



Frequency Range Extended to 3 GHz

4400 DF RECEIVER/PROCESSOR

- LCD display
- DF bearing displayed in polar and digital
- Embedded CPU
- Bitmapped graphics
- Menu driven
- Multiple RS-232 interfaces
- 1000 programmable channels
- Multiple scanning operations
- Backlit display and keypad
- Lightweight for mobile operation
- Tilt mounting base
- One year warranty on parts and labor

A General Purpose Monitor and DF Receiver/Processor



The 4400 is a compact, portable direction finding receiver/processor that also functions as a general purpose monitor and surveillance receiver. A backlit LCD display is used for good visibility in all lighting conditions.

The 4400 DF Receiver/Processor features an embedded CPU. This allows the system to be menu driven, have multiple RS-232 interfaces, and include a Bitmapped-graphics display. The multiple RS-232 interfaces provide for remote control of the system, auxiliary and remote displays, and fluxgate compass. The 4400 also features standard PC parallel printer port, PC AT compatible keyboard interface, and PC compatible VGA monitor port (for external display). Extensive remote control and monitoring functions are provided allowing complete unattended remote operation of the 4400 DF system. A 10.7MHz IF output is available to drive a spectral display unit.

The 4400 interfaces with various high performance antennas to provide accurate DF capability in the range 0.5 - 3000 MHz, depending on user requirements. These antennas can be small, lightweight, and designed for vehicle and/or airborne use. Fixed station antennas covering the above frequency range are also available for base station and/or shipboard operation. Please refer to individual antenna data sheets for your requirements.

In the monitor mode, the 4400 has a frequency coverage of 0.1 MHz to 3000 MHz with no gaps. Depending upon antenna selection, the 4400 will DF in the frequency range 0.5 - 3000 MHz, also with no gaps in coverage. Reception modes cover narrowband FM, wideband FM, AM USB, LSB and CW. The 4400 features two different scanning modes which are: scanning by channel and scanning by frequency. Tuning resolution may be set from 50 Hz - 100 kHz.

Both an internal speaker and an earphone jack are provided for monitoring received signals. The 4400 DF System has exceptional listen-through capability, allowing the operator to simultaneously DF on and listen to the contents of intercepted signals.

Model 4400 is ideally suited for vehicle, airborne, fixed station and shipboard use where wide frequency coverage and sophisticated operating features are required in a small package

4400 DF RECEIVER/PROCESSOR

SPECIFICATIONS

Bearing Resolution:	1°
Azimuthal Coverage:	360°
Bearing Integration:	200 msec to 9 seconds, operator selectable
Track and Hold:	When enabled, retains most recent bearing indication. Hold times are operator selectable from 10 seconds, 30 seconds until next signal
Offset:	0° - 359°C (1° increments)
Calibration:	Automatic system calibration to LCD display indication, stored through power down. Receiver delay calibration permanently stored in non-volatile memory
Frequency Range:	Monitor: 0.1 MHz - 3000 MHz, no gaps DF (total):0.5 MHz - 3000 MHz
Reception Modes:	NBFM, WBFM, AM, USB, LSB, CW
Receiver Sensitivity	500 kHz ~ 1.9 MHz AM: 3.5 µV (Note1) 1.9 MHz ~ 30 MHz AM: 2.5 µV (Note 1) 30 MHz ~ 470 MHz AM: 1.5 µV (Note 1) NBFM: 0.85 µV ((Note 2) WBFM: 3.5 µV (Note 2) 470 MHz~ 1040 MHz NBFM: 0.9 µV (Note 2) 1040 MHz ~ 2040 MHz NBFM: 9.0 µV (Note 2) 2040 MHz ~ 2500 MHz NBFM: 25 µV (Note 2) 2500 MHz ~ 3000 MHz NBFM: 35 µV (Note 2)
	Note 1: SSB/CW and AM sensitivity specified for 10 dB (S + N)/N ratio into 50 ohm receiver input
	Note 2: NBFM and WBFM sensitivity specified for 12 dB SINAD into 50 ohm receiver input
	Note 3: Sensitivity is reduced by up to 30 dB from 80 MHz ~ 120 MHz to reduce IMD from FM broadcast stations.
Receiver Selectivity (IF):	SSB and CW: 3.0 kHz @ -6 dB, 9.0 kHz @ -40 db AM: 9 kHz @ - 6 dB, 20 kHz @ -40 dB NBFM: 12 kHz @ -6 dB, 25 kHz @ -40 dB WBFM: 150 kHz @ -6 dB, 360 kHz @ -20 dB
IF Output:	10.7 MHz with maximum ±5 MHz bandwidth.
Memory Channels:	1000, operator programmable
Interfaces:	RS-232C, parallel printer, keyboard, VGA, compass, GPS
Electrical Specifications:	Operating Voltage: DC +11 to +32 VDC AC Adapter 115/230 VAC ±10%, 47 to 63 Hz Power Consumption: 20 watts
Mechanical: Height:	5.25" (13.3 cm) Width: 10.25" (26.0 cm) Depth: 11.00" (27.9 cm) Weight: 13 lbs (5.9 kg)
Environmental:	Operating: 0°C to +45°C Storage: -20°C to +60°C Humidity: 95% RH non-condensing per MIL-STD-810D (507.2)

Ordering Information

Model No.	Part No.	Description
DF-4400	0255464-5	DF Receiver/Processor, 0.5 – 3000 MHz CE

Specifications subject to change without notice

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