TCM 1050 Studio Vacuum Tube Condenser Microphone

USER GUIDE

Congratulations on purchasing the Nady TCM 1050 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 1050 meets the stringent requirements of even the most demanding digital recording and live broadcasting applications.

This manual covers the operation of the TCM 1050 and the TMPS-2 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's guide carefully.

UNPACKING, INSPECTION, STORAGE AND TRANSPORT

Your TCM 1050 microphone was carefully packed in the supplied aluminum flight 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 aluminum case is highly recommended for convenient and safe transport or permanent storage. It has a combination lock and roomy foam padded compartments for the TCM 1050 and all supplied accessories

ACCESSORIES INCLUDED

- TMPS-2 remote power supply/9-pattern polar pattern select unit, with switchable 115/230VAC operation
- Power cord
- SSM-1050 elastic suspension shock mount
- XC-7P 30 ft (10 m) connecting cable with 7-pin XLR
- TMCC-1 aluminum flight case
- FW-1050 foam windscreen
- User guide
- Warranty card

FEATURES

The TCM 1050 is the best value available today in studio tube condenser microphones–with the classic vintage look and the same extraordinary sound and performance of a legendary vacuum tube microphone, at a fraction of their original cost. For the first time, the superior technology of these classic microphones is affordable even to the most modest project studios. With the superior rugged construction and unparalleled warmth, presence, and clarity of the original classics–but with unbeatable affordability—the TCM 1050 studio vacuum tube condenser microphone delivers both superb sound and unsurpassed value.

- Hand-tooled brass capsule with a 3-micron gold-sputtered mylar dual diaphragm (1inch) for maximum sensitivity, long life, subtle sonic detail and unsurpassed tone
- Tube preamplifier circuitry with 6072 vacuum tube (a classic 12AT7 specially selected for low distortion, superior signal-to-noise ratio and minimum sensitivity to mechanical vibrations)
- Special output transformer designed for ultra transparency and natural warm reproduction of sound
- Almost all brass parts for years of studio workhorse reliability
- Power provided by a dedicated AC power supply with a balanced XLR output for connection to any mixing console, with no phantom power required
- Nine different polar patterns remotely selectable on power supply for ultimate versatility in use and ease of operation: omnidirectional, cardioid, figure 8, and six intermediate stages

OPERATION

The TCM 1050 must be powered by the supplied TMPS-2 power supply and amplified by a microphone pre-amp (such as built into a mixer, or a stand-alone unit).

Set-up

1. Connect the TCM 1050 to the TMPS-2 power supply with the XC-7P (7-pin) XLR cable supplied.
2. Connect the TMPS-2 Audio Output to your mixer using a standard balanced 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, and turn off its phantom power.)*
3. Connect the TMPS-2 to the AC power supply (first selecting the proper voltage: 115-230VAC)
4. Turn on the TMPS-2 Power ON/OFF Switch.
5. Slowly turn up the channel gain in your mixer to the desired level.

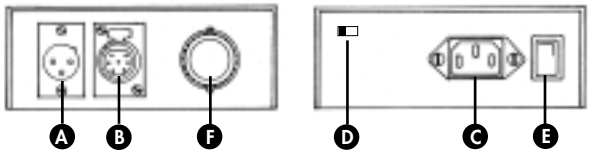
(Note: Make sure to set the mixer to the proper gain level – too much gain may distort subsequent amplifiers and too little may result in a noisy signal.)

6. Select the polar pattern desired with the Polar Pattern Select Switch: omnidirectional, cardioid, figure 8, or one of six intermediate stages.

(Note: Experiment with all these choices to fully utilize the versatility the TCM 1050 can offer for various diverse applications.)
(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.)

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
F. 9-pattern polar pattern select switch



TMPS-2

USING THE MICROPHONE SHOCK MOUNT

It is recommended that the TCM 1050 be used with the SSM-1050 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 1050 into the SSM-1050 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 FW-1050 foam windscreen is supplied with the TCM 1050. 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. 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 or pop filter if you talk or sing close to the microphone grill screen.)*

SERVICE

(U.S.) Should your Nady microphone require service, please contact the Nady Service Department via phone 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 1050 SPECIFICATIONS

Type	True condenser pressure gradient microphone with 1 in (25 mm) diameter dual diaphragms and vacuum tube preamplifier
Vacuum tube	6072 (selected from 12AT7)
Capsule capacitance	50 pF
Polar pattern	Omnidirectional, cardioid, figure 8, and six intermediate stages (silent switching)
Open circuit sensitivity @1KHz	-36dBV +/-2dBV (0dBV=1V/Pa) for all patterns
Frequency range	20 to 20,000 Hz
Rated output impedance	< 200 Ohms
Recommended load impedance	≥ 1000 Ohms
Max. SPL (1% THD @1000Hz)	134 dB
Equivalent noise level (A weighted)	≤ 18 dB-A
S/N ratio re 1Pa	74dB
Dynamic range (max SPL to A-weighted noise level)	116 dB
Ambient temperature range	14°F to 140°F (-10 °C to +60 °C)
Relative humidity range	90% (68°F, 20 °C), 85% (140°F, 60°C)
Connector	7-pin XLR (gold plated)
Mic cable	7-pin XLR cable (XC-7P), 30 ft (10 m)
Dimensions	Diameter: 2.36 in (60 mm), length: 7.1 in (180 mm)
Net weight	29 oz (800 g)
Power requirement	Dedicated TMPS-2 powering unit (115/230VAC selectable)
TMPS-2 Dimensions and Weight	2" X 5.5" X 7" (51 X 140 X 178 mm), 3.25 lbs (1.46 Kg)

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

02/01