

Wireless Adapter

Operating Instructions

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

DWA-F01D

DWX
DIGITAL WIRELESS

Owner's Record

The model and serial numbers are located at the side. Record these numbers in the spaces provided below.

Refer to these numbers whenever you call upon your Sony dealer regarding this product.

Model No. DWA-F01D

Serial No. _____

WARNING

Excessive sound pressure from earphones and headphones can cause hearing loss. In order to use this product safely, avoid prolonged listening at excessive sound pressure levels.

For the customers in the U.S.A.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

All interface cables used to connect peripherals must be shielded in order to comply with the limits for a digital device pursuant to Subpart B of Part 15 of FCC Rules.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

For the customers in Canada

This Class B digital apparatus complies with Canadian ICES-003.

For the customers in Europe

This product with the CE marking complies with the EMC Directive issued by the Commission of the European Community.

The manufacturer of this product is Sony Corporation, 1-7-1 Konan, Minato-ku, Tokyo, Japan.

The Authorized Representative for EMC and product safety is Sony Deutschland GmbH, Hedelfinger Strasse 61, 70327 Stuttgart, Germany. For any service or guarantee matters please refer to the addresses given in separate service or guarantee documents.

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Features

The DWA-F01D wireless adapter allows the optional DWR-S01D digital wireless receiver or the WRR-855S UHF synthesizer tuner unit to be rear-mounted on Sony camcorders. In combination with the DWR-S01D or WRR-855S, the DWA-F01D can also work as a portable wireless receiver.

Wide array of audio output

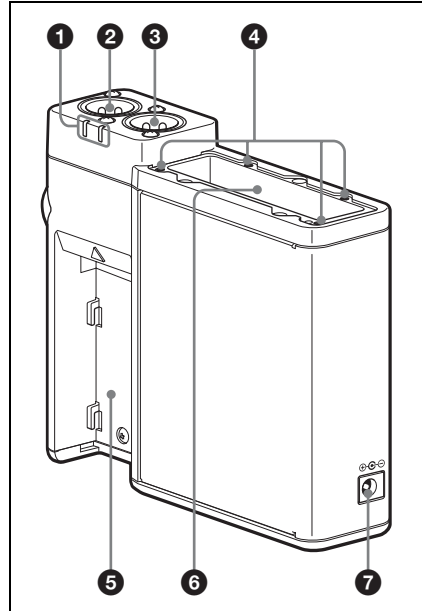
To draw its full performance, the DWA-F01D comes equipped with a wide range of interfaces. One of the analog audio output connectors can be set to output the AES/EBU digital format signal. A word sync input connector is provided for diverse operational needs.

Monitor output

A monitor output connector is provided to offer easy monitoring of the audio output.

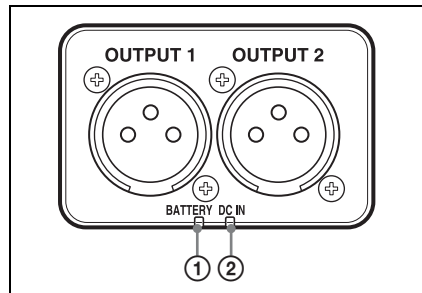
Parts Identification

Front/Top/Right Sides



1 DC IN (external power input) / remaining battery indicators

Indicates the power supply status. When using only a battery power supply, different colors will indicate the remaining battery power.



① Remaining battery indicator

Lights when a battery is inserted.

Green: Ample battery charge remains.

Orange: Battery charge is low.

Red: Battery charge is nearly empty.

When an external power supply is also connected, this indicator does not light.

② DC IN (external power input) indicator

Lights green when an external power supply is connected.

Note

Even if an external power supply or a battery is connected, the indicators will not light if the power switch on the wireless receiver is turned off.

② OUTPUT 1 connector (XLR)

Outputs balanced analog audio signals. When a DWR-S01D is installed, you can select the output tuner in the UTILITY menu of the DWR-S01D.

Under factory default settings, audio for TUNER 1 will be output.

When a WRR-855S is installed, audio signals will be output from this connector only.

③ OUTPUT 2 connector (XLR)

Outputs balanced analog audio signals.

When a DWR-S01D is installed, audio for TUNER 2 will be output.

When a WRR-855S is installed, this connector does not function.

④ Wireless receiver screw holes

Run in the mounting screws to secure the receiver/tuner unit.

⑤ Battery connector

Insert a battery (e.g., NP-F570) here.

The InfoLithium L Series is supported.

If a battery and an external power supply are connected at the same time, the external power supply will be used.

Note

The DWA-F01D cannot be used to recharge the battery. Use a commercially available battery charger to recharge the battery.

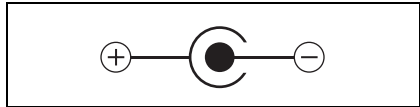
For details on inserting the battery, see "Using a Battery" on page 7.

⑥ Wireless receiver slot

Insert the optional DWR-S01D or WRR-855S here.

For details on how to attach the receiver or tuner unit to the DWA-F01D, see "Attaching the Receiver/Tuner Unit" on page 8.

⑦ DC IN (external power input) connector (DC jack)



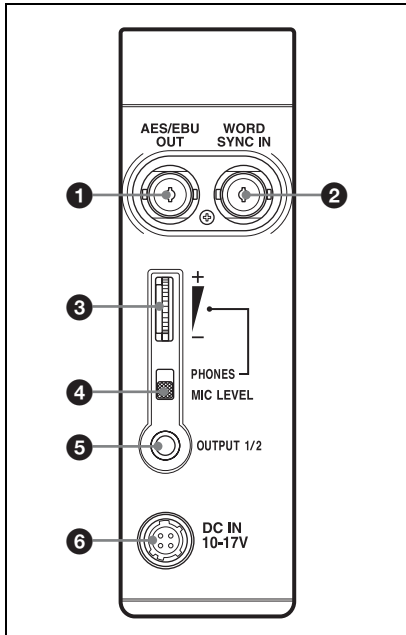
Connects to a 10 V to 17 V DC power supply.

Use a plug that has an outer diameter of ϕ 5.5 mm, an inner diameter of ϕ 2.1 mm, and a negative polarity center.

Note

Before beginning operation with an external power supply, avoid confusing the polarity of the external battery by checking the polarity again.

Left Side



❶ AES/EBU OUT connector (BNC type)

Outputs AES3-format digital audio signals.

❷ WORD SYNC IN (word sync input) connector (BNC type)

Accepts external sync signal.

When the DWR-S01D is attached and the sync signal is input, the DWR-S01D can be operated in synchronization with the whole audio system. In order for the DWR-S01D to operate in synchronization, select “AUTO” or “EXTERNAL” on the SYNC SOURCE indication of the UTILITY menu of the DWR-S01D. For details, see “On Connecting Word Clock Sync Signal and Digital Audio Signal” on page 9.

Note that this connector does not work when the WRR-855S is attached.

For details on the frequency of the sync signal, refer to the Operating Instructions supplied with the DWR-S01D.

Note

Even when the 75-ohm termination has been added on the DWR-S01D, this connector still works as the high-impedance input connector while the DWR-S01D is turned off.

❸ Monitor volume adjuster

Adjusts the audio volume for monitor output.

Adjustment is enabled only when PHONES is selected with the output selector switch.

❹ Output selector switch

Selects the output of the OUTPUT 1/2 connector.

PHONES: Allows you to connect headphones to the OUTPUT 1/2 connector to monitor audio signals.

MIC LEVEL: Allows you to connect a portable recorder or similar device to the OUTPUT 1/2 connector to record audio signals. The output level is fixed.

MIC LEVEL is selected under factory default settings.

Notes

- When a WRR-855S is installed, audio is not output from the right channel.
- As noise may be generated from the output of a connected device, be sure to lower the input or volume from the device to be connected before connecting to another device.

5 OUTPUT 1/2 connector (3.5-mm TRS jack, tip: L, ring: R, sleeve: GND)

Connects to headphones or portable recorders.

The tuner audio of the OUTPUT 1 and OUTPUT 2 connectors is output from the left and right channels respectively.

When a WRR-855S is installed, audio is only output from the left channel.

6 DC IN (external power input) connector (4-pin)

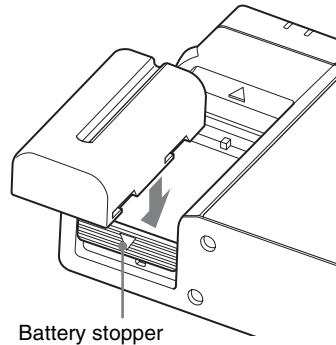
Connect to the external power output connector of the camcorder using the supplied DC power cable. This connector accepts the power voltage between 10 V DC and 17 V DC.



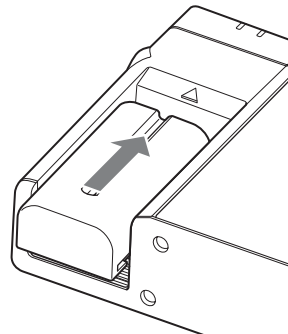
Using a Battery

Inserting the Battery

- 1 Align the grooves on the battery with the guides on the compartment, and push down the battery stopper.

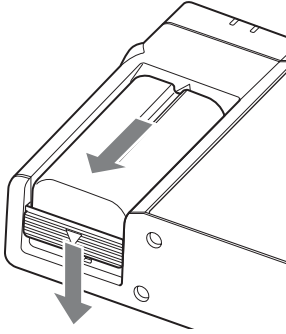


- 2 Slide the battery into the compartment while maintaining its horizontal orientation until the battery stopper returns to its original position.



Removing the Battery

Slide the battery out while holding down the battery stopper in the direction of the arrow.

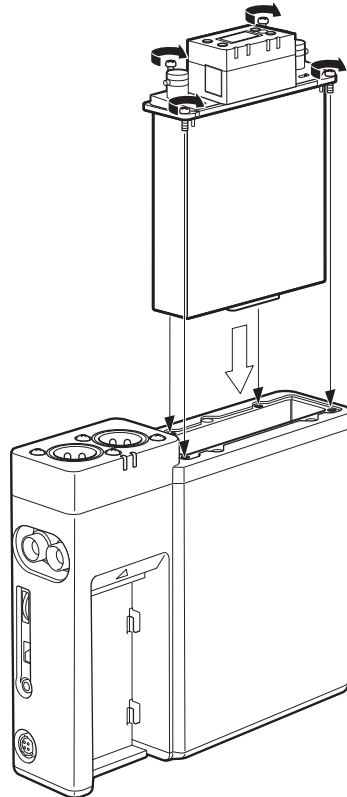


Attachment and Connections

Attaching the Receiver/Tuner Unit

Insert the DWR-S01D or WRR-855S into the wireless receiver slot.

- 1** Insert the receiver/tuner unit into the wireless receiver slot after observing the direction of the D-sub 15-pin connector inside the slot and that of the receiver/tuner unit.



- 2** Fasten four mounting screws of the receiver/tuner unit with a screwdriver.

Note

If any of the screws are loose, malfunction due to vibration may occur.

To Connect the Power Cable

Using the DC power cable supplied with the DWA-F01D, connect the DC IN connector to the DC OUT connector of the camcorder.

To Connect the Audio Cables

For analog audio

Connect the OUTPUT 1 or OUTPUT 2 connector on the DWA-F01D to the AUDIO IN connectors on the camcorder or connected device.

For connected devices that accept digital audio input

Connect the AES/EBU OUT connector on the DWA-F01D to the digital input connector on the connected device using a 75 Ω BNC cable.

On Connecting Word Clock Sync Signal and Digital Audio Signal

The DWR-S01D attached to the DWA-F01D and the device connected to the DWA-F01D through the digital audio interface can be operated properly, under either of the following conditions:

- The device that is connected to the AES/EBU OUT connector of the DWA-F01D is equipped with a sampling rate converter.
- The DWR-S01D is synchronized with the device that is connected to the

DWA-F01D using the master word clock signal input to the WORD SYNC IN connector of the DWA-F01D.

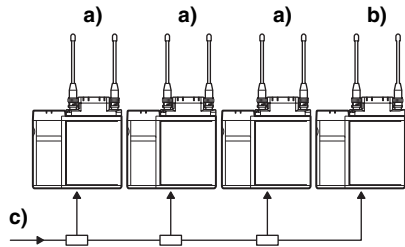
There are two types of systems for synchronization using the master word clock signal.

System example 1

The master word clock signal is split using the T-shaped BNC splitter.

One of the devices including the DWR-S01D must be terminated.

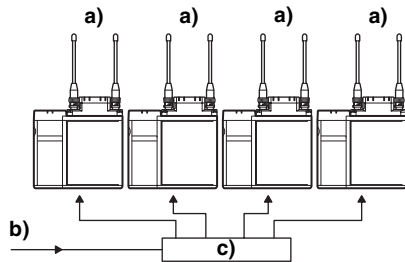
For details on how to terminate the word sync signal on the DWR-S01D, refer to the Operating Instructions supplied with the DWR-S01D.



- a) 75-ohm termination setting: OFF
- b) 75-ohm termination setting: ON
- c) Master word clock signal

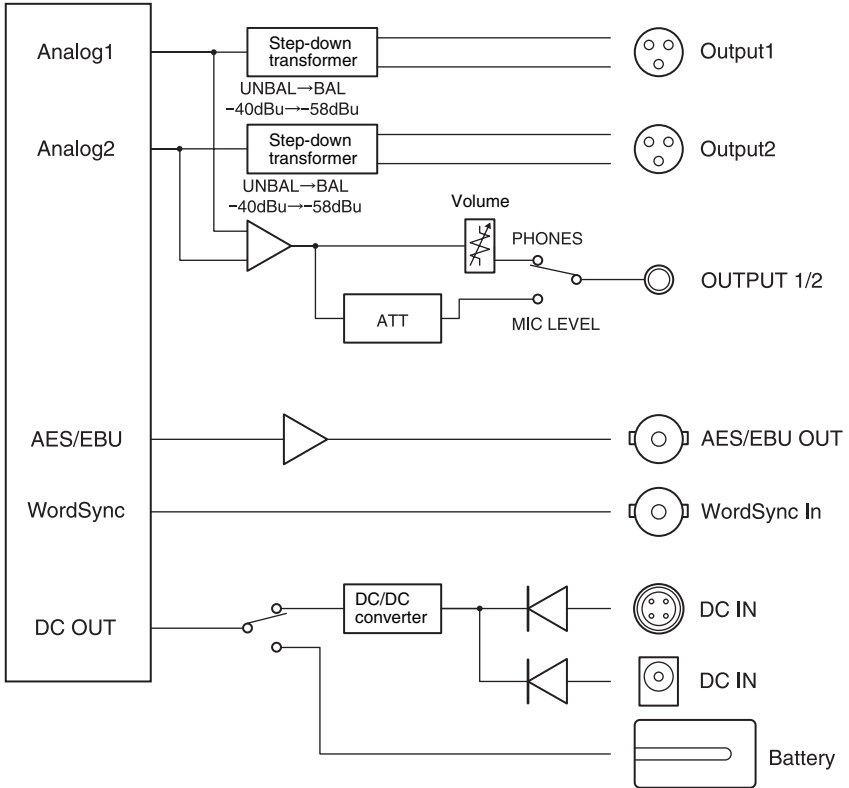
System example 2

The master word clock signal is supplied to each device using the distributor. All the devices must be terminated.



- a) 75-ohm termination setting: ON
- b) Master word clock signal
- c) Word sync signal distributor

Block Diagram



Troubleshooting

If you encounter a problem using this adapter, use the following checklist to find a solution. For any problems with the transmitter or receiver, refer to the operating instructions of the respective device. If the problem persists, consult your Sony dealer.

Symptom	Meanings	Remedy
The DWR-S01D or the WRR-855S does not turn on.	The DWR-S01D or the WRR-855S is not correctly inserted into the slot of the camcorder or this adapter.	Insert the DWR-S01D or the WRR-855S until it is firmly and completely in, and then secure it with the mounting screws.
No signal is output from the OUTPUT 2 connector when the adapter is connected to the device that accepts the analog signal only.	The tuner 2 of the DWR-S01D is not turned on.	Turn on the tuner 2 of the DWR-S01D.
	The WRR-855S is attached to the adapter.	The WRR-855S is a single-channel receiver. Thus, there is no signal output from the OUTPUT 2 connector.
There is noise in the audio output from the digital device that is connected to the adapter.	The DWR-S01D inserted in the adapter and the digital device that is connected to the adapter are not in synchronization.	If the connected device is not compatible with the asynchronous input (i.e., the sampling rate converter is not equipped), use the word clock signal to synchronize the device.
	The WORD SYNC IN connector is not 75-ohm terminated.	When the DWR-S01D that is inserted in the adapter is the end device or when the master word clock signal is input to this adapter only, add the 75-ohm termination to the WORD SYNC IN connector by using the UTILITY menu of the DWR-S01D.
Mixed audio from tuner 1 and 2 is heard from the left channel of the monitor output.	The ANALOG OUTPUT 1 function of the DWR-S01D is set to RX1+2.	Set the function to RX1. If it is set to RX1+2, mixed audio from tuner 1 and 2 will be output for the monitor output.

Symptom	Meanings	Remedy
A battery is inserted, but the indicator does not light.	The battery is fully discharged.	Recharge the battery.
	The power switch on the receiver is turned off.	The indicator is designed to light in accordance with the power switch on the receiver. Turn on the power switch.
	A power supply is connected to DC IN.	When a battery and DC IN are connected at the same time, the DC IN power supply is used. If you want to use the battery power, disconnect the DC IN power supply.
Audio cannot be heard from the headphones connected to the OUTPUT 1/2 connector.	The monitor volume adjuster is set to a low level.	Adjust the volume.
	The output selector switch is set to MIC LEVEL.	Set the output selector switch to PHONES.
Audio cannot be heard from the recorder connected to the OUTPUT 1/2 connector, or the audio is distorted.	The output selector switch is set to PHONES.	Set the output selector switch to MIC LEVEL.
Audio is not output from the right channel of the OUTPUT 1/2 connector.	Tuner 2 of the DWR-S01D is not turned on. Alternatively, a WRR-855S is connected.	Check the power switch on the DWR-S01D. As the WRR-855S is a single channel receiver, output is only possible from tuner 1 (i.e., the left channel).

Important Notes on Operation

Notes on Using the Adapter

- The Digital Wireless Microphone System product must be used within a temperature range of 0 °C to 50 °C (32 °F to 122 °F).
- Operating the adapter near electrical equipment (motors, transformers, or dimmers) may cause it to be affected by electromagnetic induction. Keep the adapter as far from such equipment as possible.

On Cleaning

- If the adapter 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 the adapter in such places or not cleaning it after its use in such places may shorten its life.
- Clean the surface and the connectors of the adapter with a dry, soft cloth. Never use thinner, benzene, alcohol or any other chemicals, since these may mar the finish.

<p>To prevent electromagnetic interference from portable communication devices</p>

<p>The use of portable telephones and other communication devices near the DWA-F01D may result in malfunction and interference with audio signals. It is recommended that portable communication devices near the DWA-F01D be turned off.</p>

Specifications

Audio section

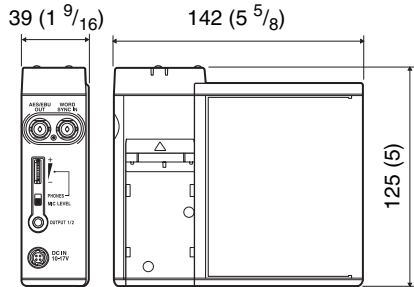
- Analog output connector
 - XLR-3-32 type
 - (OUTPUT 1/OUTPUT 2)
- Analog output impedance
 - 150 ohms or less
- Digital output connector
 - BNC-R
- AES3-id output impedance
 - 75 ohms
- WORD SYNC IN connector
 - BNC-R, 75 ohms (when the DWR-S01D is attached to the adapter and 75-ohm termination is added)
- OUTPUT 1/2 connector
 - φ 3.5 mm TRS jack
- OUTPUT 1/2 level (MIC LEVEL selected)
 - 52 dBu
- OUTPUT 1/2 level (PHONES selected)
 - 50 mW (16-ohm load, at T.H.D = 1%)

General

- Power requirements
 - 12 V DC (DC IN)
 - 7.2 V DC (battery)
- Operating voltage
 - 10 V DC to 17 V DC (DC IN)
 - 6 V DC to 8.4 V DC (battery)
- Maximum continuous operation
 - Approx. 5 hours
 - (ambient temperature of 25 °C (77 °F), fully charged Sony NP-F570 lithium-ion battery, OUTPUT 1/2 unused, DWR-S01D CH1/CH2 ON, wireless remote control function OFF, auto switch for display set to AUTO DIMMER)

- Operating temperature
 - 0 °C to 50 °C (32 °F to 122 °F)
- Storage temperature
 - 20 °C to +60 °C (-4 °F to +140 °F)

- Dimensions
 - (unit: mm (inches), excluding protrusions)



- Mass
 - Approx. 400 g (14 oz)
 - (excluding receiver and battery)

- Supplied accessories
 - DC power cable
 - (for 4-pin connector) (1)
 - Operating Instructions (1)
 - Warranty booklet (1)
 - CD-ROM (1)

- Optional accessories
 - LCS-F01D soft carrying case

Design and specifications are subject to change without notice.

Note

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.

<http://www.sony.net/>

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