Microphone électrostatique cardioïde

Micrófono de condensador de cardioide

Nieren-Kondensatormikrofon

Microfono cardioide a condensatore

BETA 98H/C

Cardioid Condenser Microphone

General Description

The Beta 98H/C miniature cardioid condenser microphone clamps onto the bell of wind instruments or onto the rim of percussion instruments. The integrated gooseneck and ratcheting swivel joint allows the mic to be easily positioned and secured, and an isolation shockmount reduces the transmission of instrument vibrations. A gooseneck angle brace is included to provide better retention of the desired microphone placement.

Featuring a highly consistent cardioid polar pattern, the Beta 98H/C provides high gain before feedback and smooth off-axis rejection. It's ability to handle extremely high sound presure levels (SPL) makes it ideal for live sound reinforcement on a variety of instruments.

Features

- Premier live performance microphone with Shure quality, ruggedness, and reliability
- Uniform cardioid pick-up pattern for maximum gain before feedback and excellent rejection of off-axis sound
- Tailored frequency response specifically shaped for open, natural sound reproduction
- Wide dynamic range for use in high sound pressure level SPL environments
- Adjustable gooseneck, angle brace and ratcheting swivel joint allow for optimal microphone positioning
- Compact, lightweight construction provide a low degree of visibility
- Interchangeable microphone cartridges with different polar patterns are available
- Snap-fit foam windscreens stay in place, minimizing wind noise

Power Requirements

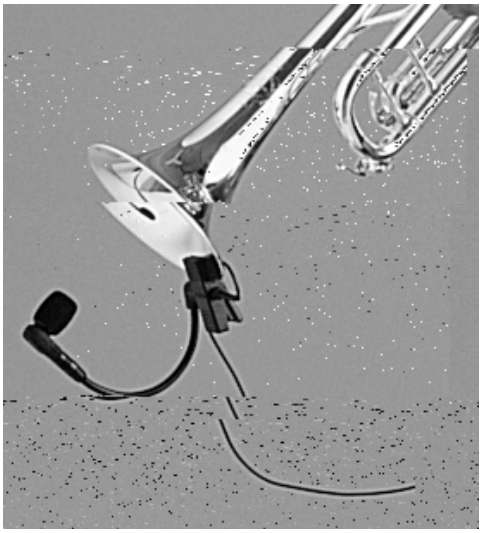
This microphone requires phantom power and performs best with a 48 Vdc supply (IEC-61938). However, it will operate with slightly decreased headroom and sensitivity with supplies as low as 11 Vdc.

Most modern mixers provide phantom power. You must use a balanced microphone cable: XLR-to-XLR or XLR-to-TRS.

Applications And Placement

The following table lists the most common applications and placement techniques. Keep in mind that microphone technique is largely a matter of personal taste; there is no one "correct" microphone position.

APPLICATION	SUGGESTED MICROPHONE PLACEMENT	TONE QUALITY
Reed Instruments	Place microphone a few inches from and aiming into bell.	Bright, minimizes feedback and leakage.
Brass & Woodwinds	Brass: 30 to 90 cm (1 to 3 ft.) away, on-axis with bell of instrument.	Bright, clear sound.
	Woodwinds: 2.5 to 15 cm (1 to 6 in.) away, on-axis with bell of instrument.	Bright, clear sound.
	Bell of instrument 90° off-axis from front of mic.	Softer, mellow sound.

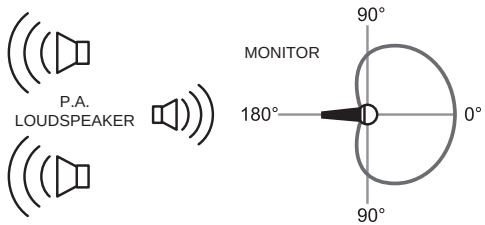


General Rules for Use

- Do not cover any part of the microphone grille with your hand, as this will adversely affect microphone performance.
- Aim the microphone toward the desired sound source (such as the talker, singer, or instrument) and away from unwanted sources.
- Place the microphone as close as practical to the desired sound source.
- Work close to the microphone for extra bass response.
- For better gain before feedback, use fewer microphones.
- Keep the distance between microphones at least three times the distance from each microphone to its source ("three to one rule").
- Place microphones as far as possible from reflective surfaces.
- Add a windscreen when using the microphone outdoors.
- Avoid excessive handling to minimize pickup of mechanical noise and vibration.

Avoiding Pickup of Unwanted Sound Sources

A cardioid microphone has the greatest sound rejection at the rear of the microphone. Place the microphone so that unwanted sound sources, such as monitors and loudspeakers, are directly behind it. To minimize feedback and ensure optimum rejection of unwanted sound, always test microphone placement before a performance.



RECOMMENDED LOUDSPEAKER LOCATIONS FOR CARDIOID MICROPHONES

Type	Electret Condenser
Frequency Response	20 to 20,000 Hz
Polar Pattern	Cardioid
Output Impedance	
Sensitivity (at 1 kHz, open circuit voltage)	1 Pascal=94 dB SPL
Maximum SPL load)	155 dB SPL (typical)
Equivalent Output Noise (A-weighted)	31 dB SPL (typical)
Signal-to-Noise Ratio (referenced at 94 dB SPL at 1 kHz)	63 dB S/N ratio is difference between 94 dB SPL and equivalent SPL of self noise, A-weighted
Dynamic Range	124 dB 132 dB
Preamplifier Output Clipping Level (1% THD)	3 dBV (1.4 V)
Polarity	Positive pressure on diaphragm produces positive voltage on pin 2 with respect to pin 3
Power Requirements	11 to 52 Vdc phantom

Accessories and Parts

Furnished Accessories

Zippered Carrying Bag	95A2398
In-Line Preamplifier (1 piece)	RPM626

Optional Accessories

Supercardioid cartridge	RPM110
Metal Locking Windscreen	A412MWS

Replacement Parts

Snap-Fit Windscreen (4 per package)	RK183WS
Cardioid cartridge	RPM108
Clamp Assembly (A98D)	RPM618

CERTIFICATION

Eligible to bear CE Marking. Conforms to European EMC Directive 2004/108/EC. Meets Harmonized Standards EN55103-1:1996 and EN55103-2:1996, for residential (E1) and light industrial (E2) environments.

The Declaration of Conformity can be obtained from:

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