenna)

Mass	Approx. 103 g (3.6 oz)
	(excluding batteries)

#### Lavalier microphone (ECM-V1BMP)

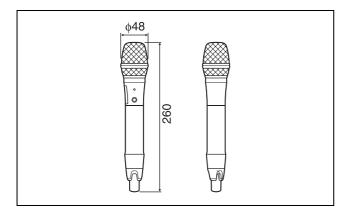
Electret condenser microphone		
Frequency response		
40 Hz to 20,000 Hz		
Omni-directional		
-43.0 ±3 dB (0 dB =1 V/Pa, at 1 kHz)		
Operating temperature		
0 °C to 50 °C (32 °F to 122 °F)		
Storage temperature		
-20 °C to +55 °C (-4 °F to +131 °F)		
2.3 mm dia., 2-conductor shielded cable,		
1.2 m (3.9 feet) long		
$\phi 6.8 \times 19.5 \text{ mm} ({}^{9}\!/_{32} \times {}^{25}\!/_{32} \text{ in.})$		
(without cable and connector)		
Approx. 16.2 g (0.57 oz)		

#### Hand-held microphone (UTX-M03)

Microphone unit Dvnamic Directional characteristic Unidirectional  $1/4 \lambda$  wavelength wire antenna Antenna Reference audio input level -55 dBV (MIC input, 0 dB attenuation) RF output level 30 mW/5 mW selectable (for model available in USA, Europe, and China) 10 mW/2 mW selectable (for model available in Thailand, Taiwan, and Korea) Frequency response 70 Hz to 18 kHz Attenuation 0 dB to 21 dB (3 dB steps) Indicator POWER/MUTING Battery life (measured with two Sony LR6/AA size alkaline batteries at 25 °C (77 °F)) Approx. 8 hours with output power of 30 mW (for model available in USA, Europe, and China) Approx. 10 hours with output power of 10 mW (for model available in Thailand, Taiwan, and Korea)

#### Dimensions

Mass

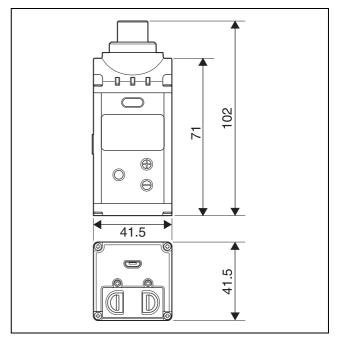


 $\phi$  48 × 260 mm (1<sup>15</sup>/<sub>16</sub> × 10<sup>1</sup>/<sub>4</sub> in.) (Diameter / length) Approx. 260 g (9.2 oz) (excluding batteries)

#### Plug-on transmitter (UTX-P03)

Reference deviation  $\pm 5 \text{ kHz}$ Reference audio input level -60 dBV (at 0 dB attenuation level) RF output level 40 mW/5 mW selectable (for model available in USA) 30 mW/5 mW selectable (for model available in Europe) 10 mW/2 mW selectable (for model available in Thailand, Taiwan, and Korea) Frequency response 50 Hz to 18 kHz Attenuation 0 dB to 48 dB (3 dB steps) Audio input connector XLR-3-11C type (female) Indicator AF/PEAK, POWER/MUTING, +48V Battery life Approx. 6 hours (measured with two Sony LR6/AA size alkaline batteries at 25 °C (77 °F))

#### Dimensions



41.5 × 102 × 41.5 mm  $(1^{11}/_{16} \times 4^{1}/_8 \times 1^{11}/_{16} \text{ in.})$ (width / height / depth) (including the audio input connector) Approx. 145 g (5.1 oz) (excluding batteries)

#### Tuner

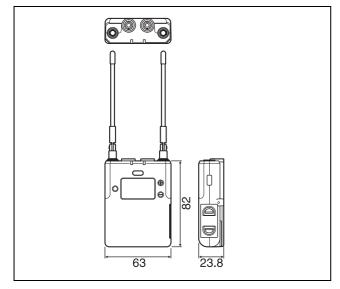
Mass

#### Portable diversity tuner (URX-P03)

Antenna  $1/4 \lambda$  wavelength wire antenna (angle-adjustable) Squelch level 15 dBµ Audio output level -60 dBV Audio output connector 3.5 mm diameter mini jack Headphone output level 5 mW (16 Ω) Reception method True diversity method Local oscillator Crystal-controlled PLL synthesizer **Receive frequencies** Models available in USA: 470 MHz to 542 MHz (UC14 model), 566 MHz to 608 MHz and 614 MHz to 638 MHz (UC30 model), 638 MHz to 698 MHz (UC42 model) Models available in Europe: 470 MHz to 542 MHz (CE21 model), 566 MHz to 630 MHz (CE33 model), 638 MHz to 694 MHz (CE42 model), 710 MHz to 782 MHz (CE51 model) Model available in China: 710 MHz to 782 MHz (CN38 model) Model available in Korea: 925 MHz to 937.5 MHz (KR Model)

	Model available in Thailand and		
	Taiwan:		
	794 MHz to 806 MHz (E model)		
Signal-to-noise-ratio			
C	60 dB or more		
Voice delay	0.35 ms		
	50 µs		
Reference frequency deviation			
1	±5 kHz		
Frequency respo	onse		
1 2 1	40 Hz to 18 kHz		
Distortion	0.9% or less (5 kHz modulation)		
Tone signal	In UWP-D compander mode:		
e	32.382 kHz		
	In UWP compander mode: 32 kHz		
	In WL800 compander mode:		
	32.768 kHz		
Indicators	POWER, RF		
Operating tempe	erature		
1 0 1	0 °C to 50 °C (32 °F to 122 °F)		
	0 °C to 35 °C (32 °F to 95 °F) when		
	charging		
Storage temperature			
0 1	-20 °C to +55 °C (-4 °F to +131 °F)		
Supply voltage	3.0 V DC (two LR6/AA size alkaline batteries)		
	5.0 V DC (supplied from USB		
	connector)		
Battery life	Approx. 6 hours (measured with two		
•	Sony LR6/AA size alkaline batteries		
	at 25 °C (77 °F))		
Dimensions	· · · · ·		

Dimensions



 $63 \times 82 \times 23.8 \text{ mm}$   $(2^{1}/_{2} \times 3^{1}/_{4} \times {}^{15}/_{16} \text{ in.})$ (Width / height / depth) (excluding antenna) Approx. 136 g (4.8 oz) (excluding batteries)

Mass

http://www.sony.net/

Sony Corporation