

**SHURE**

222 HARTREY AVE., EVANSTON, ILL. 60204 U.S.A.

MICROPHONES AND ELECTRONIC COMPONENTS

® AREA CODE 312/328-9000 • CABLE: SHUREMICRO

**DATA SHEET****MODEL 526T**  
*Super Punch*<sup>™</sup>  
**MICROPHONE****BASE STATION CITIZENS BAND POWER MICROPHONE****GENERAL**

The Shure Model 526T SUPER PUNCH base station power microphone is designed specifically for Citizens Band transceivers and amateur radio applications. For clearer transmission and improved reliability, this transistorized microphone can be used to replace ceramic or dynamic, high- or low-impedance, microphones supplied as original equipment.

Model 526T provides crisp, undistorted voice response with adjustable volume control for optimum intelligibility of transmission.

The microphone is designed for base station operation with maximum versatility. It has a momentary or locking press-to-talk transmit/receive switch for greatest ease of use, a modulation level volume control for highest undistorted output with high- or low-impedance inputs, and a NORMAL/VOX selector switch for press-to-talk or VOX-operated transceivers.

The microphone is not affected by heat or humidity and it is outstanding in its ability to resist mechanical shocks and vibration. Its exclusive ARMO-DUR<sup>®</sup> case is immune to oil, grease, fumes, salt spray, sun, rust, and corrosion. The "Million-Cycle" leaf-type press-to-talk switch is designed to withstand rigorous operating conditions and constant use.

**Microphone Features:**

- Power microphone with transistorized preamplifier
- Adjustable volume control for optimum transmitter modulation and maximum intelligibility
- Replaces either ceramic or dynamic original equipment microphones
- Excellent response for single-sideband transmission
- Uses readily available 9-volt battery — low current drain for long life
- Low hum pickup, minimum susceptibility to RF interference

- Momentary or locking press-to-talk transmit/receive switch — "Million-Cycle" leaf-type
- NORMAL/VOX selector switch for press-to-talk or VOX-operated transceivers
- Sturdy, high-impact ARMO-DUR case
- Rugged and dependable under all operating conditions

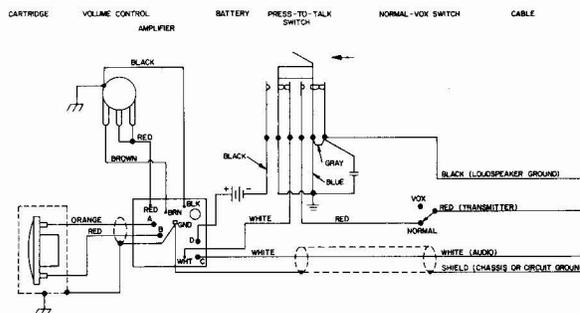
**BATTERY INSTALLATION**

Model 526T uses a 9 Vdc battery (Eveready 216 or equivalent — supplied). To install the battery, proceed as follows:

1. Loosen two screws (located underneath base) holding battery retaining clip, and remove battery retaining clip.
2. Connect terminal strap to battery.
3. Insert battery in VELCRO strap of battery retaining clip and fasten VELCRO strap.
4. Insert battery retaining clip in base and tighten screws securely.

**CONNECTIONS**

The internal connections of Model 526T are shown in Figure 1.



INTERNAL CONNECTIONS  
**FIGURE 1**

Model 526T may be connected to an amplifier, transmitter, or CB transceiver with an input impedance of 500 ohms or more. Refer to the Shure CB Wiring Guide enclosed with the microphone for detailed instructions for connecting the 526T to your CB transceiver. If your unit is not listed in the Guide, contact your dealer or Shure Brothers Incorporated for information. This microphone is not designed for use with transceivers requiring five-conductor shielded cable. Passage of the 526T cable through small-diameter connectors may be eased by lubricating the outer jacket of the cable.

The general wiring procedure for transceiver connections is as follows.

### Relay or Switching Circuit:

#### GROUNDING SWITCHING

Most transceivers employ a grounded circuit to switch from the receive to the transmit position. To connect the microphone to such a circuit, proceed as follows.

1. Unscrew the two screws securing the microphone baseplate, and remove the baseplate.
2. Cut the GRAY lead connecting two terminals of the press-to-talk switch (see Figure 1).
3. Reassemble the baseplate to the microphone and fasten securely with the previously removed screws.
4. At the end of the cable, connect the RED lead to the terminal used to complete the transmitter circuit.
5. Connect the BLACK lead to the terminal used to complete the receiver circuit. This will usually be a ground return from the loudspeaker. If a microphone switching contact is not required for the loudspeaker ground, insulate (wrap with tape) the BLACK cable lead.
6. Connect the shield to chassis or circuit ground of the transceiver (see Guide).

#### ISOLATED SWITCHING

In some transceivers, an isolated circuit is required to switch power supply voltages rather than grounds. If an isolated switching circuit is required, proceed as follows.

1. Unscrew the two screws securing the microphone baseplate, and remove the baseplate.
2. Clip and insulate the BLUE lead from the press-to-talk switch to the ground lug (see Figure 1).
3. Reassemble the baseplate to the microphone and fasten securely with the previously removed screws.
4. At the end of the cable, connect the RED lead to the isolated switch contact terminal used to complete the transmitter circuit.
5. Connect the BLACK lead to the other isolated switch contact terminal used for power supply voltage.
6. Connect the shield to chassis or circuit ground of the transceiver (see Guide).

#### CAUTION

Make certain that the shield is not connected to chassis ground for those models where the Guide specifies the shield should be connected to circuit ground.

#### NOTE

In some transceivers, there may be oscillation, squealing, or low volume in the Receive mode. In any of these cases, clip and insulate the WHITE lead between the printed circuit assembly and the normally closed contact of the press-to-talk switch (see Figure 1).

### Microphone Audio Input Circuit:

Connect the WHITE cable lead to the microphone audio input terminal.

#### VOLUME CONTROL

When the 526T replaces a ceramic (usually high-impedance) microphone supplied as original equipment, the volume control should be set at the lower ranges to prevent overmodulation and unintelligible transmission. Correct modulation can be checked on the modulation level indicator.

When the 526T replaces a dynamic (usually low-impedance) microphone supplied as original equipment, the volume control should be set at the upper ranges for correct modulation as indicated on the modulation level indicator.

#### VOX OPERATION

Most amateur equipment and some CB transceivers are designed for either press-to-talk or VOX (voice-operated relay) operation. The Model 526T provides for operation in either mode by use of the NORMAL/VOX slide switch on the bottom of the microphone base.

For press-to-talk operation, the slide switch should be in the NORMAL position. For VOX operation, the switch should be in the VOX position with the control bar locked in the On position.

### LOCKING PRESS-TO-TALK SWITCH

The fingertip control bar of the press-to-talk switch can be used in a momentary or locked-on position. For use as a momentary switch, depress the control bar and release after transmission. To lock the switch in the On position, depress the control bar and move it forward with the fingertips. To unlock the switch, move the control bar backward and remove pressure.

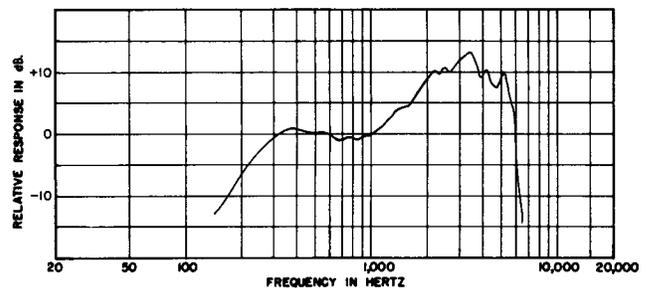
## SPECIFICATIONS

#### Type

Dynamic (with transistor preamplifier)

#### Frequency Response

200 to 6,000 Hz (see Figure 2)



TYPICAL FREQUENCY RESPONSE

FIGURE 2

#### Polar Pattern

Omnidirectional

#### Output Impedance

5,000 ohms

**Load Impedance**

500 ohms minimum

**Output Level** (at 1,000 Hz with 100 kilohm load)

Adjustable from 0.63 to 14 mV for 1 microbar input

**Signal Handling Capability** (with 50 kilohm load)

111 dB SPL at 1,000 Hz produces 1.0V with volume control at maximum

**Battery Type**

9 Vdc (Eveready 216 or equivalent)

**Battery Drain**

0.9 mA

**Battery Life**

300 hours minimum, 1 year maximum

**Switches**

Press-to-talk: single-bar, momentary or locking, leaf-type switch

NORMAL/VOX: single-pole double-throw slide switch

**Cable**

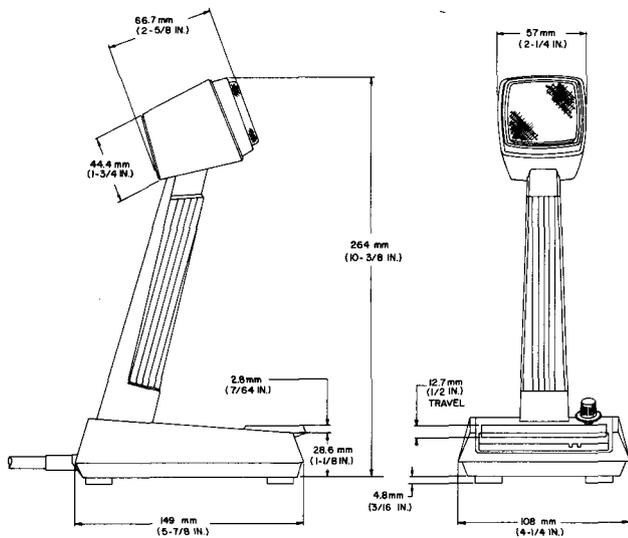
2.1m (7 ft) three-conductor shielded, plastic jacketed, attached cable

**Case**

Black, high-impact ARMO-DUR®

**Dimensions**

See Figure 3



OVERALL DIMENSIONS  
FIGURE 3

**Net Weight**

920 grams (2 lb)

**Packaged Weight**

1.2 kilograms (2 lb, 11 oz)

**REPLACEMENT PARTS**

Cartridge .....	R96
Grille Assembly .....	90D1844
Battery Retaining Clip .....	90A2351
Baseplate with NORMAL/VOX Switch .....	90A2348
Cable .....	70A3092
Switch Blade Assembly .....	90A2595
Volume Control .....	46A060
Printed Circuit Assembly .....	90A2617

**FULL ONE YEAR WARRANTY**

Shure Brothers Incorporated ("Shure"), 222 Hartrey Avenue, Evanston, Illinois 60204, warrants to the owner of this product that it will be free, in normal use, of any defects in workmanship and materials for a period of one year from date of purchase. You should retain proof of date of purchase. Shure is not liable for any consequential damages. If this Shure product has any defects as described above, carefully repack the unit and return it prepaid to the above address. If you are not in the United States, return the unit to your dealer or authorized Service Center for repair. The unit will be repaired or replaced and returned to you promptly, and if it cannot be repaired or replaced, you may elect to receive a refund.

