

DWT-B30

DWX Gen3 digital wireless
bodypack transmitter



Overview

This high performance wireless bodypack transmitter is an ideal choice for live sound applications including theatre and concerts, as well as studio based TV production and ENG/EFP.

The DWT-B30 is part of Sony's third generation DWX series digital wireless microphone system that combines advanced digital technologies, analogue microphone expertise, wireless audio transmission technologies and an enviable reputation for stability.

Sophisticated audio processing, encryption and RF transmission technologies assure secure, stable digital transmission and reception of very high quality audio with low latency.

The transmitter operates with a wide bandwidth up to 148 MHz (depending on region), and the high density 375 kHz interval channel plan enables simultaneous multi-channel operation, increasing the probability of finding unoccupied frequencies in congested metropolitan areas.

The DWT-B30 is compatible with Sony Wireless Studio control software for PC (Ver 5.22 or later), allowing flexible remote operation. Control of up to 82 transmitters is possible using the Cross Remote™ function combined with the RMU-01 remote control unit (available separately).

Features

Superb audio quality wireless transmission and reception

High quality 24-bit digital audio is transmitted and received within a specific frequency bandwidth meeting Wireless Communication Regulations for each country. Using Sony's original codec design based on years of audio engineering expertise, the DWX system delivers a wide dynamic range of more than 106 dB, wide frequency response of 20 Hz to 22 kHz, and excellent transient response.

Cross Remote™ monitor/control functions

Input attenuation, RF frequency selection, RF power output, Audio low-cut frequency and transmitter Sleep Mode can all be controlled remotely from the DWR-S03D slot-in wireless receiver.

Wide bandwidth

Up to 148 MHz bandwidth (depending on region) enables flexible operation with wide channel selection.

High density multi-channel operation

Ideal for large-scale productions, the DWT-B30 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.

Four codec modes for wide range of applications

MODE1: Compatible with first generation DWX-series devices.

MODE2: Prioritises short latency times while maintaining transmission stability and high audio quality.

MODE3: Additional signal processing suppresses noise caused by unexpected pulse interference.

MODE4: Prioritises audio quality while maintaining transmission stability and low delay time.

Low audio latency and high quality sound

Ideal for live applications, the system achieves an extremely low audio latency time of 1.2 msec, with a 96kHz sampling rate for

very high quality sound (codec MODE2, with DWT-B03R or DWT-B30).

Low noise head amplifier

Low noise head amplifier achieves -128 dBu noise floor.

Flexible audio input control

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

Stable, securely encrypted transmission and reception

The system's improved digital modulator ensures highly stable wireless transmission that is extremely tolerant to unwanted interference. In addition, data transmission and reception with AES 256-bit encryption minimises the risk of interception to assure highly secure transmission and reception.

Selectable RF output power

RF output power level is selectable (2 mW/10 mW/25 mW) to prioritise stable multi-channel or long distance operation.

User settings memory

User settings can be easily stored and loaded.

USB for power supply

A USB DC power source can be used for long-term operation or as an emergency power supply.

Easy-to-read dot-matrix OLED display

The quick-response OLED (Organic Light-Emitting Diode) display ensures clear and accurate real-time display of operational information.

Flexible battery options and long battery life

The DWT-B30 can be operated with a variety of AA-type batteries including alkaline, lithium or NiMH. Alkaline batteries allow up to 6.5 hours operation.

Specifications

GENERAL

Oscillator Type	Crystal-controlled PLL synthesizer
Antenna Type	1/4 λ wavelength wire antenna
Carrier Frequencies	UC7 : 470.125 MHz to 607.875 MHz, 614.125 MHz to 615.875 MHz (UHF-TV channels 14 to 36, 38) L/CE7 : 470.025 MHz to 614.000 MHz (UHF-TV channels 21 to 38) H/CE7 : 566.025 MHz to 714.000 MHz (UHF-TV channels 33 to 51) L/J : 470.150 MHz to 614.000 MHz (UHF-TV channels 13 to 36) MH/J : 566.025 MHz to 713.850 MHz (UHF-TV channels 29 to 52) G/J: 1240.150 MHz to 1251.825 MHz, 1253.175 MHz to 1259.850 MHz
RF Output Power	UC7, CE7, L/J, MH/J, G/J: 2 mW/10 mW/25 mW (e.r.p) selectable
	UC7, J: Sony 4-pin (SMC9-4S) (female)

Input Connector	CE7: Small 3-pin connector with lock
Reference Audio Input Level	MIC: -60 dBV (-58 dBu), 1 kHz (at 0-dB attenuator level) / LINE: +4 dBu, 1 kHz
Maximum Audio 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	20Hz to 22kHz (typical)
Dynamic Range	106 dB typical (A-weighted, T.H.D=1%)
Distortion (T.H.D)	MODE1, MODE2, MODE4: 0.03% or less MODE3: 0.3% or less
Audio Delay	MODE1: 0.8 msec/ MODE2: 0.7 msec/ MODE3: 1.8 msec/ MODE4: 0.7 msec
Wireless Remote Control	Cross Remote (2.4-GHz IEEE802.15.4 compliant)
Display	OLED
	DC 3.0 V (two LR6/AA size alkaline)

Power Requirements	batteries) DC 5.0 V (supplied from USB connector)
Battery Life	Approx. 6.5 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 Temperature	-20°C to +60°C / -4°F to +140°F
Dimensions	Approx. 63 x 17 x 73 mm (2 1/2 x 11/16 x 2 7/8 in) (W x H x D) (excluding the antenna)
Mass	Approx. 125 g (including batteries)

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
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your specific needs.

Related products



DWR-S03D

DWX Gen3 2-channel digital wireless slot-in receiver



DWR-R03D

DWX Series 2-channel digital wireless receiver



DWR-R02DN

DWX series digital wireless receiver



DWR-S02DN

Digital wireless receiver

Gallery

