

## MODEL M15 VHF AIRCRAFT BAND RADIO RECEIVER/TRANSMITTER

### OPERATION

The M15 is turned on by rotating the volume control (VOL) clockwise from the off position. OFF is fully counterclockwise. Turning this control clockwise increases the volume or loudness at the speaker. The best volume setting depends on the ambient noise, location of the speaker and the preference of the listener. In quiet environments, 1/4 turn is often satisfactory; in noisy environments 1/2 to 3/4 turn is usually best.

The channel selector switch is in the center of the front panel. It may have up to six positions; normally the number of positions corresponds to the number of crystal pairs installed. However, for single-channel radios, the switch will have two positions, both which select the single available frequency.

The squelch control eliminates receiver background noise when no signal is present. In the fully CCW position, the receiver is unsquelched. Advancing the control CW will squelch the background noise. Since using squelch may also result in not hearing weak signals, the operator should use the minimum amount which eliminates annoying noise. If it is anticipated that it may be necessary to receive some very weak signals, use no squelch at all (control fully CCW).

An aircraft type transistorized dynamic microphone is plugged into the MIC jack at the right side of the front panel. Be sure the plug is pushed into the jack (receptacle) as far as it will go. To transmit, press the push-to-talk (PTT) button on the microphone as far down as it will go. If a noise-canceling microphone is used, hold the microphone close to the mouth; these microphones are very sensitive to the distance between the operator and microphone. Talk directly into the center of the microphone, in a normal voice. Speak clearly and distinctly—many readability problems are caused by poor “mike technique”.

A red lamp near the microphone jack lights up when the PTT button is pressed to transmit. If this lamp stays on after the PTT button is released, a “stuck microphone” is indicated. If you cannot release the PTT switch (button), turn off the M15 or remove the microphone plug so your continuously operating transmitter will not prevent other radios from using the channel. With a “stuck mike”, in an emergency, you can transmit by plugging the microphone back in each time you want to transmit.

While the M15 receiver has been designed for congested radio signal environments, very strong nearby transmissions on other channels may “bleed through”, or in some cases desensitize the receiver. This does not mean that the receiver is operating improperly. If interference is a significant problem, contact Mentor Radio for assistance.