SONY

DWR-R03D

DWX Series 2-channel digital
wireless receiver

Overview

**Superb audio quality and stable operation in a
wide range of environments**

The third generation of Sony's acclaimed DWX series, this high
performance digital wireless receiver is an ideal choice for live
sound applications including theatre and concerts, as well as
studio based TV production and EFP.

The two-channel 1U rack-mountable wireless receiver features
Sony's advanced digital audio processing, encryption and RF
transmission technologies to assure secure, stable transmission
and reception of very high quality audio with low latency.

The DWR-R03D is ideal for use in large-scale multi-channel
productions, supporting up to 21 simultaneous channels per
8MHz TV band or up to 16 simultaneous channels per 6MHz TV
band.

Support for the Dante® audio-over-IP standard enables
networked multi-channel operation.

The DWR-R03D is compatible with Sony Wireless Studio control
software for PC (Ver 5.0 or later), allowing flexible remote
operation. Remote control of up to 82 transmitters is possible
using the Cross Remote™ function combined with the RMU-01

remote control unit (available separately).

Features

Very high quality wireless audio
Advanced Sony codec design assures superb audio quality, with a high dynamic range of more than 106 dB, plus a wide frequency response of 20 Hz - 22 kHz and excellent transient response.

Low-latency audio
Advanced Sony codec design reduces audio latency to as little as 1.2msec*

* DWT-B03R and DWR-R03D total delay with codec mode2 and analog output

Dante® interface for audio-over-IP networking
The DWR-R03D is compatible with the Dante digital audio-over-IP networking standard for professional AV and sound reinforcement environments. Allows headphone monitoring with other receivers in Dante network. Two Dante ports support redundant network operation.

Reliable transmission
X-Dimension Diversity™ technology, high dynamic range RF circuits and 4 antenna diversity reception system enhance RF transmission stability.

Easy, versatile remote control
The DWR-R03D is compatible with Sony's Wireless Studio control software for PC (Version 5.0 or later) and up to 82 transmitters can be controlled using the Cross Remote™ function and RMU-01 remote control unit (available separately).

AUTO FREQUENCY CHANGE function*
This function minimizes audio dropouts by automatically changing to a better frequency when the existing frequency is

congested or reception is poor. It scans for a frequency on channel 1 of the host receiver and maintains a list of safe frequencies. If the quality of the received data on another channel drops, it changes the frequency used by the corresponding receiver and paired transmitter to a better frequency.
* Available via firmware update (Ver. 1.20〜)

High density multi-channel operation
Ideal for large-scale productions, the DWR-R03D supports high-density simultaneous multi-channel operation: 375kHz spacing accommodates up to 21 channels per 8MHz TV band or up to 16 simultaneous channels per 6MHz TV band.

AUTO CHANNEL COORDINATE function*
This function coordinates channel selection by communicating with the receiver to build a channel plan in response to the RF environment without using a computer. The channel setting is also applied to the transmitter paired with the receiver.
* Available via firmware update (Ver. 1.20〜)

Four audio codec modes*
Switch between audio codec modes based on your operational needs.
* Available via firmware update (Ver. 1.20〜)

244MHz* wideband
Contributes to the reduction of equipment and burden of maintenance.
*Depending on version

AES 256bit encryption
For secure encrypted transmission.

Spectrum analyzer function*
This functions scans frequencies and displays the congestion/interference as a graph, allowing the user to visualize

the RF conditions. You can also select and set a safe frequency from the scan results.
* Available via firmware update (Ver. 1.20〜)

OUTPUT SWAP function*

This function swaps the audio outputs of two tuners when a button on the unit is operated. This provides redundancy, enabling a user who is using two transmitters to quickly swap the outputs when trouble arises on one of those transmitters, without having to reconnect audio cables.
* Available via firmware update (Ver. 1.20〜)

AC power cascade

AC power output simplifies implementation of multiple receivers in large multi-channel applications.

Dual OLED displays

Easy-to-read dual OLED displays give visual confirmation of operating information and status for each channel.

User setting memory

Settings can be easily stored to the memory of DWR-R03D.

Setting lock

Receiver settings can be locked to prevent accidental operation during performance.

Transmitter/receiver identify function

Paired transmitters/receivers are identified by blinking display.

Switchable analogue (balanced) and AES/EBU digital audio sub output

Adjustable audio output level (1 dB step)

Specifications

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Wireless Interface	WiDIF-HP
Oscillator Type	Crystal-controlled PLL Synthesizer
Reception Type	True diversity
Circuit system	Double Superheterodyne
Antenna Type	Detachable
Antenna Connector	2 diversity mode: Input BNC-R, 50 Ω (x2), Cascaded Output BNC-R, 50 Ω (x2) 4 diversity mode: Input BNC-R, 50 Ω (x4)
Carrier Frequencies - UC7	470.125 MHz to 607.875 MHz, 614.125 MHz to 615.875 MHz, 25 kHz steps
Carrier Frequencies - CEZ	470.025 MHz to 714.000 MHz, 25 kHz steps
Carrier Frequencies - J	W: 470.150 MHz to 713.850 MHz, 25 kHz steps G: 638.025 MHz to 713.850 MHz, 1240.150 MHz to 1251.825 MHz, 1253.175 MHz to 1259.850 MHz, 25 kHz steps, 806.125 MHz to 809.750 MHz, 125 kHz steps

Frequency Response	20Hz to 22kHz (typical)
Dynamic Range	106 dB or more typical (A-weighted, T.H.D=1%)
Distortion (T.H.D)	MODE1, MODE2: 0.03% or less, MODE3: 0.3% or less
Audio Delay	MODE1; 1.9 msec (total: 3.1*/3.4**msec) (Analog output), 1.9 msec (total: 3.1*/3.4**msec) (Digital output) MODE2: 0.5 msec (total: 1.2*/1.5**msec) (Analog output), 1.5 msec (total: 2.2*/2.5**msec) (Digital output) MODE3: 1.9 msec (total: 3.7*/4.0**msec) (Analog output), 2.8 msec (total: 4.6*/4.9**msec) (Digital output) *with DWT-B03R ** with other transmitters
Analog Output	BAL: XLR-3-32 (male) (✕ Main 2, Sub 2), Output level (0 dBu = 0.775 Vrms) Main BAL: +24 dBu maximum/−58 dBu to -12 dBu (1dB step adjustable) reference Sub BAL: +24 dBu maximum/−12

	dBu reference
Digital Output	XLR-3-32 (male), 110 Ω (×2) / BNC-R, 75 Ω (×1), Reference output level: –36 dBFs
Headphone Output	φ6.3 mm (1/4 inch) stereo jack
WORD SYNC IN/OUT connectors	Input connector: BNC-R with a 75 Ω termination switch, Output connector: BNC-R, External Word Sync: 32 kHz to 96 kHz
Wireless Remote Control	Cross Remote (2.4 GHz IEEE802.15.4 compliant)
LAN Connector	RJ-45 modular jack 1000BASE-T: IEEE802.3ab compliant (x 2)
Display	OLED (x2)
Power Requirements	AC: 100 to 240 V
Operating Temperature	0°C to 50°C / 32°F to 122°F
Storage/Transport Temperature	-20°C to +60°C / -4°F to +140°F
Dimensions	Approx. 482×44×335mm
Mass	Approx. 3.9 kg

Supplied Accessories

Supplied Accessories	Whip antenna (2) AC power cord (1) AC cascade cord (1) Foot (4) Operating Instructions (CD-ROM) (1)

Notes

Important note	This product is available in a variety of different frequency range models to suit the regulatory requirements of individual countries. Please contact your Sony reseller for more information on which product will best suit your specific needs.

Related products

DWT-B01N

DWX series digital wireless body-pack transmitter body-pack

DWM-02N

DWX series digital wireless microphone with interchangeable head mechanism

DWT-B03R

DWX Series digital wireless microphone bodypack transmitter

DWT-P01N

Digital wireless microphone plug-on transmitter

Wireless Studio

WD-850

UHF Antenna Divider

AN-01

Uni-directional UHF Antenna

AN-57

Ground plane antenna

DWT-B30

DWX Gen3 digital wireless bodypack transmitter

DWT-P30

DWT-P30 plug-on transmitter

Gallery