

DWT-B01N

DWX N series digital wireless body-pack transmitter body-pack



Overview

High quality wide-band transmitter with three codec modes providing short audio latency and more reliable transmission

The DWT-B01N body-pack transmitter forms part of the DWX N series digital wireless microphone system that offers high-quality full-digital operation shorter audio latency and more reliable RF transmission mode – ideal for a variety of high-quality applications, including broadcast studio, theater and live sound.

The DWX N series system, which consists of the DWT-B01N body-pack transmitter, DWM-02N microphone and DWR-R02DN receiver, delivers superb-quality wireless transmission of 24-bit digital audio. Thanks to its improved codec and new hardware, it can provide higher sound quality with lower audio latency.

The DWX N series works with Sony control software Wireless Studio 4.2 or later for PC and Wireless Studio Mobile for smartphones* to give users flexible control of the system. Remote control of up to 82 transmitters can be achieved using the Cross Remote™ function combined with the RMU-01 remote control unit.

NOTE: This model is available in multiple versions to support the widest possible range of operating frequencies. Please refer to product specifications for more information.

Three codec modes designed for wide variety of applications

MODE1 for compatibility with DWX series applications, MODE2 with higher quality sound and low latency ideal for theater, tour and broadcast applications, and MODE3 with more reliable RF transmission ideal for speech applications.

Low audio latency and high quality sound

MODE2 provides higher quality sound with a 96kHz sampling rate and very low audio latency of 1.5 msec**.

More reliable RF transmissions expands the operation range

MODE3 operation optimized for reliable transmission by preventing drop out by interference with additional error correction

Compatibility with DWX series

MODE1 operation provides the same high quality, reliability and audio latency as the previous DWX series version.

Smartphone control*

Wireless Studio Mobile software gives users remote control of the DWX N series system via a smartphone.

Notes

* Wireless Studio Mobile supported OS: iOS Ver.8.0 or later and Android Ver.4.1 or later. Operation is not guaranteed on all smartphones.

**Analog out, 2.5 msec for digital out

Wide frequency coverage with choice of channels available

The extra wide switching bandwidth covers a wide area, with a wide choice of channels available across multiple models - please refer to product specifications for more information.

UC14: 470.125 MHz to 541.875 MHz (UHF-TV channels 14 to 25)

UC30: 566.125 MHz to 607.875 MHz and 614.125 MHz to 637.875 MHz (UHF-TV channels 30 - 36 and 38 - 41) (not available in Brazil)

UC42: 638.125 MHz to 697.875 MHz (UHF-TV channels 42 - 51)

For customers in North America

The DWT-B01N/30 and DWT-B01N/42 models operate in portions of the 617–652 MHz or 663–698 MHz frequencies. As of 2017, these frequencies are being transitioned by the Federal Communications Commission (FCC) to the 600 MHz service to meet increasing demand for wireless broadband services. Users of these models must cease operating on these frequencies no later than July 13, 2020. In addition, users may be required to cease operations before that date if their operations could cause harmful interference to a 600 MHz service licensee's wireless operations on these frequencies. For more information, contact the FCC.

For customers in Canada, please consult ISED's Spectrum Advisory Bulletin for recent information related to the 600 MHz band transition.

Features

Three codec modes for more reliable RF transmissions and higher quality sound

The Sony codec has been improved to provide three codec modes optimized for a wider variety of applications. MODE1 provides compatibility with DWX series applications, with the same audio latency of 3.4 msec. MODE2 provides higher quality sound with a 96kHz sampling rate A/D converter and very low audio latency of 1.5 msec**. MODE3 provides more reliable RF transmission with an audio latency of 4.0 msec***

Superb quality wireless transmission and reception

The digital wireless microphone system transmits and receives high-quality 24-bit digital audio in a specific frequency bandwidth that meets the Wireless Communication Regulations of each country. Utilizing the Sony original codec based on Sony's years of experience in engineering audio products, the system delivers a wide dynamic range of more than 106 dB, a wide frequency response of 20 Hz to 22kHz, and an excellent transient response.

Stable and secure transmission and reception

Incorporating the improved digital modulator, the digital wireless microphone system allows highly stable wireless transmission that is extremely tolerant to unwanted interference. In addition, the system transmits and receives digitally modulated and encrypted data to minimize the risk of interception, providing highly secure transmission and reception

Simultaneous multi-channel operation

The digital wireless microphone system allows for large-scale multi-channel operations. Thanks to the digital modulator, the system realizes an intermodulation-free, equally spaced channel allocation. The digital wireless transmission technology used in this system enables a significant increase in the number of simultaneous

operations in comparison with current analog wireless systems. For example, up to 16 channels of simultaneous operation is possible in an 8-MHz operating band.

Low noise head amplifier

Low noise head amplifier achieves -128dBu noise floor.

Flexible audio input control

48dB at 3dB steps audio attenuation supported. Line / Microphone input supported. Transmitter audio attenuation can be controlled from receiver side using Sony wireless remote control system.

Flexible battery options

The DWT-B01N is able to accept a variety of AA type battery, such as Alkaline, Lithium, NiMH etc.

Selectable output power

Output power selectable between 1/10/50 mW. Chose the minimum power necessary for a venue, lengthening battery life, and reducing the already low possibility of interference. Allows the microphone to work effectively in a very wide range of venues.

High quality OLED display

A variety of information is obtained at a glance from the high quality OLED display panel, such as the reception channel, Audio and RF signal status, user name, user group, Lock etc.

Wireless remote control

Remote control of transmitter functions from the receiver can be achieved using the Cross Remote™ function and RMU-01 remote control unit

Smartphone control using Wireless Studio Mobile software

The DWX N series works with Sony control software Wireless Studio 4.2 or later for PC and Wireless Studio Mobile for smartphones* to give users flexible control of the system.

Notes

* Wireless Studio Mobile supported OS: iOS Ver.8.0 or later and Android Ver.4.1 or later.. Operation is not guaranteed on all smartphones.

**Analog out. 2.5 msec for digital out.

***Analog out. 4.9 msec for digital out

Specifications

| Specifications | |
|--------------------------|--|
| Wireless Interface | WiDIF-HP |
| Oscillator Type | Crystal-controlled PLL Synthesizer |
| Antenna Type | λ/4 flexible wire |
| Type of Emission | G1E or G1D |
| Carrier Frequencies - UC | 14UC: 470.125 MHz to 541.875 MHz (UHF-TV channels 14 to 25) 30A UC: 566.125 MHz to 607.875 MHz (UHF-TV channels 30 to 36), 25 kHz steps |

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|-----------------------------------|--|
| | 42LA: 638.125 MHz to 697.875 MHz (UHF-TV channels 42 to 51), 25 kHz steps (not available in the US or Canada) |
| Carrier Frequencies - CE7 | CE21: 470.025 MHz to 542.000 MHz (TV-21 to TV-29 channels) 25 kHz steps CE33: 566.025 MHz to 630.000 MHz (TV-33 to TV-40 channels), 25 kHz steps CE42: 638.025 MHz to 710.000 MHz (TV-42 to TV-50 channels), 25 kHz steps |
| Carrier Frequencies - J | WL: 470.150 MHz to 542.000 MHz (TV-13 to TV-24 channels), 25 kHz steps WM: 566.025 MHz to 638.000 MHz (TV-29 to TV-40 channels), 25 kHz steps WH: 638.025 MHz to 713.850 MHz (TV-41 to TV-52 and 53 channels), 25 kHz steps G: 1240.150 MHz to 1251.825 MHz, 1253.175 MHz to 1259.850 MHz, 25 kHz steps |
| RF Power | 1 mW/10 mW/50 mW (e.r.p) selectable |
| Input Connector | Sony 4-pin (SMC9-4S) (female) |
| Reference Input Level | MIC: -60 dBV (-58 dBu), 1 kHz (at 0-dB attenuator level) / LINE: +4 dBu, 1 kHz |
| Maximum Input Level | MIC: -22 dBu (with 0 dB attenuator), LINE: +24 dBu |
| Audio Attenuator Adjustment Range | 0 to 48 dB (3 dB steps, MIC input mode only) |
| Frequency Response | Transmission: 20Hz to 22kHz (typical) |
| Dynamic Range | 106 dB 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: 1.5 msec (total: 3.4msec) /MODE2: 1.0 msec (total: 1.5msec)/MODE3: 2.1 msec (total 4.0msec) |
| Wireless Remote Control | Cross Remote (2.4- GHz IEEE802.15.4 compliant) |
| Display | OLED |
| Power Requirements | DC 3.0 V (with two AA-size alkaline (LR6) batteries) |
| Battery Operating Time | Approx. 5 hours with Sony's AA-size alkaline (LR6) batteries at 25°C(77°F) at 10-mW output (with the wireless remote control function off and DIMMER MODE set to AUTO OFF) |
| Operating Temperature | 0°C to 50°C / 32°F to 122°F |
| Storage/Transport | -20°C to +60°C / -4°F to +140°F |

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|----------------------|--|
| Temperature | |
| Dimensions | 63 x 17 x 73 mm (excluding the antennas) (W x H x D) |
| Mass | Approx. 125 g (including batteries) |
| Supplied Accessories | Spare battery case (1) Soft case (1) Microphone cable (4-pin to XLRtype 3-pin) (1) USB adapter cable (1) Carrying case (1) Scribble sheet (1) CD-ROM (1) |

Related products



DWR-S02D
Digital wireless receiver



DWR-R02DN
DWX N series digital wireless receiver

Gallery

