# MODEL 215P/PC MICROPHONE

Model 215P is a ceramic omnidirectional microphone designed for communications applications of all types. Frequency response is tailored to provide a high degree of articulation and the unit is provided with a switch to control associated equipment. Model 215PC is the same unit with a coiled cord.

Size, balance and geometry of the microphone allow hand held operation for long periods of time with minimum fatigue, and separate diecast base converts it to a desk mike.

# SPECIFICATIONS

Element: Piezoelectric Ceramic.

Frequency Response: 200-4,000 Hz.

Impedance: High. Recommended input impedance, 500 k ohms

minimum.

Output Level: -56 dB re 1 V/dyne/CM<sup>2</sup>.

Polar Response: Essentially omnidirectional, becoming

slightly directional at high frequencies.

On-Off Switch: Leaf type, SPDT. When actuated, short to

ground is removed from microphone circuit

and grounds relay circuit.

Connector: Barrel = Common ground; Band = Microphone;

Tip = Switch.

Cable: Four feet, three conductor, one shielded.

Construction: Front section pressure diecast. Rear case

molded from Cycolac.

Finish: Black.

Dimensions: Width = 1-7/16" Depth = 1-11/32" Height = 7-7/8".

Weight: Microphone - 8 ounces. Desk Base - 13 ounces.

Warranty: Guaranteed for one year from date of purchase against

defects in materials or workmanship.

## INSTALLATION CAUTION NOTICE

Standard practice on this and all quality microphones is to ground the microphone element and case to afford best shielding and lowest hum pickup. On some equipment an AC-DC circuit is used. This allows the ground circuit within the equipment to be connected to one side of the AC line, and thus presents a possible shock hazard. It is recommended that this microphone not be used with this type of equipment.

Pt. No. 74119

### GENERAL

TEN-TEC microphones, Models 214, 215P and 215PC, are supplied with a toggle rocker switch. The switch can be left in either the 'on' or 'off' position. In some applications, e.g. mobile or hand held, or when short transmissions are the rule, it may be desirable to have a momentary 'on', spring return 'off' action. This can easily be accomplished by following the conversion instructions below.

#### CONVERSION

- 1. Remove the two screws from the back of the microphone case. Notice that the longer one comes from the bottom hole.
- Lay open the back from the front assembly and feed 10 to 12 inches of cable back through the case opening so that the front assembly can be easily worked on.
- 3. Note switch and toggle spring detail, Figure 1. Operate the switch several times and notice contact sequence. There are two sets of contacts, a single pole single throw (SPST) normally open switch on the top of the stack and a SPST normally closed set on the bottom. (In Model 214 the lower set is not used.)

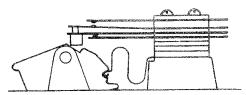


Figure 1 - Toggle Action

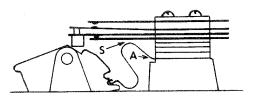


Figure 2 - Spring Return Action

- 4. Remove the two screws holding the switch stack to the front case.
- 5. Remove the phospor bronze "S" spring from the bottom of the stack and turn it over.
- 6. Re-attach the stack to the case. Seat mounting screws firmly.
- 7. The "S" spring will now have to be adjusted as shown in Figure 2. First make sure that free end of the spring is in the proper notch in rocker as shown in Figure 2.
- 8. With long nose pliers, grasp the spring at point A, where it emerges from the stack. Bend the spring counterclockwise with the pliers so that it clears the bottom blade by 1/32 to 1/16 inch, no more. Refer to point S in Figure 2.
- 9. Test rocker action. When positioned fully 'on' the "S" spring should not touch but just meet the bottom blade without deflecting it. If it does not, bend the spring until it does.
- 10. Check contact action. Make sure bottom set opens and top set closes when rocker is depressed. Bend blades slightly where they emerge from stack if they don't. Check rocker return action for smooth feeling.
- 11. Re-assemble case.