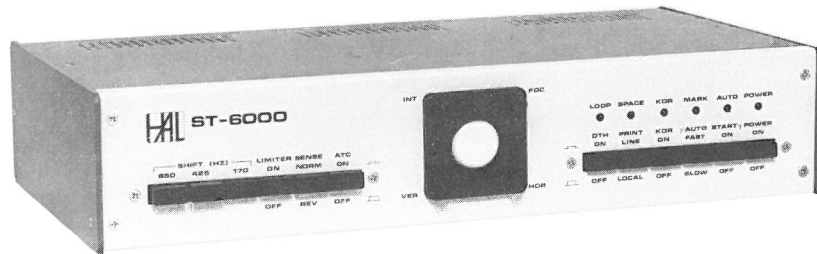


HAL COMMUNICATIONS CORP.
 Government & Commercial Products Division
 1201 West Kenyon Road
 Post Office Box 365
 Urbana, Illinois 61801-0365
 Phone: (217) 367-7373 FAX (217) 367-1701

ST-6000 RTTY Demodulator



The ST-6000 provides outstanding recovery of HF RTTY signals, despite noise, interference, or weak signals. Deluxe features of the ST-6000 include a multi-pole active filter front-end, wide dynamic range limiter, either FM (hardlimiting) or AM reception, active filter discriminator and low-pass filters, and internal crystal-controlled AFSK tone keyer. The ATC (Automatic Threshold Control) and DTH (Decision Threshold Hysteresis) features minimize effects of selective fading and multi-path distortion of the RTTY signal. The ST-6000, available with either "Low" or "High" frequency tone sets, receives and transmits 170, 425, and 850 Hz shifts. Other features include internal loop supply, KOS (Keyboard Operated Switch) circuit, autostart, antispaces, oscilloscope tuning indicator, and a rear panel with I/O connections for flexible interfacing to all data handling equipment. All in all, the ST-6000 is everything you could want in a demodulator.

SPECIFICATIONS

Electrical

Input Data and Rate: Serial Baudot or ASCII code, up to 110 baud.

Input Impedance: 600 ohms, balanced, transformer coupled.

Output Signals: 60 ma @ 175 VDC loop or low-level RS-232C.

Note: An auxiliary loop keyer is available to key a second loop with an external loop supply.

Miscellaneous Output:

Discriminator output to external scope, pre-autostart and post-autostart data, keyboard operated switch (KOS), printer motor AC power.

Autostart Response Time: Slow, 3.5 sec. Fast, 1.5 sec.

Printer motor Dropout Time: 20 sec. ± 10 sec.

Tuning Indicator: 1" scope.

Keyboard Operated Switch (KOS):

Transistor switch to actuate external circuits
 Rated +25 VDC, 500 ma.

Frequency of Marine standard tone pair:

Shift:	170 Hz (1700 Hz center, ± 85 Hz)
Mark:	1615 Hz
Space:	1785 Hz

Frequency of CCITT (Low) tone pairs:

Shift:	850 Hz	425 Hz	170 Hz
Mark:	1275 Hz	1275 Hz	1275 Hz
Space:	2125 Hz	1700 Hz	1445 Hz

Frequency of U.S. (High) tone pairs:

Shift:	850 Hz	425 Hz	170 Hz
Mark:	2125 Hz	2125 Hz	2125 Hz
Space:	2975 Hz	2550 Hz	2295 Hz

Custom tone pairs available on special order.

Audio Tone Keyer

Input Signal: Dry contacts, EIA-RS-232C levels, or internal current loop.

Output Signal:

Levels: variable from — 40 dbm to 0 dbm

Impedance: 600 ohm nominal, balanced.

Distortion: All harmonics below the 9th harmonic are greater than 40 db down.

Stability: Crystal controlled to ± 0.5%

Physical

Cabinet Finish: Castle tan front and rear panel.

Textured chocolate brown top, bottom and side panels.

Cabinet Style: Table or 19" rack mount.

Size: Table: 3.50 H x 9 D x 17 W (inches)

8,9 H x 22,8 D x 43,2 W (cm)

Rack: 3.50 H x 9 D x 19 W (inches)

8,9 H x 22,8 D x 43,3 W (cm)

Weight: 12.0 lbs (5,45 kg) net, 15.0 lbs. (6,82 kg) shipping.

Power: 105-125 VAC (210-250 VAC optional)

50-60 Hz, 20 Watts.

(Specify table or rack and tone pairs when ordering.)

A written copy of the applicable warranty may be obtained free of charge upon request. Specifications subject to change without notice.