

# SONY



## UWP-D Series

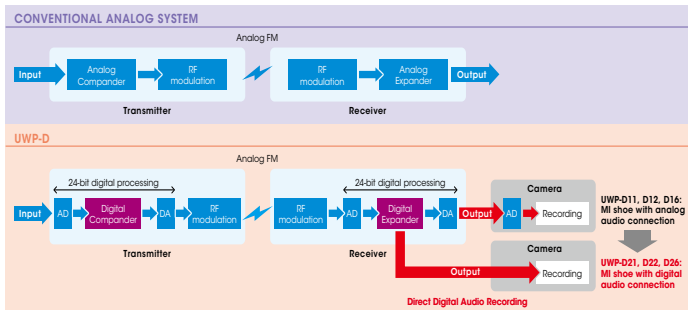
### UWP-D21, UWP-D22, UWP-D26

UHF Wireless Microphone Package

#### Sony's Digital Audio Processing

Sound quality is the most important issue in wireless transmission. Conventional analog systems make use of compressors to provide the required dynamic range. However, while compressor systems have improved over time, their inherent problems with sound quality and transient response performance have yet to be completely resolved.

Sony's newly developed Digital Audio Processing system, which uses DSP (digital signal processing) for digital compressing, realizes high sound quality. This technology improves transient response performance and realizes high-quality sound.



DSP optimizes a time-constant range between the transmitter and receiver. It provides superb transient response performance. While analog compressing systems cannot reproduce sounds such as a bell or tee shot with precision, Sony's Digital Audio Processing technology can reproduce them very accurately.

#### Dynamic Response



DSP also can correct characteristics of frequency response in the transmission process for precise reproduction of original sounds.

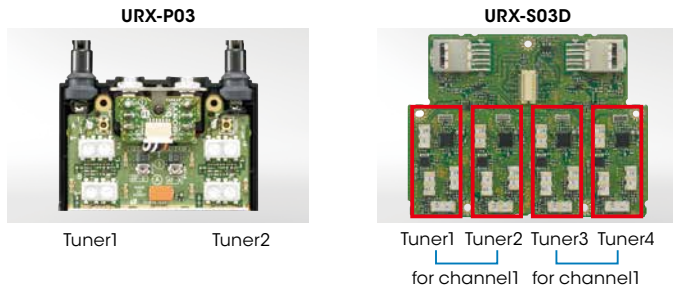
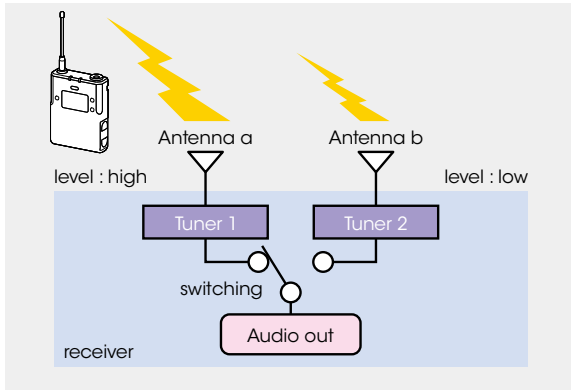
Moreover, URX-P40 supports Multi Interface Shoe™ (MI shoe) with digital audio interface. It enables direct digital audio recording and delivers high sound quality with low noise by skipping the D/A and A/D process in combination with the new SMAD-P5 MI shoe adaptor and Sony's XDCAM camcorders.\*1

\*1 For details on cameras that support this function, visit the Sony's website.

## True Diversity Reception System For Stable RF Transmission

Typically, wireless microphone transmission systems are subject to interruptions in reception (RF signal dropout), but the UWP-D Series reduces this to a minimum. Utilizing a true diversity reception system\*, it achieves highly stable reception because of its two receiving antennas, each with RF circuits. RF signals from the two antennas are compared and the stronger signal is automatically selected for output. The angle of the antennas on the portable receiver can also be adjusted, which helps to further eliminate signal dropout.

\*2 URX-P03D: True Diversity for 1-channel use / Dynamic Switching Diversity for 2-channel use



UTX-B40 UTX-P40 UTX-M40 URX-P40

## NFC SYNC Function For Quick And Easy Secure Channel Setting



As one-person operation by videographers increases in popularity, simple and quick channel setting for reliable RF transmission is becoming crucial. Delivering enhanced usability, the unique NFC SYNC feature is designed for easy and fast frequency setting. The operator simply holds the NFC SYNC button on the receiver for a few seconds and the system automatically scans the appropriate frequency. Thereafter, the user just needs to touch the receiver with the transmitter to switch the channel, achieving optimum speed and efficiency.

UTX-B40 UTX-P40 UTX-M40 URX-P40

## Low Profile And Light Weight

Reduced size and a light weight allow the high levels of mobility required for a wide range of applications and assist with versatile operation. The UTX-B40 bodypack transmitter has been reduced in size by approximately 20% compared to the previous model; the UTX-P40 plug-on transmitter has been reduced in size by approximately 20% compared to the previous model; and the length of the URX-P40 receiver with the SMAD-P5 MI shoe adaptor has been drastically shortened, making it easy to use with compact camcorders and smaller digital interchangeable lens cameras.



UTX-B40 UTX-P40 UTX-M40 URX-P40

## Auto Gain Mode Volume Control

This sets the gain moderately high, and uses a limiter to help prevent distortion. Make this mode your first choice when the volume of the voice is unknown.

UTX-B40 UTX-P40 UTX-M40 URX-P40

## +15 dB Gain Volume Boost Mode For Off-Mic Audio

This boosts the gain by 15 dB for when the microphone is not near the person's mouth and the audio level is insufficient. It's convenient for interviews.

UTX-B40 UTX-P40 UTX-M40 URX-P40

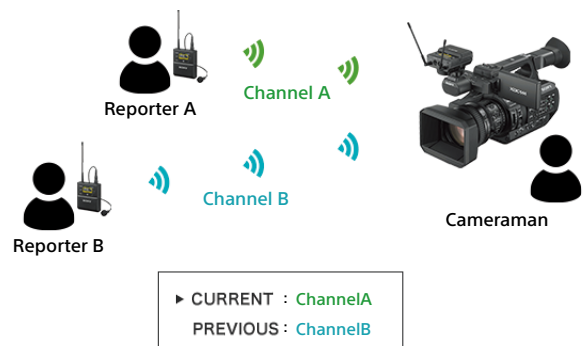
## Line Input Available

Switchable MIC and LINE input levels and adjustable attenuators allow you to select appropriate audio input levels.

UTX-B40 UTX-P40 UTX-M40 URX-P40

## Channel Memory Function For Fast Switching Between Two Receiver Frequencies

The channel memory function enables quick switching between the previously set channel and the current channel. This is useful when using one tuner in combination with two transmitters.



UTX-B40

UTX-P40

UTX-M40

URX-P40

## Multi-Interface Shoe-Mount Adaptor With Digital Audio Interface (option)\*3



### Transmitter Frequency Sent to Receiver

Transmitter settings such as the frequency and compander mode on the tuner are transmitted via NFC communication. This is useful when using multiple tuners in combination with one transmitter.

UTX-B40

UTX-P40

UTX-M40

URX-P40

### +48V Power Supply

This function enables direct connection of dynamic microphones and condenser microphones requiring DC 48 V powering.

The wireless receiver of the UWP-D Series can be attached to camcorders and interchangeable-lens cameras that have an MI (multi-interface) shoe using the MI shoe adaptor. This eliminates the need for connecting cables. By using the MI shoe adaptor, audio signals can be transmitted from the wireless receiver to a camera. The wireless receiver can get power from the camera, and the camera can control power ON/OFF, unifying power management.

\*3 For details on cameras that support this function, visit the Sony's website.

## SPECIFICATIONS

	UTX-B40 Bodypack Transmitter	UTX-M40 Handheld Transmitter	UTX-P40 Plug-on Transmitter	UTX-B03HR Bodypack Transmitter
Oscillator Type	Crystal-controlled PLL synthesizer			
Antenna Type	1/4λ wavelength wire antenna		-	1/4λ wave length wire
Carrier Frequencies	14UC : 470.125 MHz to 541.875 MHz(UHF-TV channels 14 to 25)			
	25UC : 536.125 MHz to 607.875 MHz (UHF-TV channels 25 to 36)			
	42LA : 638.125 MHz to 697.875 MHz(UHF-TV channels 42 to 51)			
	90U : 941.625 MHz to 951.875 MHz, 953.000 MHz to 956.125 MHz, and 956.625 MHz to 959.625 MHz			
	21CE : 470.025 MHz to 542.000 MHz(UHF-TV channels 21 to 29)			
	33CE : 566.025 MHz to 630.000 MHz(UHF-TV channels 33 to 40)			
	42CE : 638.025 MHz to 694.000 MHz (UHF-TV channels 42 to 48)			
	38CN : 710.025 MHz to 782.000 MHz(UHF-TV channels 38 to 46)			
	E : 794.125 MHz to 805.875 MHz			
BJ : 806.125 MHz to 809.750 MHz				
KR : 925.125 MHz to 937.500 MHz				
RF Output Power	30 mW/5 mW selectable (UC, U, CE, LA, CN models) 10 mW/2 mW selectable (J, E, KR models)		40 mW/5 mW selectable (UC, U, LA models) 30 mW/5 mW selectable (CE, CN models) 10 mW/2 mW selectable (J, E, KR models)	30 mW/5 mW selectable (UC, U, CE, LA, CN models) 10 mW/2 mW selectable (J, E, KR models)
Capsule Type	Electret condenser	Dynamic	-	-
Directivity	Omni-directional	Uni-directional	-	-
Input Connector	3.5mm diameter 3-pole locking mini jack	-	XLR-3-11C type (female)	Sony SMC9-4S (female)
Reference Audio Input Level	-60 dBV (MIC input, GAIN MODE set to NORMAL, 0 dB attenuation) +4 dBu (LINE input)	-55 dBV (GAIN MODE set to NORMAL, 0 dB attenuation)	-60 dBV (MIC input, GAIN MODE set to NORMAL, 0 dB attenuation)	MIC: -60 dBV (at 0-dB attenuator level) / LINE: +4 dBu
Maximum Audio Input Level	-	151 dB SPL (21 dB attenuation, using supplied microphone unit)	-	-
Audio Attenuator Adjustment Range	0 dB to 27 dB (3dB steps)	0 dB to 21 dB (3 dB steps)	0 dB to 48 dB (3 dB steps)	0 dB to 27 dB (3 dB steps)
Frequency Response	23 Hz to 18 kHz (Typical) (UC, U, CE, LA, CN, E, KR models)	70 Hz to 18 kHz (Typical) (UC, U, CE, LA, CN, E, KR models)	23 Hz to 18 kHz (Typical) (UC, U, CE, LA, CN, E, KR models)	
	40 Hz to 15 kHz (Typical) (J model)	70 Hz to 15 kHz (Typical) (J model)	40 Hz to 15 kHz (Typical) (J model)	
Signal-to-Noise Ratio	60 dB (-60 dBV, 1 kHz sine wave input) 102 dB (GAIN MODE set to AUTO GAIN, max deviation, A-weighted) 96 dB (GAIN MODE set to NORMAL, max deviation, A-weighted)			60 dB (-60 dBV, 1 kHz sine wave input) 96 dB (max deviation, A-weighted)
Distortion	0.9% or less (-60 dBV, 1 kHz input)			
Audio Delay	Approx. 0.35 ms			
Tone Signal Frequency	In UWP-D compander mode: 32.382 kHz / In UWP compander mode: 32 kHz / In WL800 compander mode: 32.768 kHz			
Display	OLED			LCD
Power Requirements	DC 3.0 V (two LR6/AA size alkaline batteries) DC 5.0 V (supplied from USB Type-C connector)			DC 3.0 V (with two AA-size alkaline (LR6) batteries) DC 5.0 V (via USB micro-B)
Battery Life (measured with two Sony LR6/AA size alkaline batteries at 25 °C (77 °F), DISPLAY MODE set to AUTO OFF)	Approx. eight hours with output power of 30 mW (UC, U, CE, LA, CN models)		<b>During +48V OFF:</b> Approx. seven hours with output power of 40 mW (UC, U, LA models) Approx. eight hours with output power of 30 mW (CE, CN models) Approx. 10 hours with output power of 10 mW (J, E, KR models)	
	Approx. 10 hours with output power of 10 mW (J, E, KR models)		<b>During +48V ON and ECM-673 connection:</b> Approx. six hours with output power of 40 mW (UC, U, LA models) Approx. six hours with output power of 30 mW (CE, CN models) Approx. seven hours with output power of 10 mW (J, E, KR models)	
Operating Temperature	0 °C to 50 °C (32 °F to 122 °F)			
Storage/Transport Temperature	-20 °C to +55 °C (-4 °F to +131 °F)			
Dimensions	63 × 73 × 19 mm (2 1/2 × 2 7/8 × 3/4 in.) (W / H / D) (excluding antenna)	ø48 × 258 mm (1 15/16 × 10 1/4 in.) (diameter / length)	38 × 98 × 38 mm (1 1/2 × 3 7/8 × 1 1/2 in.) (W / H / D) (including the audio input connector)	63 × 92.6 × 20 mm (2 1/2 × 3 3/4 × 13/16 in.) (excluding the antenna) (W × H × D)
Mass	Approx. 83 g (2.9 oz) (excluding batteries)	Approx. 255 g (9.0 oz) (excluding batteries)	Approx. 139 g (4.9 oz) (excluding batteries)	Approx. 105 g (3.7 oz.) (excluding batteries)

## SPECIFICATIONS

	URX-P40 Portable Receiver	URX-P03D 2-channel Portable Receiver	URX-S03D Slot-in Portable Receiver
<b>Oscillator Type</b>	Crystal-controlled PLL synthesizer		
<b>Reception Type</b>	True diversity method	Space diversity*1	True diversity
<b>Antenna Type</b>	1/4 λ wavelength wire antenna (angle-adjustable)		Detachable
<b>Carrier Frequencies</b>	14UC : 470.125 MHz to 541.875 MHz(UHF-TV channels 14 to 25)		
	25UC : 536.125 MHz to 607.875 MHz (UHF-TV channels 25-36)		
	42LA : 638.125 MHz to 697.875 MHz(UHF-TV channels 42-51)		
	90U : 941.625 MHz to 951.875 MHz, 953.000 MHz to 956.125 MHz, and 956.625 MHz to 959.625 MHz		
	21CE : 470.025 MHz to 542.000 MHz(UHF-TV channels 21-29)		
	33CE : 566.025 MHz to 630.000 MHz(UHF-TV channels 33-40)		
	42CE : 638.025 MHz to 694.000 MHz (UHF-TV channels 42-48)		
	38CN : 710.025 MHz to 782.000 MHz(UHF-TV channels 38-46)		
	E : 794.125 MHz to 805.875 MHz		
	JB : 806.125 MHz to 809.750 MHz		
KR : 925.125 MHz to 937.500 MHz			
<b>Frequency Response</b>	23 Hz to 18 kHz (Typical) (UC, U, CE, LA, CN, E, KR models)		
	40 Hz to 15 kHz (Typical) (J model)		
<b>Signal-to-Noise Ratio</b>	60 dB (1 kHz sine wave, 5 kHz modulation) 96 dB (max deviation, A-weighted)	60 dB (1 kHz sine wave, 5 kHz modulation) 96 dB (max deviation, A-weighted)	
<b>Distortion (T.H.D)</b>	0.9% or less (1 kHz sine wave, 5 kHz modulation)		
<b>Audio Delay</b>	Approx. 0.35 ms (analog output) Approx. 0.24 ms (digital output)	Approx. 0.375 ms	
<b>Analog Input</b>	-	3-pole mini jack, unbalanced	-
<b>Analog Input Level</b>	-	-50 dBV (±12dB Adjustable, 3-dB step)	-
<b>Audio Output Connector</b>	3.5mm diameter 3-pole locking mini jack, external connection	3-pole mini jack, unbalanced	D-sub 15pin, unbalanced
<b>Analog Output Level*2</b>	-60 dBV (3.5 mm diameter 3-polelocking mini jack, analog output, 0 dB audio output level) -20 dBFS (external connection, digital output, 0 dB audio output level) -50 dBFS (external connection, analog output, 0 dB audio output level)	-60 dBV (at ±5 kHz deviation)	-40 dBu (at ±5kHz deviation)
<b>Analog Audio Output Adjustment Range</b>	-12 dB to +12 dB (3-dB step)		-
<b>Headphone Output Connector</b>	3.5 mm diameter mini jack	ø3.5 mm (5/32 inch) stereo mini jack	-
<b>Headphone Output Level</b>	Max. 10mW (16-ohm)	5 mW (16-ohm)	-
<b>Tone Signal Frequency</b>	In UWP-D compander mode: 32.382 kHz / In UWP compander mode: 32 kHz / In WL800 compander mode: 32.768 kHz		
<b>Display</b>	OLED	LCD	
<b>Power Requirements</b>	DC 3.0 V (two LR6/AA size alkaline batteries) DC 5.0 V (supplied from USB Type-C connector)	DC 3.0 V (with two AA-size alkaline (LR6) batteries) DC 5.0 V (via USB micro-B connector)	DC 7.0 V
<b>Battery Life</b>	Approx. six hours (measured with two Sony LR6/AA size alkaline batteries at 25 °C (77 °F), DISPLAY MODE set to AUTO OFF)	Approx. five hours with Sony's AA-size alkaline (LR6) batteries at 25°C (77°F)	-
<b>Operating Temperature</b>	0°C to 50°C (32°F to 122°F)		
<b>Storage/ Transport Temperature</b>	-20°C to +55°C (-4°F to +131°F)		
<b>Dimensions (W x H x D)</b>	63 x 70 x 31 mm (2 1/2 x 2 7/8 x 1 1/4 in.) (excluding antenna)	63 x 82 x 28.4 mm (2 1/2 x 3 1/4 x 1 1/8 inches) (excluding the antennas)	88 x 116.2 x 31.2mm (3 1/2 x 4 5/8 x 1 1/4 in.) (excluding the antennas)
<b>Mass</b>	Approx. 131 g (4.6 oz) (excluding batteries)	Approx. 210 g (7.4 oz) (including batteries)	Approx. 303g (10.7 oz.) (with supplied antennas attached)

\*1 True Diversity for 1-channel use / Dynamic Switching Diversity for 2-channel use.

\*2 0dBμV= 1μV EMF, 0dBu=0.775Vrms, 0dBV=1V, 0dB SPL=2x10<sup>-5</sup> Pa.

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