

TR-8 Scanning Receiver Specifications

General	Synthesized direct conversion receiver
Frequency coverage	138 to 235 MHz continuous coverage
Frequency selection	Direct entry via keypad or rotary knob
Frequency resolution	100Hz
Center frequency accuracy	± 1 ppm at 20°C
Frequency stability	± 2 ppm from -20 to +70°C (referenced to frequency at 20°C)
Long term frequency drift	(after one-minute stabilization) ± 100 Hz
Audio Bandwidth (-3dB)	Three user selectable ranges: [500-1300Hz] [350-1800Hz] [800Hz - 1600Hz]
Acceptable modes of operation	pulse amplitude modulation (PAM), pulse period modulation (PPM), continuous wave (CW), and single side band (SSB)
Low battery indication	Battery gauge on display
Power supply	Internal: 4.2V/3300mAh rechargeable Li-Ion cell External (battery charger input): 5V via USB-C jack
Typical operating lifetime (@ 20°C)	15 hours with automatic LCD backlight usage 12 hours with LCD backlight 'locked on' (medium level)
RF input impedance	50 ohms
Noise figure	4 dB typ with 50 Ω source impedance
Sensitivity for 10 dB S+N/D/N	Better than -130 dBm typical (500-1300Hz audio bandwidth setting)
Typical minimum discernible input level	-150 dBm (0.007 microvolt)
Adjacent Channel Rejection	10kHz: 30dB typ 50kHz: 50dB typ
Audio gain control range	20 dB typ
RF gain control range	150 dB typ
Total gain control range	170 dB typ
Audio output impedance	16 Ω (headphone jack)
Internal speaker cut out	Internal speaker is muted when plug is inserted in headphone jack
Audio output jack	1/8 inch (3.5mm) stereo or monaural phone plug
Programming / Charging connector	USB-C jack
RF input connector	BNC jack
Display	3 x 5 cm 128 x 64 pixel LCD display with auto-dimming backlight
Keypad	Backlit silicone keypad with 3 multi-function 'soft' keys.
Gain control	Rotary encoder with pushbutton controls both RF gain and Audio volume
Tune control	Rotary encoder with pushbutton adjusts frequency in 100 Hz steps
Multipurpose LED	Front panel LED has multiple functions: With TR-8 off Red: battery charging Blue: battery fully charged With TR-8 on Red (pulsed): over-gain warning indicator Blue (pulsed): RF pulse detected
Scan memory	2,475 frequencies (organized in 25 lists with up to 99 frequencies each)
Programming	Frequency lists may be modified via PC application and uploaded via the USB-C port
Operating temperature range	-20° C to +70° C
Dimensions	15.9 x 6.1 x 2.8 cm (6.25 x 2.4 x 1.1 in) [excluding knobs, and connectors]
Weight	285g typ