SONY

Preliminary

UHF Synthesized Wireless Microphone System

UWP-C3

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OUTLINE

The new Sony UWP-C3 package is the latest addition to the UWP Series UHF Synthesized Wireless Microphone Systems. The UWP-C3 is a turnkey package, consisting of a newly developed plug-on transmitter to convert a wired microphone into a wireless microphone, a portable tuner, and accessories required for the use of these components.
The UWP Series incorporates Sony field-proven wireless technologies including a UHF PLL-synthesized system, space-diversity reception, and a tone squelch function – enabling stable and virtually noise-free transmission and reception.
The new plug-on transmitter is designed to be extremely durable and is well balanced for use with the Sony F-112 – a new dynamic microphone suited to cost-effective newsgathering applications.
Whether used in a low-cost ENG or EFP system, the UWP-C3 package delivers the convenience of uncompromised wireless microphone operation at a very affordable price.

FEATURES

PLL-synthesized System

The UWP-C3 achieves stable transmission and reception by using a UHF PLL (Phase Locked Loop) frequency synthesized system, which provides accurate carrier signal frequencies. This system is used in both the transmitters and tuners, so that a stable carrier is generated at the transmitter, and accurately tuned in at the tuner. This PLL-controlled system provides highly stable, user-selectable frequencies in increments of 125 kHz.

Space-diversity Reception System

Typically, wireless microphone transmission systems can be subject to reception interruptions (signal dropout), but the UWP-C3 reduces this to a minimum. By utilizing a space-diversity reception system, it achieves stable reception by using dual-antenna inputs/reception circuits. These receive signals over two different paths and automatically select the stronger RF signal for output.

Tone Squelch Circuitry

To avoid picking up carrier signals transmitted from other systems, the transmitter of the UWP-C3 transmits a 32 kHz pilot-tone signal along with the audio signal. The tuner's squelch circuit recognizes this tone signal, and outputs the audio signal only when this tone signal is received. This function prevents the output of unwanted signals and noise from other signal transmissions in the air, as well as the RF noise and popping noise that occur when the transmitter is powered on or off.

Pre-programmed Operating Frequencies

The UWP-C3 incorporates pre-programmed frequencies that meet the wireless-communication regulations of each country.

Simultaneous Multi-channel Operation

The UWP-C3 allows simultaneous operation of up to 16 wireless microphones. Optimum combinations of practically tested, interference-free frequencies are stored in the tuner. By using the pre-programmed frequency groups, users can easily choose interference-free frequencies for the transmitters and tuners, simplifying the task of system setup.

Plug-on Transmitter

- Converts a wired microphone to a wireless microphone via an XLR connector
- Compact and lightweight body provides balanced handling
- Attenuator function allows adjustment of the microphone-input level
- Durable connecting mechanism with a microphone for dependable operation
- 50 mW RF power output for stable and long-distance transmission
- MIC/LINE input level switchable
- A backlight LCD provides extensive information, including the operating channel number and frequency in MHz, attenuator level, audio-input status, RF-output status, transmitter-battery status, and accumulated operating time
- An LED indicator for audio-input status
- Approximately six hours of continuous operation with two AA-size batteries

Portable Tuner

- Angle-adjustable antennas to help eliminate signal dropout. This feature additionally provides mounting-position flexibility when the portable tuner is mounted on a camcorder.
- An LCD screen provides extensive information, including the operating channel number and its frequency in MHz, audio-output status, RF-input level, tuner-battery status, and accumulated operating time
- A green LED indicator illuminates when RF-input signals are appropriately received
- Approximately six hours of continuous operation with two AA-size batteries
- Stereo mini jack with monitor-volume control
- Supplied shoe-mount adaptor enables easy mounting on Sony camcorders. Two output cables and a belt clip are provided.

SPECIFICATIONS

Plug-on Transmitter	
Oscillator	Crystal-controlled PLL synthesizer
Type of emission	F3E
Carrier frequencies	758 MHz to 782 MHz (TV channels 62 to 65) or 782 MHz to 806 MHz (TV channels 66 to 69) Users may choose from 188 frequencies on each model
RF power output	50 mW
Pilot-tone signal	32 kHz
Frequency response	50 Hz to 18 kHz (typical)
Reference deviation	±10 kHz (-60 dBV, 1kHz input)
Signal-to-noise ratio	60 dB or more (±10 kHz deviation at 1 kHz modulation, A-weighted)
Audio attenuator adjustment range	0 to 21 dB (in 3 dB steps)
Audio input level	MIC input position: -60 dBV (at 0 dB attenuator level), LINE input position: +4 dBu
Audio input connector	XLR-3-11C type
Indicators	LCD: operating channel number/frequency, attenuator level, audio-input status, RF-output status, transmitter battery status, and accumulated operating time LED: audio-input status
Power requirements	DC 3.0 V (two AA-size batteries)
Battery life	Approx. 6 hours with Sony AA-size batteries at 25 °C (77 °F)
Dimensions (W x H x D)	44 x 98 x 35 mm (1 3/4 x 3 7/8 x 1 7/16 inches)
Mass	Approx. 185 g (6 oz) including batteries

Portable Tuner	
Oscillator	Crystal-controlled PLL synthesizer
Type of reception	Space diversity
Receiving frequencies	758 MH to 782 MHz (TV channels 62 to 65) or 782 MHz to 806 MHz (TV channels 66 to 69) Users may choose from 188 frequencies on each model
Antenna	1/4 λ wave length wire
Pilot-tone signal	32 kHz
RF squelch level	15 dBμ
Frequency response	50 Hz to 18 kHz (typical)
Reference deviation	±5 kHz (at 1kHz modulation)
Signal-to-noise ratio	60 dB or more (±5 kHz deviation at 1 kHz modulation, A-weighted)
Audio output connector	3.5 mm (5/32 inch) dia., 3-pole mini jack, unbalanced
Audio output level	-58 dBm
Monitor output connector	3.5 mm (5/32 inch) dia., stereo mini jack
Monitor output level	5 mW (at 16 Ω)
Indicators	**LCD**: operating channel number/frequency, audio-output status, RF-input level, tuner-battery status, and accumulated operating time **LED**: RF-input status
Power requirements	DC 3.0 V (two AA-size batteries)
Battery life	Approx. 6 hours with Sony AA-size batteries at 25 °C (77 °F)
Dimensions (W x H x D)	63 x 100 x 30 mm (2 1/2 x 4 x 1 3/16 inches)
Mass	Approx. 180 g (6 oz) including batteries
Supplied accessories	Shoe-mount adaptor (x1), belt clip (x1), output cable (x2, 3-pole mini-plug/XLR-type, 3-pole mini-plug/stereo mini-plug), operating instructions (x1)

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Use of Sony wireless devices in the United States of America is regulated by the Federal Communications Commission as described in Parts 15 and 74 of the FCC regulations.
Users authorized thereby are required to obtain an appropriate license.

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