High-Performance 2.2 kW transceiver in an 18" radome

7" LCD RADAR
MODEL 1715

- High Contrast 7" Silver Bright LCD for excellent sunlight viewability
- 14 range scales from 0.125 to 24 nm
- Low power consumption in Watchman mode - only 8 W
- Dual bandwidth IF amplifier: broad band for high definition in short ranges, narrow band for enhanced detection in long ranges
- Variable antenna speeds with range scales for optimum performance on all ranges
- Cursor position can be read in L/L (GPS navigator is required)
- Programmable Navigation Data repeater feature
- Zoom in to a specific area
- Reverse video feature for effective use at night
- Guard Zone Alarm (US Patent No.5032842)
The MODEL 1715 is a high contrast LCD radar designed for pleasure craft and small fishing boats. Radar echoes are presented in four shades of gray on the 7” Silver Bright LCD. The Radar offers detailed pictures of coastline and targets at short ranges thanks to narrower pulselengths and dual IF bandwidths. The antenna rotation speed automatically changes depending on the range selection for optimum target detection. The compact, waterproof display allows table top or panel mounting in the cockpit or on the open fly bridge.

The radar has a power saving Watchman mode. In this mode, the antenna is stopped and the transmission is off, while the screen displays nav data only. The radar wakes up at a specified time interval (5, 10 or 20 min) and operates for a minute. If a target enters the Guard Zone, an audible alarm sounds and the radar goes into its normal operating mode, cancelling the Watchman mode. The alarm may also be set to work for a target leaving the Zone.

Other standard features include: EBL (Electronic Bearing Line), VRM (Variable Range Marker), TLL output (Target L/L), Cursor L/L readout, Echo Trail, Guard Zone Alarm, Anti Clutter Rain, Automatic control of tuning and sensitivity. The A/C RAIN control improves the target detection in the rain by elaborate design of the receiver.

With use of nav data inputs in NMEA 0183 format, the radar offers additional functions. Graphical and numeric waypoint information can be shown on the display. The Waypoint is indicated by a lollipop mark for easy identification on the radar display. In the TLL output function, you can output a specified target’s L/L by using the cursor to the optional GPS navigator as a mark.

### SPECIFICATIONS OF MODEL 1715

#### ANTENNA

- **Type**: Microstrip radiator enclosed in ø460 mm (18”) radome
- **Beamwidth**: Hor. 5.2°, Vert. 25°
- **Rotation Speed**: 24 rpm (3 to 24 nm), 31 rpm (1 to 2 nm) 41 rpm (0.125 to 0.75 nm)

#### RF TRANSCIEVER

- **Frequency**: 9410 ± 30 MHz (X-band)
- **Pulsewidth & PRR**: 0.8 μs
- **Peak Output Power**: 0.08 μs/3000 Hz (0.125 to 0.75 nm) 2.2 kW nominal (IEC 60945 Test method)
- **IF Amplifier**: 60 MHz
- **BW**: 5 MHz (1 to 24 nm) 15 MHz (0.125 to 0.75 nm) (IEC 60529 Test method)

#### DISPLAY

- **Display Unit**: 7” monochrome LCD, 4 gray tones, 240 x 320 pixels, 102 mm (W) x 138 mm (H)
- **Accuracy**: Range: 1.0 % of range in use or 8 m, whichever is greater
- **Bearing**: EBL accuracy ±1°
- **Range and Range Ring Interval**: Range: 0.125, 0.25, 0.5, 0.75, 1, 1.5, 2, 3, 4, 6, 8, 12, 16, 24 nm
  - Ring: 0.0625, 0.125, 0.25, 0.5, 0.5, 1, 1.2, 2, 2.3, 4, 6 nm
- **Echo Trail**
- **Interface** (NMEA 0183 format)
- **Input**:
  - DPT (Depth), HDT (Compass), MTW (Water temperature), VBW (Doppler), STW (Speed over ground), TLL (Target L/L), Cursor L/L readout, Echo Trail, Guard Zone Alarm, Anti Clutter Rain, Automatic control of tuning and sensitivity.
- **Output**: TLL (Target L/L), Bearing, Waypoint information can be shown on the display.

#### ENVIRONMENT

- **Temperature** (IEC 60945 Test method)
  - Antenna Unit: -25°C to +70°C
  - Display Unit: -15°C to +55°C
- **Waterproofing** (IEC 60529 Test method)
- **Antenna Unit**: IEC IPX5, CFR46 (USCG)
- **Display Unit**: IEC IPX5, CFR46 (USCG)

#### POWER SUPPLY

- **12 to 24 VDC, 38 W (max), 8 W (in Watchman mode)**
- **115/230 VAC with optional rectifier PR-62**

#### EQUIPMENT LIST

- **Standard**
  - 1. Display Unit RDP-142
  - 2. Antenna Unit RSB-0095
  - 3. Antenna Cable 10/15/20 m (Specify when ordering)
  - 4. Power Cable 3.5 m
  - 5. Spare Parts & Installation Materials
- **Option**
  - 1. Rectifier PR-62 for 115/230 VAC mains
  - 2. NMEA Cable, 5 m (MJ-AT7SF0007-050)
  - 3. NMEA Cable, 0.5 m branched (MJ-A15A7F0004-005)
  - 4. NMEA Cable, 2 m 7P to 7P (MJ-A15A7F0005-020)
  - 5. Antenna Bracket OP03-93
  - 6. External Buzzer XH3-BZ-L970

### Interconnection Diagram

- **Antenna Unit**
  - RSB-0095
  - NMEA 0183
  - GPS/NWAAS
  - GP-320B
  - PR-62
- **Display Unit**
  - RDP-142
  - GPS Navigator
  - Anemometer
  - Echosounder
  - 1 unit

- 3.5 m
- 12-24 VDC
- 115/230 VAC

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**SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE**

**PLEASE READ MANUAL BEFORE USING THE UNIT**