# SONY

Sony ECM-88 Series lavalier microphones are extremely miniature, omni-directional electret condenser microphones ideal for qualitycritical applications in broadcasting, theater, and field productions.

As well as offering a high sensitivity, flat-andwide frequency response and low noise characteristics, these microphones also provide other significant enhancements. A water-resistant architecture reduces the risk of water or perspiration entering the microphone capsule. The capsule itself is just 3.5 x 3.5 x 16.8 mm, allowing for easy, natural-looking concealment in a stage costume.

Whenever size, quality and reliability are of paramount importance, the Sony ECM-88 Series offers the perfect solution.



## ECM-88 ECM-88PT ECM-88FPT

ELECTRET CONDENSER

## **FEATURES**

#### Dual-Diaphragm Mechanism fig 1

ECM-88, ECM-88PT, and ECM-88PT electret condenser microphones use a dual-diaphragm mechanism, which contributes to their high sensitivity and low inherent noise characteristics. The diaphragm and backplates are fixed vertically to the microphone capsule, which effectively reduces the mechanical noise caused by cable vibration and friction. In addition, the diaphragm for each microphone uses a rectangular 'tray' instead of a fragile ring, which minimizes deformation of the diaphragm to maintain sound quality.

#### Flat-and-Wide Frequency Response fig 2

The ECM-88 Series provides a flat-andwide frequency response (20 Hz to 20 kHz), which provides natural sound reproduction. This enables the operator to add sound effects easily during the mixing process.

#### Ultra-Compact Microphone Capsule

The microphone capsule of the ECM-88 Series is also ultra compact, at just  $3.5 \times 3.5 \times 16.8 \text{ mm}$  (5/32 x 5/32 x 11/16 inch). This miniature design makes it extremely easy to conceal.

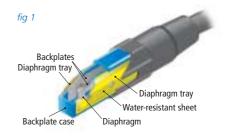
#### Water-Resistant Design

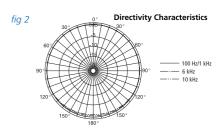
A water-resistant architecture is used within each microphone capsule, helping to prevent water or perspiration from entering the capsule and, in turn, reducing the possibility of damage to the diaphragm. This architecture allows ECM-88 Series lavalier microphones to maintain sound clarity in almost any application or environment, from theater productions to location-based recording.

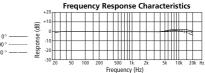
#### **Choice of Models**

The ECM-88 Series consists of three models: the ECM-88, ECM-88PT, and ECM-88FPT. This gives users the flexibility to choose the most appropriate microphone color and connector for their specific requirements.

- ECM-88: Black-colored model supplied with a Sony 4-pin connector (SMC9-4P), for use with the Sony DC-78 power supply unit or the Sony WRT-8B wireless bodypack transmitter.
- **ECM-88PT**: Black-colored model supplied without a connector (pigtail), enabling users to choose the connectors according to their transmitter.
- **ECM-88FPT**: Beige-colored model supplied without a connector (pigtail).









### SUPPLIED ACCESSORIES

The ECM-88 and ECM-88PT microphones are supplied with two types of microphone holders – double-pin and tie-clip – plus a urethane windscreen.



## SPECIFICATIONS

ECM-88 Series Electret C	ondenser Mic	crophones	
Capsule type	Electret conde	Electret condenser	
Directivity	Omni-directional		
Frequency response	20 Hz to 20 kHz		
Sensitivity	-52 dB <sup><math>11</math></sup> ±2 dB (when used in combination with the DC-78)		
(at 1 kHz)	-38 dB*1 (12.6 mV)		
Output impedance (at 1 kHz)	100 $\Omega$ ±20% (when used in combination with the DC-78) 2.5 k $\Omega$ ±30%		
Dynamic range	99 dB or more		
Signal-to-noise ratio	68 dB or more (A-weighted, 1 kHz, 1Pa.)		
Inherent noise	26 dB SPL' <sup>2</sup> or less (A-weighted, 1 kHz, 1Pa.)		
Wind noise	45 dB SPL $^{\!\!\!^{\star_2}}$ or less (when using the supplied windscreen)		
Induction noise from	5 dB SPL*2 or less		
external magnetic field	(when used in combination with the DC-78)		
Maximum input sound pressure level	125 dB SPL*2		
Cable length	2.5 m (8.2 feet)		
Output connector	ECM-88: Sony SMC9-4P		
	ECM-88PT/88	3FPT: no connector (pigtail)	
Power requirements	DC 1.1 to 10.0 V		
Dimensions (microphone capsule)	3.5 x 3.5 x 16.8 (h) mm ( <sup>5</sup> /32 x <sup>5</sup> /32 x <sup>11</sup> /16 inch)		
Mass	ECM-88: 32 g (including microphone cable) ECM-88PT/88FPT: 20 g (including microphone cable)		
Supplied accessories	ECM-88:	Microphone holder (x 2, tie-clip and double-pin types), urethane windscreen (x 1), carrying case (x 1), operating instructions (x 1)	
	ECM-88PT: ECM-88FPT:	Microphone holder (x 2, tie-clip and double-pin types), urethane windscreen (x 1), operating instructions (x 1) Operating instructions (x 1)	
*1 0 dB = 1V/Pa., at 1 kHz			
$\cdot$ up = iv/rd., dt i KHZ	$^{*2}$ 0 dB SPL = 20 $\mu$ Pa.		

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## **OPTIONAL ACCESSORIES**

#### DC-78 DC Power Supply Unit

- Designed for use with the ECM-88 and other Sony lavalier microphones equipped with an SMC9-4P connector.
- Two-way powering: can be powered using either an AA-size (LR6) alkaline battery or an external DC (12 to 48 V) power supply.
- Supplied with an SMC9-4S input connector and an XLR 3-pin output connector.
- Mass: approximately 130 g (4.6 oz) including battery.
- Dimensions: 20 cm diameter x 144 cm (<sup>13</sup>/<sub>16</sub>-inch diameter x 5 <sup>3</sup>/<sub>4</sub> inches)
- Battery life: approximately 6,000 hours

#### AD-KIT88 Microphone Accessory Kit

• Includes two types of microphone holders (double-pin and tie-clip), a holder adaptor for dual-microphone operation, plus six urethane windscreens (red, yellow, green, blue, gray, and black).





Each item contained in the AD-KIT88 kit is also available	
separately.	

SAD-P88	Double-pin type microphone holder (x 6)
SAD-88B	Tie-clip type microphone holder (x 6)
SAD-W88B	Holder adaptor for dual-microphone operation (x 6)
	(Used with microphone holder)
AD-C88	Color urethane windscreen (x 2 sets)
AD-R88B	Black urethane windscreen (x 12)









SAD-W88B



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AD-C88

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