

# Performance you've always wanted at a price you never expected.

They're used in broadcasting for everything from network news, to talk shows to soap operas. They're used when rock and roll headliners hit the stadium circuit, and for Broadway musicals. Sony's 800 Series UHF Wireless Microphone Systems are the stuff of pro audio legend. But until now, this high performance has only been available to musicians and producers with deep pockets. Now Sony changes all that with the latest additions to the 800 MHz UHF Wireless Microphone family. Now you're free from the interference, distortion and assorted hash of the crowded VHF band. You're free to mix and match mics, body packs and receivers with the rest of Sony's 800 Series. And you're free to step up to the UHF world, even if your budget is firmly rooted in the real world.

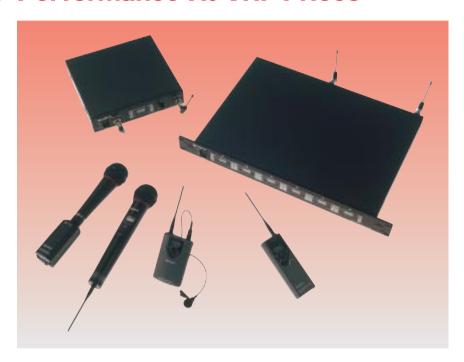


## Sony Offers...

### **Freedom To UHF Performance At VHF Prices**

### Up to 19-channel Simultaneous Operation

Special combinations of intermodulation-free wireless channels are conveniently stored in the CPU of each tuner. This makes it easy to choose the correct operating frequencies for simultaneous multi-channel operation. This UHF synthesized wireless system employs six channel groups. Each group allows for different variations on the number and combination of various UHF TV channels. By using channel number designations of (64), (66) and (68), up to 19 channels can be operated simultaneously, over all channels from 64 to 69.



### **Channel Allocation**

TV Channel Group No.	(64) 64,65	(66) 66,67	(68) 68,69
11	64-05	66-05	68-05
	64-14	66-14	68-14
	64-25	66-25	68-25
	64-41	66-41	68-41
	64-47	66-47	68-47
	65-12	67-12	69-12
	65-16	67-16	69-16
	65-30	67-30	69-30
	65-37	67-37	69-37
	65-40	67-40	69-40
	65-42	67-42	69-42

TV Channel Group No.	(64) 65	(66) 67	(68) 69
12	65-01	67-01	69-01
	65-05	67-05	69-05
	65-11	67-11	69-11
	65-25	67-25	69-25
	65-28	67-28	69-28
	65-36	67-36	69-36
	65-41	67-41	69-41
	65-43	67-43	69-43

TV Channel Group No.	(64) 64	(66) 66	(68) 68
13	64-03	66-03	68-03
	64-13	66-13	68-13
	64-18	66-18	68-18
	64-26	66-26	68-26
	64-37	66-37	68-37
	64-40	66-40	68-40
	64-44	66-44	68-44
	64-46	66-46	68-46

TV Channel Group No.	(64) 64,65	(66) 66,67	(68) 68,69
A1	64-05	66-02	68-06
	64-12	66-24	68-20
	64-15	66-29	68-24
	65-24	67-16	68-40
	65-33	67-18	69-04
		67-39	69-17
			69-23
			69-47

TV Channel Group No.	(64) 65	(66) 67	(68) 69
A2	65-02	67-07	69-11
	65-19	67-33	69-22
	65-43	67-45	69-30
			69-36
			69-40
			69-43
			69-45

TV Channel Group No.	(64) 64	(66) 66	(68) 68
А3	64-01	66-06	68-10
	64-18	66-22	68-21
	64-42	66-44	68-29
			68-35
			68-39
			68-42
			68-44



WRR-805A with Sony DCR-VX1000 camcorder

### 800 MHz UHF Transmission Quality

If you want to escape the walkietalkies, CB radios and hash of the VHF band, step up to 800 MHz UHF. As with previous Sony 800 MHz wireless products, these new 800 Series components bring you all the benefits of Sony engineering, offering a choice of 282 wireless channels, in the range from 770 to 806 MHz.\*

\* Frequencies and TV bands differ in versions shipped to other countries.



### Frequency-Agile Frequency-Synthesis Tuning

Because RF interference can change from venue to venue -- and from night to night -- Sony's wireless systems can also change. You get your choice of 282 wireless channels, available to switch at a moment's notice. This ability, made possible by Sony Frequency Synthesis Tuning, is your first line of defense against all those other potential sources of interference.

### **Space Diversity Reception for Added Protection**

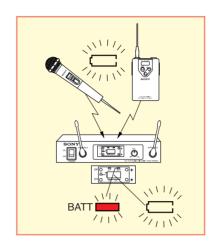
If you've ever listened to a car radio in a traffic jam, you know that small changes in location can make a big difference in radio reception. The same is true when "talent" moves about the stage with a wireless mic. Sony's defense against the threat of multipath distortion is by equipping our receivers with Space Diversity Reception. The system uses two receiving antennas, some distance apart. The tuner constantly compares the signal from both antennas -- and chooses the best one!



### **Freedom Of Operational Convenience**

### Remote Battery Alarm on Receiver

For added assurance of continued operation, you can now monitor the battery reserves of handheld, body pack and plug-on transmitters; the battery indicator on LCD starts flashing on the handheld and body pack transmitter, and the battery indicator on LED turns red on the plug-on transmitter, both indicating approx. one hour before the batteries go dead. On the receiver, the battery indicator on the LCD and LED displays also flash, helping to avoid the chance of battery failure at a critical moment.





### Long Operating Time with A Single AA-size (LR6) Alkaline Battery

The handheld mic offers up to 5 hours of continuous operation, and 6 hours for the body pack transmitter are guaranteed with only one single AA-size (LR6) alkaline battery.

\* Battery life depends on environmental and usage conditions.

#### Modular Design for 6/11/19 Simultaneous Operation

The MB-806A Tuner Base Unit features slots for six WRU-806A diversity receiver modules, with an internal antenna divider for six channels of diversity operation in a single rack space. Using the optional WD-820A Antenna Divider, you can go even further, with up to 19 wireless mics operating simultaneously on a single pair of AN-820A active antennas!

#### Comprehensive LCD

For operational convenience, an easyto-read LCD (Liquid Crystal Display) is built into the handheld mic, body pack transmitter, and receivers to provide various information such as battery status indication, accumulated operating hours, operating channel, and attenuation.

#### **Auto Channel Assignment**

The MB-806A also features a convenient auto channel assignment function. Once an operating group is set on one of the installed WRU-806A receiver, channels within the same group are automatically assigned, and unusable channels for the additional receivers will be automatically detected and skipped. This enables instant and automatic multi-channel setting of the entire rack of receivers.\*

\* Auto channel assignment function is available only when the tuner base unit holds the receiver modules in the same TV channels.



### Compatible with Sony's Existing 800 Series

You can mix and match these new wireless components with previous Sony 800 Series components as you please! Use the new body pack transmitters and mics with your existing receivers -- or use existing transmitters with the new receivers.





### **Main Features**

### **WRT-807A**

### **UHF Synthesized Dynamic Wireless Microphone**

- · High sound quality for vocals powerful, crisp and clean sound as well as presence in the low and mid frequency range
- Dynamic microphone capsule which is employed in the Sony F-780 professional vocal microphone
- · LCD for display of channels, attenuator and accumulated operating hours
- Up to 5 hours of continuous operation with a single AA-size (LR6) battery
- 10 mW RF power output
- · Battery alarm transmitted to compatible receivers
- Newly-developed lockable power switch to prevent accidental operation



### **UHF Synthesized Body Pack Transmitter**

- · Smoothly tapered body pack with compact, lightweight design
- Battery alarm transmitted to compatible receivers
- · LCD for display of channel, attenuator and accumulated operating hours
- Up to 6 hours of continuous operation with a single AA-size (LR6) alkaline battery
- •10 mW RF power output
- 3-pole mini jack with a lock mechanism for secure lavalier cable clamping
- Switchable -40 dB/-60 dB input level and PHASE switches for guitar and lavalier microphone
- · Microphone options:

GC-0.7MP Guitar Cable, ECM-44BMP/ECM-77BMP/ECM-121BMP/ECM-122BMP/ECM-166BMP Electret Condenser Microphone and ECM-310BMP Electret Condenser Headset Microphone





### *WRT-808A*

### **UHF Synthesized Transmitter**

- Plug-on transmitter converts a microphone to a wireless microphone
- · Fitted with an XLR connector
- Compact and lightweight body, providing balanced handling
- Durable connecting mechanism for dependable operation
- Switchable RF power output, 50 mW for a longer working distance or 10 mW for multi-channel operation
- Variable input attenuation, 0 dB to 50 dB
- · Battery alarm transmitted to compatible receivers
- · LED for AF/Peak, battery indication
- Up to 4 hours continuous operation with two AA-sized (LR6) alkaline batteries



**WRT-807A** 

### **WRR-802A**

### **UHF Synthesized Diversity Tuner**

- · Single-channel Space Diversity Tuner
- Half 19-inch rack width and 1U height
- AF, RF, and battery alarm indication by both LED and LCD to double check operating condition (channel indication by LCD only)
- Output volume control
- Supplied portable front-mounted passive antennas



**WRR-802A** 



Rear Panel

### Two types of output connectors

- TRS Phone Balanced connector (6.3 mm dia.), -20 dBm for LINE
- · XLR connector, -58 dBm for MIC or -20 dBm for LINF

#### MB-806A

\*The six optional WRU-806A are installed



### *MB-806A*



**Rear Panel** 

#### **Tuner Base Unit**

- Modular design, 1U height 19-inch rack
- · Accommodates up to six WRU-806A for up to six simultaneous channels of operation
- Up to 11 simultaneous channels on a single pair of AN-820A Active Antennas with the optional WD-820A Antenna Divider
- Up to 19 simultaneous channels on a single pair of AN-820A Active Antennas with the optional WD-820A Antenna Divider
- · XLR output connectors for each tuner and mix output
- Selectable output level, -58 dBm for MIC or -20 dBm for LINE
- · Space Diversity Reception for dependable RF reception
- AF, RF, and battery alarm indication by both LED and LCD to double check operating condition (channel indication by LCD only)
- Auto channel assignment of additional receiver modules for instant programming of interference-free multichannel operation
- RF input attenuator (10 dB/0 dB) switch
- Supplied passive antennas for rear mounting (with provision for front mounting)

#### WRR-805A



### **WRU-806A**

### **UHF Synthesized Tuner Unit**

- Dedicated plug-in diversity receiver module for MR 806A
- Space Diversity Reception for dependable RF reception



### **WRR-805A**

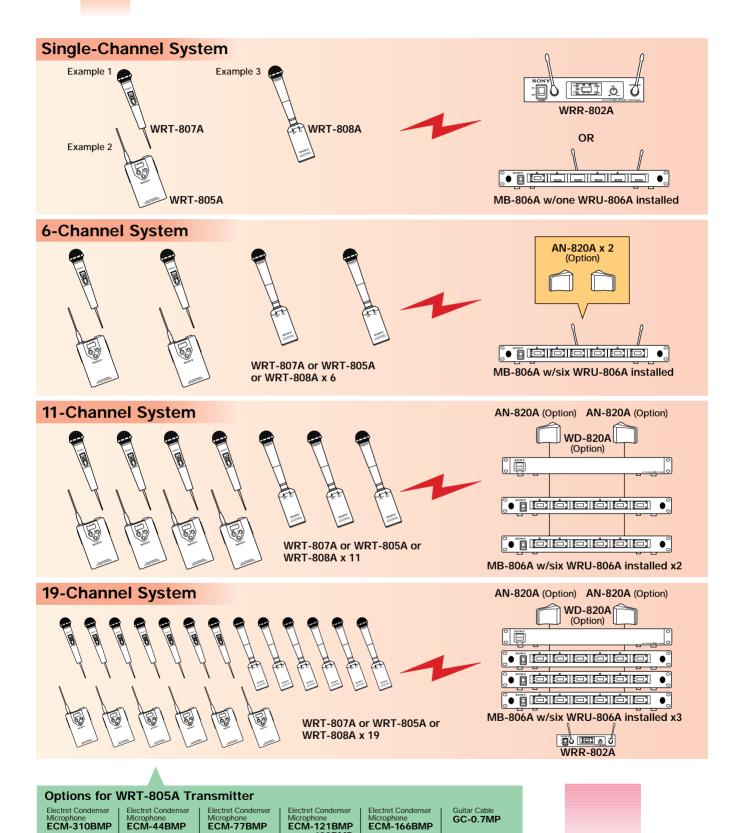
#### **UHF Synthesized Portable Tuner**

- Compact, lightweight portable tuner for a wide variety of camcorders that have a stereo mini jack
- Flexible mounting position and direction for secure operation
- RF, battery alarm indication by both LED and LCD to double check operating condition (AF and channel indication by LCD only)
- LCD for display of operating channel, AF, RF, accumulated operating hours, the tuner's battery status
- LED for RF condition, the transmitter's battery alarm indication
- Convenient headphone monitoring with volume control
- 3-pole mini jack with a lock mechanism for secure camera cable clamping
- Up to 6 hours of continuous operation with two AA-size (LR6) alkaline batteries
- •RF Muting function

### **System Configuration**

ECM-44BMP

ECM-77BMP



ECM-166BMP

### **Specifications**

	WRT-807A (68),(66),(64)	WRT-805A (68),(66),(64)	WRT-808A (68),(66),(64)
Carrier frequency:	794 MHz to 806 MHz (68)	794 MHz to 806 MHz (68)	794 MHz to 806 MHz (68)
	782 MHz to 794 MHz (66)	782 MHz to 794 MHz (66)	782 MHz to 794 MHz (66)
	770 MHz to 782 MHz (64)	770 MHz to 782 MHz (64)	770 Mhz to 782 MHz (64)
Oscillator:	Crystal controlled PLL synthesizer	Crystal controlled PLL synthesizer	Crystal controlled PLL synthesizer
Type of emission:	110KF3E	110KF3E	110KF3E
RF power output:	10 mW (50 Ω load)	10 mW (50 Ω load)	50 mW or 10 mW selectable (50 Ω load)
Antenna:	1/4 wave length wire antenna	1/4 wave length wire antenna	Internal antenna
Reference deviation:	±5 kHz (94 dB SPL*1, 1 kHz)	±5 kHz (-60 dBV*2, 1 kHz input)*3	±5 kHz (-60 dBV*2, 1 kHz input)
Frequency response:	50 Hz to 15,000 Hz	70 Hz to 15,000 Hz	70 Hz to 15,000 Hz
Signal-to-noise ratio:	More than 60 dB (A-weighted)	57 dB (A-weighted)	More than 57 dB (A-weighted)
Attenuator adjustment range (pad):	21 dB, variable in 3 dB steps	21 dB, variable in 3 dB steps	0 to 50 dB, continuous
Max. sound pressure level:	151 dB SPL*1 (1 kHz)	_	_
Max. input level:	_	+17 dBV (-40 dBV position, attenuator 21 dB)	26 dBV*2
Input level:	_	-40 dBV (±16 kHz deviation at 1 kHz modulation)*3	<del>_</del>
		-60 dBV (±5 kHz deviation at 1 kHz modulation)*3	
Frequency stability:	_	_	Within ±0.005 %
Input connector:	_	3.5 mm (5/32 inch) dia.	XLR-3-11 type
		3-pole mini phone jack with lock mechanism	
Microphone capsule:	Dynamic	_	_
Directivity:	Uni-directional	_	<del>_</del>
Operating voltage:	DC 1.5 V, AA-size (LR6) alkaline battery(1)	DC 1.5 V, AA-size (LR6) alkaline battery(1)	DC 3.0 V, AA-size (LR6) alkaline battery (2)
Battery life:	Approx. 5 hours w/(LR6)	Approx. 6 hours w/ (LR6)	Approx. 4 hours w/(LR6)
	AA-size alkaline battery (1)	AA-size alkaline battery (1)	AA-size alkaline battery (2)
Dimensions:	51 x 238 mm (2 1/8 x 9 3/8 inches)	58 (W) x 93 (H) x 21 (D) mm	40 x 40 x 108 mm
	(Max. dia. x length)	(2 3/8 x 3 3/4 x 27/32 inches)	(1 5/8 x 1 5/8 x 4 3/8 inches)
Mass:	440 g (15.5 oz) w/ battery	100 g (3.5 oz) w/ battery	175 g (6.18 oz) w/ batteries
Supplied accessories:	Operating instructions (1)	Operating instructions (1)	Operating instructions (1)
	Microphone holder (1)		
	Metal screw adaptor (1)		

<sup>\*1 0</sup> dB SPL = 2 x 10-5 Pa. \*2 0 dBV = 1 Vr.m.s. \*3 INPUT switch at -60 dBV position

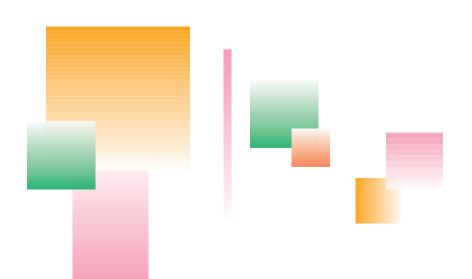
	WRR-802A (68),(66),(64)	MB-806A	WRU-806A (68),(66),(64)	WRR-805A (68),(66),(64)
Receiving frequency:	794 MHz to 806 MHz (68), 782 MHz to 794 MHz (66), 770 MHz to 782 MHz (64)	770 MHz to 806 MHz	794 MHz to 806 MHz (68), 782 MHz to 794 MHz (66), 770 MHz to 782 MHz (64)	794 MHz to 806 MHz (68), 782 MHz to 794 MHz (66), 770 MHz to 782 MHz (64)
Oscillator:	Crystal controlled PLL synthesizer	_	Crystal controlled PLL synthesizer	Crystal controlled PLL synthesizer
Type of reception:	110KF3E	_	110KF3E	110KF3E
Reference deviation:	±5 kHz	_	±5 kHz	±5 kHz
Selectivity:	More than 60 dB	_	More than 60 dB	More than 60 dB
Spurious rejection:	More than 70 dB	_	More than 70 dB	More than 70 dB
Frequency range:	100 Hz to 15,000 Hz	_	100 Hz to 15,000 Hz	100 Hz to 15,000 Kz
Signal-to-noise ratio:	More than 60 dB (A-weighted)	_	More than 60 dB (A-weighted)	More than 30 dB (A-weighted RF input: 10 dBµ) More than 60 dB (A-weighted RF input: 60 dBµ)
Harmonic distortion:	Less than 1.0 %	_	Less than 1.0 %	Less than 1.0 %
RF muting level:	30 dBµ	_	30 dBµ	15 dBμ ±5 dBμ
Audio output level:	-20 dBm (±5 kHz deviation at 1 kHz modulation)	-20 dBm/-58dBm (±5 kHz deviation at 1 kHz modulation)	_	-58 dBm (±5 kHz deviation at 1 kHz modulation)
Audio output connector:	XLR and TRS phone, 6.3 mm (1/4 inch) dia., balanced	XLR type	_	3.5 mm (5/32 inch) dia. 3-pole mini phone jack with look mechanism, balanced
Antenna connector:	BNC-R type	BNC-R type	_	<u> </u>
Headphone output connector:	, <u> </u>	, <u> </u>	_	3.5 mm dia. (5/32 inch) 3-pole mini phone jack
Power consumption:	_	30 W	_	_
Operating voltage:	DC 9 V	AC 120 V, 60 Hz	DC 9 V	DC 3 V, AA-size (LR6) alkaline battery (2)
Current consumption:	600 mA	_	225 mA	170 mA
Battery life:	_	_	<del>_</del>	Approx. 6 hours w/(LR6) AA-size alkaline battery (2)
Dimensions (W x H x D):	218 x 44 x 210 mm (8 5/8 x 1 3/4 x 8 3/8 inches)	482 x 44 x 300 mm (19 x 1 3/4 x 11 7/8 inches)	57 x 26 x 122 mm (2 1/4 x 1 1/16 x 4 7/8 inches)	44 x 121 x 24 mm (1 3/4 x 4 7/8 x 31/32 inches)
Mass:	1.6 kg (3 lb 8 oz)	3.6 kg (7 lb 15 oz)	160 g (5.7 oz)	140 g (4.9 oz) w/batteries
Supplied accessories:	Operating instructions (1) AC power adaptor (1) Antenna (2)	Operating instructions (1) AC power cord (1) Antenna (2)	Operating instructions (1)	Operating instructions (1) Attachment case with a belt clip (1) Output cable (1)

 $<sup>\</sup>stackrel{-}{*}$  0 dBm = 0.775 Vr.m.s., 600  $\Omega$  load, 0 dBµ = 1 µV, 0 dBu = 0.775 Vr.m.s. open

	ECM-310BMP	ECM-44BMP	ECM-77BMP
Capsule type:	Electret condenser	Electret condenser	Electret condenser
Frequency range:	70 to 12,000 Hz	40 to 15,000 Hz	40 to 20,000 Hz
Directivity:	Wide-cardioid	Omni-directional	Omni-directional
Sensitivity	-44 dB (6.3 mV) ±3 dB	-40 dB (10 mV) ±3 dB	-39 dB (11 mV) ±2 dB
(0 dB = 1 V/1 Pa. at 1 kHz):			
Output impedance:	800 $\Omega$ ±30 % at 1 kHz, unbalanced	2.5 k $\Omega$ ±30 % at 1 kHz, unbalanced	2.5 k $\Omega$ ±30 % at 1 kHz, unbalanced
Microphone cable:	1.2 m (3.9 feet)	1.2 m (3.9 feet)	1.2 m (3.9 feet)
Output connector:	3.5 mm (5/32 i	nch) dia. 3-pole mini phone plug with	lock mechanism
Dimensions Microphone head:	10 mm (13/32 inch) dia.	8.5 mm dia. x 14.5 mm	5.6 mm dia. x 12.5 mm
		(11/32 inch dia. x 19/32 inch)	(1/4 inch dia. x 1/2 inch)
Mass Microphone head:	_	Approx. 2 g (0.07 oz)	Approx. 1.5 g (0.05 oz)
Total:	Approx. 46 g (1.62 oz),		
	without connector		
Finish:	Mat black finish	Mat black finish	Mat black finish
Supplied accessories:	Operating instructions (1)	Operating instructions (1)	Operating instructions (1)
	Wind screen (1)	Holder clip (1)	Holder clip (1)
		Wind screen (1)	Wind screen (1)

	ECM-121BMP/122BMP	ECM-166BMP	
Capsule type:	Electret condenser	Electret condenser	
Frequency range:	100 to 10,000 Hz	100 to 10,000 Hz	
Directivity:	Omni-directional	Uni-directional	
Sensitivity	-41 dB (8.9 mV)	-44 dB (6.3 mV) ±3 dB	
(0 dB = 1 V/1 Pa. at 1 kHz):			
Output impedance:	2.5 kΩ ±30 % at 1 kHz, unbalanced	2.5 kΩ ±30 % at 1 kHz, unbalanced	
Microphone cable:	0.2 m (7 7/8 inches) /1.2 m (3.9 feet)	1.2 m (3.9 feet)	
Output connector:	3.5 mm (5/32 inch) dia. 3-pole mini	phone plug with lock mechanism	
Dimensions Microphone head:	8.5 mm dia. x 17 mm	12.5 mm dia. x 23.5 mm	
	(11/32 inch dia. x 11/16 inch)	(1/2 inch dia. x 15/16 inch)	
Mass Microphone head:	Approx. 3 g (0.11 oz)	Approx. 3.5 g (0.12 oz)	
Finish:	Mat black finish Mat black finish		
Supplied accessories: Operating instructions (1)		Operating instructions (1)	
	Holder clip (1)	Holder clip (1)	
	Wind screen (1)	Wind screen (1)	

	GC-0.7MP
Input impedance:	More than 1 M $\Omega$
Connectors:	3.5 mm (5/32 inch) dia. 3-pole mini phone plug with lock mechanism (for transmitter) 6.5 mm (1/4 inch) dia. phone plug (for guitar)
Cable:	0.7 mm (2.3 feet)
Mass:	Approx. 70 g (2.47 oz)



### **Optional Accessories**

#### **ECM-310BMP** Electret Condenser Microphone



- · Headset-style microphone
- · Wide cardioid capsule
- Lightweight, with flexible microphone positioning for optimum voice pick-up
- 3-pole mini plug with a lock mechanism for secure cable clamping

#### **ECM-44BMP** Electret Condenser Microphone



- Omni-directional
- · High sound quality
- 3-pole mini plug with a lock mechanism for secure cable clamping
- Mic head: 8.5 mm (11/32 inch) dia. x 14.5 mm (19/32 inch)

### **ECM-77BMP** Electret Condenser Microphone



- · Omni-directional
- Superior sound quality leader in the Sony ECM lavalier microphone series
- 3-pole mini plug with a lock mechanism for secure cable clamping
- Mic head: 5.6 mm (1/4 inch) dia. X 12.5 mm (1/2 inch)

#### ECM-121BMP/122BMP Electret Condenser Microphone



- Omni-directional
- 3-pole mini plug with a lock mechanism for secure cable clamping
- Mic head: 8.5 mm (11/32 inch) dia. x 17 mm (11/16 inch)
- Mic cable length: ECM-121BMP = 0.2 m (7 7/8 inches), ECM-122BMP = 1.2 m (3.9 feet)

### **ECM-166BMP** Electret Condenser Microphone



- Uni-directional
- 3-pole mini plug with a lock mechanism for secure cable clamping
- Mic head: 12.5 (1/2 inch) dia. X 23.5 mm (15/16 inch)

#### WD-820A UHF Antenna Divider



- Up to four diversity distribution outputs
- Connection of up to four antennas
- DC 9 V power supply for the AN-820A UHF Antenna
- Cascade connection

#### AN-820A UHF Antenna



- Built-in amplifier for signal compensation. 10 dB gain to compensate for cable loss.
- External powering from the WRR-MB-806A or WD-820A via coaxial cable
- Used in pairs for diversity reception
- LED for power indication
- Easy installation on a wall or in a microphone stand with the supplied adaptor

#### **GC-0.7MP** Guitar Cable



- Use with WRT-805A Body Pack Transmitter
- Special active guitar cable for high quality reproduction of guitar sound
- 3-pole mini plug with a lock mechanism for secure cable clamping
- Cable 5.5 mm (7/32 inches) dia.
   x 0.7 m (2.3 feet) long

### LCS-T805 Soft Case



- Holding WRT-805A UHF Synthesized Body Pack Transmitter to be attached to a guitar strap
- Guitar strap width: 15 mm (19/32 inch) to 70 mm (2 7/8 inches)

#### SC-M800 Carrying Case



- Compact and lightweight polypropylene case
- Capacity to hold: WRT-805A, WRT-807A, WRR-802A, lavalier microphones and accessories
- Dimensions: 460 (W) x 390 (H) x 90 (D) mm (18 1/8 x 15 3/8 x 3 5/8 inches)
- Mass: 1.4 kg (3 lb 1.38 oz)

### SONY

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