

# TS430 REVIEW

**Trio TS 430S Multimode HF Transceiver**  
By Angus McKenzie MBE, C.Eng, FIERE, G3OSS



Many readers will have used Trio's earlier *TS120* and *130* SSB/CW LF and HF band transceivers, and will probably have admired them for their simplicity of operation coupled with good ergonomics and reasonable performance. Despite constant criticism over the years, Trio have never incorporated an FM facility on their HF rigs before, but at last we have in the *430* one in which an FM transmit and receive capability is complemented by AM, upper and lower single sideband and CW. Most unfortunately, the FM facility together with narrow SSB and CW filters are optional extras, at £31 to £35 each, but this review sample was loaned to the magazine by Ham International, who could not supply accessories at the time.

## Facilities and Ergonomics

The *TS430* is basically a 13V DC rig which draws up to around 16A peak current on transmit. It will work equally satisfactorily as a home station with a suitable external power supply (around £100) or in the car. On receive the rig covers from 150kHz up to 30MHz, stepping up or down in 1MHz steps or from one amateur band to the next, dependent on the position of a switch labelled '1MHz'. Two rates of tuning are provided, with 10 or 100Hz per step, but unfortunately the 'kHz per rev' is not quite constant across each 1MHz band. For example, we measured anywhere between 8.5 and 9.5kHz per revolution

on the smaller step position, despite Trio's claim in the manual that it should be 10kHz. To the left of the main tuning knob is a row of five push buttons selecting LSB, USB, CW, AM and FM modes. On the left hand side is the 13V on/off switch and rockers for TX/RX, VOX controlled TX, processor on/off, ALC or current metering, narrow/wide IF filter (only wide supplied for review). The normal multipin Trio microphone socket is on the bottom left, and a Trio hand mic with PTT and 'up and down' buttons was supplied with the review sample. On the left side is also ¼" headphone jack (plenty of volume here) and concentrically mounted rotary gain controls for mic and carrier insertion levels. A fluorescent green digital frequency readout above the tuning knob displays the nearest 100Hz, (or to the nearest 10Hz if an internal jumper is cut). To the left is the meter which on receive is a normal S meter but on TX reads total current of ALC. Behind another window, to the right, is the display showing the selected memory channel.

Unlike Trio's earlier models, this latest *TS430* has very many push buttons to the right of centre, as well as some rotary switches, which can provide some most useful facilities, but perhaps also a few that you may well never use. The main memory switch selects any one of eight memory channels, insertion of any frequency into these requiring just the touch of the MEMORY IN button. The 6th and 7th memory positions also serve a select start and stop frequencies for continuous scanning, another button putting the box into the scanning mode, with an accompanying button to hold the scan. Two separate VFOs are provided, a four-position rotary switch selecting either of these of a criss-cross arrangement allowing you to transmit on one and receive on the other, or vice versa.

## Poor documentation

Additional buttons provide facilities for inserting VFO B's frequency into A, frequency lock, small or large frequency steps, memory recall (this sets the chosen VFO to the selected memory frequency from which the VFO can then move), fixed memory channel, and memory scan. Large up and down buttons shift the band either to the next amateur band, or to the next 1MHz band, determined by another switch. Further switches select receiver incremental tuning (the pot for this is concentrically mounted with the 1F shift control which has a centre indent), noise blanker, 20dB antenna attenuator and finally a very good notch filter, the pot for which is concentrically mounted with a squelch control which acts on all modes. The only other controls on the front panel are concentrically mounted rotaries for RF and audio gain.

On the top of the rig are four very