SONY



Pro-Audio General Catalogue

The history of the Sony microphone began in 1950 when, for the first time, Sony microphones and tape recorders were introduced to the world. Now, more than 60 years later, Sony is synonymous with the production and distribution of high quality professional audio products for news gathering, video production, live events and broadcast.

Sony innovations continued with the development of electret condenser microphones in the 1960s, appealing to audiophiles who needed condenser performance with the simplicity of a dynamic mic. This was followed by the introduction of the Sony Lavalier mic in the 1970s.

During the 1960s, the first wireless mic was also developed, offering systems for field and studio applications and offering the ideal combination of performance, reliability and versatility. From the 1970s, Sony developed the first Worldwide diversity system. And in the 1980s, we expanded into UHF systems, Diversity ENG camera receivers, wireless handheld mics and systems for music reproduction. More recently, Dual Diversity & rack mount tuners plus UHF diversity wireless systems were introduced to the market and, coming out of our work with digital audio on CD & DAT formats from the 1980s, the Oxford Console and the DMX-R100 followed in the 1990s.

Our fully Digital Wireless DWX system provides the best sound quality and stability of any digital wireless on the market, providing high end audio solutions in a range of applications from ENG to live music and fixed installations in studios and OBs, providing Sony audio solutions available for everyone.

With our UWP-D wireless microphone series Sony also provides a digital audio processing system for ENG use with portable receiver, providing the user with full channel access and up to 72MHz bandwidth, the perfect audio solution for shooting on the go.



the power to move us

Experience superb performance, long-lasting reliability and seamless system integration with Sony superior digital and analogue professional audio

> With over 60 years' experience of continually redefining the creative and technical possibilities for live and recorded sound, our professional audio solutions range from leading-edge digital and analogue wireless systems to shotgun microphones, headphones and more. In fact, everything you need to create.

share and enjoy perfect sound.

Wireless Microphone

World-leading professional digital wireless microphone systems offering superb quality 24-bit AES/EBU digital audio for the highest quality applications.

Ground-breaking entry-level analogue wireless microphone packages with a range of robust, all-metal transmitters and portable and fixed receivers for professional and semi-professional applications.

Affordable high-quality 24-bit digital audio microphone packages with a range of robust, all-metal transmitters and portable and fixed receivers for a wide range of applications.

Wired Microphone

Professional Electret condenser microphones delivering excellent sound and noise handling performance for location and studio applications.

Professional Dynamic microphones delivering excellent sound and noise handling performance for location and studio applications.

Mixer/Recorder/Headphone

Professional Mixer for location and Recorder and Headphone for general purpose applications

contents

DWX Series

UWP-D/UWP Series 16

DWZ Series

ECM Series

F Series

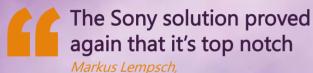
53

30

41

56

SRP/DMX/PCM/MDR Series



Markus Lempsch, Ryan Leslie European Stage Manager



High-quality sound with
Sony's original codec WiDIF-HP
High RF stability and minimized interference
RF remote control

The digital wireless system for the digital moment



Sony's New DWX™ Boosts Sound Quality and Operational Convenience

With its new, cutting-edge digital wireless microphone system, Sony combines advanced digital technologies, world-leading analog microphone expertise, wireless audio transmission technologies, and an enviable reputation for stability.

By incorporating the very latest digital technologies, the DWX is set to revolutionize live stage performances...in much the same way as the music recording industry changed when Sony applied advanced digital technologies to recorders, mixing consoles, and signal processing equipment. The DWX ensures superb sound quality, convenient multi-channel operation, and innovative workflow without compromise.

Once again, Sony opens new doors to the digital world.



Technologies

WIDIF-HP

Sony's Original Wireless Interface, WiDIF™-HP

A new high-profile format for the digital audio interface on UHF - WiDIF-HP - has been developed for the DWX.

Superb Quality Wireless Transmission

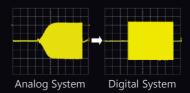
WiDIF-HP transmits high-quality 24-bit/48-kHz sampling digital audio signals in real time, with a wide dynamic range of more than 106 dB, a wide frequency response of 20 Hz to 22 kHz, and a low system latency of 3.4 ms*. Additionally, there is no compander, a device commonly used in conventional analog wireless systems which can degrade audio performance.

Greater Flexibility with Multi-channel Operation

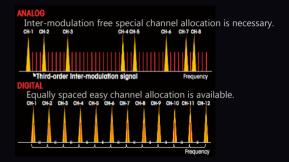
WiDIF-HP enables large-scale multi-channel operation. Thanks to a digital modulator, WiDIF-HP realizes inter-modulation-free, equally spaced channel allocation, which enables a significant increase in the number of simultaneous digital wireless systems in comparison with current analog wireless systems. For example, up to 12 channels of simultaneous operation are supported using a 6-MHz bandwidth TV channel in the USA. WiDIF-HP supports approximately 50 percent more systems simultaneously than current analog wireless systems. This format allows the use of existing WL-800 Series analog wireless channel plans. In this configuration, the DWX reliably operates along with WL-800 Series analog wireless systems, with no risk of analog/digital wireless system interference.



Dynamic Response



■ More Simultaneous Multi-channel Operations



Technologies

Stable and Secure Transmission

WiDIF-HP allows highly stable wireless transmission without audio degradation - transmission that is both secure and extremely tolerant to interference waves. The format is digitally modulated and encrypted to minimize any risk of interception, providing highly secure transmission. For confidential communication, WiDIF-HP provides two communication modes:

Secure key mode: Wireless communication between a transmitter and receiver can be established by exchanging an

encryption key that is generated by the transmitter.

Password mode: Multiple transmitters and receivers can be configured by setting all devices with the same user-designated password. In addition, password mode is for broadcast communication, enabling multiple receivers to receive

audio signals from a single transmitter.

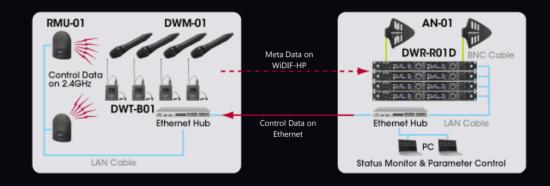
WiDIF-HP Specifications		
Sampling frequency	48 kHz	
Quantization bit length	24 bit	
Frequency response	20 Hz to 22 kHz	
Dynamic range	106 dB typical (A-weighted)	
Distortion (T.H.D)	0.03% or less	
Occupied RF bandwidth	192 kHz or less	
Modulation method	π/4 Shift QPSK	
Audio delay	3.4 ms*	

^{*} When DWM-01 and DWR-R01 are used in combination.

XX Cross Remote

Innovative Monitor/Control Function, Cross Remote™

WiDIF-HP transmits high-quality 24-bit/48-kHz sampling digital audio signals in real time, with a wide dynamic range of more than 106 dB, a wide frequency response of 20 Hz to 22 kHz, and a low system latency of 3.4 ms*. Additionally, there is no compander, a device commonly used in conventional analog wireless systems which can degrade audio performance.



Products

Sony is renowned for innovation in digital audio. Now, all of this expertise and legendary performance is available in a digital wireless microphone system using UHF frequency range.

DWM-02

Handheld digital wireless microphone



- Superb audio quality by using 24bit/48KHz high class AD convertor
- Simultaneous multi-channel operation
- Three interchangeable heads and third party support
- Robust 31.3mm/pitch 0.1mm threading interchangeable mechanism for quick change (Shure mount, over 50 capsules from various manufacturers will work on the DWM-02)
- Remote control of transmitter functions from the receiver
- Selectable RF output power (1/10/50 mW)
- Digital low-cut filter
- Up to 72MHz bandwidth



CU-C31 Capsule Unit

- Condenser type
- Cardioid
- 60 Hz 20 kHz



CU-F31
Capsule Unit

- Dynamic type
- Super cardioid
- 60 Hz 18 kHz



CU-F32 Capsule Unit

- Dynamic type
- Wide cardioid
- 70 Hz 18 kHz



DWA-CU01NMMicrophone adapter

 Microphone adapter for 3rd party capsule



DWT-B01

Belt-pack digital wireless transmitter

- Superb audio quality by using 24bit/48KHz high class AD - convertor
- Unlimited simultaneous multi-channel operation*
- Lightweight and rugged design
- Switchable mic or line input level and adjustable attenuator
- 48V phantom power
- OLED display
- RF remote for all functions by Wireless Studio remote software
- Up to 72MHz bandwidth



ECM-77BC Lavalier Microphone



ECM-66BC Lavalier Microphone





Flat Lavalier Microphone



ECM-55BC Lavalier Microphone



DWT-P01

Plug-on digital wireless transmitter

- Superb audio quality by using 24bit/48KHz high class AD convertor
- Unlimited simultaneous multi-channel operation*
- Lightweight and rugged design
- Switchable mic or line input level and adjustable attenuator
- 48V phantom power
- OLED display
- RF remote for all functions by Wireless Studio remote software
- Up to 72MHz bandwidth

*Bandwidth of the device is limiting the number of simultaneous channels.

Products



DWR-R02D

2 channel rack-mount digital wireless receiver

- Superb quality 24-bit/48kHz sampling digital audio
- Simultaneous multi-channel operation
- Unlimited number of simultaneous channels (500KHz spacing)
- Remote control of transmitter functions from the receiver
- Full control over cross-remote via Wireless Studio software
- 1U-size rack-mountable design
- Supports a variety of output functions such as XLR and BNC for AES3 digital, and GND lift function for analogue BAL output
- Supports a variety of output functions with two AES3/EBU outputs up to 24-bit/96 kHz plus World Sync input/output
- Flexible AC/DC power options
- Up to 72MHz bandwidth



DWR-S02D

2 channel slot-in portable digital wireless receiver

- Superb audio quality by AES3 out and 24Bit/48kHz D/A conversion
- Various viewfinder functions with Sony XDCAM camcorders
- · Full digital workflow with Sony XDCAM camcorders
- Up to 72MHz bandwidth
- Active/Free channel scan



WD-850

Antenna divider

- Antenna signal output to up to four receivers
- Cascade output connectors allowing simultaneous use of up to two WD-850 channel dividers
- 2-channel antenna input connectors
- Power supplied to the Sony UHF antenna



DWA-01D

Digital wireless adapter

- For use with DWR-S01D or DWR-S02D receiver
- Stand-alone wireless receiver operation
- Wide array of interfaces including two-channel AES3 digital or analogue output
- Unique lock-together mechanism to allow two DWA-01D adaptors to be easily combined
- Supports V-mount attachment
- Hirose 4-pin DC powering



DWA-F01D

Digital wireless adapter

- For use with DWR-S01D or DWR-S02D receiver.
- Stand-alone wireless receiver operation
- Top-panel operation for mixer bag
- Three-way powering (Hirose 4-pin DC powering, DC In and NP-Batteries)
- Three-parallel audio output, including XLR analogue output, BNC AES/EBU digital output and mini-phone analogue output

Accessories



AN-01 UHF Antenna

- Log-periodic antenna
- Uni-directional
- Built-in booster



AN-57 UHF ground plane antenna

- · Ground plane antenna
- Horizontal omni-direction



AN-820 UHF Antenna

- Dipole antenna
- Horizontal omni-direction
- Built-in booster



RMU-01
Remote Control Unit

- Extension of Cross Remote function
- Control of up to 82ch transmitter
- Two-way powering



Wireless Studio

PC Software

- Bundled application for PC
- Full control of all system parameters on receiver and transmitter
- Channel plan adviser
- RF Chart Grapher / RF Chart Analyser



LCS-F01D Soft Carrying Case

- Soft case for DWA-F01D
- Shoulder strap is included
- Support V-mount attachment



GC-0.7CP
/S: Straight plug
/R: Right-angle plug



EC-1.5CF
Microphone cable



CBK-55BKEFP-Style Buildup Kit for F55/F5

- Shoulder pad and additional interface for the PMW-F55/F5
- Supports Wireless slot-in audio receiver (WRR-855S/DWR-S01D/DWR-S02D)



For Shoulder Camcorders

The DWR-S02D can be inserted into wireless slot of Shoulder camcorders or mounted on top the Battery.



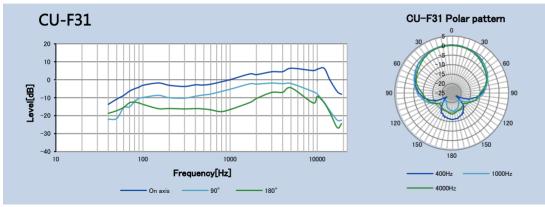
Frequencies

	Operating Frequencies	470 MHz to 542 MHz	566 MHz to 630 MHz	566 MHz to 638 MHz	638 MHz to 694 MHz	638 MHz to 698 MHz	710 MHz to 782 MHz	806 MHz to 810MHz
	version	UC14		UC30 *1		UC42		
UC	Selectable Frequencies	564 (in 125kHz steps) 2772 (in 25kHz steps)		517 (in 125kHz steps) 2541 (in 25kHz steps)		470 (in 125kHz steps) 2310 (in 25kHz steps)		
	version		CE33		CE42		CE51	
CE	Selectable Frequencies		504 (in 125kHz steps) 2560 (in 25kHz steps)		441 (in 125kHz steps) 2240 (in 25kHz steps)		567 (in 125kHz steps) 2880 (in 25kHz steps)	
	version				CN29			
CN	Selectable Frequencies				441 (in 125kHz steps) 2240 (in 25kHz steps)			
	version							JB
J	Selectable Frequencies							30 (in 125kHz steps)

^{*1 566} MHz to 608 MHz and 614 MHz to 638 MHz



	CU-C31
Capsule type	Electret condenser
Directivity	Uni-directional (Cardioid)
Sensitivity	–48 dB (0 dB=1 V/Pa, 1 kHz)
Frequency response	60 Hz to 20 kHz
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	Ф47.6 mm x 61.5 mm
Mass	Approx. 130 g



	CU-F31
Capsule type	Dynamic
Directivity	Uni-directional (Super cardioid)
Sensitivity	-54 dB (0 dB=1 V/Pa, 1 kHz)
Frequency response	60 Hz to 18 kHz
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	Ф47.6 mm x 77.4 mm
Mass	Approx. 150 g

CU-F32	2			CU-F32 Polar pattern
20 10 0 -10 -30 -40				90 150 150 150
10	100	1000	10000	180
	Free	quency[Hz]		400Hz 1000Hz
	On axis	90° — 180	°	4000Hz

	CU-F32
Capsule type	Dynamic
Directivity	Uni-directional (Cardioid)
Sensitivity	-54 dB (0 dB=1 V/Pa, 1 kHz)
Frequency response	70 Hz to 18 kHz
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	Ф47.6 mm x 77.4 mm
Mass	Approx. 150 g

		DWT-B01 Bodypack transmitter	DWM-02 Handheld wireless microphone	DWT-P01 Plug-on transmitter		
Wireless Interface			WiDIF-HP			
Oscillator Type			Crystal-controlled PLL Synthesizer			
Antenna Type		λ/4 flexible wire				
Type of Emission			G1E or G1D			
		U1424: 470.125 MHz to 541.875 MHz (TV-14 to TV-25 channels), 125 kHz steps				
	UC	U3040: 566.125 MHz to 637.875 MHz (TV-30 to TV-41 channels, except TV-37channel), 125 kHz steps				
		U4250: 638.3	125 MHz to 697.875 MHz (TV-42 to TV-51 channels), 12	25 kHz steps		
Carrier Frequencies		CE3338: 566.025 MHz to 630.000 MHz (TV-33 to TV-40 channels), 25 kHz steps				
Camer rrequencies	E7	CE4248: 638	.025 MHz to 710.000 MHz (TV-42 to TV-50 channels), 2	25 kHz steps		
		CE5157: 710.025 MHz to 782.000 MHz (TV-42 to TV-50 channels), 25 kHz steps				
	CN	CN2935: 638.025 MHz to 694.000 MHz (T	V-29 to TV-35 channels), 25 kHz steps	-		
	J	JB: 806.125 MHz to 809.750 M	Hz (B band), 125 kHz steps	-		
	UC		1 mW/10 mW/50 mW (e.r.p) selectable			
RF Power	CE7		1 mW/10 mW/50 mW (e.r.p) selectable			
IN TOWE	CN	1 mW/10 mW/50 mV		-		
	J	1 mW/10 mW (e.	r.p) selectable	-		
Input Connector		Sony 4-pin (SMC9-4S) (female)	-	XLR-3-11C (female)		
Phantom Power Voltage		-	-	+48 V		
Reference Input Level		MIC: -60 dBV (-58 dBu), 1 kHz (at 0-dB attenuator level) LINE: +4 dBu, 1 kHz	-	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 dB	–16 dBu (with 0 dB attenuator)	MIC: -22 dBu (with 0 dB attenuator) LINE: +24 dB		
Audio Attenuator Adjustment Range		0 to 48 dB (3 dB steps, MIC input mode only)	0 dB to 21 dB (in 3-dB steps)	0 to 48 dB (3 dB steps, MIC input mode only)		
Frequency Response		Transmission: 20Hz to 22kHz (typical)	Transmission: 20Hz to 22kHz (typical)	Transmission: 20Hz to 22kHz (typical)		
Dynamic Range		106 dB typical (A-weighted, T.H.D=1%)	-	106 dB typical (A-weighted, T.H.D=1%)		
Distortion (T.H.D)		0.03% or less (0 dBu = 0.775 Vrms)	0.03% or less (0 dBu = 0.775 Vrms) -			
Audio Delay			Approx. 1.5 msec			
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)		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, and +48V set to OFF.		
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		63 x 17 x 73 mm (excluding the anntenas) (W x H x D)	Ø37.1 x 194 mm	44 x 78 x 44 mm (excluding protrusions) (W x H x D)		
Mass		Approx. 125 g (including batteries)	Approx. 235 g (including batteries)	Approx. 245 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), USB cable (1), Carrying case (1), Scribble sheet (1), CD-ROM (1)	1 3: 3 :	Spare battery case (1), Soft case (1), USB adapter cable (1), USB cable (1), CD-ROM (1)		

^{*0}dB μ V= 1 μ V EMF, 0dBu=0.775Vrms, 0dBV=1V, 0dB SPL=2x10⁻⁵ Pa

		DWR-R02D Rack-mount receiver	DWR-S02D Slot-in receiver
Wireless Interface		WiDIF-HP	WiDIF-HP
Oscillator Type		Crystal-controlled PLL Synthesizer	Crystal-controlled PLL Synthesizer
Reception Type		True diversity	True diversity
Circuit system		Double Superheterodyne	Double Superheterodyne
Antenna Type		Detachable	Detachable
Antenna Input Connector		BNC-R, 50 Ω (x2)	BNC-R, 50 Ω (x2)
Antenna Cascaded Output		BNC-R, 50 Ω (x2)	-
		U1424: 470.125 MHz to 541.875 MHz (TV-14 to TV-25 channels), 125 kHz steps	U1424: 470.125 MHz to 541.875 MHz (TV-14 to TV-25 channels), 125 kHz steps
	UC	U3040: 566.125 MHz to 637.875 MHz (TV-30 to TV-41 channels, except TV-37channel), 125 kHz steps	U3040: 566.125 MHz to 637.875 MHz (TV-30 to TV-41 channels, except TV-37channel), 125 kHz steps
		U4250: 638.125 MHz to 697.875 MHz (TV-42 to TV-51 channels), 125 kHz steps	U4250: 638.125 MHz to 697.875 MHz (TV-42 to TV-51 channels), 125 kHz steps
Carrier Frequencies		CE3338: 566.025 MHz to 630.000 MHz (TV-33 to TV-40 channels), 25 kHz steps	CE3338: 566.025 MHz to 630.000 MHz (TV-33 to TV-40 channels), 25 kHz steps
	CE7	CE4248: 638.025 MHz to 710.000 MHz (TV-42 to TV-50 channels), 25 kHz steps	CE4248: 638.025 MHz to 710.000 MHz (TV-42 to TV-50 channels), 25 kHz steps
		CE5157: 710.025 MHz to 782.000 MHz (TV-42 to TV-50 channels), 25 kHz steps	CE5157: 710.025 MHz to 782.000 MHz (TV-42 to TV-50 channels), 25 kHz steps
	J	770.250 MHz to 809.750 MHz (FPU-1 to FPU-4, B band), 125 kHz steps	770.250 MHz to 809.750 MHz (FPU-1 to FPU-4, B band), 125 kHz steps
Frequency Response		20Hz to 22kHz (typical)	20Hz to 22kHz (typical)
Dynamic Range		106 dB or more typical (A-weighted, T.H.D=1%)	106 dB or more typical (A-weighted, T.H.D=1%)
Distortion (T.H.D)		0.03% or less (0 dBu = 0.775 Vrms)	0.03% or less (0 dBu = 0.775 Vrms)
		Approx. 1.9 ms (analog output)	Approx. 2.1 msec (Analog output in combination with the DWA-01D/F01D)
Audio Delay		Approx. 1.9 ms (digital output)	Approx. 1.9 msec (AES/EBU output incombination with the DWA-01D/F01D and through a digital
			connection with a camcorder)
		BAL: XLR-3-32 (male), 47 Ω or less (×2)	
		UNBAL: Ø6.3 mm (1/4 inch) mono jack, 220 Ω or less (×2)	
		Output level (0 dBu = 0.775 Vrms)	
		BAL: –22 dBu maximum/–58 dBu reference	
Analog Output		(when MIC output)	D-sub 15 pin (male) (×1)
Analog Output		BAL: +24 dBu maximum/–12 dBu reference	Analog: Reference output level: –40 dBu
		(when LINE output)	
		UNBAL: +8 dBu maximum/–28 dBu reference	Digital: Reference output level: –36 dBFS/–20 dBFS
		(when UNBAL ATT =0 dB)	(switchable)
		XLR-3-32 (male), 110 Ω (×1)	
Digital Output		BNC-R, 75 Ω (×1)	
Digital Satpat		Reference output level (0 dBu = 0.775 Vrms) –36 dBFs	
Headphone Output		Ø6.3 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)	Cross Remote (2.4-GHz IEEE802.15.4 compliant)
LAN Connector		RJ-45 modular jack 100BASE-TX: IEEE802.3u compliant	-
Display		OLED	OLED
Power Requirements		AC: 100 to 240 V 0.4 A or less DC: 12 V 1.6 A or less	7 V DC
Operating Temperature		0°C to 50°C (32°F to 122°F)	0°C to 50°C (32°F to 122°F)
Storage/Transport Temperature		-20°C to +60°C (-4°F to +140°F)	-20°C to +60°C (-4°F to +140°F)
Dimensions		482 x 44 x 335 mm (W x H x D)	88 x 119 x 31 mm (W x H x D)
Mass		Approx. 4.1 kg (including the attached antenna)	Approx. 280 g (including the supplied antennas)
Supplied Accessories		Whip antenna (2), Antenna mount with BNC connector (2), AC power cord (1), Foot (4), Operating Instructions (CD-ROM) (1), PC control software (CD-ROM) (1)	Whip antenna (2), USB adapter cable (1), USB cable (1), CD-ROM (1), Frequency band label (1)
		Control Software (CD NOW) (1)	

		WD-850 UHF Antenna Divider	
	Frequency Range	US : 470 to 806 MHz CE : 470 to 862 MHz J : 770 to 810 MHz	
	Antenna Input	BNC-R, 50 Ω (x4), (2 inputs 2 channels)	
	Supply Voltage For Booster	DC 9V/OFF switchable (supplied through the antenna input connectors)	
Input/Output	Output Connector	BNC-R, 50 Ω (x8), (4 outputs 2 channels)	
	Cascaded Output	BNC-R, 50 Ω (x2), (1 input 2 channels)	
	RF Transmission Loss	±3 dB (between antenna input to output)	
	Inter-Connector Connection Loss	15 dB or more	
	Input/Output VSWR	3.0 or less	
	Power Requirements	US: 120 V AC, 60 Hz CE: 230 V, 50 Hz J: AC I00V, 50Hz/60Hz	
	Power Consumption	18 W (when 100 mA is being supplied to the antenna booster)	
	Operating Temperature	0°C to 50°C	
		32°F to 122°F	
	Storage/Transport	-20°C to +60°C	
General	Temperature	-4°F to +140°F	
	5.	Approx. 482 × 44 × 285 mm (W x H x D)	
	Dimensions	Approx. 19 x 1 3/4 x 11 1/4 inches (W x H x D)	
	Mass	Approx. 4.4 kg	
	Mass	Approx. 9 lb 11 oz	
		50 Ω terminator (6)	
	Supplied Accessories	AC power cord (1)	
		Operating Instructions (1)	

	DWA-01D Wireless Adapter	DWA-F01D Wireless Adapter	
Audio output connector	Analog/Digital: SMC9-4S (female) (OUTPUT1/2)	Analog: XLR-3-32 type (OUTPUT 1/OUTPUT 2) Digital: BNC-R	
Analog output impedance	150 ohms or less	150 ohms or less	
AES3-id output impedance	110 ohms	75 ohms	
WORD SYNC IN connector	BNC-R, 75 ohms (when the DWR-S02D is attached to the adapter and 75-ohm termination is added)	BNC-R, 75 ohms (when the DWR-S02D is attached to the adapter and 75-ohm termination is added)	
OUTPUT 1/2 or Phones connector	Ø 3.5 mm TRS jack	Ø 3.5 mm TRS jack	
OUTPUT 1/2 or Phones level	50 mW (16-ohm load, at T.H.D = 1%)	MIC LEVEL selected: –52 dBu PHONES selected: 50 mW (16 ohm load, at T.H.D = 1%)	
Power requirements	12 V DC	12 V DC (DC IN), 7.2 V DC (battery)	
Operating voltage	10 V DC to 17 V DC	10 V DC to 17 V DC (DC IN), 6 V DC to 8.4 V DC (battery)	
Maximum continuous operation	-	Approx. 5 hours (ambient temperature of 25 °C (77 °F), °F), fully charged Sony NP-F570 lithium-ion battery, OUTPUT 1/2 unused, DWR-S01D CH1/CH2 ON, wireless remote control function OFF, auto switch for display set to AUTO DIMMER)	
Operating temperature	0 °C to 50 °C (32 °F to 122 °F)	0 °C to 50 °C (32 °F to 122 °F)	
Storage temperature	-20 °C to +60 °C (-4 °F to +140 °F)	-20 °C to +60 °C (-4 °F to +140 °F)	
Dimensions	Approx. 88 × 144 × 31.5 mm (W x H x D)	Approx. 142 × 125 × 39 mm (W x H x D)	
Mass	Approx. 330 g	Approx. 400 g (excluding receiver and battery)	
Supplied accessories	DC power cable (for 4-pin connector) (1), Mount plate (1), Audio cable (2)	DC power cable (for 4-pin connector) (1), Operating Instructions (1), CD-ROM (1)	

	AN-01 UHF Antenna	AN-57 Ground Plane Antenna
Frequency range	470 to 862 MHz	638 MHz to 810 MHz (When supplied elements are attached: 470 MHz to 638 MHz)
Antenna gain	5 dBi or more	0 dBi (from center frequency)
Voltage standing wave ratio	2.5 or less	3 or less (from center frequency)
Directivity	Half power angle: 150 degrees or less Front to back ratio: 12 dB or more	Horizontal, omnidirectional
Booster Frequency range	470 to 862 MHz	-
Booster gain	18 dB/10 dB/0 dB, switchable	-
Output impedance	50 ohms	Impedance 50 Ω (representative value)
Booster Voltage standing wave ratio	3 or less	-
Noise figure	6 dB or less	-
Third order 60 dB or more (95 dBµVEMF input)		-
Output connector	BNC-R type	BNC-R type
Supply voltage	9 V/12 V DC	-
Current consumption	100 mA or less	-
Operation 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. 343 × 341 × 36 mm (W x H x D)	Ø121 × 288 mm (When supplied supplied elements are attached: Ø153 × 320 mm)
Mass	Approx. 530 g	Approx. 280 g
Supplied accessories	Microphone stand attachment pole/ grip (1 set), Stand Adapter, PF1/2 to W5/8 type (1), PF1/2 to W3/8 type (1), Operating Instructions (1)	Antenna Elemens (4), Operating Instructions (1)

	RMU-01 Remote Control Unit
Radio system	Conforms to IEEE802.15.4
Frequency range of transmission/ Reception	2405 MHz to 2480 MHz
Antenna gain	2 dB
Antenna power	1 mW
Remote control distance	10 m (33 feet) at maximum (per unit)
LAN transmission speed	10 M/100 Mbps (automatic detection)
Connectors	LAN connector: RJ45-type, eightpin (accepts PoE power)
Supply voltage	When the PoE device is used: 48 V DC When the AC adapter is used: 12 V DC
Current consumption	When the PoE device is used: 50 mA or less When the AC adapter is used: 100 mA or less
PoE power reception	Conforms to IEEE802.3af (supports mode A and B)
Operation temperature	When the PoE device is used: 0 °C to 50 °C (32 °F to 122 °F) When the AC adapter is used: 0 °C to 45 °C (32 °F to 113 °F)
Storage temperature	-20 °C to +60 °C (-4 °F to +140 °F)
Dimensions	107 × 151 × 30 mm (W x H x D)
Mass	Approx. 300 g (10.5 oz)
Supplied accessories	AC adapter (1), Bracket (2), Screw adapter (2), Screws (1 set), Safety wire (1), Operating Instructions (1), CD-ROM (1)



High-quality Sound with Digital Audio Processing

Innovation in Sound -- Introducing the new UWP-D Series wireless microphone system, which realizes high-quality sound and stable wireless transmission utilizing true diversity reception system. Since its introduction in 2003, the UWP Series has been widely used in a broad range of applications, not only for ENG (electronic news gathering) and EFP (electronic field production), but also for live concerts, sporting events, documentaries, and weddings.

High-quality Sound

Sony's Digital Audio Processing technology improves transient response performance, and realizes high-quality sound.

Superior Operability

Performs channel settings via Automatic Channel Setting mode.

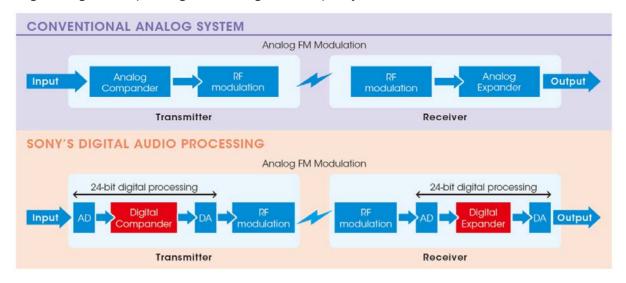
Low Profile and Lightweight

The small body size and lightweight design are ideal for use in small camcorders or interchangeable-lens digital cameras.



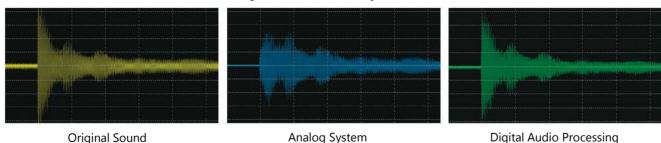
Sony's Digital Audio Processing

Sound quality is the most important issue in wireless transmission. Conventional analog systems make use of companders to provide the required dynamic range. However, while compander systems have improved over time, their inherent problems with sound quality and transient response performance have yet to be completely solved. Sony's newly developed Digital Audio Processing, which uses DSP (digital signal processing) for digital companding, realizes high sound quality.



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

Multi Interface Shoe Adaptor (Option)

The wireless receiver of the UWP-D Series can be attached to camcorders or 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. In addition, the wireless receiver can get power from the camera, and the camera can control power ON/OFF, unifying power management*1.



XLR cable connection

- -Need audio cable
- -Need AA alkaline battery
- -Need On/Off manual operation

MI Shoe connection



- -No need audio cable
- -Power supply from camera*1
- -On/Off control from camera*1
 - *1 For details on cameras that support this unit, visit the Sony website.

Package Lineup

UTX-P03:

Plug-on Transmitter

UTX-B03:

Bodypack Transmitter

Frequencies as follows UWP-D11 Omni-directional Microphone XLR-BMP Stereo Mini-BMP Cable Lavalier Microphone Holder Clin Cable **CE21 CE33** CE42 **CE51 CN38** KR3 Belt Clip Shoe Mount Windscreen UTX-B03: URX-P03: Adaptor **Bodypack Transmitter** Portable Receiver UWP-D12 Microphone Belt Clip XLR-BMP Stereo Mini-Holder Clip Cable BMP Cable **CE33** CE42 CE51 **CE21** KR3 Shoe Mount UTX-M03: URX-P03: Adaptor Handheld Wireless Portable Receiver Microphone UWP-D16 Omni-directional Microphone XLR-BMP Stereo Mini-Lavalier Microphone Holder Clip Cable BMP Cable **CE42** CE51 **CE21** KR3 Belt Clip Soft Case

URX-P03:

Portable Receiver

Shoe Mount

Adaptor

Windscreen

Products



UTX-B03 **Bodypack Transmitter**

- Sony's Digital Audio Processing
- ·Compatibility with UWP Series / WL-800 Series
- •Extremely compact, lightweight, and robust metal body
- •USB for power supply or charging batteries
- Switchable MIC/LINE input level and adjustable
- attenuator (0 dB to 21 dB, 3-dB steps)
- Supplied with omni-directional lavalier microphone



UTX-M03 Handheld Wireless Microphone

- · Sony's Digital Audio Processing
- •Incorporates an all-metal, robust, uni-directional dynamic
- microphone capsule with minimized popping and wind noise
- Compatibility with UWP Series / WL-800 Series
- USB for charging batteries
- Interchangeable microphone capsule



UTX-P03 Plug-on Transmitter

- ·Sony's Digital Audio Processing
- ·Converts a wired microphone to a wireless microphone
- ·via an XLR-type connector
- Compatibility with UWP Series / WL-800 Series
- •USB for power supply or charging batteries
- •Extremely compact, lightweight, and robust metal body
- +48 V power supply



URX-P03 Portable Receiver

- Sonv's Digital Audio Processing
- Easy-to-use Automatic Channel Setting mode
- Space Diversity Reception System for stable reception
- Compatibility with UWP Series / WL-800 Series
- Headphone output for monitoring
- Extremely compact, lightweight, and robust metal body
- USB for power supply or charging batteries
- Output level control





ECM-V1BMP Omni-directional Lavalier Microphone



AD-RV1B2 Windscreen Pack (SPCS)



SAD-HV1B2 Holder Clip Pack



BATC-3AA Battery Case



BLC-BP2 Belt Clip (2PCS)



SMAD-P2 Shoe Mount Adaptor



SMAD-P3 MI Shoe Mount Adaptor



SAD-M01 Microphone Holder



EC-0.46BX



3-pole Locking Mini Plug-XLR(M) Cable



EC-1.5BX 3-pole Locking Mini Plug-XLR(F) Cable



EC-0.8BM 3-pole Locking Mini Plug-Stereo Mini



LCS-URXP3 Soft Case



ECM-X7BMP Uni-directional. Lavalier Microphone



Lavalier Microphone



ECM-44BMP Omni-directional Lavalier Microphone



ECM-166BMP Uni-directional Lavalier Microphone



ECM-FT5BMP Omni-directional Lavalier Microphone



ECM-LZ1UBMP Uni-directional Lavalier Microphone



ECM-322BMP Omni-directional Headset Microphone



ECM-HZ1UBMP Uni-directional



Headset Microphone



CU-C31 Capsule Unit

 Condenser type Cardioid • 60 Hz - 20 kHz



CU-F31 Capsule Unit · Dynamic type Super cardioid

• 60 Hz - 18 kHz



CU-F32 Capsule Unit · Dynamic type Wide cardioid • 70 Hz - 18 kHz

How to Attach the Soft Case (Option)

For Handheld Camcorders



On the Grip Belt



For Shoulder Camcorders



On Top of the Battery



V-Shoe Mount



Direct Mount



A-8278-057-B Mounting Bracket



A-8278-057-B Mounting Bracket



A-1528-515-A Mounting Plate



SMAD-V1 V-Shoe Mount Adaptor * Remove the V-Shoe part



SMAD-V1 V-Shoe Mount Adaptor



LCS-URXP3 Soft Case

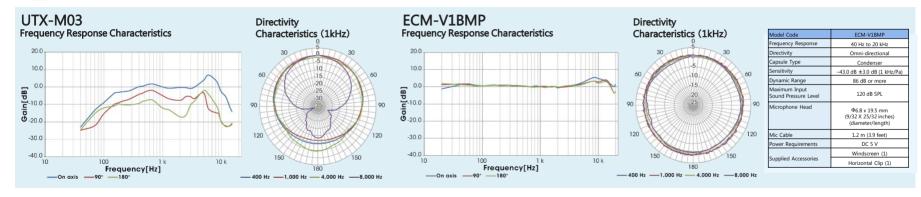


LCS-URXP3 Soft Case

Frequencies

	Operating Frequencies	470 MHz to 542 MHz	566 MHz to 630 MHz	566 MHz to 638 MHz	638 MHz to 694 MHz	638 MHz to 698 MHz	710 MHz to 782 MHz	794 MHz to 806 MHz	806 MHz to 810 MHz	925 MHz to 937 MHz
	version	UC14		UC30*1		UC42				
UC	Selectable	564 (in 125-kHz steps)		517 (in 125-kHz steps)		470 (in 125-kHz steps)				
	Frequencies	2772 (in 25-kHz steps)		2541 (in 25-kHz steps)		2310 (in 25-kHz steps)				
	version	CE21	CE33		CE42		CE51			
CE	Selectable	567 (in 125-kHz steps)	504 (in 125-kHz steps)		441 (in 125-kHz steps)		567 (in 125-kHz steps)			
	Frequencies	2880 (in 25-kHz steps)	2560 (in 25-kHz steps)		2240 (in 25-kHz steps)		2880 (in 25-kHz steps)			
	version						CN38			
CN	Selectable						567 (in 125-kHz steps)			
	Frequencies						2880 (in 25-kHz steps)			
	version							E		
E	Selectable							94 (in 125-kHz steps)		
	Frequencies							54 (III 125 KH2 steps)		
	version								J	
J	Selectable								94 (in 125-kHz steps)	
	Frequencies								54 (III 125-KHZ Steps)	
	version									KR3
KR	Selectable									94 (in 125-kHz steps)
	Frequencies									3 1 (111 123 KH2 3(EPS)

*1 566 MHz to 608 MHz and 614 MHz to 638 MHz



		UTX-B03 Bodypack transmitter	UTX-M03 Handheld wireless microphone	UTX-P03 Plug-on transmitter					
Oscillator Type			Crystal-controlled PLL Synthesizer						
Antenna Type		1/4 wave length wire	1/4 wave length wire (internal)	Integral type					
Type of Emissic	n		F3E						
		UC14 : 470.125 MHz to 541.875 MHz							
	UC	UC30 : 566.125	MHz to 607.875 MHz and 614.125 MHz to 637.8	75 MHz					
		UC42 : 638.125 MHz to 697.875 MHz							
		CE21 : 470.025 MHz to 542.000 MHz							
Control	CE7		CE33 : 566.025 MHz to 630.000 MHz						
Carrier Frequencies	CE/		CE42: 638.025 MHz to 694.000 MHz						
cquericies		CE51 : 710.025 MHz to 782.000 MHz							
	CN	CN38 : 710.025 M	IHz to 782.000 MHz	-					
	E		E: 794.125 MHz to 805.875 MHz						
	J	JB: 806.125 MH	z to 809.750 MHz	-					
	KR		KR3: 925.125 MHz to 937.500 MHz						
	UC			40 mW / 5 mW					
	CE7	30 mW	30 mW / 5 mW						
RF Power	CN			-					
	J	10 mW	/ / 2 mW	-					
	KR/E			10 mW / 2 mW					
Capsule Type		Electret condenser	Dynamic	-					
Directivity		Omni-directional	Uni-directional	- XLR-3-11C (female)					
Input Connector		3-pole locking mini jack	<u> </u>						
Phantom Power Voltage			-	+48V					
Reference Input Level		MIC: -60 dBV (at 0-dB attenuator level) / LINE: +4 dBu		MIC: -60 dBV (at 0-dB attenuator level) / LINE: +4 dBu					
Maximum Input Level		-	151 dB SPL (at 21-dB attenuator level)	-					
Audio Attenuator Adjustment Range		0 dB to 21 dB (in 3-dB steps): Mic input	0 dB to 21 dB (in 3-dB steps)	0 dB to 21 dB (in 3-dB steps): Mic input					
a,aaac.ic itu	UC/CE7/		Transmission: 23 Hz to 18 kHz (typical)						
Frequency	CN/KR/E	Transmission: 23 Hz to 18 kHz (typical)	Capsule Unit: 70 Hz to 18 kHz	Transmission: 23 Hz to 18 kHz (typical					
Response		T	Transmission: 23 Hz to 15 kHz (typical)						
	J	Transmission: 40 Hz to 15 kHz (typical)	Capsule Unit: 70 Hz to 18 kHz	<u> </u>					
Signal-to-Noise Ratio									
Audio Delay		96 dB (max deviation, A-weighted) Approx. 0.35 msec							
Pilot Tone Sign	al	32 kHz / 32.382 kHz / 32.768 kHz							
Display			LCD	-					
Power Requirer	ments	DC 3.0 V (with two AA-size alkaline (LR6) batteries)							
i ower nequirer	nents		,						
Battery Operating Time		UC/CE7/CN: Approx. eight hours with Sony's . 30-mV E/KR3/J: Approx. 10 hours with Sony's AA-size ou	UC: Approx. six hours with Sony's AA- size alkaline (LR6) batteries at 25°C (77°F) at 50-mW output CE7: Approx. eight hours with Sony's AA-size alkaline (LR6)batteries at 25°C (77°F) at 30-mW output E/KR3: Approx. 10 hours with Sony's AA-size alkaline (LR6)batteries at 25°C (77°F) at 10-mW output						
Storage/ Transp Temperature	oort		-20°C to +55°C (-4°F to +131°F)	In					
Dimensions		63 x 82 x 20 mm (2 1/2 x 3 1/4 x 13/16 inches) (excluding the anntenas) (W x H x D)	ø48 x 260 mm (1 15/16 x 10 1/4 inches) (diameter / length)	42 x 42 x 102 mm (1 11/16 x 1 11/16 x 4 1/8 inches) (W x H x D)					
Mass		Approx. 149 g (5.3 oz) (including batteries)	Approx. 296 g (10 oz) (including batteries)	Approx. 197 g (6.9 oz) (including batteries)					

		URX-P03 Portable receiver		
Oscillator Type		Crystal-controlled PLL Synthesizer		
Antenna Type		True diversity		
Type of Emission		1/4 wave length wire		
		UC14 : 470.125 MHz to 541.875 MHz		
	UC	UC30 : 566.125 MHz to 607.875 MHz and 614.125 MHz to 637.875 MHz		
		UC42 : 638.125 MHz to 697.875 MHz		
		CE21 : 470.025 MHz to 542.000 MHz		
	CE7	CE33 : 566.025 MHz to 630.000 MHz		
Carrier Frequencies	CE/	CE42 : 638.025 MHz to 694.000 MHz		
		CE51 : 710.025 MHz to 782.000 MHz		
	CN	CN38 : 710.025 MHz to 782.000 MHz		
	E	E: 794.125 MHz to 805.875 MHz		
	J	JB: 806.125 MHz to 809.750 MHz		
	KR	KR3: 925.125 MHz to 937.500 MHz		
Frequency Response		23 Hz to 18 kHz (tyipcal)		
Signal-to-Noise Ratio		96 dB (max deviation, A-weighted)		
Distortion (T.H.D)		0.9% or less (-60 dBV, 1 kHz input)		
Audio Delay		Approx. 0.35 msec		
Analog Output		3-pole mini jack, unbalanced		
Analog Output Level		-60 dBV (at ±5 kHz deviation)		
Audio Attenuator Adjustme	nt Range	-12 dB to +12 dB (3-dB step)		
Headphone Output		ø3.5 mm (5/32 inch) stereo mini jack		
Headphone Output Level		5 mW (at 16-ohm load)		
Pilot Tone Signal		32 kHz / 32.382 kHz / 32.768 kHz		
Display		LCD		
Power Requirements		DC 3.0 V (with two AA-size alkaline (LR6) batteries)		
1		DC 5.0 V (via USB micro-B)		
Battery Operating Time		Approx. six hours with Sony's AA-size alkaline (LR6) batteries at 25°C (77°F)		
Operating Temperature		0°C to 50°C (32°F to 122°F)		
Storage/ Transport Tempera	ture	-20°C to +55°C (-4°F to +131°F)		
Dimensions		63 x 82 x 23.8 mm (2 1/2 x 3 1/4 x 15/16 inches) (excluding the anntenas) (W x H x D)		
Mass		Approx. 176 g (6.2 oz) (including batteries)		
*0dBµV= 1µV EMF, 0dBu=0.775Vrms, 0dBV=1V, 0dB SPL=2x10-5 Pa				

Compatibility with UWP Series / WL-800 Series

DSP enables a digital compander to match Sony's analog wireless system. The UWP-D transmitter can be used with a UWP Series or WL-800 Series receiver, and a UWP Series or WL-800 Series transmitter can be used with a UWP-D receiver

Transmitter	Receiver	COMPANDER MODE		
UWP-D	UWP-D	UWP-D		
UWP	UWP-D	UWP		
UWP-D	UWP	UWP		
WL800	UWP-D	WL800		
UWP-D	WL800	WL800		

UWP-D: High speech quality mode supported incombination with UWP-D series devices. UWP: Mode supported in combination with Sony UWPseries transmitters. WL800: Mode supported in combination with Sony 800-series transmitters.



WRR-855S

UHF Synthesized Diversity Tuner

- Space Diversity Tuner for camcorder use
- Easily mounts onto Sony HDCAM™/XDCAM™ HD422/Digital Betacam™/XDCAM SD/ MPEG IMX™ camcorders without need for audio/power cables or a mounting adapter
- Compact and lightweight design: 280 g (11 oz)
- A D-sub 15-pin connector for audio output to a Sony professional camcorder and for receiving its power supply from the camcorder
- A LCD provides various information such as RF input level and audio output status



DWA-01D

Digital wireless adapter

- For use with DWR-S01D or DWR-S02D receiver
- Stand-alone wireless receiver operation
- Wide array of interfaces including two-channel AES3 digital or analogue output
- Unique lock-together mechanism to allow two DWA-01D adaptors to be easily combined
- Supports V-mount attachment
- Hirose 4-pin DC powering



BTA-801

Portable Tuner Mount Adapter

- Allows a WRR-855S portable tuner to be mounted on a Sony professional camcorder
- External DC power input via the supplied 4-pin cable



DWA-F01D

Digital wireless adapter

- For use with DWR-S01D or DWR-S02D receiver
- Stand-alone wireless receiver operation
- Top-panel operation for mixer bag
- Three-way powering (Hirose 4-pin DC powering, DC In and NP-Batteries)
- Three-parallel audio output, including XLR analogue output, BNC AES/EBU digital output and mini-phone analogue output





LCS-F01D
Soft Carrying Case

WRR-855S UHF Synthesized Diversity Tuner						
Receiving channels	1 channel					
	566 MHz to 590 MHz (U30/32) 638 MHz to 662 MHz (U42/44)					
Receiving frequency range	606 MHz to 630 MHz (CE38)					
	758 MHz to 782 MHz(CN) 782 MHz to 806MHz (U6668)					
	806 MHz to 810MHz (JB)					
Local oscillators	925 MHz to 932MHz(KR) 1st: PLL synthesizer 2nd: PLL synthesizer					
De-emphasis	50 μs					
Reference deviation	±5 kHz deviation at 1 kHz modulation (Maximum deviation: ±40 kHz deviation at 1 kHz modulation)					
Selectivity	60 dB or more at ±250 kHz					
Spurious rejection	80 dB or more					
Frequency range	40 Hz to 18 kHz (typical)					
Signal-to-noise ratio	60 dB or more at 60 dBµ RF input at reference deviation, A-weighted					
RF muting (squelch) level	10 dBµ or OFF					
Audio output level	-40 dBu at reference deviation					
Audio output connector	D-sub 15-pin (1), unbalanced					
Antenna connector	BNC-R type (2), 50 Ω (nominal)					
Operating voltage	External: DC 7 V					
Current (power) consumption	200 mA or less at external DC 7 V					
Dimensions (W x H x D)	88.0 x 119.0 x 31.3 mm (3 1/2 x 4 3/4 x 1 1/4 inches)					
Mass	Approx. 280 g (10.0 oz)					
Supplied accessories	Antennas (1 pair), Operating instructions (1)					

^{*}The WRR-855S receives power from a camcorder via the D-sub 15-pin connector. ** $0dB\mu V = 1\mu V$ EMF, 0dBu = 0.775Vrms, 0dBV = 1V, 0dB SPL= $2x10^{-5}$ Pa

Products UWP-X Series



UWP-X7

Fixed all-metal belt-pack UHF wireless microphone package

- UTX-B2 belt-pack transmitter
- URX-M2 tuner module
- Supplied accessories: Lavalier microphone (x1), windscreen (x1), microphone holder clip (x1), belt clip (x1)



Tuner module



- Installed in the MB-X6 tuner unit or the SRP-X500P all-in-one type presentation mixer/amplifier
- Can use up to six receivers in MB-X6 mainframe
- UWP is available in CH33, CH38, CH42 and CH51 with 24MHz Bandwidth*

MB-X6 Tuner Base Unit



Front Panel: MB-X6 with six WRU-806A/806B tuner units installed



Rear Panel

- Accommodates up to six WRU-806A/806B for up to six channels of simultaneous operation
- Addition of the WD-850 allows multi-channel operation with even more channels
- Easy mechanism for attaching and detaching tuner modules
- RF input attenuator switch (10 dB/0 dB)
- Balanced XLR output connector for each tuner and mix output
- Selectable output level: -58 dBu (for MIC) or -20 dBu (for LINE) at ±5 kHz deviation at 1 kHz modulation
- Auto channel search function automatically selects unoccupied channels
- Supplied with passive antennas
- Modular, 1U high, 19-inch rack unit



UTX-B2

Belt-pack transmitter

- Extremely compact, lightweight and robust metal body
- Switchable MIC/LINE input level and adjustable attenuator (0 to 21dB, 3dB steps)
- Supplied with omni-directional Lavalier microphone
- UWP is available in CH33, CH38, CH42 and CH51 with 24MHz Bandwidth*
- Output power is 5/30mW

UTX-M03

Handheld Wireless Microphone

- Sony's Digital Audio Processing
- Incorporates an all-metal, robust, uni-directional dynamic
- microphone capsule with minimized popping and wind noise
- Compatibility with UWP Series / WL-800 Series
- USB for charging batteries
- Interchangeable microphone capsule

SRP-X500P Digital Powered Mixer



SRP-X500P with two URX-M2 tuner modules installed

SRP-X700P Digital Powered Mixer



SRP-X700P with two URX-M2 tuner modules installed

Accessories UWP-X Series



AD-RX7B Windscreen Pack (5PCS)



SAD-HV1B Holder Clip Pack (4PCS)



BATC-2AABattery Case



SAD-M01 Microphone Holder



ECM-X7BMP Lavalier Microphone



ECM-166BMP Uni-directional Lavalier Microphone



ECM-LZ1UBMP Uni-directional Lavalier Microphone



ECM-322BMP Omni-directional Headset Microphone



ECM-HZ1UBMP Uni-directional Headset Microphone



AN-820 UHF Antenna



AN-57 UHF ground plane antenna

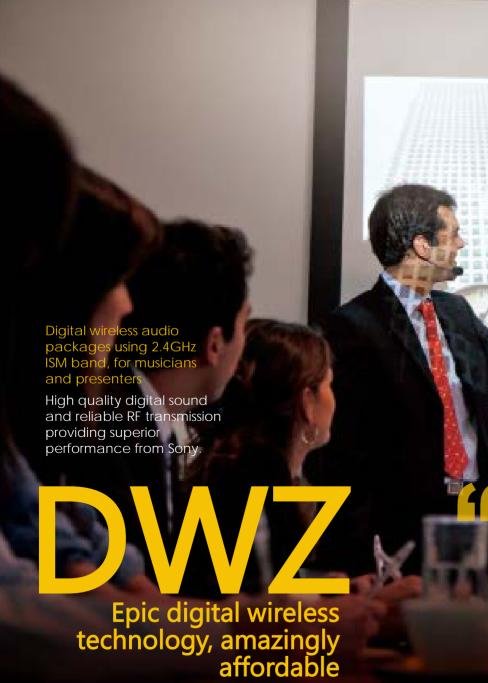
Frequencies UWP-X Series

		perating quencies	566 MHz to 590 MHz	566 MHz to 590 MHz	606 MHz to 630 MHz	638 MHz to 662 MHz	638 MHz to 662 MHz	758 MHz to 782 MHz	794 MHz to 806 MHz	806 MHz to 810MHz	925 MHz to 932MHz
	V	ersion/		UC3032			UC4244				
U		lectable		188			188				
	Fred	quencies		(in 125kHz steps)			(in 125kHz steps)				
	νν	ersion/	CE33		CE38	CE42					
C	E Sel	lectable	189		189	189					
	Fred	quencies	(in 125kHz steps)		(in 125kHz steps)	(in 125kHz steps)					
	V	ersion/						CN			
C		lectable						188			
	Fred	quencies						(in 125kHz steps)			
	V	ersion/							E		
1	Sel	lectable							94		
	Fred	quencies							(in 125kHz steps)		
	v	ersion/								JB	
	J Sel	lectable								30	
		quencies								(in 125kHz steps)	
	V	ersion/									KR
K		lectable									55
	Fred	quencies									(in 125kHz steps)

		UTX-B2X Bodypack Transmitter	URX-M2 Tuner Module					
Oscillator		Crystal-controlled PLL Synthesizer	Crystal-controlled PLL Synthesizer					
Type of emission		F3E	Space diversity					
	U3032	566 MHz to 590 MHz, selectable from 188 frequencies (in 125-kHz steps)						
	U4244	638 MHz to 662 MHz, selectable from 188 frequencies (in 125-kHz steps)						
	CE33	566 MHz to 590 MHz, selectable from 189 frequencies (in 125-kHz steps) / 960 frequencies (in 25-kHz						
Carrier frequencies	CE38	606 MHz to 630 MHz, selectable from 189 frequencies (in 125-kHz steps) / 960 frequencies (in 25-kHz						
	CE42	638 MHz to 662 MHz, selectable from 189 frequencies (in 125-kHz steps) / 960 frequencies (in 25-kHz						
	CN	758 MHz to 782 MHz, selectable from 188 frequencies (in 125-kHz steps)						
	Е	794 MHz to 806 MHz, selectable from 94 fi	requencies (in 125-kHz steps)					
	J	806 MHz to 810MHz, selectable from 30 fr	equencies (in 125-kHz steps)					
	KR	925 MHz to 932MHz, selectable from 55 fr	equencies (in 125-kHz steps)					
DE names autout		30mW/5mW selectable (U,CE7,CN models)						
RF power output		10mW/2mW selectable (E, J, KR3 model)	-					
Antenna		1/4 wave length	wire					
Pilot tone signal		32 kHz						
RF squelch level		-	25 dBµ					
_		40 Hz to 18 kHz (typical) (U,CE7,CN,E,KR)	40 Hz to 18 kHz (typical) (U,CE7,CN,E,KR)					
Frequency response		50 Hz to 15 kHz (typical) (J)	50 Hz to 15 kHz (typical) (J)					
Reference deviation		±7 kHz (-60 dBV, 1-kHz input) (U,CE7,CN,E,KR) ±5 kHz (-66 dBV, 1-kHz input) (J)	±5 kHz (at 1-kHz modulation)					
Signal-to-noise ratio		60 dB or more (±7-kHz deviation at 1-kHz modulation, A-	60 dB or more (±5-kHz deviation at 1-kHz modulation, A-weighted)					
		Electret condenser, omni-directional (UTX-B2V)						
Microphone capsule		Electret condenser, uni-directional (UTX-B2X)	=					
Audio attenuator adj	ıstment	, , ,						
range		0 dB to 21 dB (in 3-dB steps): Mic input	-					
Audio input level		MIC: -60 dBV (at 0-dB attenuator level) LINE: +4 dBu	-					
Audio connector		Input: 3-pole mini jack	Output: 3-pole mini jack, unbalanced					
Indicators LCD		Operating channel number/frequency, attenuator level, RF level (High/Low), audio input status, transmitter battery accumulated operating time	Operating channel number/frequency, audio status, RF input level					
	LED	Audio input status	RF input status					
Power requirements		DC 3.0 V (with two AA-size alkaline (LR6) batteries)	DC 9.0 V					
Battery life		Approx. eight hours with Sony's AA-size alkaline (LR6) 25°C(77°F) at 30-mW output (except E model)						
Dattery inc		Approx. ten hours with Sony's AA-size alkaline (LR6) 25°C(77°F) at 10-mW output (E model)						
Dimensions (W x H x D)		$63 \times 82.5 \times 18.7$ mm (2 1/2 × 3 1/4 × 3/4 inches) excluding the antennas	57 x 26 x 121 mm (2 1/4 x 1 1/16 x 4 7/8					
Mass		Approx. 145 g (5.1 oz), including batteries	Approx. 150 g (5.3 oz)					

MB-X6 Tuner Base Unit					
Receiving channels	6 channels when accommodating 6 URX-M2 tuner modules				
Receiving frequency range	566 MHz to 862 MHz				
Audio output level	-20 dBu* (LINE)/-58 dBu* (MIC) at reference deviation				
Audio output connector	XLR-3-32 (7), balanced				
Antenna attenuator level	0 dB or 10 dB				
Antenna connector	Inputs: BNC-R type (2), 50 Ω (nominal)				
Operating voltage	AC 120 V, 60 Hz (USA-type) AC 230 V, 50/60 Hz (AU-type)				
Current (power) consumption	30 W when accommodating six WRU-806A/806B tuner modules				
Dimensions (W x H x D)	482 x 44 x 285 mm (19 x 1 3/4 x 11 1/4 inches)				
Mass	Approx. 5.5 kg (12 lb 2 oz)				
Supplied accessories	AC power cord (1), Antennas (1 pair), Operating instructions (1)				

^{*0}dBµV= 1µV EMF, 0dBu=0.775Vrms, 0dBV=1V, 0dB SPL=2x10-5 Pa



The DWZ-M50 mic is heavy enough to feel like a quality built piece of kit, but without being so heavy it would make your arm ache. The weight has also been nicely balanced and the whole unit sits well in the hand.

My opinion of Sony has actually been turned around by this product. It is a very impressive and adaptable system which I would definitely recommend.

Ashley Riggs, Pro Mobile, Issue 59

Great Performances for Presenters and Vocalists

Experience stable and reliable sound from Sony. With 24-bit linear PCM digital transmission, you get high sound quality with high reliability, utilizing unique transmission technology also developed by Sony. With the support of two RF modes, your audio signal can be captured and transmitted reliably and easily.



Technologies

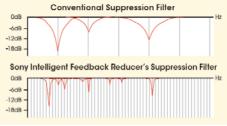
Intelligent Feedback Reducer

DWZ-M70

DWZ-B70H

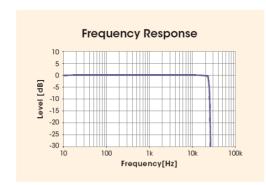
The Sony Intelligent Feedback Reducer can suppress unwanted feedback (howling) with high-performance DSP and Sony's unique algorithms designed to eliminate eedback before it becomes unbearable. Also, the equivalent of maximum 1024-band suppression fi Iters are continuously tuned automatically in real time, eliminating feedback and avoiding deteriorating the original signal; this delivers the highest quality sound that can be enjoyed by presenters, vocalists, and audiences. You can freely select the audio outputs to which you want this feedback reduction filter to apply – for example, you can output original audio to the main PA system, while processed audio is delivered to your monitor speakers.

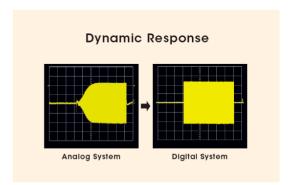




Superb Digital Sound Quality

High-quality 24-bit linear PCM digital transmission offers a pristine audio experience, and a wide frequency range of 10 Hz to 22 kHz. With these high-quality digital sound packages, you can experience professional performances by presenters and vocalists. The audio performance degradation that's typical with conventional analog wireless systems is avoided, because these digital wireless packages are designed without the need for a compander.





Technologies

• Two RF Modes for Reliable Transmission

The DWZ-M70 package and WZ-B70HL package provide two selectable RF odes. Simply choose the one that makes best use of your actual 2.4-GHz RF environment.

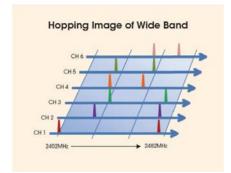
[Wide Band Hopping Mode]

This mode reduces interference with other wireless equipment used in the same environment, such as wi-fi devices. It doesn't require you to have technical knowledge about radio

frequencies.

Wide Band Hopping Mode also supports additional error correction for more secure transmission*.

* Latency of approximately 5 ms.

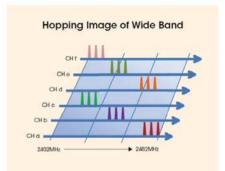


[Narrow Band Hopping Mode]

This mode helps you to avoid interference from other devices – for example, 2.4-GHz wireless remote controllers that are commonly used for lighting control. This enables you to

coordinate

frequencies when using multiple wireless systems simultaneously**.



^{**} Latency of approximately 3 ms.

O Battery Recharging System **DWZ-M70** DWZ-В70HL

The BC-DWZ1 optional battery charger enables you to recharge NiHM batteries in the ZTX-M02RC and the ZTX-B02RC. The BC-DWZ1 is a contactless recharger; this means that you simply place the handheld microphone and/or bodypack transmitter into the charging station to recharge NiMH-type batteries. You do not need to physically remove the rechargeable batteries to recharge them, which saves you time and reduces wear and tear to the transmitters.



^{*}BC-DWZ1 and NiMH battery are sold separately.

Package Lineup

DWZ-B70HL

Digital wireless Lavalier microphone set for presenters and vocalists





ZRX-HR70

Half-rack receiver









Microphone

holder clip





Cord Clip



DWZ-M70

Digital wireless set for presenters and vocalists









ZTX-M02RC Handheld microphone



Microphone holder



Antenna

AC adaptor



DWZ-M50

Digital wireless vocal set optimised for musicians and bands





ZRX-HR50 Half-rack receiver (DIGITAL WIRELESS RECEIVER)



ZTX-M01 Handheld microphone (DIGITAL WIRELESS RECEIVER)



Microphone holder



Antenna



AC adaptor

Package Lineup

DWZ-B50GB

Digital wireless guitar



SONY

Some

ZRX-HR70 Half-rack receiver (DIGITAL WIRELESS RECEIVER)



ZTX-B01 Bodypack transmitter (DIGITAL WIRELESS RECEIVER)



GC-0.7BMP Guitar cable



Antenna



Belt Clip



AC adaptor

DWZ-B50IDigital wireless instrument set





ZRX-HR50 Half-rack receiver (DIGITAL WIRELESS RECEIVER)



ZTX-B01 Bodypack transmitter (DIGITAL WIRELESS TRANSMITTER)



ECM-GZ1UBMP
Gooseneck microphone



Antenna



Belt Clip

AC adaptor



DWZ-B30GB Digital wireless set for





ZRX-C30 Compact receiver



ZTX-B01 Bodypack transmitter (DIGITAL WIRELESS RECEIVER)



GC-0.7BMP Guitar cable



Belt Clip



Belt Clip



AC adaptor

Products



ZRX-HR70

digital wireless half-rack receiver

- Intelligent Feedback reducer function
- 3-way parallel audio output ." TS phone (x2), Balanced XLR (x1)
- 5-Band graphic digital equalizer
- Colour LCD for simple operation and status monitoring for TX & RX
- Clear channel scan for easy set up
- Rack mountable 1U half-rack size (with optional RMM-HRD1 rack mount kit)
- Detachable whip antenna



ZRX-HR50

digital wireless half-rack receiver

- 3-way parallel audio output ." TS phone (x2), Balanced XLR (x1)
- 5-Band graphic digital equalizer
- Colour LCD for simple operation and status monitoring for TX & RX
- Clear channel scan for easy set up
- Rack-mountable 1U half-rack size (with optional RMM-HRD1 rack mount kit)
- Detachable whip antenna



ZRX-C30

digital wireless compact receiver

- Light and compact design
- Built-in antenna to protect against rough handling conditions
- 3-way parallel audio output ." TS phone (x2), Balanced XLR (x1)
- 3-way flexible powering: DC 12V / DC 9V / 9V 6LR61 battery
- Cable tone control
- LED Indicators for status monitoring for TX & RX

Products



- Sony's original high-quality cardioid dynamic capsule
- Interchangeable capsule design, with a flexible choice of capsules, including CU-C31, CU-F31 and CU-F32
- Momentary switch for muting or talk-back application
- Lock function protects from inadvertent setting changes
- · Two AA battery operation
- Robust metal body



- Sony's original high-quality cardioid dynamic capsule
- Interchangeable capsule design, with a flexible choice of capsules
- Latch switch for power on/off for conventional operation
- Two AA battery operation with contactless rechargeable function (with optional BC-DWZ1 battery charger)
- Robust metal body



ZTX-B01 digital wireless belt-pack transmitter

- Muting function for tuning
- Lock function protects from inadvertent setting changes
- Two AA battery operation
- Robust metal body



ZTX-B02RCBelt-pack transmitter

- AES 128-bit Encryption function
- Both cardioid condenser headset microphone and cardioid condenser Lavalier microphone are included
- Momentary switch for muting or talk-back application
- Two AA battery operation with contactless rechargeable function (with optional BC-DWZ1 battery charger)
- Robust metal body

Accessories



GC-0.7BMP Guitar cable



Gooseneck microphone



ECM-GZ1UBMP AD-RX7B Windscreen pack



RMM-HRD1*1

Rack mount kit

BC-DWZ1 Battery charger



Headset microphone



ECM-LZ1UBMP Lavalier microphone



SAD-HZ1B Microphone holder clip



EC-1.5BX XLR Input cable



CU-C31 Capsule Unit Condenser type Cardinid • 60 Hz - 20 kHz



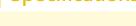
Capsule Unit





*1 For single/double use

Specifications

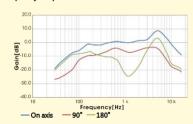


ZTX-M01 Frequency Response Characteristics

ZTX-M02RC

Frequency Response

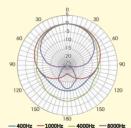
— On axis



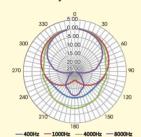
Frequency[Hz]

— 90° -180°

Directivity Characteristics (1 kHz)



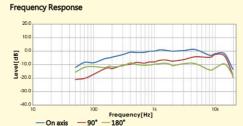
Directivity Characteristics



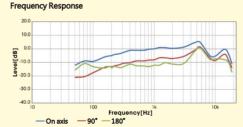
ECM-GZ1UBMP Frequency Response Characteristics



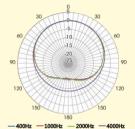
ECM-HZ1UBMP



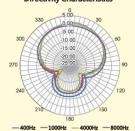
ECM-LZ1UBMP



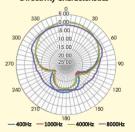
Directivity Characteristics (1 kHz)



Directivity Characteristics



Directivity Characteristics



		DWZ-M70	DWZ-B70HL	DWZ-M50					
Transmitting	Transmitter Type	Handheld	Bodypack 2402.0 MHz to 2478.5 MHz	Handheld					
Section	Carrier Frequencies								
	RF Power Output	10 mW (e.i.r.p.) rack-mount (Half / 1 channel)							
	Receiver Type								
Receiving	Reception Type Antenna Type	Space diversity External whip antenna							
Section	Receiving Frequencies	external winip antenna 2402,0 MHz to 2478,5 MHz							
	RF Sensitivity	24 dBpV or less							
	Capsule Type	Dynamic	Electret condenser	Dynamic					
	Directivity	Dynamic	Uni-directional	Dynamic					
	,		MIC: -22 dBu						
	Maximum Input Level	142 dBSPL (with 12 dB attenuator)	INST/LINE: +8 dBu (when attenuator level is 0 dB)	142 dB SPL (with 12 dB attenuator)					
	Audio Attenuator Adjustment Range	0 / 6 / 12 dB	0 / 10 / 20 dB	0 / 6 / 12 dB					
		Transmission: 10 Hz to 22 kHz	Transmission: 10 Hz to 22 kHz	Transmission: 10 Hz to 22 kHz					
	Frequency Response	Microphone unit: 70 Hz to 16 kHz	Headset Microphone: 60 Hz to 18 kH	Microphone unit: 70 Hz to 18 kHz					
		·	Lavalier Microphone: 60 Hz to 18 kHz	•					
			MIC: 102 dB (A-weighted)						
Audio Section	Dynamic Range	102 dB (A-weighted)	INST/LINE: 98 dB (A-weighted)	102 dB (A-weighted)					
		Narrow band mode: Approx. 3 ms / Wide band mode: Approx. 5 ms (Transmitter + Receiver)	Narrow band mode: Approx. 3 ms / Wide band mode: Approx. 5 ms (Transmitter + Receiver)	Narrow band mode: Approx. 3 ms / Wide band mode: Approx. 5 ms (Transmitter + Receiver)					
	Audio Delay	(Additional Audio Delay for Intelligent Feedback Reducer/Low: 0ms, Mid: 8ms, High: 16ms)	(Additional Audio Delay for Intelligent Feedback Reducer/Low: 0ms, Mid: 8ms, High: 16ms)						
	Distortion (T.H.D)	-							
		XLR-3-32, balanced (x1), Phone jack, unbalanced (x2)	0.03% or less (-38 dBu, 1 kHz input) XLR-3-32, balanced (x1), Phone jack, unbalanced (x2)	XLR-3-32, balanced (x1) / Phone jack, unbalanced (x2)					
	Analog Output			XER 3 32, Balancea (XI) / Thorie Jack, anbalancea (XZ)					
	Reference output level	(Intelligent Feedback Reducer is available)	(Intelligent Feedback Reducer is available)						
		Balanced Output : MIC: -58 dBu / LINE: -12 dBu	Balanced Output : MIC: -58 dBu / LINE: -12 dBu	Balanced Output MIC: -58 dBu / LINE: -12 dBu					
		Unbalanced Output: -28 dBu	Unbalanced Output: -28 dBu	Unbalanced Output: -28 dBu					
Other	Encryption	ASE 128-bit	ASE 128-bit	-					
Other Equipment	Display		LCD						
Equipment	USB Port(for firmware update)								
		ZTX-M02RC: 3.0 V DC (two LR6 (size AA) alkaline dry cell batteries)	ZTX-B02RC: 3.0 V DC (two LR6 (size AA) alkaline dry cell batteries)	ZTX-M01: DC 3.0 V (two LR6 (size AA) alkaline dry cell batteries)					
	Power Requirements	(Rechargeable function is available with two HR6 (size AA) Ni- MH rechargeable batteries)	(Rechargeable function is available with two HR6 (size AA) Ni-MH rechargeable batteries)						
		ZRX-HR70: External DC input: 12 V DC	ZRX-HR70: External DC input: 12 V DC	ZRX-HR50: DC 12 V					
		ZKA-HK70. External DC Input. 12 V DC	ZKX-HK70. External DC Input. 12 V DC						
	Battery Operating Time	Approx. 10 hours of continuous use (25 °C (77 °F) ambient temperature, Sony LR6 (size AA) alkaline dry cell batteries)	Approx. 10 hours of continuous use (25 °C (77 °F) ambient temperature, Sony LR6 (size AA) alkaline dry cell batteries)	Approx. 10 hours of continuous use (25 °C (77 °F) ambient temperature, Sony LR6 (size AA) alkaline dry cell batteries) Sony LR6 (size AA) alkaline dry cell batteries)					
	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)						
General		ZTX-M02RC: φ 48 × 258 mm (1 15/16 × 10 1/4 inches)	ZTX-B02RC: 63 × 87 × 20 mm (2 1/2 × 3 1/2 × 13/16 inches) (w/h/d)	ZTX-M01: 48 × 258 mm (1 15/16 × 10 1/4 inches)					
	Dimensions	(diameter/length)	(excluding the antenna)	(diameter/length)					
	Difficultions	ZRX-HR70: 168 × 44 × 96 mm (6 5/8 × 1 3/4 × 3 7/8 inches) (w/h/d)	ZRX-HR70: 168 × 44 × 96 mm (6 5/8 × 1 3/4 ×3 7/8 inches) (w/h/d)	ZRX-HR50: $168 \times 44 \times 96$ mm (6 5/8 \times 1 3/4 \times 3 7/8 inches) (w/h/d)					
	Mass	ZTX-M02RC: Approx. 308 g (11 oz.) (including batteries)	ZTX-B02RC: Approx. 162 g (5.7 oz.) (including batteries)	ZTX-M01: 305 g (11 oz) (including batteries)					
		ZRX-HR70: Approx. 510 g (1 lb. 2.0 oz.)	ZRX-HR70: Approx. 510 g (1 lb. 2.0 oz.)	ZRX-HR50: 510 g (1 lb 2 oz)					
	Supplied Accessories	ZTX-M02RC(1), ZRX-HR70(1), Mic holder (1), Antenna (2), AC adapter (1), Quick Start Guide (1), Before Use (1), CD-ROM (1)	ZTX-B02RC(1), ZRX-HR70(1), Uni-directional Lavalier Microphone (1), Uni-directional Headset microphone (1), Mic holder clip (1), Cord clip (1), Wind screen (1), Belt clip (1), Belt clip screw (1), Antenna (2), AC adapter (1), Quick Start Guide (1), Before Use (1), CD-ROM (1)	Microphone holder (1), Antenna (2), AC adaptor (1), Quick Start Guide (1), CD-ROM (1)					

		DWZ-B30GB	DWZ-B50GB	DWZ-B50I			
	Transmitter Type		Bodypack				
Transmitting Section	Carrier Frequencies						
Transmitting Section	RF Power Output		2,402.0 MHz to 2,478.5 MHz 10 mW (e.i.r.p.)				
	Receiver Type	Compact (1 channel)	Rack-mount (Ha	alf / 1 channel)			
	Reception Type	The second secon	Space diversity	, ,			
Receiving Section	Antenna Type	Internal monopole antenna	External whi	p antenna			
J	Receiving Frequencies		2,402.0 MHz to 2,478.5 MHz	,			
	RF Sensitivity	30 dB V or less	24 dB V	or less			
	Capsule Type	-		Condenser			
	Directivity	-		Uni-directional			
	Maximum Input Level	MIC: -22 dB	Bu / INST: +8 dBu (with 0 dB attenuator)				
	Audio Attenuator Adjustment Range		0 / 10 / 20 dB				
Audio Section	Frequency Response	10 Hz to 22 kH	Hz	Transmission: 10 Hz to 22 kHz/Gooseneck Microphone: 20 Hz to 22 kHz			
	Dynamic Range	MIC: 102 dB					
	Audio Delay	Narrow band mode: Approx. 3	nitter + Receiver)				
	Distortion (T.H.D)	0.0	0.03% or less (-38 dBu, 1 kHz input)				
	Analog Output	XLR-3-32, balanced (x1) / Phone jack, unbalanced (x2)					
	Reference Output Level	-Balanced Output: -20 dBu -Main/Tuner Out: -28 dBu	-Balanced Output MIC: - -Unbalanced O	: -58 dBu / LINE: -12 dBu Output: -28 dBu			
	Encryption	-	-	-			
Other Equipment	Display	-		LCD			
Other Equipment	USB Port(for firmware update)	TX x1 / RX x 1	TX x1 / RX x 1	TX x1 / RX x 1			
		ZTX-B01: DC 3.0 V (two LR6 (size AA) alkaline dry cell batteries)					
	Power Requirements	ZRX-C30: DC 12 V / 9 V / Square 9 V 6LR61battery	V / Square 9 V 6LR61battery ZRX-HR50: DC				
	Battery Operating Time			°C (77 °F) ambient temperature, Sony LR6 e dry cell batteries)			
	Operating Temperature		0°C to 50°C (32°F to 122°F)				
	Storage/Transport Temperature	-2	20°C to +60°C (-4°F to +140°F)				
General	Dimensions	7TX-B01· 63 × 80 × 20 mm (2.1	1/2 × 3 1/4 × 13/16 inches) (W/H/D) (exclud	ling the antenna)			
			01: 156 g (5.5 oz) (including batteries)	<i>y</i>			
	Mass	ZRX-C30: 205 g (7.2 oz) (including battery) ZRX-HR50: 5) g (1 lb 2 oz)			
	Supplied Accessories	3.1 3 ,		Uni-directional Gooseneck Microphone (1), Wind screen (1), Belt clip (1), Belt clip screw (1), Antenna (2), AC adaptor (1), Quick Start Guide (1), CD-ROM (1)			

^{*0}dBµV= 1µV EMF, 0dBu=0.775Vrms, 0dBV=1V, 0dB SPL=2x10-5 Pa



When You Need Superior Quality and Excellent Versatility in the Most Demanding Sound Gathering Applications

Since Sony introduced the ECM-678 Electret Condenser Shotgun Microphone in 2003, the shotgun microphone family having already been well-accepted for field production and broadcast studio applications.

Sony's expertise and knowledge, accumulated over decades as a world-leading supplier of broadcast equipment, are consolidated in these compact, lightweight microphones.

Despite their slim body, Sony's shotgun microphones offer excellent sensitivity, low inherent noise, flat-and-wide frequency response, superb sound quality, and extreme durability.

These microphones are optimally designed for use with Sony's professional camcorders, which are globally playing active roles in video acquisition with their excellent video quality.

As well as operating with camcorders, Sony's shotgun microphones are also suitable in other sound-gathering configurations; they can be used, for example, as boom microphones.

The versatile shotgun microphone family from Sony provides the ideal choice for virtually all quality-conscious sound gathering applications requiring extremely smooth and natural sound reproduction.

Shotgun microphone

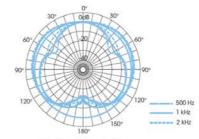


ECM-680S

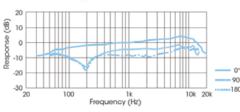
MS stereo shotgun Electret condenser microphone

- Superb sensitivity of -28dB*2 (stereo)/- 32dB*2 (monaural) and extremely low inherent noise of less than 20dB SPL (stereo/monaural).
- Flat-and-wide frequency response: 50Hz to 20kHz (stereo), 40Hz to 20kHz (monaural)
- · Built-in low-cut filter
- · Compact and lightweight design

ECM-680S Stereo

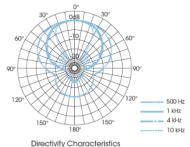


Directivity Characteristics

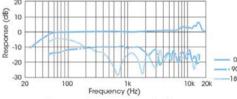


Frequency Responce Characteristics

ECM-680S Monoral



Directivity Characteristics



Frequency Responce Characteristics

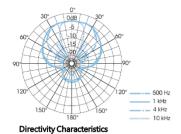
Shotgun microphone

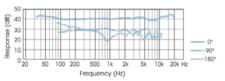


ECM-678

Shotaun Electret condenser microphone

- Superb sensitivity of -28dB (0dB=1 V/Pa.) and an extremely low inherent noise of less than 16dB SPL
- Flat-and-wide frequency response (40Hz to 20kHz)
- Compact design
- High-durability and reliability
- Built-in low-cut filter

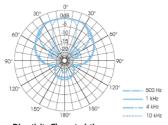




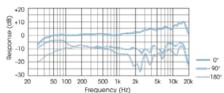
FCM-674

Affordable shotgun Electret condenser microphone

- Excellent sensitivity of -36dB (0dB=1 V/Pa.) and low inherent noise level of less than 17dB SPI
- Flat-and-wide frequency response (40Hz to 20kHz)
- · Compact and lightweight design
- Two-way powering (48V Phantom Power and 1,5V AA battery)
- · Built-in low-cut filter
- Built-in battery liquid leakage protection circuit







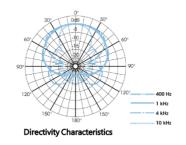
Frequency Response Characteristics

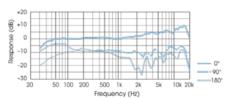


FCM-673

Shotaun Electret condenser microphone

- Excellent sensitivity of -36dB (0dB=1 V/Pa.) and a low inherent noise level of less than 17dB SPL
- Flat-and-wide frequency response (40Hz to 20kHz)
- · Compact and lightweight design
- High-durability and reliability
- Built-in low-cut filter



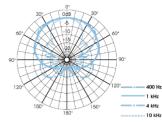




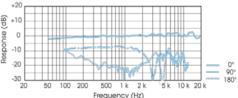
FCM-VG1

Shotaun Electret condenser microphone

- Excellent sensitivity of -33 dB (0 dB=1 V/Pa), and a low inherent noise level of less than 18 dB SPL
- Flat-and-wide frequency response (40 Hz to 20 kHz), excellent sensitivity of -33 dB (0 dB=1 V/Pa) and a low inherent noise level of less than 18 dB SPL
- · Compact and extremely lightweight design with metal body
- · Built-in low-cut filter
- External DC (40 to 52 V) operation
- · Newly Developed windscreen



Directivity Characteristics



Frequency Response Characteristics

Frequency Response Characteristics

Frequency Response Characteristics

Shotgun microphone



ECM-MS2

Compact MS stereo back Electret condenser shotgun microphone

- Compact lightweight design ideal for use with handheld camcorders
- Stereo and mono operation
- Professional quality sound reproduction
- · Metal body reduces external noise
- External DC (40 to 52 V) operation
- Original windscreen protects from contact noise
- Cable tie for bundling and fastening the microphone cable



EMC-CG50BP

UHF ground plane antenna

- Light wight Shotgun Microphone with Ø 3.5 gold coating L type stereo mini plug for small camcorders or DSLR camera.
- Built-in Low-cut Filter
- Power Supplied by Camera or Alkaline AA Battery
- Original windscreen protect from contact noise



Accessories

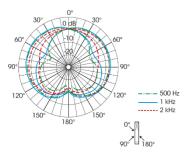


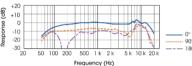
EC-0.5X3F5M XLR-3P - XLR-5P cable



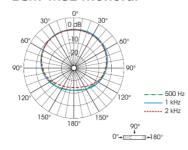
EC-0.5X5F3M XLR-5P - XLR-3P (2) cable

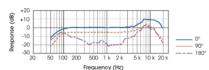
ECM-MS2 Stereo

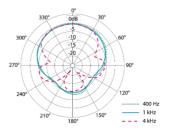


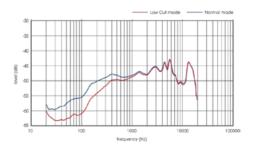


ECM-MS2 Monoral









	ECM-680S		ECM-678	ECM-674	ECM-673
Mode	Stereo	Monaural	-	-	-
Capsule type	Electret o	ondenser	Electret condenser	Electret condenser	Electret condenser
Stereo type	MS (Mid-Side) st	ereo microphone	-	-	-
Directivity	Uni-directional	Super-cardioid	Super-cardioid	Super-cardioid	Super-cardioid
Frequency response	50 Hz to 20 kHz	40 Hz to 20 kHz	40 Hz to 20 kHz	40 Hz to 20 kHz	40 Hz to 20 kHz
Sensitivity (at 1 kHz)	-28 dB*1 ±3 dB	-32 dB*1 ±3 dB	$-28 \text{ dB}^{*1} \pm 3 \text{ dB}$	-36 dB*1 ±3 dB	-36 dB*1 ±3 dB
Output impedance (at 1 kHz)	100 Ω	±20%	200 Ω ±20%	220 Ω ±20%	220 Ω ±20%
Dynamic range	103 dB or more	104 dB or more	111 dB or more	Phantom: 107 dB or more, Battery: 98 dB or more	107 dB or more
Signal-to-noise ratio (IEC179A- weighted, 1 kHz, 1Pa)	73 dB or more	74 dB or more	78 dB or more	77 dB or more	77 dB or more
Inherent noise	21 dB SPL*2 or less	20 dB SPL*2 or less	16 dB SPL*2 or less	17 dB SPL*2 or less	17 dB SPL*2 or less
Wind noise	55 dB SPL*2 or less (with windscreen) 60 dB SPL*2 (without windscreen)		60 dB SPL*2 or less (without windscreen)	45 dB SPL*2 or less (with windscreen), 50 dB SPL*2 (without windscreen)	45 dB SPL*2 or less (with windscreen), 50 dB SPL*2 (without windscreen)
Induction noise from external magnetic field	0 dB SPL	.* ² or less	0 dB SPL*2 or less	0 dB SPL* ² or less	0 dB SPL*2 or less
Maximum input sound pressure level	124 di	B SPL*2	127 dB SPL ^{'2}	Phantom: 124 dB SPL*2, Battery: 115 dB SPL*2	124 dB SPL* ²
Power requirements	DC 40	to 52 V	DC 40 to 52 V	External: DC 40 to 52 V, Battery: 1.5 V	DC 40 to 52 V
Dimensions		250 mm 7/8 inches)	ø20 x 250 mm (ø13/16 x 9 7/8 inches)	ø20 x 268 mm (ø13/16 x 10 5/8 inches)	ø20 x 200 mm (ø13/16 x 7 7/8 inches)
Mass	Approx. 105 g (3.7 oz)		200 g (7 oz)	Approx. 185 g (6.5 oz) without battery Approx. 208 g (7.3 oz) with battery	Approx. 135 g (4.8 oz)
Windscreen (x1), Microphone holder (x1), Microphone spacer (x2), Microphone cable, XLR-5P - XLR-5P (x1), Stand Adaptor (x2), Carrying case (x1), Operating instructions (x1)		Windscreen (x1), Microphone holder (x1), Microphone spacer (x2), Microphone cable, XLR-3P - XLR-3P (x1), Stand Adaptor (x2), Carrying case (x1), Operating instructions (x1)	Windscreen (x1), Microphone holder (x1), Microphone spacer (x2), Microphone cable, XLR-3P - XLR-3P (x1), Stand Adaptor (x2), Operating instructions (x1)	Windscreen (x1), Microphone holder (x1), Microphone spacer (x2), Microphone cable, XLR-3P - XLR-3P (x1), Stand Adaptor (x2), Operating instructions (x1)	

	ECM-VG1	ECM-MS2	ECM-CG50BP
Mode	_	_	Monaural
Capsule type	Mono Electret Condenser	_	Electret condenser
Stereo type	-	MS (Mid-Side) stereo microphone	_
Directivity	Uni-directional (super-cardioid)	Uni-directional	Super-cardioid
Frequency response	40 Hz to 20 kHz	Stereo: 80 Hz to 20,000 Hz Monaural: 70 Hz to 20,000 Hz	40 Hz to 20 kHz
Sensitivity (at 1 kHz)	-33 dB*1 ±3 dB	Stereo: -32 dB*1 1) Monaural: -36 dB 1)	-48 dB/Pa±4 dB *Specially tuned to be used with the camcorders AGC function
Output impedance (at 1 kHz)	60Ω±20%, Balanced	60Ω±20%, Balanced	-
Output connector	-	Cannon XLR-3-12C type x2	ø 3.5 gold coating L type stereo mini plug cable length Approx. 35 cm (13 7/8 in.)
Dynamic range	107 dB or more	100 dB or more	80 dB or more
Signal-to-noise ratio (IEC179A-weighted, 1 kHz, 1Pa)	76 dB or more	69 dB or more	76 dB or more
Inherent noise	18 dB SPL*2 or less	25 dB SPL*2 or less 2)	18 dB SPL*2 (Average)
Wind noise	45 dB SPL ^{*2} or less (with windscreen)	45 dB SPL*2 or less (with wind screen) 65 dB SPL or less (without wind screen)	-
Induction noise from external magnetic field	0 dB SPL*2	0 dB SPL*2 /1 x 10-7 T (1 mG) or less	-
Maximum input sound pressure level	125 dB SPL* ²	125 dB SPL*2 or more (input level for 1% waveform distortion at 1 kHz, converted into equivalent input sound pressure level) 2)	100 dB SPL*2 or more
Power requirements	External, DC 40 V to 52 V	External power supply 40 V to 52 V DC (IEC 61938 P48)	Approx. 900 hours with one alkaline AA battery or plug-in phantom power from audio jack of compatible camcorder
Dimensions	ø20 x 210 mm (ø13/16 x 8 3/8 inches)	ø20 x 137 mm (ø20 31/32 x 5 1/2 inches)	Approx. Ø 21 mm × 261 mm (Ø 27/32 in × 10 3/8 in.) (excluding cord)
Mass	Approx. 66g (2.3 oz.)	Approx. 160g (5.6 oz.)	Approx. 85 g (3 oz.) (excluding battery)
Supplied Accessories	Windscreen (x1), Mic holder (1), Mic spacer (1), Stand adaptor (2), Operating instructions (1)	Wind screen (1), Cable tie (1), Operating instructions (1), Warranty booklet (1)	Shotgun microphone (1), Wind screen (1), Microphone holder (1), Microphone spacer(1), Set of printed documentation

^{*1 0} dB=1 V/Pa, 1 kHz

^{*2 0}dB SPL=2×10-5 P

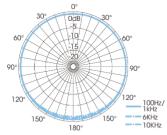
Lavalier microphone

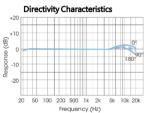
ECM-88 series



FEATURES

- Ultra-miniature, omni-directional electret condenser microphone.
- Designed for quality-critical applications in broadcasting, theater, and field productions.
- Choice of model variations to suit specific user requirements.
- Flat-and-wide frequency response provides natural sound reproduction.
- Water-resistant design maintains sound clarity in almost any application or environment.
- Dual-diaphragm mechanism contributes to high sensitivity, wide dynamic range, and low noise.
- Low cable-noise characteristics.
- Miniature design makes it easy to conceal in a stage costume.





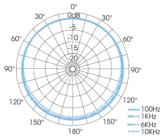
Frequency Response Characteristics

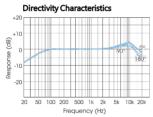




FFATURES

- Miniature, omni-directional electret condenser microphone.
- Worldwide-acclaim for performance and reliability in studio, ENG, and EFP applications.
- Choice of model variations to suit specific user requirements.
- Wide frequency response, high sensitivity, and low-noise characteristics.
- Miniature design makes it easy to conceal in a costume.
- Ideal for use with DWT-B01





Frequency Response Characteristics

ECM-66 series /9X



FFATURES

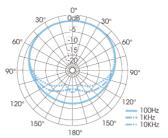
- Uni-directional, electret condenser microphone.
- Resistant to howling by rejecting indirect sound.
- Ideal for institutional use and sound-contracting applications such as speeches, lectures, and conferences.
- Designed for a wide range of applications from voice to instrumental recording.
- Wide dynamic range (101 dB), and high maximum input-soundpressure level (130 dB SPL).
- Low inherent-noise characteristics.

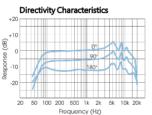
ECM-55 series



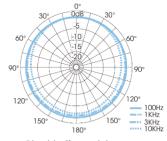
FFATURES

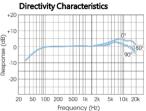
- Omni-directional, electret condenser microphone.
- High signal-to-noise ratio and low inherent-noise characteristics.
- Large microphone head of 10.6 mm (7/16 inch) diameter offers rich sound reproduction.
- Successor to the ECM-50 microphone, the world's first electret condenser lavalier microphone





Frequency Response Characteristics





Frequency Response Characteristics

Lavalier microphone

ECM-44 series





FFATURES

- Omni-directional, electret condenser microphone.
- Choice of model variations to suit specific user requirements.
- Cost-effective miniature microphone provides superb sound quality.

ECM-44B does not support external DC operation.

ECM-166 series



FFATURES

- Uni-directional, electret condenser microphone.
- Resistant to howling by rejecting indirect sound.
- Reasonably priced lavalier microphone, ideal for institutional use and soundcontracting applications such as speeches, lectures, and conferences.

ECM-V1BMP



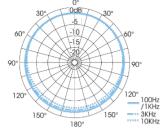
- The lavalier microphone supplied with the UWP package is available as an individual microphone.
- Omni-directional, electret condenser microphone.
- Reasonably priced lavalier microphone, ideal for ENG and EFP uses.

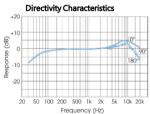
FCM-X7RMP



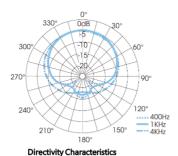
FFATURES

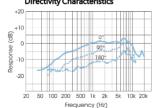
- The lavalier microphone supplied with the UWP package is available as an individual microphone.
- Uni-directional, electret condenser microphone.
- Resistant to howling by rejecting indirect sound.
- Reasonably priced lavalier microphone, ideal for institutional use and soundcontracting applications such as speeches, lectures, and conferences



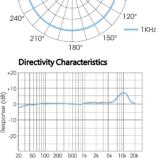


Frequency Response Characteristics



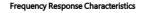


Frequency Response Characteristics

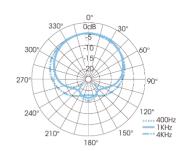


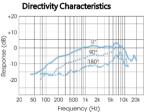
0°

0dB -5 -10/



Frequency (Hz)





Frequency Response Characteristics

Lavalier / Headset microphone

ECM-322 series

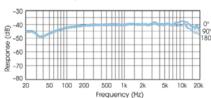


FEATURES

- Omni-directional, electret condenser microphone.
- Headset microphone, ideal for a variety of multimedia presentation applications ranging from seminars and conferences to lectures and workshops.
- Ear-clip-style design, wearable on either the left or right ear.
- The position of the microphone is adjustable.
- With the adjustable soft-texture ear hook and detachable headband, the headset microphone is comfortable to wear and fits stably on the ear, even during lengthy presentations.

90° 150° 100 Hz

Directivity Characteristics



Frequency Response Characteristics

ECM-LZ1UBMP



FFATURES

- The lavalier microphone supplied with the UWP package is available as an individual microphone.
- Omni-directional, electret condenser microphone.
- Reasonably priced lavalier microphone, ideal for ENG and EFP uses.

ECM-HZ1UMBP



FFATURES

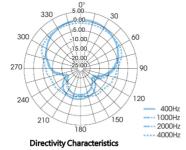
- The lavalier microphone supplied with the UWP package is available as an individual microphone.
- Omni-directional, electret condenser microphone.
- Reasonably priced lavalier microphone, ideal for ENG and EFP uses.

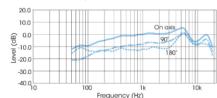
ECM-GZ1IBMP



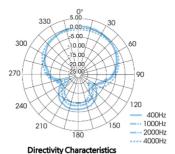
FFATURES

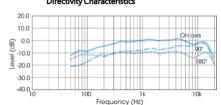
- The lavalier microphone supplied with the UWP package is available as an individual microphone.
- Omni-directional, electret condenser microphone.
- Reasonably priced lavalier microphone, ideal for ENG and EFP uses.



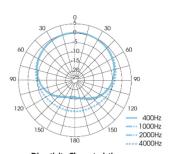


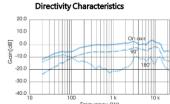
Frequency Response Characteristics





Frequency Response Characteristics





Frequency Response Characteristics

			ECM-88 Series	ECM-77 Series	ECM-66 Series	ECM-55 Series	ECM-44 Series	ECM-166 Series
		unit and XLR-3-12C type connector.)	ECM-88B with supplied DC-78	ECM-77B	ECM-66B	ECM-55B	ECM-44B	_
Model Variations		pin <smc9-4p> connector.)</smc9-4p>	ECM-88BC	ECM-77BC	ECM-66BC	_	ECM-44BC	ECM-166BC
Widder Variations	BMP type (Supplied with a 3.5 mm of	diameter, 3-pole mini plug.)	_	ECM-77BMP	_	_	ECM-44BMP	ECM-166BMP
	Pigtail type (Supplied without a conn	ector <pigtail>.)</pigtail>	ECM-88BPT ECM-88FPT	ECM-77BPT	_	_	ECM-44BPT	_
Capsule type			Electret Condenser	Electret Condenser	Electret Condenser	Electret Condenser	Electret Condenser	Electret Condenser
Frequency response	е		20 Hz to 20 kHz	40 Hz to 20 kHz	70 Hz to 14 kHz	30 Hz to 18 kHz	40 Hz to 15 kHz	100 Hz to 10 kHz
Directivity			Omni-directional	Omni-directional	Uni-directional	Omni-directional	Omni-directional	Uni-directional
Sensitivity (0 dB=1	\//Do. at 1 kH=\	XLR type	$-52.0 \text{ dB} \pm 2 \text{ dB}^{*1}$	$-52.0 \text{ dB} \pm 2 \text{ dB}$	$-50.0 \text{ dB} \pm 2 \text{ dB}$	−52.0 dB ± 2 dB	$-53.0 \text{ dB} \pm 3 \text{ dB}$	_
Sensitivity (0 db=1	V/Pa, at 1 KHZ)	SMC/BMP/Pigtail type	$-39.0 \text{ dB} \pm 2 \text{ dB}$	$-39.0 \text{ dB} \pm 2 \text{ dB}$	$-36.5 \text{ dB} \pm 2 \text{ dB}$	_	$-40.0 \text{ dB} \pm 3 \text{ dB}$	-45.0 dB ± 3 dB
Output impedance	at 1 kHz	XLR type	100 Ω ± 20% (balanced)*1	150 Ω \pm 20% (balanced)	100 Ω ± 20% (balanced)	$100 Ω \pm 20\%$ (balanced)	$250 Ω \pm 20\%$ (balanced)	_
		SMC/BMP/Pigtail type	$2.5 \text{ k}\Omega \pm 30\% \text{ (unbalanced)}$	$2.5 \text{ k}\Omega \pm 30\% \text{ (unbalanced)}$	$2.5 \text{ k}\Omega \pm 30\% \text{ (unbalanced)}$	=	$2.5 \text{ k}\Omega \pm 30\% \text{ (unbalanced)}$	
Dynamic Range			99 dB or more	90 dB or more	101 dB or more	98 dB or more	90 dB or more	96 dB or more
	io (A-weighted, 1 kHz, 1 Pa.)	l .	68 dB or more	64 dB or more	65 dB or more	66 dB or more	62 dB or more	60 dB or more
Inherent noise (0dB	3 SPL = 2E-5 Pa.)		26 dB SPL or less	30 dB SPL or less	29 dB SPL or less	28 dB SPL or less	32 dB SPL or less	34 dB SPL or less
Wind noise (with w	indscreen, at 2m/s) (0 dB SP	PL = 2E-5 Pa.)	45 dB SPL or less	40 dB SPL or less	50 dB SPL or less	40 dB SPL or less	40 dB SPL or less	_
Induction noise fro	m external magnetic field (d	B SPL/1E-7 T, 0 dB SPL = 2E-5 Pa.)	5 dB SPL or less	5 dB SPL or less	5 dB SPL or less	5 dB SPL or less	5 dB SPL or less	_
Maximum input sou	und pressure level (0 dB SPL	. = 2E-5 Pa.)	125 dB SPL	120 dB SPL	130 dB SPL	126 dB SPL	122 dB SPL	130 dB SPL
		Battery	IECR6 or LR6*1	IECR6 or LR6	IECR6 or LR6	IECR6 or LR6	IECR6 or LR6	_
Power supply (XLR	type only)	Battery life (LR6)	Approx. 6000 h*1	Approx. 6000 h	Approx. 400 h	Approx. 6000 h	Approx. 6000 h	_
		External power	DC 12 to 48 V*1	DC 12 to 48 V	DC 24 to 48 V	DC 12 to 48 V	_	_
Daa	_	XLR type	DC 1.5 V*1	DC 1.5 V	DC 1.5 V	DC 1.5 V	DC 1.5 V	_
Power requirement	S	SMC/BMP/Pigtail type	DC 1.1 to 10.0 V	DC 1.1 to 10.0 V	DC 1.1 to 10.0 V	_	DC 1.1 to 10.0 V	DC 1.1 to 10.0 V
		XLR type (internal battery)	0.3 mA or less*1	0.3 mA or less	3.5 mA or less	0.3 mA or less	0.3 mA or less	_
Current drain		XLR type (external battery)	2 mA or less*1	2 mA or less	2 mA or less	2 mA or less	_	_
		SMC/BMP/Pigtail type	0.4 mA or less	0.4 mA or less	0.4 mA or less	_	0.4 mA or less	0.4 mA or less
		XLR type	2.5 m (8.2 feet)	3.0 m (9.8 feet)	3.0 m (9.8 feet)	3.0 m (9.8 feet)	3.0 m (9.8 feet)	_
Cable length		SMC/BMP type	1.2 m (3.9 feet)	1.2 m (3.9 feet)	1.2 m (3.9 feet)	_	1.2 m (3.9 feet)	1.2 m (3.9 feet)
		Pigtail type	2.5 m (8.2 feet)	3.0 m (9.8 feet)	_	_ '	3.0 m (9.8 feet)	_
Dimensions		Microphone head	3.5 x 3.5 x 16.8 mm (5/32 x 5/32 x 11/16 inch) Clip attachment area:3.9 mm (5/32 inch) diameter	5.6 diameter x 12.5 mm (1/4 diameter x 1/2 inch)	10.6 diameter x 24.2 mm (7/16 diameter x 31/32 inch)	10.6 diameter x 21 mm (7/16 diameter x 27/32 inch)	8.5 diameter x 14.5 mm (11/32 diameter x 19/32 inch)	12.5 diameter x 23.5 mm (1/2 diameter x 15/16 inch
		Power unit (XLR type only)	20.0 diameter x 144 mm (13/16 diameter x 5 3/4 inches)	20.0 diameter x 133 mm (13/16 diameter x 5 1/4 inches)	20.0 diameter x 163 mm (13/16 diameter x 6 1/2 inches)	20.0 diameter x 133 mm (13/16 diameter x 5 1/4 inches)	20.0 diameter x 126 mm (13/16 diameter x 5 inches)	
		Microphone head only	0.6 g (0.02 oz)	1.5 g (0.05 oz)	7 g (0.25 oz)	6.5 g (0.23 oz)	2 g (0.07 oz)	3.5 g (0.12 oz)
		Total XLR type	162 g (5.7 oz)	122 g (4.3 oz)	167 g (5.9 oz)	127 g (4.5 oz)	121 g (4.3 oz)	_
Mass		SMC type	22 g (0.7 oz)	23 g (0.8 oz)	30 g (1.1 oz)	-	24 g (0.8 oz)	25 g (1.0 oz)
		BMP type	=	17 g (0.6 oz)	=	=	18 g (0.6 oz)	19 g (0.7 oz)
Р		Pigtail type	20 g (0.7 oz)	26 g (0.9 oz)	_	_	29 g (1.0 oz)	=
Supplied accessories		Single/Horizontal type tie clip (x1)*2, Single/Vertical type tie clip (x1)*2, Double/Horizontal type tie clip (x1)*3, Urethane type windscreen (x1)*2, Microphone case (x1)*3, Operating instructions (x1), Perrite clamp (x1)	Single/Horizontal type tie clip (x1) *, Single/Vertical type tie clip (x1)**, Double/Horizontal type tie clip (x1), Metal-mesh type windscreen (x1), Microphone case (x1) *, Operating instructions (x1)	case (x1), Operating	Single/Horizontal type tie clip (x1), Single/Vertical type tie clip (x1), Double/Horizontal type tie clip (x1), Metal-mesh type windscreen (x1), Microphone case (x1), Operating instructions (x1)	Single/Horizontal type tie clip (x1), Urethane type windscreen (x1), Microphone case (x1) ⁶ , Operating instructions (x1)	clip (x1), Urethane type windscreen (x1), Operatin instructions (x1)	
#1 FCM 00Dddddddd			Operating instructions (x1), Ferrite clamp (x1)	*4.6:				

^{*1} ECM-88B used with the supplied DC-78 battery unit.

^{*2} ECM-88FPT is not supplied with mic accessories.

^{*3} Double / Horizontal type tie clip and microphone case are supplied with ECM-88B only.

^{*4} Single / Vertical type tie clip, Double / Horizontal type tie clip, and microphone case are supplied with ECM-77B only.
*5 Single / Vertical type tie clip and microphone case are supplied with ECM-66B only.

^{*6} The microphone case is supplied with ECM-44B only.

		ECM-V1 Series*1	ECM-X7 Series*2	ECM-322 Series	ECM-LZ1UBMP	ECM-HZ1UBMP	ECM-GZ1UBMP
XLR type (Supplied with	a battery unit and XLR-3-12C type connector.)	_	_	_	_	_	_
Model Variations SMC type (Supplied with	h a Sony 4-pin <smc9-4p> connector.)</smc9-4p>	_	_	ECM-322BC	_	_	_
viouei variations	n a 3.5 mm diameter, 3-pole mini plug.)	ECM-V1BMP	ECM-X7BMP	ECM-322BMP	ECM-LZ1UBMP	ECM-HZ1UBMP	ECM-GZ1UBMP
	ithout a connector <piqtail>.)</piqtail>	-	_	— — — — — — — — — — — — — — — — — — —	_	_	_
Capsule type		Electret Condenser	Electret Condenser	Electret Condenser	Electret Condenser	Electret Condenser	Electret Condenser
Frequency response		40 Hz to 20 kHz	100 Hz to 15 kHz	50 Hz to 18 kHz	60 Hz to 18 kHz	60 Hz to 18 kHz	20 Hz to 22 kHz
Directivity		Uni-directional	Uni-directional	Omni-directional	Uni-directional	Uni-directional	Uni-directional
	KLR type	_	_	_	_	_	_
-	SMC/BMP/Pigtail type	-43.0 ± 3 dB	-44.0 ± 3 dB	-42 dB ± 3 dB	-31.0 dB ±3.0 dB	-31.0 dB ±3.0 dB	-55.0 dB ±3.0 dB
Output impedance	KLR type	_		_	_	_	_
at 1 kHz	SMC/BMP/Pigtail type	$1.2 \text{ k}\Omega \pm 30\%$ (unbalanced)	$1.2 \text{ k}\Omega \pm 30\%$ (unbalanced)	1.4 kΩ \pm 30% (unbalanced)	$1.4 \text{ k}\Omega \pm 30\%$ (unbalanced)	$1.4 \text{ k}\Omega \pm 30\% \text{ (unbalanced)}$	600Ω±30%
Dynamic Range		86 dB or more	88 dB or more	81 dB or more	94dB or more	94dB or more	120dB or more
Signal-to-noise ratio (A-weighted, 1 kHz, 1	Pa.)	60 dB or more	62 dB or more	60 dB or more	68dB or more	68dB or more	64dB or more
Inherent noise (0dB SPL = 2E-5 Pa.)		34 dB SPL or less	32 dB SPL or less	34 dB SPL or less	26dB SPL or less	28dB SPL or less	30dBSPL or less
,				55 dB SPL or less			
Wind noise (with windscreen, at 2m/s)(0 dB SPL = 2E-5 Pa.)		-	_	(without windscreen)	_	_	_
Induction noise from external magnetic fie Maximum input sound pressure level (0 dE		120 dB SPL	 120 dB SPL	— 115 dB SPL	 120dB SPL	120dB SPL	 150dB SPL
	3 SPL = 2E-5 Pa.) Battery	120 GB SPL	120 GB SPL	— 112 GB SPL	1200B SPL	1200B SPL	1200R 25F
Power supply (XLR type only)	Battery life (LR6)	-		_		_	_
	External power KLR type	_ _	<u> </u>	<u> </u>	<u> </u>	_ _	<u> </u>
· · · · · · · · · · · · · · · · · · ·	SMC/BMP/Pigtail type	DC 5 V	 DC 5 V	DC 1.1 to 10.0 V	DC 1.5 to 10 V	DC 1.5 to 10 V	DC 3 to 10 V
	XLR type (internal battery)		— —	DC 1.1 to 10.0 V	— — — — — — — — — — — — — — — — — — —	DC 1.3 to 10 V	DC 310 10 V
	XLR type (external battery)	_		_	_	_	_
	SMC/BMP/Pigtail type	0.2 mA or less	0.2 mA or less	1.3 mA or less	0.6mA or less	0.6mA or less	0.6mA or less
2	XLR type	-	I	_	-	_	_
Cable length	SMC/BMP type	1.2 m (3.9 feet)	1.2 m (3.9 feet)	1.2 m (3.9 feet)	1.2 m (3.9 feet)	1.2 m (3.9 feet)	1.8 m (5.9 feet)
Ī	Pigtail type	_		_	_	_	_
	Microphone head	6.8 diameter x 19.5 mm	11.5 diameter x 20.5 mm	8.4 diameter (capsule case) x 168 mm	15 diameter (capsule case) x 25 mm	15 diameter (capsule case) x 170 mm	13 diameter (capsule cas x 29 mm
Dimensions	унсторноне неаи	(9/32 diameter x 25/32 inch)	(15/32 diameter x 13/16 inch)	(11/32 diameter x 6 5/6 inch)	(19/32 diameter x 1 inch)	(19/32 diameter x 6 3/4 inch)	(17/32 diameter x 1 3/1 inch)
	Power unit (XLR type only)	_	Ì	_	-	_	_
	Microphone head only Total XLR type		<u> </u>	<u> </u>	<u> </u>		<u> </u>
1				10 g (0.4 oz) without			_
Mass	SMC type	_	_	connector	_	_	_
_	BMP type	16.2 g (0.57 oz)	18.0 g (0.63 oz)	10 g (0.4 oz) without connector	5 g (0.18 oz) without connector	10 g (0.35 oz) without connector	25 g (0.9 oz) without connector
	Pigtail type						
Supplied accessories		Single/Horizontal type tie clip (x1), Urethane type windscreen (x1), Operating instructions (x1)	Single/Horizontal type tie clip (x1), Urethane type windscreen (x1), Operating instructions (x1)	Headband (x1), clip (x1), Carrying case (x1), Operating instructions (x1)	Mic holder clip (x1), Windscreen (x1), Operating instructions (x1)	Headband (x1), Cord clip (x1), Windscreen (x1), Operating instructions (x1)	Windscreen (x1), Carryii pouch (x1), Operating instructions (x1)

^{*1} The characteristics are measured as UTX-B2V.

^{*2} The characteristics are measured as UTX-B2X.

Optional Accessories

	ECM-88	ECM-77	ECM-66	ECM-55	ECM-44	ECM-166	ECM-V1	ECM-X7	ECM-LZ1UBMP	ECM-LZ1UBMP	ECM-LZ1UBMP
Single/Horizontal type tie clip	SAD-H88B (x 6)	SAD-H77B (x 10)	SAD-H55B (x 10)	SAD-H55B (x 10)	SAD-H44B (x 10)	-	SAD-HV1B2 (x 4)	SAD-HV1B (x 4)	SAD-HZ1B (x 4)	_	_
Single/Vertical type tie clip	500	Jac 9	——————————————————————————————————————	——————————————————————————————————————	——————————————————————————————————————	_	——————————————————————————————————————	——————————————————————————————————————	——————————————————————————————————————	_	_
Double/ Horizontal Type tie clip	SAD-V88B (x 6)	SAD-V77B (x 10) SAD-W77BL (x 6)	_	_	_	_	_	_	_	_	_
Safety-pin type microphone holder	SAD-S88B (x 6)	SAD-S77 (x 6)	_	_	_	_	_	_	_	_	_
Metal-mesh windscreen	_	AD-R77B (x 6)	_	AD-R55B (x 6)	_	-		_	_	_	_
Urethane windscreen	AD-R88B (x 12)	AD-C77B (x 12)	AD-R66B (x 12)	_	AD-R44B (x 12)	-	AD-RV1B2 (x 5)	AD-RX7 (x 6)	AD-RX7 (x 6)	AD-RX7 (x 6)	AD-RX7 (x 6)
Color windscreens	AD-C88 (x 2 sets)	AD-C77 (x 2 sets)	_	_	_	_	_	_	_	_	_
DC power supply unit (SMC9-4S to XLR 3-pin)	DC-78 Supplied with ECM-88B	DC-78	DC-78	_	DC-78	DC-78	_	_	_	_	_
Microphone accessory kit	AD-KIT88B	AD-KIT77	_	_	_	_	_	_	_	_	_

F Series Dynamic Microphones

Dynamic microphones



F-780

Uni-directional Dynamic Microphone

- For critical vocal recording, professional sound reinforcement and broadcast production
- Rugged capsule in a resilient body structure
- Special AlNiCo magnet provides excellent sensitivity, powerful and accurate sound reproduction.
- Edgewise winding voice coil with lightweight CCAW (Copper Clad Aluminum Wire) provides powerful, crisp, clean sound in the mid and high frequency range.

Directivity Characteristics



F-720

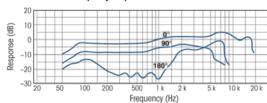
Uni-directional Dynamic Microphone

- For general presentation and speech use in schools, halls, churches and other industrial applications
- Virtually impervious to handling noise and vibration because of efficient, one-piece capsule shock mount
- Convenient TALK switch to turn the microphone on and off

Directivity Characteristics





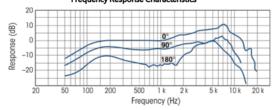


100 Hz

----- 1 kHz

----- 6 kHz

Frequency Response Characteristics

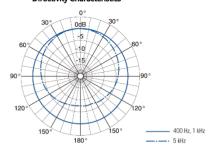


F-115B

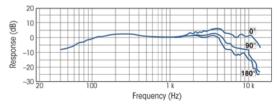
Omni-directional Dynamic Microphone

- Ideal for sound pick-up, especially under adverse weather conditions such as rain or heavy wind thanks to its water-shedding, double-lavered windscreen
- Newly developed omni-directional microphone capsule for clear sound pick-up from any direction.
- Metal body offers a high level of durability to withstand severe conditions encountered in demanding sound pick-up environments, and a special rubber at the core of the microphone reduces shocks and vibrations
- The directly connected microphone cable is waterresistant-limiting deterioration of internal parts
- Ideal for security and observation applications in various outdoor environments

Directivity Characteristics



Frequency Response Characteristics



Dynamic microphones

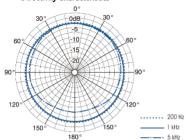


F-112

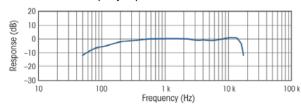
Omni-directional Dynamic Microphone

- Ideal for field production and news gathering application, especially for interviews
- Newly-developed omni-directional microphone capsule for clear voice pick-up from any directions
- Metal body offers a high level of durability to withstand severe conditions encountered in demanding sound pick-up environments.
- Robust brass connector for repeating cable connections
- Optimized balance when combined with the wireless plug-on transmitter included in the Sony UWP-V6 package (UTX-P1), WRT-8P, and DWT-P01

Directivity Characteristics



Frequency Response Characteristics



	F-780	F-720	F-115B	F-112	
Capsule type		Dy	namic		
Frequency response	50 Hz to 18 kHz	50 Hz to 18 kHz	40 Hz to 12 kHz	60 Hz to 18 kHz	
Directivity	Uni-dire	ectional	Omni-c	directional	
Sensitivity (0 dB=1 V/Pa at1 kHz)	-53 dB ±3 dB	-57 dB ±3 dB	-54 dB ±2 dB	-52 dB ±3 dB	
Output impedance	400 Ω ±20%	500 Ω ±20%	400 9	Ω ±20%	
Induction noise from an external magnetic field	Less than 5 dB SPL/1 x 10-7 T (1 mG)	Less than 10 dB SPL/1 x 10-7 T (1 mG)	Less than 5 dB SPL/1 x 10-7 T (1 mG)		
Wind noise	Less than 50 dB SPL	Less than 55 dB SPL	Less than 40 dB SPL Less than 40 dB		
Connector		XLR-3	-12C type		
Dimensions	ø51 x 165 mm (ø2 1/8 x 6 1/2 inches)	ø37.6 x 160 mm (ø1 1/2 x 6 3/8 inches)	ø62 x 203 mm		
Mass	290 g (10.2 oz)	260 g (9.2 oz)	330 g (11.6 oz)	215 g (7.6 oz)	
Supplied accessories	Microphone hold stand adaptor (PF 1/2 to 3/	to NS 5/8, PF 1/2 to W 8)	Operating instructions (x1)		
	(x1 each), Operatir	ng instructions (x1)			

^{*1} Pa=1x10-5 bar

^{*0} dB SPL=2x10-5 Pa



Mixer

SRP-X700P Digital Powered Mixer



SRP-X700P with two URX-M2 tuner modules installed

- 6 x 1-AV switcher contains two RGB/component video inputs (with 5.1 surround sound), one RGB input (with stereo audio), and three composite/S-video inputs (with stereo audio)
- Integrated high-quality six-input mixer comprised of four microphone, two microphone/line, and two line inputs
- Mounting slots built in for two URX-M2 or WRU-806A/806B diversity receiver modules
- Audio-signal processing includes digital equalizer and dynamics processing for each microphone channel, plus on-board digital feedback reducer
- Built-in 200 W + 200 W (4 Ω), 150 W + 150 W (8 Ω), max. 150 W (70 V line) digital power amplifier



SRP-X500P Digital Powered Mixer



SRP-X500P with two URX-M2 tuner modules installed

- 5 x 1-AV switcher contains two RGB/component video inputs and three composite video inputs (each with stereo audio)
- Integrated high-quality audio mixer with four microphone inputs and one stereo line input
- Mounting slots built in for two URX-M2 or WRU-806A/806B diversity receiver modules
- Audio-signal processing includes digital equalizer and dynamics processing for each microphone channel, plus on-board digital feedback reducer
- Built-in four-channel digital power amplifier



SRP-X100 Rack Mount Audio Mixer



- 19-inch rack-mountable design
- Two microphone inputs (channel 1 to 2)
- Four mono inputs (channels 3 to 6, MIC/LINE switchable)
- Three stereo line inputs (channel 7 to 9)
- Master L and R outputs, switchable to mono outputs
- L/R Rec output carries all inputs (except channel 9 input to avoid feedback)
- Two mono sub outputs



	SRP-X500P	SRP-X700P	SRP-X100P
Receiving channels	Two channels when accommodating two URX-	_	
Receiving frequencies	566 MHz to 862 MHz	566 MHz to 862 MHz	_
Power requirements	AC 120/230 V, 50/60 Hz (CED/U2)	AC 120 V, 60 Hz (for U.S.A and Canada) AC 220 V, 50/60 Hz (for China) AC 230 V, 50/60 Hz (for other countries)	AC 120/230 V, 50/60 Hz (CED/U2)
Power consumption	150 W	120 W	19 W
Dimensions (W x H x D)	482 x 132 x 350 mm (19 x 5 1/4 x 13 7/8 inches)	482 x 132 x 357 mm (19 x 5 1/4 x 14 inches)	482 x 44 x 175 mm (19 x 1 3/4 x 7 inches)
Mass	Approx. 13 kg (28 lb 11 oz)	Approx.12 kg (26 lb 3 oz)	Approx. 2.6 kg (5 lb 12 oz)

Mixer



DMX-P01Digital Portable Mixer

- Portable, digital field-mixer designed for ENG/EFP application
- 24-bit A/D and D/A converters and internal 32-bit DSP for excellent sound quality
- 4 microphone/line inputs with +48 V mic power (on/off)
- 2 channels of balanced analog output and AES/EBU digital output (stereo)
- Digital cascade input with phono connector
- Coaxial output connector for mix-bus output or S/PDIF digital output
- Selectable sampling rate: 48 kHz or 96 kHz
- Full control of every parameter from the front panel
- Digital limiters on both inputs and outputs, and digital compressors on outputs
- A scene memory recall feature to instantly recall
- A power-on memory function recalls parameters in three different ways
- Easy-to-read backlit LCD panel displays output levels and setup menus
- Camera-audio return-level check via 12-pin connector
- Panel lock and parameter lock function
- Operates on eight AA-size alkaline (LR6) batteries or external DC 10 to 15 V power

LEFT PANEL



RIGHT PANEL



	DMX-P01 Digital Portable Mixer
	Four XLR-3-31 (female) connectors
Mic Input	Selectable mic -70 dBu to -30 dBu (max 0 dBu) or line level -30 dBu to +10 dBu (max. +24 dBu)
	Four XLR-3-31 (female) connectors
Line Input	Selectable mic -70 dBu to -30 dBu (max 0 dBu) or line level -30 dBu to +10 dBu (max. +24 dBu)
	Master output (analog) 2 ch: +4 dBu, -10 dBu, -60 dBu, (max. +24 dBu) , XLR-3-32 (male) (x2)
	Digital output 2 ch: AES/EBU / XLR-3-32 (male) (x1),
Line Output	S/PDIF (or Cascade output) (x1)/ IEC 60958 coaxial phono connector, unbalanced
	Tape output (analog) 2 ch: -10 dBu, (max10 dBu) O1/8" TRS jack, unbalanced, 10 kohms or more
Frequency Response	20 Hz to 40 kHz +0.5/-3.0 db (@ 96 kHz)
Total Harmonic Distortion (Line Input to Line Output)	Less than 0.05%
Signal Processing	Digital limiter and LCF on each input, digital limiter and compressor on main output
De la Cara	Internal: DC 12 V (eight AA-size alkaline batteries)
Power Consumption	External: DC 12 V via DC jack or DC 10 V to 15 V via XLR-4-32 (female)
Power Requirements	DC 12V
Dimensions (W x H x D)	266 x 68 x 206 mm (10 1/2 x 2 3/4 x 8 1/8 inches)
Mass	Approx. 2.2 kg (Approx. 4lb 13 oz)
Supplied Accessories	12-pin multi-connector (1), Meter scale sheets (6 types), Battery holders (2), Feet (4), Operation instruction CD-ROM (1), Operation manual (x1)

Products



PCM-D100

Portable High Resolution Audio Recorder

- DSD, PCM, and MP3 recording
- Built-in high-quality Electret Condenser Microphones, adjustable from 90° -120°
- Built-in 32GB internal Flash Memory and Optional SD Card slot
- 5-Second Pre-record Buffer*1
- Divide/Combine duuring playback*1
- Track Mark Support*2
- Dual Signal Path Mic Pre and ADC*3
- Cfade-in, Fade-Out for LPCM self recordings
- Super Bit Mapping for LPCM 16 bit self recording
- *1 For PCM+MP3+SDS self recordings
- *2 For PCM+MP3 self recordings
- *3 Optional modes for PCM+MP3 self recordings



PCM-M10

Portable Linear PCM Recorder

- User-friendly Operation
- 96kHz 24bit Recording
- 4GB Built-in Flash Memory
- 5 Second Pre-Record Buffer
- microSD / Memory Srick Micro (M2) Slot
- WAV and MP3 Format Record / Play
- Digital Pitch Control
- Sound Forge Audio Studio LE Software Included

	PCM-D100	PCM-M10
Audio Formats Supported	Record: DSD, WAV and MP3; Playback: DSD, WAV, FLAC, MP3, WMA (Non DRM), AAC-LC (Non-DRM)	Record: .WAV and MP3; Playback: .WAV, .MP3, .WMA (Non DRM), .M4A (AAC-LC, Non-DRM)
Built-in Mic	Electret condenser microphones. Max input level: 128 dB SPL. Frequency response 20 Hz to 20 kHz	Electret condenser microphones. Max input level: 123 dB SPL. Frequency response 20 Hz to 20 kHz
	(Stereo Mini Jack) Input impedance: 22 k ohm,	(Stereo Mini Jack)
Mic Input	Rated input level: 2.5 mV; Minimum input level: 0.7 mV	Input impedance: 22 k ohm, Rated input level: 2.5 mV; Minimum input level: 0.9 mV
Line Input (Analog)	(Stereo Mini Jack) Input impedance: 22k ohm; Minimum input level: 450mV; Rated input level: 2.0V	(Stereo Mini Jack) Input impedance: 22k ohms; Minimum input level: 500mV; Rated input level: 2.0V
Line Input (Optical)	Optical Digiital Input: Input level: -27 dBm to -14 dBm; Emission wavelength: 660 nm	NA
Line Output (Analog)	Output impedance: 220 ohms;Output level: 1.7V; Load impedance 22k ohms	Line out available from headphone jack (menu selectable)
Line Output (Optical)	Output level: -21dBm to -15 dBm	NA
Headphone Output	Stereo Mini Jack; Maximum output: 25 mW + 25 mW or more; Load impedance: 16 ohms	Stereo Mini Jack; Maximum output: 20 mW + 20 mW; Load impedance: 16 ohms
Frequency Response	20Hz - 50kHz (Line In) @ DSD2.8 ; 20Hz - 45kHz (Line In) @ LPCM 192kHz/24bit	20 Hz to 40 kHz (Line in) @ 96KHz
Sampling Frequency	DSD 2.8MHz; LPCM 192kHz/176.4kHz/96kHz/88.2kHz/48kHz/44.1kH z	22.05kHz, 44.1kHz, 48kHz and 96kHz
Quantization	16-bit LPCM, 24-bit PCM and 1-bit DSD	16-bit linear, 24-bit linear
S/N Ratio	DSD 98dB or greater; LPCM 24 bit 96dB or greater	87dB or greater (1KHz IHF-A) when set to 24-bit
Total Harmonic Distortion (Line Input to Line Output)	DSD: 0.008% or below (1kHz, 22kHz LPF)	0.03% or below (1kHz, 22kHz LPF)
(Ellie Input to Ellie Output)	LPCM: 0.006% or below (1kHz, 22kHz LPF)	
Wow and Flutter	Below measurable limit (less than +/- 0.001%W.Peak)	Below measurable limit (less than +/- 0.001%W.Peak)
USB	High-speed USB,mass storage class	High-speed USB,mass storage class
Power Consumption	0.75w	0.27w
Power Requirements	Four AA size Alkaline batteries (supplied). Four AA NiMH Rechargable batteries (optional)	Two AA size Alkaline batteries (supplied). Two AA NiMH Rechargable batteries (optional)
DC Input Jack	6V	3V
Battery Life	25 hrs @44.1kHz/16 bit; 18 hrs @192kHz/24bit or 12 hrs @ DSD2.8	24 hrs @ 44.1KHz/16-bit or 19 hrs @ 96KHz/24-bit
Memory Stick Slot	Accepts SD, SD-HC,SD-XC, Memory Stick Pro Duo and Memory Stick Pro-HG	Accepts Memory Stick Micro (M2) and microSD
Dimensions	"2 7/8" x 6 1/8" x 1 1/4" (w x h x d) not including projecting parts and controls"	2 1/2" x 4 1/2" x 7/8" (w x h x d) not including projecting parts and controls
Weight	13.9 oz (including batteries)	6.6 oz (including batteries)

Products



MDR-7550 Professional In-Ear Headphones

- 16mm Driver Unit with ML Diaphragm
- In-Ear Monitor (IEM) Design
- Flexible Ear Hanger Ensures Superior Fit
- Hybrid Silicone/Rubber Earbuds, 3 Sizes Supplied
- Supplied Soft Case

MDR-7502

• 40mm Driver Unit

Closed-Ear Design

Supplied Soft Case

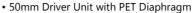
Folding Construction

 Stereo Unimatch Plug Gold Connectors and OFC Cord

Professional Headphones



MDR-7510 **Professional Headphones**



- Supplied Soft Case



MDR-7506

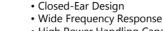
Professional Headphones

- 30mm Driver Unit
- Closed-Ear Design
- Stereo Unimatch Plug
- Gold Connectors and OFC Cord









High Power Handling Capacity 2.000mW

Stereo Unimatch Plug

• Gold Connectors and OFC Cord



MDR-7520

Professional Headphones

- 50mm Driver Unit with LCP Diaphragm
- Closed-Ear Design
- Wide Frequency Response
- High Power Handling Capacity 4,000mW
- Stereo Unimatch Plug
- Gold Connectors and OFC Cord
- Supplied Soft Case

SONY

Distributed by

©2015 Sony Corporation. All rights reserved.

Reproduction in whole or in part without written permission is prohibited.

Features and specifications are subject to change without notice.

The values for mass and dimension are approximate.

"SONY", "DWX", "WiDIF" and "Cross Remote" are trademarks of Sony Corporation.

All other trademarks are the property of their respective owners.