

SPC-20 Condenser Microphone

USER GUIDE

Congratulations on purchasing the Nady SPC-20 Condenser Microphone! The SPC-20 is designed for the most critical live sound and recording applications and is ideal for handheld vocal and mid-high frequency instrument miking.



To take full advantage of the superb features of the SPC-10, and to enjoy long and trouble-free use, please read this User's Guide carefully.

UNPACKING, INSPECTION, STORAGE AND TRANSPORT

Your SPC-20 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

- SPC-20 microphone
- User Guide
- Warranty card
- Mic clip
- Foam padded plastic carrying case

OPTIONAL ACCESSORIES

- SMSP-1 48V phantom power supply

FEATURES

- Unique 2-layer ballscreen "pop" filter for elimination of breath noises
- Pressure gradient back electret condenser and transformerless FET circuitry for ultra transparency and enhanced transient response
- Wide frequency response (50~16,000Hz) with specially tailored mid-high presence for vocal punch and exceptional crisp, clear sound
- Supercardioid polar pattern for maximum feedback rejection
- Ultra-high (140dB) SPL capacity and wide 115dB dynamic range for maximum freedom from distortion even in the most demanding applications
- 4.5mV/Pa sensitivity, and 200 Ω rated impedance with 1000 Ω minimum load impedance
- Superior internal shockmounting to eliminate handling noise
- Lightweight, rugged and durable
- Required 48VDC phantom power

USING YOUR SPC-20

The SPC-20 can be used with any standard mixer, powered mixer/amplifier, or mic preamp. Using either an XLR to XLR or XLR to 1/4" phone plug low impedance cable, connect the female XLR end to the SPC-20 and the other end (male XLR or 1/4" phone plug, as appropriate) to your equipment.

Depending on the application, the SPC-20 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 unpleas-

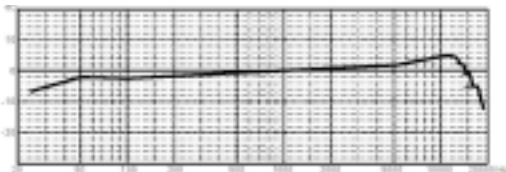
ant howling effect (acoustic feedback) may occur. Although all microphones are prone to feedback to some extent, those with a unidirectional polar pattern (such as the SPC-20) are specially designed to accept only signals from the audio source directly in front of the mic cartridge. Thus, the cardioid pattern of the SPC-20 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 SPC-20 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.

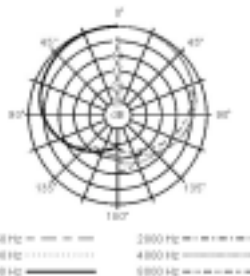
PRECAUTIONS AND CARE OF YOUR SPC-20

- 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.
- To protect the mic cartridge and ensure the longest possible useful life, it is highly recommended that for vocal applications, an external foam windscreen be used over the ball grille. This will prevent the buildup of saliva and perspiration on the cartridge diaphragm, which degrades performance and shortens the useful life of the microphone. Such a wind "sock" will also eliminate wind noise when the mic is used in a windy outdoor environment.

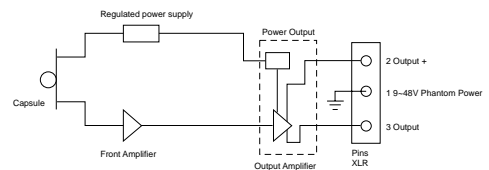
FREQUENCY RESPONSE



POLAR PATTERN



SCHEMATIC



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.

SPC-20 SPECIFICATIONS

CARTRIDGE TYPE	Back Electret Condenser	CONNECTOR	3-pin XLR (gold plated)
DIRECTIVITY PATTERN	Supercardioid polar pattern for optimum feedback rejection	POWER REQUIREMENT	+48V phantom power, 2.7mA
FREQUENCY RESPONSE	50 to 16,000Hz	MIC CABLE	3-pin XLR standard cable (not supplied)
SENSITIVITY (@1kHz, 74dB S.P.L.).....	-47dB V/Pa (4.5mV/Pa)	DIMENSIONS	1.9" Diam. x 6.9" (48 Diam. x 175 mm)
IMPEDANCE	200Ω	WEIGHT	9.3 oz (260 g)
MINIMUM LOAD IMPEDANCE	1,000Ω	MATERIAL	Die-cast zinc
MAXIMUM S.P.L. (THD ≤1% 1kHz)	140dB	BALLSCREEN	Steel mesh
DYNAMIC RANGE	115dB		

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