

ELECTRET CONDENSER MICROPHONE

ECM-678



### **OUTLINE**

The Sony ECM-678 is a short shotgun, electret condenser-type microphone, which delivers outstanding sound performance in all field production and broadcast studio applications. It is also wellsuited for use on Sony professional camcorders such as the HDV™Series, DVCAM™ Series, and XDCAM™ Series. The ECM-678 offers excellent sensitivity, low inherent noise, and extreme durability. Its highly directional response allows clear voice pick-up even in the most demanding of environments, while the built-in low-cut filter switch helps to reduce unwanted pop and wind noise encountered in the field. With its high performance and durability, the ECM-678 microphone is the perfect choice for quality-critical soundacquisition applications.

#### **FEATURES**

# **Superior Sound Quality**

The ECM-678 is equipped with a newly developed microphone capsule, which delivers a superb sensitivity of -28 dB (0 dB=1 V/Pa.) and an extremely low inherent noise of less than 16 dB SPL. This provides the clearest pick-up of even the faintest sounds at long distances.

# Flat-and-Wide Frequency Response

The ECM-678 microphone has a flatand-wide frequency response (40 Hz to 20 kHz) and will provide sound reproduction that is extremely smooth and natural.

#### **Compact Design**

The ECM-678 has been specially designed to meet the needs for a compact yet high-performance shotgun microphone. The result is a highly directional microphone that is only 250 mm in length.

#### **Built-in Low Cut Filter**

The built-in two-position (M, V) low-cut switch provides users with a simple method of reducing the effects of undesired ambient noise.

# **High Durability and Reliability**

The vibration-resistant mechanism of the ECM-678 offers high durability and reliability, making it suitable for the harshest environments encountered in the most demanding of sound-acquisition scenarios.



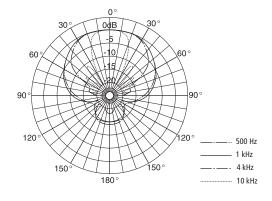
The ECM-678 attached to a Sony camcorder (without windscreen)

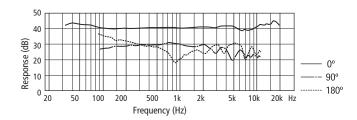
# **SPECIFICATIONS**

	ECM-678
Capsule type	Electret condenser
Directivity	Uni-directional (Super-cardioid)
Frequency response	40 Hz to 20 kHz
Sensitivity (at 1 kHz)	-28 dB*1 ±3 dB
Output impedance (at 1 kHz)	200 Ω ±20%
Dynamic range	111 dB or more
Signal-to-noise ratio	78 dB or more (IEC179 A-weighted, 1 kHz, 1Pa.)
Inherent noise	16 dB SPL*2 or less
Wind noise	60 dB SPL*2 or less
Induction noise from external magnetic field	0 dB SPL*2 or less
Maximum input sound pressure level	127 dB SPL*2
Power requirements	External, DC 48 V ±4 V
Dimensions	ø <sup>13</sup> / <sub>16</sub> x 9 <sup>7</sup> / <sub>8</sub> inches (ø20 x 250 mm)
Weight	7 oz (200 g)

 $<sup>^{*1}</sup>$  0 dB=1 V/Pa., at 1 kHz

<sup>\*2 0</sup> dB SPL=20μ Pa.





**Directivity Characteristics** 

Frequency Response Characteristics

# **SUPPLIED ACCESSORIES**

Windscreen (x1)
Microphone holder (x1)
Microphone spacer (x1)
Carrying case (x1)
Operating instructions (x1)





Sony Electronics Inc. 1 Sony Drive Park Ridge, NJ 07656 www.sony.com/proaudio ©2004 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.

All non-metric weights and measurements are approximate.

Sony, DVCAM, and XDCAM are trademarks of Sony Corporation.

HDV and HDV logo are trademarks of Sony Corporation and

Victor Company of Japan, Limited (IVC).