



latter is intended for use in the CW mode, and only functions when CW is selected. Both work well, the notch filter being effective, useable within the passband of a speech signal without too much loss of intelligibility.

The last of the controls sets the width of the i.f. passband and enables the selected passband width to be moved across the received signal. These are arranged as a friction coupled concentric pair, so that once the width has been set to the optimum, allowing for QRM etc, the two controls can be rotated as one for setting the passband relative to the received signal. Some time was needed to get used to these, but the manual is very helpful with explicit instructions and diagrams on their use.

### The rear panel

A brief tour of the rear panel shows the normal SO239 antenna socket. In addition an auxiliary antenna is allowed, as well as an external receiver, with options on how these combinations are used. Muting, sidetone and other controls are also available for the other receiver.

Low level Tx output for transverter use (0.1v rms into 50ohm), external VFO, AF out (for recording), IF out (for spectrum analyser), external PTT, and the key jack (why is this always relegated to the back?) are among the more notable connectors available, but there are a number of others including a 12v dc output for accessories.

Finally, lurking under the bot-

tom panel are a number of potentiometers, for the sidetone pitch and volume, and for setting up the Tx audio response. This latter feature could be useful, especially for the YL operator who suffers from most rigs being shaped for the male voice, with the result that most YL's sound alike. As satisfactory results were obtained on the air, these controls were not adjusted, but have obvious advantages for compensation if your voice characteristics tend to base or treble.

### The Circuit

Unlike the 101 series, the FT-102 uses dual conversion (8.2MHz and 455MHz) on transmit and receive. Signals from the antenna can be routed through a tuneable high voltage (24v) RF dual JFET

