



# RSM-4 Studio Instrument & Vocal Ribbon Microphone

## USER GUIDE

Congratulations on purchasing the Nady RSM-4 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. Especially suited for recording guitar amplifier cabinets, the versatile RSM-4 is also great on vocals, acoustic instruments, strings, horns, orchestras and choral groups, ambient instrument audio, and many live sound applications. Powerful and versatile, and with the unmatched natural sound of classic ribbon mics, the RSM-4 meets the stringent requirements of even the most demanding digital recording and live broadcasting applications.

This manual covers the operation of the RSM-4 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-4 microphone was carefully packed at the factory, and the shipping carton and internally padded wooden storage case were designed to protect the unit during shipping. Please always store your mic in the wooden case and also retain the shipping 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-4, 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 below).

### STANDARD ITEMS SUPPLIED

- RSM-4 ribbon microphone
- Foam padded wooden storage box
- Mic clip
- Velvet drawstring storage bag
- User Guide
- Warranty card

### OPTIONAL ACCESSORIES

- MPF-6 Pop Filter (highly recommended, as ribbon microphones are very susceptible to damage from strong air blasts, as with percussive sounds during recording)

### FEATURES

- The unparalleled, uncompromised sound of a classic ribbon (velocity) mic
- Versatile design for numerous applications, including close miking of guitar amps and cabinets, and many other vocal and instrument recording and live sound uses
- Low-tension 45mm long, 6 micron thick aluminum ribbon design with typical "large, mellow" ribbon audio reproduction with smooth, natural extended low and high ends
- Fast accurate transient response, ultra-high 165 dB SPL capability, unmatched transient response and overall stunning realism
- Figure-8 audio directional (pickup) pattern for both front and rear side, with extended sweet spots (as compared to large diaphragm condenser mics), and slightly different frequency responses from front and rear side. Also, increased off-axis high frequency response on sides, with decreased high response above and below on-axis (though lower audio levels).
- Individual recording volume control of separate sources, through use of stereo mic setups wherein isolation is achieved by placing the source so that it is in the principal axis of one mic and the off-axis null of the other
- Manufactured with the finest materials with a machined housing with advanced internal shock mount construction for the highest structural integrity and rugged reliability

## WARNING / PRECAUTIONS

The active 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-4 please always follow these 4 precautions:

1. Always protect your RSM-4 from any hard knocks, such as from dropping the mic, or not properly padding in shipment, as such jolts can destroy the ribbon assembly. Always handled 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-4! 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. Never intentionally or accidentally apply any phantom power from your mixer or a phantom power supply to your RSM-4 as it can burn up the ribbon. Please always check carefully before connecting your ribbon mic that there is no phantom power being provided to the RSM-4.
4. When not in use, always keep the microphone in the padded wooden box 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 the wooden box should be placed on its side so that the mic is in an upright position when storing.

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

## USING THE OPTIONAL MPF-6 POP FILTER

The optional MPF-6 pop filter should always also be used with your RSM-4. 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-4. It is also useful in keeping mouth spray out of the microphone, which can also degrade or destroy the delicate ribbon.

## 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-4 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

**Ribbon type & Dimensions:** Pure aluminum, 6 microns thick, 45mm X 5mm (L X W)

**Polar pattern:** Figure 8

**Sensitivity:** -55dB(0dB=1V/Pa)

**Frequency response:** 30 to 18,000Hz (+/- 3dB)

**Impedance:** <= 200 Ohms

**Recommended load impedance:** 1000 Ohms

**Max. SPL (1% THD @1000Hz):** 165 dB

**Equivalent noise level to IEC 268-4(A weighted):** 18 dB

**S/N ratio re 1Pa:** 70 dB

**Mic cable:** 3-pin XLR standard cable (attached)

**Size: Diameter:** 3" (76 mm), length 6.5" (165 mm), thickness 1" (25 mm)

**Net weight:** 12 oz (794g)

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