

CODE*STAR INSTRUCTION MANUAL

INTRODUCTION. Congratulations on your purchase of the CODE*STAR all-mode code reader. You now own one of the most sophisticated code readers ever designed. It can copy Morse code, RTTY code (Baudot), and ASCII computer code. You can connect it to your radio receiver for "off the air" reception or you can use it with a telegraph key for Morse code practice. With the optional ASCII output port you can directly drive a teleprinter, TV terminal, or home computer.

CODE*STAR uses a custom designed microcomputer and specially designed analog circuitry. This circuitry employs a narrow bandpass filter to reject noise and QRM and an automatic gain control (AGC) to help minimize the effect of signal fading. The microcomputer uses a proprietary program that provides digital filtering and automatic tracking of Morse code. These features reduce greatly the errors from noise and cannot be found on other code readers at any price.

SPECIFICATIONS.

Mode M1: Morse, 3-33 WPM, auto-track, heavy filtering.
Mode M2: Morse, 3-70 WPM, auto-track, light filtering.
Mode B60: Baudot, 5 level code, 60 WPM.
Mode B67: Baudot, 5 level code, 67 WPM.
Mode B100: Baudot, 5 level code, 100 WPM.
Mode ASCII: ASCII, 8 level code, 110 Baud.
Readout: Eight characters, 14 segment alphanumeric.
RTTY Characters: Upper case letters, numbers and punctuation.
Morse Characters: Letters, numbers, comma, period, question mark and slant bar. Special characters: \overline{SK} = #, \overline{KN} = !, \overline{AS} = *, \overline{BT} = -, and \overline{AR} = +.
Receiver Input: RCA jack, 50mV min., internal CW/RTTY filter with 800 Hz center frequency, 1K ohm impedance, AGC 16 db.
Key Input: RCA jack, ground to key oscillator and produce tone.
Power: 12 VDC at 250 mA, 3.5 mm jack.
Dimensions: 7.75 in. wide x 5.75 in. deep x 3.375 in. high (18.73 x 14.6 x 8.57 cm.).
Weight: 2 lbs. (0.9 kg.).
Warranty: Limited 90 day (see next page).

POWER REQUIREMENTS. CODE*STAR is designed to operate from a well-filtered +12 volt DC power supply capable of producing 250 mA average current. Power is supplied through a 3.5 mm jack on the rear panel. A specially designed 120 VAC to 12/13 VDC power adapter is provided with CODE*STAR that meets this requirement. The adapter provides 12/13 volts DC (when loaded) on the "tip" of the plug with respect to the "sleeve" or ground return. Simply insert the 3.5 mm power plug of this adapter into the power jack on the rear panel of CODE*STAR. *Do not insert or remove this plug while power is applied as damage could result to CODE*STAR or the adapter.*

CONNECTION OF CODE*STAR TO RECEIVER. In order for CODE*STAR to decode signals from a receiver a shielded audio cable (not furnished) must be connected between the receiver audio output and the CODE*STAR "RECEIVER" jack. This cable may be connected to the receiver's headphone jack, external speaker jack or directly to the two wires of the receiver speaker. Make sure the cable "braid" or "ground shield" is connected to the ground side of the receiver audio output.

OPERATION OF CODE*STAR-TUNING STATIONS. In order for CODE*STAR to function properly, the receiver audio signal and power adapter must be connected as described above. Your receiver should be in the CW or SSB mode and no additional filters should be in the line.