

## Memories

12 of these are provided, of which four are 'protected' in that two buttons have to be pressed simultaneously to enter the frequency into positions 9-12 on the memory selector switch. The other eight just need one button pushed to get the displayed frequency into a memory. Memory back-up can be provided by means of batteries if required.

There is one potential problem with the memories — the rig stores the mode as well as the frequency. Hence if you store a frequency when in SSB mode (which you might well do when tuning around the CW end of the bands), you are stuck in SSB mode when you reselect that memory channel, and nothing you can do will change this (except retuning with the main VFO). I would have thought the storage of the frequency alone would have been adequate — although I would not have been surprised if it had also stored the RF and AF gain settings, and the height of the operator's chair.

## Bandwidth controls

Variable selectivity controls are almost obligatory in the modern transceiver and can go a long way to eliminating interference on our crowded bands. The 980 is supplied with WIDTH and SHIFT controls. The former adjusts the IF bandwidth of the receiver during all reception modes, the maximum bandwidth being dependent on the filters fitted. Moving the inner of the two concentric controls counterclockwise moves the lower skirt of the pass-band higher in frequency, while clockwise shifts the upper skirt lower. The other SHIFT control provides the 'missing' half by moving the relative position of the IF pass-band with respect to the frequency to which the receiver is tuned.

Hence, by using both controls together it is possible to eliminate interference on both sides of a signal, once you have got the hang of it. The SHIFT control is indented every 100Hz of shift for reference.

## Notch filter

Additional selectivity is available from an Audio Peak Filter, for CW, with variable frequency control, and a Notch filter for

removing heterodynes. Unfortunately this latter function must rate as the worst I have come across, with a notch depth barely above 20dB according to the meters. The subjective performance wasn't any better, with only weak heterodynes which you wouldn't worry about anyway being reducible to any extent. The handbook doesn't state any figure for Notch Depth so this may or may not be typical of the filter. This compares with 40dB for the FT-102.

## Metering

Extensive metering facilities are available via the two front panel meters, what they tell you depending on the mode and a selector switch. The first meter is mainly used for transmit, and can show the supply voltage, SWR forward voltage, processor compression (in dB), PA stage collector current, or power output. It also functions as the discriminator meter for FM receive.

The second meter is the S Meter on receive, and either ALC, or SWR reading on transmit.

## Transmit

A very useful feature on the CW transmit side is the provision of a reference tone against which you can zero beat an incoming signal,

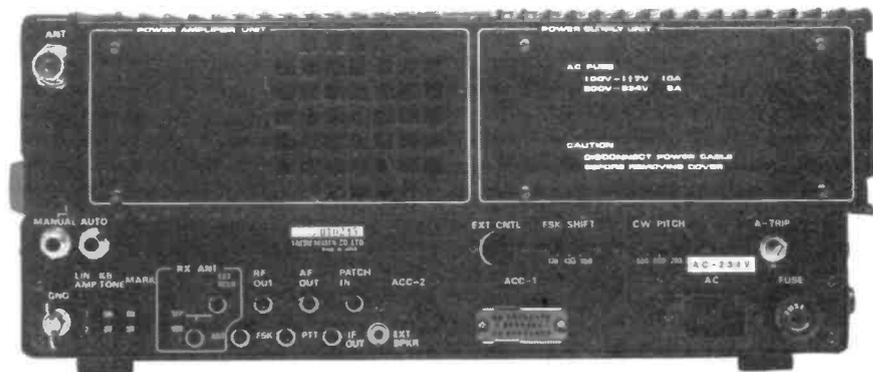
for proper transceiver operation. It

The MONITOR control also lets you monitor your transmitted signal at audio frequencies, and helps in setting up the compressor (processor). Use of headphones for this is almost mandatory if you want to avoid acoustic feedback. The headphone jack will accept either stereo or mono headphones.

Full break-in operation is available for CW, although not as fast as that on the Trio model. Still pleasant to use though. Normal VOX controls are fitted, with the DELAY and LEVEL controls being on the front panel for a change — the ANTI-TRIP control is on the rear panel.

## On the rear panel

There are 14 further connectors on the rear panel. In addition to the antenna socket (SO239), Key (switchable manual or auto), and grounding terminal, there are switches to control a bleeper which will sound when certain front panel controls are depressed, and a CALIBRATE function to provide 25kHz marker signals for the receiver. If your linear amplifier is capable of break-in operation, this can be catered for, as can a separate antenna for the receiver section only. FSK keying, RF out (100mV rms into 50 ohms — which is rather low



works by generating a tone whose frequency is exactly equal to the difference between that of the third IF and the BFO. The level of the tone is variable via the MONITOR control, which is essential when trying to zero beat varying strength CW signals. The pitch is also adjustable to 500/600/700Hz via the rear panel. I would have thought that 500Hz was a bit low for most people, and that 800Hz, which is the most common pitch would have been preferable.

for effective transverter operation), and a constant level low level AF signal for recording are also provided. The remainder of the sockets are for various accessories, PTT (external such as foot switch) and the computer interface.

## Power supply

One of the consequences of having a lot of electronics in a small space is that they need a lot of