



CM 88 Cardioid Condenser Microphone

USER GUIDE

To take full advantage of the superb features of the CM 88, and to enjoy long and trouble-free use, please read this User's Guide carefully.



Congratulations on purchasing the Nady CM 88 Condenser Microphone — the first general purpose handheld vocal microphone of its kind to feature a studio quality large diaphragm condenser element. The CM 88 is a versatile, professional level microphone, perfect for all live entertainment, recording, and broadcast applications requiring uncompromised studio quality sound.

UNPACKING, INSPECTION, STORAGE AND TRANSPORT

Your CM 88 microphone was carefully packed at the factory, and the shipping carton was designed to protect the unit during shipping. Please examine your microphone before using and retain the external shipping package for reuse should you ever need to return your microphone for servicing. A foam padded plastic carrying case is provided for safe, convenient transport and storage.

STANDARD ITEMS SUPPLIED

- CM 88 microphone
- Microphone clip
- Foam windscreen
- User Guide
- Warranty card

OPTIONAL ACCESSORIES

- 48V phantom power supply (SMPS-1)

FEATURES

Back electret condenser microphone designed for cymbals of all types (including rides, crashes and hi-hats), reeds, acoustic guitars, piano and vocals (with the accessory windscreen) and overhead applications (both live and recording)

- Extremely uniform and tight cardioid polar pattern for ease in mixing
- Extended frequency response for smooth, crisp, ultra-transparent reproduction
- Aluminum housing and gold-plated XLR contacts
- 9-52V phantom powered

CONNECTING THE CM 88

The CM 88 can be used in live sound reinforcement and broadcasting and in studio or live recording. It must be powered by 48V phantom power (such as supplied by the optional Nady SMPS-1 phantom power supply or a mixing console with phantom powering), and amplified by a microphone pre-amp (such as built into a mixer, or a stand-alone unit).

(Note: Make sure to set the pre-amp to the proper gain level—too much gain may distort subsequent amplifiers and too little may result in a noisy signal)

The CM 88 can be connected to your mixer or phantom power supply using a standard balanced 3-pin XLR microphone cable. Before connecting to a mixer directly, turn the channel to which you're connecting to its lowest gain setting. If you are using the Nady SMPS-1 Phantom Power Supply, connect in the following order:

1. Connect the CM 88 to the SMPS-1
2. Connect the SMPS-1 Signal Output to your mixer
3. Connect the SMPS-1 to the AC power supply (115-230VAC)
4. Turn on the SMPS-1 Power ON/OFF switch
5. Slowly turn up the channel gain in your mixer to the desired level

USING YOUR CM 88

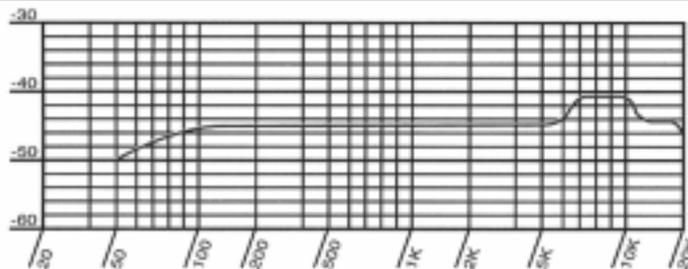
Depending on the application, the CM 88 can either be handheld or mounted on a microphone stand with a standard mic clip. Be aware of the proximity effect (an increase in bass response) when the mic is placed close to the mouth or instrument. This may or may not be desirable. Experimenting with the position of the mic with respect to the audio source will ensure the optimum results you are seeking in any given application. Also, never place your hand over the ballscreen of the mic during use, as this can degrade the performance. If the microphone is placed too near a speaker, an unpleasant howling effect (acoustic feedback) may occur. Although all microphones are prone to feedback to some extent, those with a unidirectional polar pattern (such as the CM 88) are specially

designed to accept only signals from the audio source directly in front of the mic cartridge. Thus, the cardioid pattern of the CM 88 ensures that it will deliver only the desired audio in front of the mic, rejecting the unwanted audio from the rear, even in noisy ambient conditions with high sound pressure levels from the PA and monitor speakers. This means that feedback will be greatly minimized with the CM 88 in all live performance miking applications. Some useful ways in which to totally eliminate annoying feedback include: experimenting with mic positions with respect to the speakers, decreasing speaker volume (whenever possible), and adjusting the equalization of the mic audio with the mixer.

PRECAUTIONS AND CARE OF YOUR CM 88

- The capsule is the heart of the condenser microphone. If it becomes dirty or wet, the sound will be degraded. Never spray any liquid on the microphone head. Always use a foam windscreen if you talk or sing close to the microphone grill screen.
- The microphone should never be dropped or subjected to extreme shock. Store only in a padded case to protect it during transport.
- Keep the microphone away from extremely high temperatures (above 140°F or 60°C) and humidity. Avoid leaving the microphone in direct sunlight for long periods of time.
- When using the microphone outdoors, avoid getting it wet.
- After use in a high-moisture application such as a stage performance, wipe off the microphone with a dry cloth and permit it to air dry. Do not store the unit in a closed space (e.g., a plastic bag) until all moisture has evaporated.
- The CM 88 is supplied with a foam windscreen. This windscreen fits over the grill portion of the microphone and is designed primarily to decrease bass rumble (from wind noise pickup) during outdoor live or recording use. It is also useful in keeping mouth spray out of the microphone head. The windscreen should be used whenever someone is close miked to both protect the microphone and to also eliminate "popping" sounds from percussive breath sounds. *(Note: Be aware that the foam windscreen will slightly attenuate the high frequency response of the microphone.)*

FREQUENCY RESPONSE



SERVICE

(U.S.) Should your Nady microphone require service, please contact the Nady Service Department via telephone at (510) 652- 2411 or e-mail at service@nadywireless.com. **(INTERNATIONAL)** For service, please contact the Nady distributor in your country through the dealer from whom you purchased this product.

Date of purchase _____
Dealer's Name _____
Street _____
City _____ State _____ Zip _____

Note: Do not attempt to service this unit yourself as it will void your warranty.

CM 88 SPECIFICATIONS

Element Black Electret Condenser
Polar pattern Unidirectional
Frequency range 50~18KHz
Sensitivity -45dB ± 3dB (0dB=1V/Pa @ 1KHz)
Output impedance 200 Ohms ± 30% (@ 1KHz)
S/N Ratio Over 60dB
Max. SPL (1% THD @1000Hz) 136dB
Power requirement +48VDC phantom power
Material Copper

Connector 3-pin XLR (gold plated)
Phasing Positive voltage on pin 2 relative to pin 3
Mic cable 3-pin XLR standard cable (not supplied)
Size Diameter: 0.9" (22mm), Length: 5.1" (130mm)
Net weight 5oz (130g)

Specifications and design subject to change for improvement purposes without prior notice.