

SONY®

Sony Lavalier Microphones



ECM-88/88PT

ECM-88FPT

ECM-77 Series

ECM-66 Series

ECM-55 Series

ECM-44 Series

ECM-166 Series

Actual size

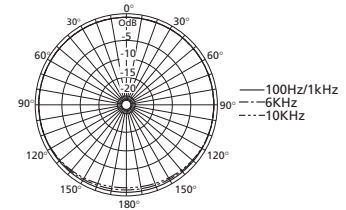
ECM-88 Series
ECM-77 Series
ECM-66 Series
ECM-55 Series
ECM-44 Series
ECM-166 Series
ECM-310 Series

ECM-88 series

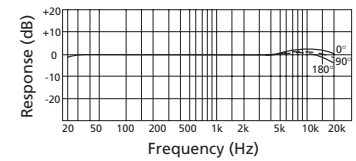


FEATURES

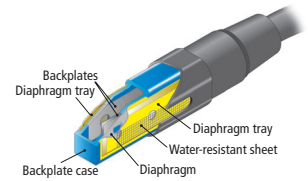
- Ultra-miniature, omni-directional electret condenser microphone.
- Designed for quality-critical applications in broadcasting, theater, and field productions.
- Flat-and-wide frequency response provides natural sound reproduction to enable the addition of sound effects during the mixing process.
- Water-resistant design maintains sound clarity in almost any application or environment.
- Dual-diaphragm mechanism contributes to the high sensitivity, wide dynamic range, and low-noise characteristics.
- Low cable-noise characteristics.
- Miniature design makes it easy to conceal in a stage costume.
- Three models available:
 - ECM-88:** Black-colored model supplied with a Sony 4-pin connector (SMC9-4P), for use with the WRT-8B/822A/822B Sony bodypack transmitter or DC-78 DC power supply unit.
 - ECM-88PT:** Black-colored model supplied without a connector (pigtail), enabling users to choose connectors according to their transmitter.
 - ECM-88FPT:** Beige-colored model supplied without a connector (pigtail).



Directivity Characteristics



Frequency Response Characteristics



Dual-Diaphragm Mechanism

SUPPLIED ACCESSORIES



Tie-clip type microphone holder (x 1)
ECM-88FPT is not supplied with mic accessories.



Double-pin type microphone holder (x 1)



Urethane windscreen (x 1)



Carrying case (x 1)
**Supplied with ECM-88 only.*

OPTIONAL ACCESSORIES



AD-KIT88
 Microphone accessory kit



DC-78
 DC power supply unit (SMC9-4S to XLR 3-pin)



SAD-88B
 Tie-clip type microphone holder (x 6)



SAD-P88
 Double-pin type microphone holder (x 6)



SAD-W88B
 Holder adaptor (x 6)
 (Used with microphone holder)



AD-C88
 Color windscreens (x 2 sets)



AD-R88B
 Urethane windscreen (x 12)

ECM-77 series



FEATURES

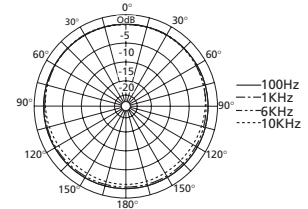
- Miniature, omni-directional electret condenser microphone.
- Worldwide-acclaim for performance and reliability in studio, ENG, and EFP applications.
- Wide frequency response, high sensitivity, and low-noise characteristics.
- Miniature design makes it easy to conceal in a costume.
- Wide model variations to suit specific user requirements. Four models are available:

ECM-77B: Black-colored model supplied with an in-line battery unit. Two-way powering possible – internal AA-size (LR6) alkaline-battery operation or external DC (12 to 48 V) operation.

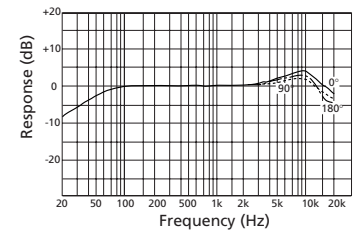
ECM-77BC: Black-colored model supplied with a Sony 4-pin connector (SMC9-4P), for use with the WRT-8B/822A/822B Sony bodypack transmitter.

ECM-77BMP: Black-colored model supplied with a 3-pole mini jack with stable lock mechanism, for use with the UWP Series bodypack transmitter.

ECM-77BPT: Black-colored model supplied without a connector (pigtail).



Directivity Characteristics



Frequency Response Characteristics

SUPPLIED ACCESSORIES



Single/Horizontal-type tie clip (x 1)



Single/Vertical-type tie clip (x 1)

**Supplied with ECM-77B only.*



Double/Horizontal-type tie clip (x 1)

**Supplied with ECM-77B only.*



Metal-mesh windscreen (x 1)



Carrying case (x 1)

**Supplied with ECM-77B only.*

OPTIONAL ACCESSORIES



AD-KIT77
Microphone accessory kit



DC-78
DC power supply unit (SMC9-4S to XLR 3-pin)



SAD-H77B
Single/Horizontal-type tie clip (x 10)



SAD-V77B
Single/Vertical-type tie clip (x 10)



SAD-W77B
Double/Horizontal-type tie clip (x 6)



SAD-S77
Safety-pin type microphone holder (x 6)



AD-C77B
Urethane windscreen (x 12)



AD-C77
Color windscreens (x 2 sets)



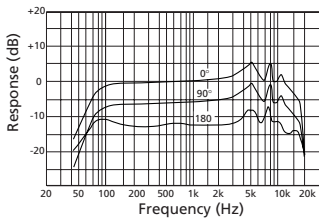
AD-R77B
Metal-mesh windscreen (x 6)

ECM-66 series

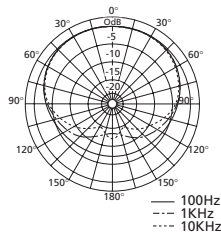


FEATURES

- Uni-directional, electret condenser microphone.
- Resistant to howling by rejecting indirect sound.
- Designed for a wide range of applications from voice to instrumental recording.
- Wide dynamic range (101 dB), and high maximum input-sound-pressure level (130 dB SPL).
- Low inherent-noise characteristics.
- Two models available:
 - ECM-66B:** Black-colored model supplied with an in-line battery unit. Two-way powering possible – internal AA-size (LR6) alkaline-battery operation or external DC (24 to 48 V) operation.
 - ECM-66BC:** Black-colored model supplied with a Sony 4-pin connector (SMC9-4P), for use with the WRT-8B/822A/822B Sony bodypack transmitter.



Frequency Response Characteristics



Directivity Characteristics

SUPPLIED ACCESSORIES



Single/Horizontal-type tie clip (x 1)



Single/Vertical-type tie clip (x 1)
*Supplied with ECM-66B only.



Urethane windscreens (x 1)



Carrying case (x 1)
*Supplied with ECM-66B only.

OPTIONAL ACCESSORIES



SAD-H55B
Single/Horizontal-type tie clip (x 10)



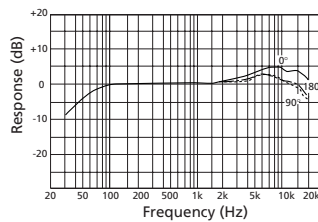
AD-R66B
Urethane windscreens (x 12)

ECM-55 series

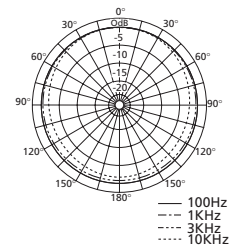


FEATURES

- Omni-directional, electret condenser microphone.
- Successor to the ECM-50 microphone, the world's first electret condenser lavalier microphone.
- Large microphone head of 10.6 mm (7/16 inch) diameter offers rich sound reproduction.
- High signal-to-noise ratio and low inherent-noise characteristics.
- One model available:
 - ECM-55B:** Black-colored model supplied with an in-line battery unit. Two-way powering possible – internal AA-size (LR6) alkaline-battery operation or external DC (12 to 48 V) operation.



Frequency Response Characteristics



Directivity Characteristics

SUPPLIED ACCESSORIES



Single/Horizontal-type tie clip (x 1)



Single/Vertical-type tie clip (x 1)



Double/Horizontal-type tie clip (x 1)



Metal-mesh windscreens (x 1)



Carrying case (x 1)

OPTIONAL ACCESSORIES



SAD-H55B
Single/Horizontal-type tie clip (x 10)



AD-R55B
Metal-mesh windscreens (x 6)

ECM-44 series



FEATURES

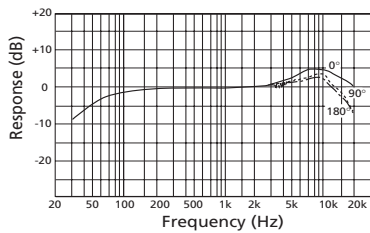
- Omni-directional, electret condenser microphone.
- Cost-effective miniature microphone provides superb sound quality.
- Wide model variations to suit specific user requirements. Four models are available:

ECM-44B: Black-colored model supplied with an in-line AA-size (LR6) alkaline-battery unit.

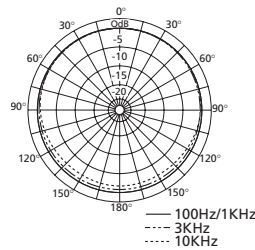
ECM-44BC: Black-colored model supplied with a Sony 4-pin connector (SMC9-4P), for use with the WRT-8B/822A/822B Sony bodypack transmitter.

ECM-44BMP: Black-colored model supplied with a 3-pole mini jack with stable lock mechanism, for use with the UWP Series bodypack transmitter.

ECM-44BPT: Black-colored model supplied without a connector (pigtail).



Frequency Response Characteristics



Directivity Characteristics

SUPPLIED ACCESSORIES



Single/Horizontal-type tie clip (x 1)



Urethane Windscreen (x 1)



Carrying case (x 1)
**Supplied with ECM-44B only.*

OPTIONAL ACCESSORIES



DC-78
DC power supply unit (SMC9-4S to XLR 3-pin)



SAD-H44B
Single/Horizontal-type tie clip (x 10)



AD-R44B
Urethane windscreen (x 12)

ECM-166 series



FEATURES

- Uni-directional, electret condenser microphone.
- Resistant to howling by rejecting indirect sound.
- Reasonably priced lavalier microphone ideal for institutional use and sound-contracting applications such as speeches, lectures, and conferences.
- Two models available:
 - ECM-166BC:** Black-colored model supplied with a Sony 4-pin connector (SMC9-4P), for use with the WRT-8B/822A/822B Sony bodypack transmitter.
 - ECM-166BMP:** Black-colored model supplied with a 3-pole mini jack with stable lock mechanism, for use with the UWP Series bodypack transmitter.

ECM-310 series



FEATURES

- Lightweight, headset-style microphone.
- Designed for multimedia presentation applications.
- Wide-cardioid, electret condenser microphone provides crisp and clear sound, while isolating undesired sound from surrounding ambience.
- Adjustable hinge and gooseneck for optimum voice pickup.
- Two types available:
 - ECM-310BC:** Black-colored model supplied with a Sony 4-pin connector (SMC9-4P), for use with the WRT-8B/822A/822B Sony bodypack transmitter.
 - ECM-310BMP:** Black-colored model supplied with a 3-pole mini jack with stable lock mechanism, for use with the UWP Series bodypack transmitter.

SUPPLIED ACCESSORIES



Single/Horizontal-type tie clip (x 1)



Urethane windscreen (x 1)

SPECIFICATIONS

		ECM-88 Series	ECM-77 Series	ECM-66 Series	ECM-55 Series
Model Variations					
XLR type (Supplied with a battery unit and XLR-3-12C type connector.)		ECM-88 with optional DC-78	ECM-77B	ECM-66B	ECM-55B
Pigtail type (Supplied without a connector <pigtail>.)		ECM-88PT, ECM-88FPT	ECM-77BPT	—	—
SMC type (Supplied with a Sony 4-pin <SMC9-4P> connector.)		ECM-88	ECM-77BC	ECM-66BC	—
BMP type (Supplied with a 3.5 mm diameter, 3-pole mini plug.)		—	ECM-77BMP	—	—
Capsule type		Electret Condenser			
Frequency response		20 Hz to 20 kHz	40 Hz to 20 kHz	70 Hz to 14 kHz	30 Hz to 18 kHz
Directivity		Omni-directional		Uni-directional	Omni-directional
Sensitivity (0 dB=1 V/Pa, at 1 kHz)		XLR type -52.0 dB ±2 dB *1	-52.0 dB ±2 dB	-50.0 dB ±2 dB	-52.0 dB ±2 dB
		Pigtail/SMC/BMP type -39.0 dB (11.2 mV)		-36.5 dB (15 mV)	—
Output impedance at 1 kHz		XLR type 100 Ω ±20% (balanced) *1	150 Ω ±20% (balanced)	100 Ω ±20% (balanced)	—
		Pigtail/SMC/BMP type 2.5 kΩ ±30% (unbalanced)			—
Dynamic range		99 dB or more	90 dB or more	101 dB or more	98 dB or more
Signal-to-noise ratio (A-weighted, 1 kHz, 1 Pa.)		68 dB or more	64 dB or more	65 dB or more	66 dB or more
Inherent noise (0 dB SPL = 2E-5 Pa.)		26 dB SPL or less	30 dB SPL or less	29 dB SPL or less	28 dB SPL or less
Wind noise (with windscreen, at 2 m/s) (0 dB SPL = 2E-5 Pa.)		45 dB SPL or less	40 dB SPL or less	50 dB SPL or less	40 dB SPL or less
Induction noise from external magnetic field (dB SPL/1E-7 T, 0 dB SPL = 2E-5 Pa.)		5 dB SPL or less			
Maximum input sound pressure level (0 dB SPL = 2E-5 Pa.)		125 dB SPL	120 dB SPL	130 dB SPL	126 dB SPL
Power supply (XLR type only)		Battery IECR6 or LR6 *1	IECR6 or LR6		
		Battery life (LR6) Approx. 6000 h *1	Approx. 6000 h	Approx. 400 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
Power requirements		XLR type DC 1.5 V *1	DC 1.5 V		
		Pigtail/SMC/BMP type DC 1.1 to 10.0 V			
Current drain		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
		XLR type (external power) 2 mA or less *1	2 mA or less		
		Pigtail/SMC/BMP type 0.4 mA or less			
Cable length		XLR type —	9.8 feet (3.0 m)		
		Pigtail type 8.2 feet (2.5 m)	9.8 feet (3.0 m)	—	
		SMC/BMP type 8.2 feet (2.5 m)	3.9 feet (1.2 m)		—
Dimensions		Microphone head 5/32 x 5/32 x 11/16 inch (3.5 x 3.5 x 16.8 mm)	1/4 diameter x 1/2 inch (5.6 diameter x 12.5 mm)	7/16 diameter x 31/32 inch (10.6 diameter x 24.2 mm)	7/16 diameter x 27/32 inch (10.6 diameter x 21 mm)
		Power unit (XLR type only) —	13/16 diameter x 5 1/4 inches (20.0 diameter x 133 mm)	13/16 diameter x 6 2/1 inches (20.0 diameter x 163 mm)	13/16 diameter x 5 1/4 inches (20.0 diameter x 133 mm)
Weight		Microphone head only 0.02 oz (0.6 g)	0.05 oz (1.5 g)	0.25 oz (7 g)	0.23 oz (6.5 g)
		Total XLR type —	4.3 oz (122 g)	5.9 oz (167 g)	4.5 oz (127 g)
		Pigtail type 0.7 oz (20 g)	0.9 oz (26 g)	—	—
		SMC type 1.1 oz (32 g)	0.8 oz (23 g)	1.1 oz (30 g)	—
		BMP type —	0.6 oz (17 g)	—	—
Supplied accessories		Tie-clip type mic holder (x 1) *2 Double-pin type mic holder (x 1) *2 U. windscreen (x 1) *2 Microphone case (x 1) *3 Operating instructions (x 1)	S.H. tie clip (x 1) S.V. tie clip (x 1) *4 D.H. tie clip (x 1) *4 M. windscreen (x 1) Microphone case (x 1) *4 Operating instructions (x 1)	S.H. tie clip (x 1) S.V. tie clip (x 1) *5 U. windscreen (x 1) Microphone case (x 1) *5 Operating instructions (x 1)	S.H. tie clip (x 1) S.V. tie clip (x 1) D.H. tie clip (x 1) M. windscreen (x 1) Microphone case (x 1) Operating instructions (x 1)

*1 When used with the optional DC-78 battery unit.

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

*3 The microphone case is supplied with ECM-88 only.

*4 S.V. tie clip, D.H. tie clip, and microphone case are supplied with ECM-77B only.

*5 S.V. tie clip and microphone case are supplied with ECM-66B only.

		ECM-44 Series	ECM-166 Series	ECM-310 Series
Model Variations				
XLR type (Supplied with a battery unit and XLR-3-12C type connector.)		ECM-44B	—	—
Pigtail type (Supplied without a connector <pigtail>.)		EECM-44BPT	—	—
SMC type (Supplied with a Sony 4-pin <SMC9-4P> connector.)		ECM-44BC	ECM-166BC	ECM-310BC
BMP type (Supplied with a 3.5 mm diameter, 3-pole mini plug.)		ECM-44BMP	ECM-166BMP	ECM-310BMP
Capsule type		Electret Condenser		
Frequency response		40 Hz to 15 kHz	100 Hz to 10 kHz	70 Hz to 12 kHz
Directivity		Omni-directional	Uni-directional	Wide-cardioid
Sensitivity (0 dB=1 V/Pa, at 1 kHz)		XLR type -53.0 dB ±3 dB	—	—
		Pigtail/SMC/BMP type -40.0 dB (10 mV)	-45 dB (5.6 mV)	-44 dB (6.3 mV)±3db
Output impedance at 1 kHz		XLR type 250 Ω ±20% (balanced)	—	—
		Pigtail/SMC/BMP type 2.5 kΩ ±30% (unbalanced)	—	800 Ω ±30% (unbalanced)
Dynamic range		90 dB or more	96 dB or more	93 dB or more
Signal-to-noise ratio (A-weighted, 1 kHz, 1 Pa.)		62 dB or more	60 dB or more	—
Inherent noise (0 dB SPL = 2E-5 Pa.)		32 dB SPL or less	34 dB SPL or less	—
Wind noise (with windscreen, at 2 m/s) (0 dB SPL = 2E-5 Pa.)		40 dB SPL or less	—	63 dB SPL or less
Induction noise from external magnetic field (dB SPL/1E-7 T, 0 dB SPL = 2E-5 Pa.)		5 dB SPL or less	—	—
Maximum input sound pressure level (0 dB SPL = 2E-5 Pa.)		122 dB SPL	130 dB SPL	127 dB SPL
Power supply		Battery IECR6 or LR6	—	—
(XLR type only)		Battery life (LR6) Approx. 6000 h	—	—
		External power —	—	—
Power requirements		XLR type DC 1.5 V	—	—
		Pigtail/SMC/BMP type DC 1.1 to 10.0V	—	—
Current drain		XLR type (internal battery) 0.3 mA or less	—	—
		XLR type (external power) —	—	—
		Pigtail/SMC/BMP type 0.4 mA or less	—	0.32 mA or less
Cable length		XLR type 9.8 feet (3.0 m)	—	—
		Pigtail type 9.8 feet (3.0 m)	—	—
		SMC/BMP type 3.9 feet (1.2 m)	—	—
Dimensions		Microphone head 1 ¹¹ / ₃₂ diameter x 1 ¹⁹ / ₃₂ inch (8.5 diameter x 14.5 mm)	1/2 diameter X 1 ¹⁵ / ₁₆ inch (12.5 diameter x 23.5 mm)	1 ¹³ / ₃₂ diameter x 5/8 inch (10.0 diameter x 152 mm)
		Power unit (XLR type only) 1 ¹³ / ₁₆ diameter x 5 inches (20.0 diameter x 126 mm)	—	—
Weight		Microphone head only 0.07 oz (2 g)	0.12 oz (3.5 g)	—
		Total XLR type 4.3 oz (121 g)	—	—
		Pigtail type 1.0 oz (29 g)	—	—
		SMC type 0.8 oz (24 g)	1 oz (25 g)	2.0 oz (56 g)
		BMP type 0.6 oz (18 g)	0.7 oz (19 g)	1.8 oz (50 g)
Supplied accessories		S.H. tie clip (x 1) U. windscreen (x 1) Microphone case (x 1) *	U. windscreen (x 1) Tie clip (x 1) Operating instructions (x 1)	U. windscreen (x 1) Operating instructions (x 1)
		Operating instructions (x 1)	—	—

* The microphone case is supplied with only ECM-44B.

SONY

Sony Electronics Inc.
1 Sony Drive
Park Ridge, NJ 07656
www.sony.com/microphones

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