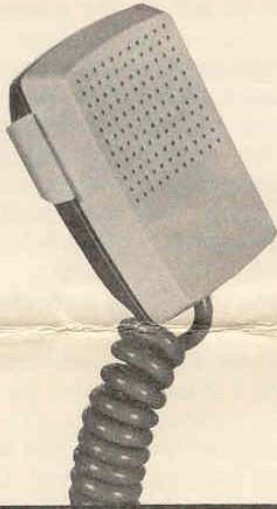


GENERAL:

The model M+3 transistorized mobile microphone has been designed especially for the CB, amateur radio, business radio and communications field. The M+3 utilizes a transistorized compression amplifier providing a gain of 15 db over conventional hand held ceramic microphones.

Mobile Communications



MODEL M+3
FIGURE 1

SPECIFICATIONS

for

M+3 JM+3

Amplified
Mobile Microphone

The M+3 with its high output compression amplifier has the capability of fully modulating any transmitter or transceiver. With the slide actuated gain control properly set you are assured of full modulation at all times without overmodulation. The ceramic generating element of the M+3 is unaffected by extreme temperature and humidity conditions. The compression amplifier uses rugged silicon transistors for maximum temperature stability. The amplifier is constructed on a printed circuit board for maximum reliability. The M+3 case is rugged Cylolac to withstand the day to day abuse and extreme variations in temperature conditions encountered in mobile operations. Case front is light blue and case rear is medium blue in color. The cable is 3 conductor, 1 shielded coil cord with medium blue (Hypalon) jacket with excellent memory or shape retention after repeated extending and retracting.

The M+3 microphone is activated by pressing the convenient press-to-talk bar on the side of the microphone. This applies power to the amplifier while performing the necessary switching of the red and black conductors used to actuate the transceiver or transmitter.

The output level of the M+3 is easily adjusted by moving the recessed slide actuated volume control on the rear of the case. The M+3 has a tailored frequency response of 300 to 3500 Hertz with a rising characteristic. This provides maximum speech intelligibility in transmission with a reduction in local noise interference. This combination of full modulation capability provided by the compressor amplifier and the tailored frequency response of the ceramic generating element assures you of maximum voice power to increase your range and cut through local QRM conditions.

Generating Element: Ceramic

Sensitivity (at compression threshold):

—36 db (0 db = 1 volt per microbar)
1 megohm load

—42 db (0 db = 1 volt/microbar), 1000 ohm load

Amplifier Voltage Gain: 0 to 15 db

Gain Control: Slide actuated button

Frequency Response: 300 to 3500 Hz

Output Impedance: 1000 ohms

Temperature Range: —30° C to +65° C

Power Supply: Ray-o-vac #1501 (or equivalent), 7 volt Mercury Battery, included.

Battery Drain: 0.9 ma.

Battery Life: 6 months under normal usage

Cable: 3CIS, coiled cord, 11" retracted, 5' extended, medium blue, Hypalon jacket

Weight: 260 grams (9.2 oz.) with cable

Case: Cylolac, light blue front, medium blue rear

TURNER MICROPHONES

TURNER DIVISION OF CONRAC CORPORATION
909 17th Street N.E., Cedar Rapids, Iowa 52402
(319) 365-0421 • Telex: 464437

FIGURE 2

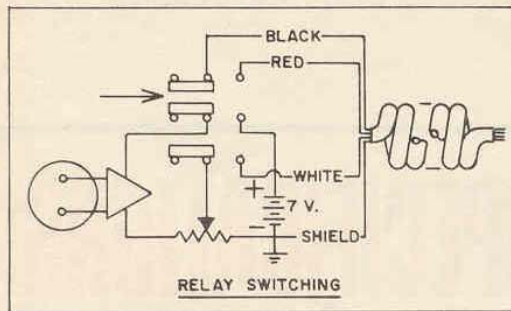
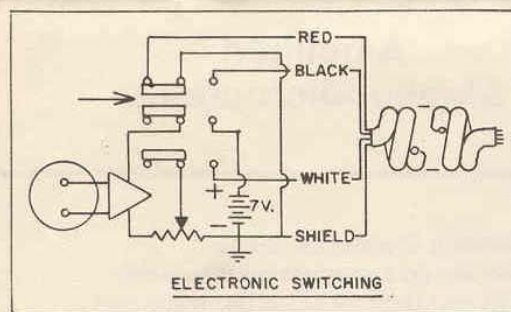


FIGURE 3



GUARANTEE

All Turner M + 3 microphones are individually and thoroughly tested before leaving the factory and are guaranteed by the Turner Division, Conrac Corporation, against defective materials and workmanship for one year, provided that the instructions are fully complied with and that the units are not opened, except for battery replacement, or tampered with in any way. Microphones covered by this warranty should be returned to the factory and will be repaired or replaced at no cost other than transportation one way.

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CONRAC

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Transistorized Mobile Microphone

The M+3 was designed to fill the need of a mobile microphone with high average modulation level capability. It is for use with all types of communication transmitters and transceivers, particularly business radio and CB.

The M+3 can be easily adapted to almost any transmitter. The white wire is the signal ("hot") lead and the shield provides a ground connection between microphone and transmitter case/ground. The black and red leads provide the necessary control switching as shown in Figure 2 and 3. When replacing another microphone with the M+3, consult the equipment manual for proper wiring of the connector (if connector is used). If an equipment manual is not available, then care should be taken to analyze the microphone being replaced to determine connector connections and type of switching needed. Experience indicates that most difficulties in replacing a microphone occur as a result of poor workmanship in making up the connector. Avoid excessive heat which can damage insulation and keep exposed leads short to prevent shorting within the connector.

In case of difficulty, please do not tamper with the microphone as this will void the factory warranty. Consult Turner connection manual or contact factory for further instructions. (When writing factory for information please include set schematic).

A LOSS IN MODULATION LEVEL MEANS A LOSS IN EFFECTIVE COMMUNICATIONS RANGE OF YOUR EQUIPMENT.

The M+3 is designed to be used at a 1/4 inch, this distance being the most natural for mobile communications. At this distance, background noise is minimized. The volume control should be set initially at 1/3 to 1/2 of full range. Remember this is a starting point and your modulation level should be verified on a monitor scope. The M+3 is designed to operate at slightly above the threshold of limiting when used at the specified distance at normal voice level. The limiter range is 15 db. The wide range in output level allows you to compensate for variations in the audio input sensitivity of the many transmitters available.

The M+3 is wired for relay switching (closing an external set of contacts — no connection to ground), the JM+3 is wired for "electronic switching." (The most common type of electronic switching is alternate switching of two wires to ground).

The additional switching contacts provided by the three pole double throw switch in the new M+3 and JM+3 give them greater switching flexibility and allow for compatibility with virtually all transceivers, either tube type or transistorized, except in most cases those which require a carbon microphone.

BATTERY REPLACEMENT

Remove door in rear case by turning the hanger button counter clockwise. Remove battery from inside of door. Install new battery, making sure to observe polarity then replace door and tighten hanger. NOTE: Your new M+3 is shipped from the factory with battery furnished, packed loose in box to prevent corrosion. It will be necessary to install battery before attempting to use your microphone.