



# RSM-8A Active Ribbon Studio Microphone

## USER GUIDE



Congratulations on purchasing the Nady RSM-8A Active Ribbon Studio Microphone. This superior neoclassic microphone is designed for use in contemporary, state-of-the-art studios, yet offers the unique natural sound previously only available on such classic large ribbon mics as the legendary RCA 44, which is still used to make great recordings today after almost 70 years. Perfect for recording studio vocals, acoustic instruments, strings, horns, orchestras and choral groups, ambient instrument audio, and many live sound applications. Powerful and versatile, with the unmatched natural sound of classic ribbon mics yet the higher gain of conventional studio microphones, the RSM-8A meets the stringent requirements of even the most demanding digital recording and live broadcasting applications.

This manual covers the operation of the RSM-8A microphone and the available optional accessories.

To take full advantage of the superb features of your microphone, and to enjoy long and trouble-free use, please read this user's guide carefully. As ribbon microphones are, by their design, very sensitive to damage from mishandling and use, it is very important to read and observe the precautions below about proper use.

### UNPACKING, INSPECTION, STORAGE AND TRANSPORT

Your RSM-8A microphone was carefully packed at the factory, and the shipping carton (and soft padded bag) was designed to protect the unit during shipping. Please retain this container for subsequent transport and in the highly unlikely event that you ever need to return your microphone for servicing. Please note: since the ribbon assembly of the RSM-8A, as with all ribbon microphones, is extremely fragile, you must verify immediately upon receipt of your microphone that it has not been damaged during shipment and is operating correctly. The warranty on this microphone does not extend beyond an initial inspection, since these microphones can be so easily damaged during handling and use. If the unit arrived damaged please return it immediately to where you bought it. Units that are damaged in use can be returned to Nady Systems and the ribbon assembly replaced for a fixed charge (see Service section).

### STANDARD ITEMS SUPPLIED

- RSM-8A active ribbon microphone with attached stand mount
- User Guide
- Warranty card
- Padded carrying bag

### OPTIONAL ACCESSORIES

- MPF Series Pop Filter (highly recommended, as ribbon microphones are very susceptible to damage from strong air blasts, as with percussive sounds during recording)

### FEATURES

- All the warmth and natural, uncompromised sound expected of a classic Nady ribbon microphone with the added gain and selectable features offered by proven ultra low-noise FET active circuitry and transformer output.
- Perfect for recording vocals, acoustic and electric guitars, drums, percussion, strings, brass, or any environment where true natural reproduction of the audio is desired.
- Low tension 50mm long, 2 micron thick aluminum ribbon (velocity) design for characteristic "large, mellow" ribbon audio reproduction with smooth, natural extended low and high ends
- Over 40dB higher gain than most non-active ribbon microphones making it easy to use with any mic mixer or preamp.
- -10dB pad and Low Cut filter selector switches for often-needed attenuation and elimination of stage rumble.
- Unmatched fast, accurate transient response, ultra-high 165 dB SPL capability, and overall stunning realism
- Figure-8 audio directional (pickup) pattern for front and rear sides, extended sweet spots (as compared to large diaphragm condenser mics), and increased off-axis high-frequency response on sides, with decreased treble and lower audio levels above and below on-axis
- Swivel U-bracket allowing ease in positioning for any situation or audio source.
- Manufactured with the finest materials, machined housing and advanced internal shock-mount construction for structural integrity and rugged reliability
- 48V Phantom Power required

### USING THE OPTIONAL MPF SERIES POP FILTER

The optional MPF Series pop filter should always also be used with your RSM-8A. This pop filter should be placed between the sound source and the microphone to prevent percussive sound blasts and air movement from damaging the very fragile ribbon assembly of the RSM-8A. It is also useful in keeping mouth spray out of the microphone, which can also degrade or destroy the delicate ribbon.

## WARNING / PRECAUTIONS

The sound capturing element of your microphone is a very thin corrugated aluminum ribbon clamped under light tension and mounted between the poles of a strong magnet. This design enables it to produce warmest, most natural sound available from any type of studio microphone. However, it also makes this the most sensitive and fragile studio microphone available. All ribbon microphones require special care or they will be seriously damaged. In order to ensure long life for your RSM-8A please always follow these precautions:

1. Always protect your RSM-8A from any hard knocks, such as from dropping the mic, or not properly packaging when shipping, as such jolts can destroy the ribbon assembly. Always handle with complete care.
2. Prevent any sudden or strong blasts of air movement from ever reaching your microphone, as they can tear and destroy the fragile ribbon.  
Never blow into your RSM-8A! When using, always utilize a pop filter, such as the optional Nady MPF-6, to prevent any percussive sounds from damaging the ribbon. Such filters also prevent damage from moisture from mouth spray;
3. When not in use, always keep the microphone in the carrying bag provided. Also, always store the mic in a vertical position because, over time, the 2" long ribbons can sag, gradually degrading performance if the mic is stored on its side.

*Note: damaged ribbons are not covered by warranty and there will be a charge to repair.*

## CONNECTING THE RSM-8A

The RSM-8A 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-1X phantom power supply or a mixing console with phantom power), 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 RSM-8A 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 to avoid noticeable transient POP noise. If you are using the Nady SMPS-1X Phantom Power Supply, connect in the following order:

1. Connect the RSM-8A to the SMPS-1X
2. Connect the SMPS-1X Signal Output to your mixer
3. Connect the SMPS-1X adapter to the AC power supply (115—230VAC)
4. Turn on the SMPS-1X Power ON/OFF switch
5. Slowly turn up the channel gain in your mixer to the desired level



## 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@nady.com](mailto:service@nady.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 \_\_\_\_\_

Do not attempt to service this unit yourself, as it will void your warranty. Please note that due to the extremely delicate nature of ribbon mics, which can easily be damaged by misuse and mishandling (as noted under Warning / Precautions section above), the ribbon assembly of the RSM-8A is not covered under warranty. Check your unit carefully upon receipt and return to place of purchase immediately if there are any problems with the mic. After that, the standard Nady warranty will only apply to defects in materials and workmanship other than the ribbon assembly. If these are damaged, please contact the Nady Service Department for a quote for replacement of the ribbon assembly.

## SPECIFICATIONS

**Type:** Large Ribbon Geometry (LRG) ribbon (velocity) Microphone  
**Electronics:** Active FET circuit with transformer output  
**Pad Switch:** -10dB  
**Low Cut Filter:** - 12 dB @ 100 Hz  
**Phantom Power:** 48V required  
**Ribbon type & Dimensions:** Pure aluminum, 2 microns thick, 50mm x 5mm (L x W)  
**Polar pattern:** Figure 8  
**Sensitivity:** -35dB (0dB=1V/Pa)  
**Frequency response:** 30 to 18,000Hz (+/- 3dB)

**Impedance:** < 200 Ohms  
**Recommended load impedance:** 1000 Ohms  
**Max. SPL (1% THD @1000Hz):** 140 dB  
**Equivalent noise level to IEC 268-4(A weighted):** <17 dB  
**S/N ratio re 1Pa:** 76 dB  
**Output:** 3-pin XLR  
**Size: Diameter:** 2.7" (68.5mm), length 7.3" (185mm)  
**Net weight:** 29 oz (816g)

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