

D X P 3 8



DSP HF Radio Modem



HAL COMMUNICATIONS CORP.

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DXP 38

SPECIFICATIONS

CLOVER-II:

Data Format: 8-Bit, transparent, 4-tones
Tone Center: 750/1250/1750/2250 Hz
Bandwidth: 500 Hz @ -50 dB
Symbol Rate: 31.25 per second
Error Correction Coding: Reed-Solomon; 60, 75, or 90%
ARQ Mode Modulation: BPSM, QPSM, 8PSM, 8P2A, 16P4A
ARQ Protocol: 2-level, multiblock auto adaptive
Adaptive Mode Control: Set TX mode by measuring S/N & Phase dispersion
ARQ Throughput: 60 - 560 bits/sec Error Corrected
FEC Mode Modulation: 2DPSM, BPSM, QPSM, 8PSM, 8P2A, 16P4A
FEC Throughput: 30 - 360 bits/sec

FSK WAVEFORM:

FSK Tones: 500-3000 Hz, programmable
TTY Code: Baudot and ASCII
TTY Rates: 45, 50, 57, 75, 100, 110 Baud
TOR Code: CCIR-476 & CCIR-625
TOR Modes: ARQ, FEC
TOR Rate: 100 Baud
P-Mode* Modes: Auto-ARQ & FEC
P-Mode* Rates: 100/200 Baud

HARDWARE:

Cabinet: Aluminum, black 3.5" x 7.5" x 10.75
DSP Processor: TI TMS320C25-50
Control Processor: Motorola 68EC000
Analog I/O: TI TLC320AC01 14-bit Codec
Memory: Flash RAM
I/O Interface: Serial RS232, 9.6 to 57.6 kbps
Power Input: 9 to 18 VDC, .6 Amp
Mode Indicators: STBY, CALL, LINK, ERROR, TX, RX
Tuning Indicator: "cross" of 4 10-segment LED-Bars
M/S Modes: FSK: Mark and Space Fitter Amplitudes
CLOVER: Tone 1, 2, 3, 4 Filter Amplitudes
 Δf Mode: All modes Zero-center frequency error, +/- 50 Hz range
Radio Connections: RX Audio, TX Audio, PTT, FSK, SEL-CAL

SOFTWARE:

Firmware: On-board stored in Flash RAM (Upgraded via serial I/O)
Terminal Software: Included with DXP38. Proven terminal software for PC-DOS. New HAL terminal software for Windows (95, 98, NT4.0)
Updates: Free updates to HAL software via www.halcomm.com
Third Party: Works with existing 3rd party software (same commands as DSP-4100).

WARRANTY: One Year Parts and Labor

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

*The word 'P-MODE' is the HAL designation for a communications protocol that may also be known as 'Pactor', a registered trademark of the Spezielle Communications Systeme GmbH (SCS) firm in Hanau, Germany. HAL affirms that, to the best of its knowledge, 'P-MODE' is compatible and interoperable with the protocol SCS calls 'Pactor' and with the link establishment and weak signal modes of the protocol SCS calls 'Pactor-II'.



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