

ECM-680S

Shotgun electret condenser microphone



The Sony ECM-680S is an MS stereo* shotgun, electret condenser-type microphone, ideal for a broad range of field production and broadcast studio applications. Incorporating newly developed microphone capsules, the ECM-680S offers excellent sensitivity, low inherent noise, and a flat-and wide frequency response. The most distinguished feature of the ECM-680S is its switchable operation between a highly directional monaural mode and stereo mode.

Monaural mode provides highly directional sound pickup, while stereo mode delivers natural and spatial sound. The ECM-680S is compact and lightweight, making it well-suited to use with a range of Sony professional camcorders. In addition, it can be mounted on a boom pole for more versatility. With its excellent quality and versatility, the ECM-680S is an ideal choice for quality-conscious sound gathering applications.

* MS microphone signal of the ECM-680S is internally decoded to L and R (stereo) outputs

Benefits

Superior Sound Quality

The ECM-680S uses the Mid-Side (MS) technique that offers natural stereo sound and excellent localization. Equipped with newly developed large diaphragm

microphone capsules with bidirectional characteristics, the ECM-680S delivers a superb sensitivity of -28 dB* (stereo)/-32 dB* (monaural), and extremely low inherent noise of less than 20 dB SPL (stereo/monaural).

* 0 dB=1 V/Pa

Switchable between Stereo & Mono

The ECM-680S can operate in either stereo or monaural (uni-directional) mode, allowing it to be used in both EFP and ENG applications. Stereo mode is ideal for capturing environmental sound with natural sound quality, while monaural mode is ideal for clearly capturing voice and sound from a distance. These modes can be selected from the switch on the microphone or from compatible Sony professional camcorders*.

The LED on the microphone lights up when the ECM-680S is set to stereo mode, to easily notify the user that operating mode is currently selected.

* Stereo and monaural modes can be switched from the Sony HDW-F900R CineAlta™ camcorder, HDW-790 HDCAM™ camcorder, and PDW-F350/F330 XDCAM™ HD camcorder

Flat and Wide Frequency Response

The ECM-680S microphone has a flat-and wide frequency response (50 Hz to 20 kHz (stereo)/40Hz to 20 kHz (monaural)) in both stereo and monaural modes, and will provide sound reproduction that is extremely smooth and natural.

Compact and Lightweight

The ECM-680S has been designed to be a compact yet high-performance stereo shotgun microphone, ideal for camera mounted use. It measures only 250 mm (9 7/8 inches) in length and weighs less than 140 g (4.9 oz), maintaining good balance and mobility when mounted on a range of Sony professional camcorders.

Technical Specifications

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|---|--|
| Capsule type | Electret condenser |
| Stereo type | MS (Mid-Side) stereo microphone |
| Directivity | Uni-directional |
| Frequency response | Stereo: 50 Hz to 20 kHz Monaural: 40 Hz to 20 kHz |
| Sensitivity (at 1 kHz) | Stereo: -28 dB(*1) \pm 3 dB Monaural: -32 dB(*1) \pm 3 dB |
| Output impedance (at 1 kHz) | 100 ohms \pm 20% |
| Dynamic range | Stereo: 104 dB or more Monaural: 106 dB or more |
| Signal-to-noise ratio (IEC179 A-weighted, 1 kHz, 1Pa) | Stereo: 74 dB or more Monaural: 76 dB or more |

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|--|---|
| Inherent noise | 20 dB SPL(*2) or less |
| Wind noise | 60 dB SPL(*2) or less (with windscreen), 55 dB SPL(*2) (without windscreen) |
| Induction noise from external magnetic field | 0 dB SPL(*2) or less |
| Maximum input sound pressure level | 124 dB SPL(*2) |
| Power requirements | DC 40 to 52 V |
| Power consumption | Stereo: 4 mA or less x 2ch Monaural: 4 mA or less |
| Mass | Approx. 140 g (4.9 oz) |
| Dimensions | 20 mm diameter x 250 mm long |
| | (*1) 0 dB=1 V/Pa, at 1 kHz (*2) 0 dB=20 μ Pa |

Compatible Products

XDCAM



PDW-700

XDCAM HD422 Camcorder recording HD material at up to 50Mb/s onto Dual Layer Professional Disc



PDW-F355L

Fully-featured XDCAM HD Camcorder recording onto the latest Dual Layer Professional Disc for even longer recording time - supplied without lens.



PDW-F335K/2

A versatile XDCAM HD Camcorder recording onto the latest Dual Layer Professional Disc for even longer recording time - supplied with a Canon KH20x6.4 manual focus lens.



PDW-F800

XDCAM HD422 Camcorder



PDW-F335L

A versatile XDCAM HD Camcorder recording onto the latest Dual Layer Professional Disc for even longer recording time - supplied without lens.



PMW-EX1

A Compact Full-HD Camcorder With SxS PRO Recording, for an Evolving Era of HD



PMW-EX1R

A Compact Full-HD Camcorder with SxS PRO Solid State Recording and 1/2-inch Exmor sensors

HDCAM and HDCAM SR



HDW-650P

HD camcorder, offering 2.2 million pixels per colour, HDCAM recording and switchable between 50i, 59.94i and 25P scanning.



HDW-790P

HD camcorder, offering 2.2 million pixels per colour, HDCAM recording and is switchable between 50i and 25P scanning.

NXCAM



HXR-NX5E

1/3-inch Exmor™ CMOS Professional AVCHD Camcorder with GPS



HXR-NX5M

1/3-inch Exmor™ CMOS Professional AVCHD Camcorder