

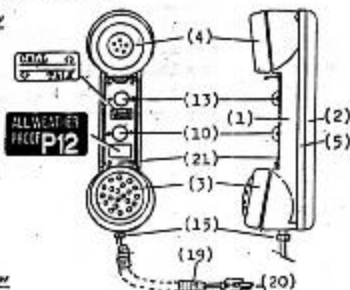
The model P-12 is a durable industrial handpiece for 2-way, simultaneous communication. Utilizing piezo-electric element for voice transmission, it withstands high temperatures and high humidity. Drip-proof construction. Recommended to be used under severe environments including the tropics, tunnel, ship, forestry, factory, construction site, etc.  
 Precautions: Handle the unit with due care not to give excessive shock or heat. Do not immerse the unit in water. Store the unit under normal temperature and humidity.

## I. CONSTRUCTION

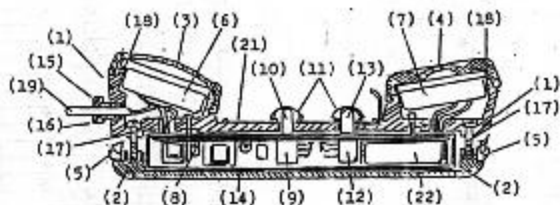
The handpiece unit contains call signal generator, voice sending amplifier, and two "AA" batteries. On the operation panel side are Call button (grey) and Talk button (black). No external power source is necessary for communication.

Name of Each Part

External View



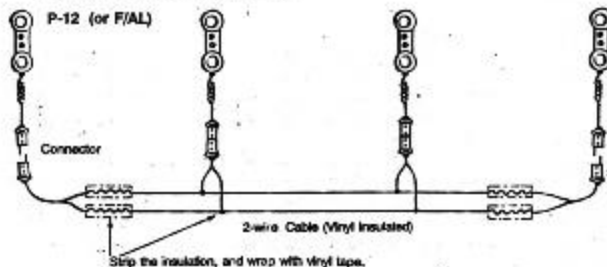
Sectional View



- |                                |                         |
|--------------------------------|-------------------------|
| (1) Handset body               | (12) Call button switch |
| (2) Handset cover              | (13) Call push button   |
| (3) Mouthpiece                 | (14) Chassis case       |
| (4) Earpiece                   | (15) Gland              |
| (5) Cover packing              | (16) Gland packing      |
| (6) Transmitter capsule (CE-2) | (17) Cover fixing screw |
| (7) Receiver capsule (CE-2)    | (18) Capsule packing    |

## II. INSTALLATION

- Simply connect the line connectors of two P-12's with 2-conductor cable having core diameter of approx 0.75mm or larger. Disregard polarity in wiring. Make connection of the cables by stripping the insulation, and winding a plastic tape on the connected part. The accessory heat-shrink tubes may be used to cover the spliced wires, by heating it with a heat-air blow, etc.
- More than 2 units of P-12 can be hooked up on the communication line. The headset type phone F/AL can also be used in conjunction with P-12. Note that when the number of phone sets connected is around 6 or more, the signaling sound may get weaker. The self-powered separate bell unit RB-1 (option) may be used in such instance. In case of one-to-one connection, cable length up to approx. 3 km should allow operation with adequate buzzer/speech sound volume.



## III. OPERATION

- To start communication, press down CALL (grey) button, and calling signal is transmitted to the other party (at the same time you hear the buzzer sound from your handset also).
- The other party, being signaled by the buzzer, responds to the call by also pressing CALL button.
- Both parties then simultaneously press down TALK (black) button to commence conversation. While the TALK button is pressed down at both ends, the conversation can be made in a manner just like an ordinary telephone. Keep the button pressed down with enough strength.

**Note:** When more than 2 phone units are hooked up on the communication line, unique signaling code, like pushing the switch two times, three times, etc. at a time, may be used so that the calling station can be identified by the buzzer signal.

## IV. CHANGING BATTERIES

When the battery power gets low, the buzzer sound will get weaker. To replace the batteries, unscrew the mouth piece (3) and ear piece (4), and take out the transmitter capsule (6) and receiver capsule (7) together with their connecting wires. Then remove two handset covers.