



TCM 1100 Studio Vacuum Tube Condenser Microphone

USER GUIDE

Congratulations on purchasing the Nady TCM 1100 Vacuum Tube Condenser Microphone. This superior microphone is perfect for recording studio vocals, acoustic instruments, orchestras and choral groups, ambient instrument audio, and many live sound applications. Powerful and versatile, the TCM 1100 meets the stringent requirements of even the most demanding digital recording and live broadcasting applications.



This manual covers the operation of the TCM 1100 and the TMPS-1 power supply. To take full advantage of the superb features of this microphone, and to enjoy long and trouble-free use, please read this user guide carefully.

UNPACKING, INSPECTION, STORAGE AND TRANSPORT

Your TCM 1100 microphone was carefully packed in the supplied plastic carrying case at the factory, and the shipping carton was designed to protect the unit during shipping. Please retain this container in the highly unlikely event that you ever need to return your microphone for servicing. The supplied carrying case is highly recommended for convenient and safe transport or permanent storage. It has roomy compartments for the TCM 1100 and all accessories, including the TMPS-1 power supply and the 7-pin XLR microphone cable and the power cord.

STANDARD ITEMS SUPPLIED

- Power supply (TMPS-1), with power cord
- User guide
- Warranty card
- 7-pin XLR microphone cable (XC-7P)
- Plastic carrying case

OPTIONAL ACCESSORIES

- Foam windscreen (FW-1/1000)
- Spider elastic suspension shock mount (SSM-3)
- Leatherette pouch
- Aluminum flight case (SMCC-2)

FEATURES

Offering the natural, rich warm reproduction of sound that is the defining feature of the best classic tube microphones – but at an amazingly breakthrough affordable price – the TCM 1100 sets a new standard for price/performance value in studio vacuum tube condenser microphones.

- With cardioid pattern pickup and the most faithful sound reproduction available at any price – suitable for even the most critical (vocal or instrumental) live sound or studio recording and broadcasting applications
- Hand-tooled brass capsule with a 3-micron gold-sputtered mylar diaphragm (1.1 inch) for maximum sensitivity, long life, subtle sonic detail, and excellent tone
- Unique, specially designed gold-plated center element creates a gentle extension of the top octaves and an enhanced transient response
- 6072 (classic 12AT7) vacuum tube and special output transformer deliver superior pristine sound with ultra transparency
- Almost all brass parts construction ensures years of rugged reliability
- Supplied with a rugged portable plastic carrying case and 16' / 7-pin XLR cable and TMPS-1 power supply (with switchable 115/230V operation and balanced output)

USING THE MICROPHONE SHOCK MOUNT

It is recommended that the TCM 1100 be used with the optional SSM-3 spider shock mount, which uses an elastic suspension to isolate the microphone from vibration, thereby lowering noise transmitted to the microphone from the stand. This is a useful tool in many situations, such as when the performer is tapping his or her feet, or when there is noise pickup from the rumbling of traffic outside of the building. The disadvantage of using the shock mount is that the weight of the microphone may make it drift in the elastic suspension, so mic placement may take a little longer. To insert the TCM 1100 into the SSM-3 shock mount, pinch close the levers on the sides of the mount to the open position, then slide the microphone into place.



USING THE FOAM WINDSCREEN

The optional FW-1 foam windscreen is available for the TCM 1100. 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 FW-1 or other windscreen should be used whenever someone is close miked to both protect the microphone and to also eliminate "popping" sounds from percussive breath sounds. An external stand mount pop filter, such as the Nady MPF-6, is also ideal for this application.



(Note: Be aware that the foam windscreen will slightly attenuate the high frequency response of the microphone.)

(WARNING: 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.)

OPERATION

The TCM 1100 must be powered by the supplied TMPS-1 power supply and amplified by a microphone pre-amp (such as built into a mixer, or a stand-alone unit).

Controls and Connections

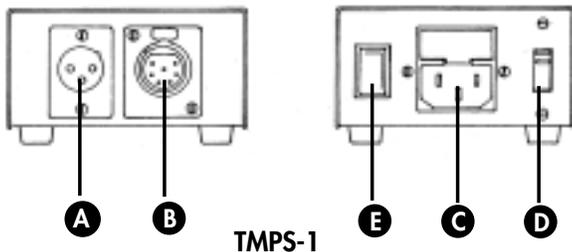
- A: Audio output for connection to a standard balanced 3-pin XLR cable
- B: To microphone (use the supplied 7-pin XLR cable: XC-7P)
- C: IEC AC cord receptacle (with internal fuse), AC power cable supplied
- D: 115/230 VAC select switch.
(Note: verify setting is at the correct voltage supplied or the unit will be damaged)
- E: Power ON/OFF switch

Set-up

1. Connect the TCM 1100 to the TMPS-1 power supply with the XC-7P (7-pin) XLR cable supplied
2. Connect the TMPS-1 Audio Output to your mixer using a standard 3-pin XLR microphone cable. (Note: Before connecting to a mixer directly, turn the channel to which you're connecting to its lowest gain setting. Turn off the phantom powering to the connected channel as it is not needed.)
3. Connect the TMPS-1 to the AC power supply (first selecting the proper voltage: 115-230VAC)
4. Turn on the TMPS-1 Power ON/OFF switch.
5. Slowly turn up the channel gain in your mixer to the desired level.

(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.)

(Note: For optimum performance, it is best to let the microphone warm up for 5 to 10 minutes so that the internal vacuum tube can reach its peak specifications.)



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.

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

Date of purchase _____ Serial # _____

Dealer's Name _____

Street _____

City _____ State _____ Zip _____

TCM 1100 SPECIFICATIONS

Type.....True condenser pressure gradient microphone with 1.1 inch single diaphragm and vacuum tube pre-amplifier

Polar patternCardioid

Open circuit sensitivity.....20 mV/Pa = 34 dBV (0dBV=1V/Pa)

Frequency range20 to 20000Hz

Rated output impedance< 250 Ohms

Recommended load impedance≥ 1000 Ohms

Max. SPL (1% THD @1000Hz).....122 dB

Equivalent noise level to
DIN 45405(CCIR 468-2).....26dB

IEC 268-4(A weighted)16dB-A

S/N ratio re 1Pa78dB

Power requirementDedicated TMPS-1 powering unit

Ambient temperature range14°F to 140°F (-10°C to +60°C)

Relative humidity range.....90%(68°F, 20°C), 85%(140°F, 60°C)

Connector7-pin XLR (gold plated)

Mic cable.....7-pin XLR cable (XC-7P), 16 ft (5 m)

Vacuum tube6072 (selected from 12AT7)

SizeDiameter: 2.1" (55 mm),
length: 6.5" (165 mm)

Net weight......15 oz (420g)

TMPS-1 Power Supply
Power requirement.....115VAC/60Hz, 220VAC/60Hz (selectable)

Pinouts 7-pin XLR (female).....Pin 1: 200V/2mA
Pin 2: 6.7VDC/170mA
Pin 3: 200V
Pin 4: grounded
Pin 5: audio -
Pin 6: audio +
Pin 7: grounded

3-pin XLR (male).....Pin : grounded
Pin 2: audio +
Pin 3: audio -

Dimensions6.3" x 4.3" x 2.5" (160 x 110 x 63mm)

Weight2.64 lbs (1.2 Kg)