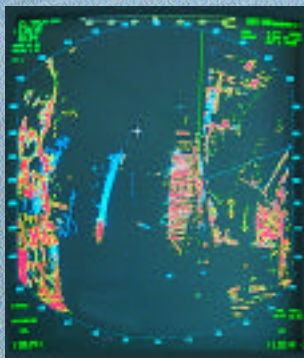
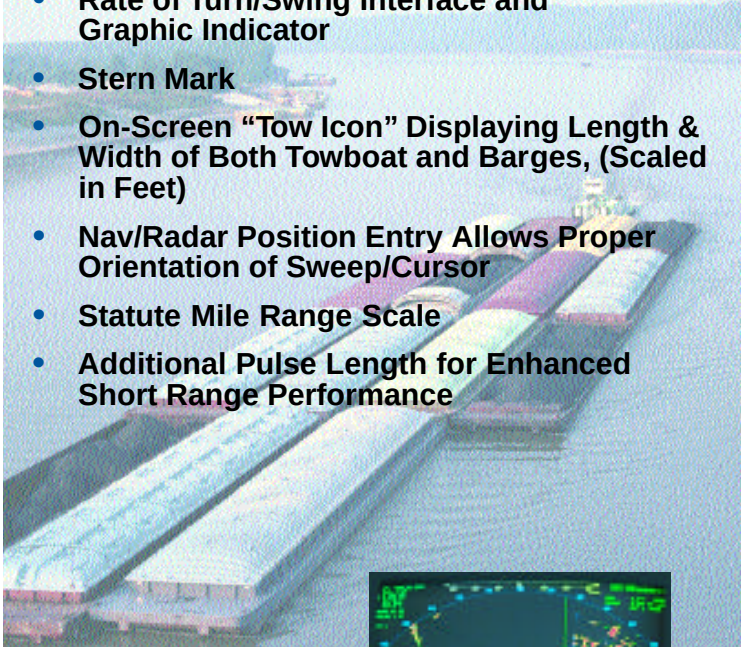


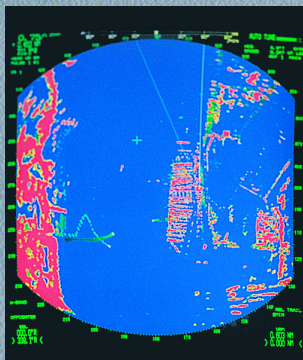
FURUNO®

21" Multi-Color High-Performance X-Band River Radar Model FR-2125V

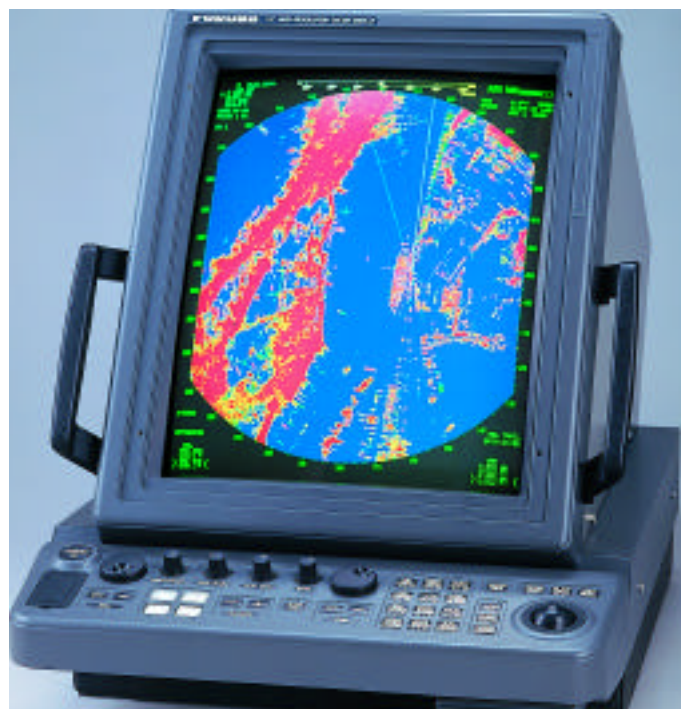
- 25kW Output with river ranges
- Expanded 21" Color CRT Portrait Screen Presentation
- Rate of Turn/Swing Interface and Graphic Indicator
- Stern Mark
- On-Screen "Tow Icon" Displaying Length & Width of Both Towboat and Barges, (Scaled in Feet)
- Nav/Radar Position Entry Allows Proper Orientation of Sweep/Cursor
- Statute Mile Range Scale
- Additional Pulse Length for Enhanced Short Range Performance
- Full Color or Monochrome Presentation (Operator Selectable)
- Dark Blue, Light Blue or Black Display Background Modes for Day or Night Use
- Proven, Commercial Gearbox Design with Choice of 6.5' or 8' Antennas
- Dual EBL's and VRM's
- Range Scales of 0.125, 0.25, 0.5, 0.75, 1, 1.5, 2, 3, 6, 12, 24, 48, 96 s.m.
- 115 VAC Operation
- True and relative vectors to determine future movement of other ships
- Four Preset Function (Macro) Keys for Optimized System and Watch Timer Use



On-screen echo trail displays the path of a target.



Full color or monochrome presentations allow for use at day or night.



SPECIFICATIONS OF FR-2125V

ANTENNA RADIATOR

- | | |
|--------------|-------------------------|
| 1. Type | Slotted waveguide array |
| 2. Beamwidth | |

	FR-2125V radiator	
Radiator Type	XN20AF	XN24AF
Length	6.5 ft	8 ft
Beamwidth (H)	1.23°	0.95°
Beamwidth (V)	20°	20°

- 3. Rotation** 24rpm or 42rpm (option to XN-20AF)

RF TRANSCEIVER

1. **Frequency**
X-band 9410 MHz $\pm$ 30 MHz
2. **Output power** 25kW
3. **Pulselengths and PRR**

Range scales	P/L(μs)	PRR (Hz)
0.125, 0.25	0.07	3000
0.5	0.07/0.15	3000
0.75, 1.5	2 from 0.07/0.15/0.3	3000/1500
3	2 from 0.15/0.3/0.5/0.7	3000/1500
6	2 from 0.3/0.5/0.7/1.2	1500/1000
12, 24	2 from 0.5/0.7/1.2	1000/600
48, 96	1.2	600

4. IF 60 MHz, Logarithmic. BW 28/3 MHz
5. Noise Figure 6dB or Less

DISPLAY REQUIREMENTS

- | | |
|--|--|
| 1. Picture tube | 21" high-resolution color CT (1280x1024 pixels),
Rasterscan non-interlace |
| Regular type | Yellow or green echoes in 16 levels or
3 colors depending on echo strengths |
| 2. Minimum range and discrimination | Meets 35m HSC requirements |
| 3. Range Discrimination | Better than 20 m |
| 4. Range scales | |

Range (sm)	0.125	0.25	0.5	0.75	1.0	1.5	3	6	12	24	48	96
Rings (sm)	0.025	0.05	0.1	0.25	0.25	0.25	0.5	1	2	4	8	16

- 5. Accuracy**
Range: 1% of range in use or 15m, whichever is greater
Bearing: Better than 1°
- 6. Presentation**
Head-up, Head-up TB, North-up, True Motion
Sea or ground stabilization

INTERFACE

- | | |
|------------------------|---|
| Analog | ROT (Rate of turn) |
| Digital in IED 61162-1 | |
| Input: | \$- GGA, \$- GLL, \$- RMA, \$- RMB, \$- RMC,
\$- BWR, \$- BWC, \$- WPL, \$- RTE, \$- DPT,
\$- DBT, \$- DBS, \$- VDR, \$- MWV, \$- VBW,
\$- VHW, \$- VWT, \$- VWR, \$- ZDA, \$- MTW,
\$- VTG |
| Output: | \$RAOSD, \$RARSD |

POWER SUPPLY (Specify when ordering)

- AC set: 115/230 VAC,
410VA (FR-2125V)

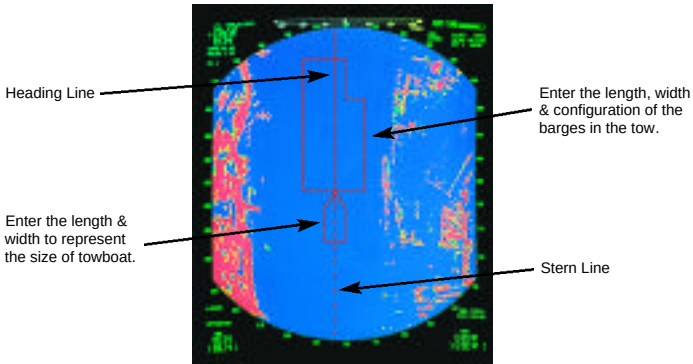
EQUIPMENT LIST

Standard

- | | |
|---|--------|
| 1. Display Unit with Hand Grip | 1 Unit |
| 2. Antenna Unit | 1 Unit |
| 3. Installation Materials and spare parts | 1 Set |

Option

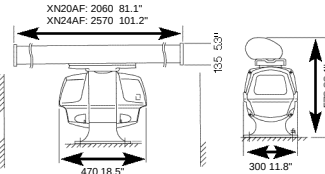
1. Performance monitor PM-30 (Relay Board Kit OP03-150 required)
2. 42 rpm scanner motor
3. Gyro Interface GC-8
4. Stepdown Transformer for 380/440 VAC



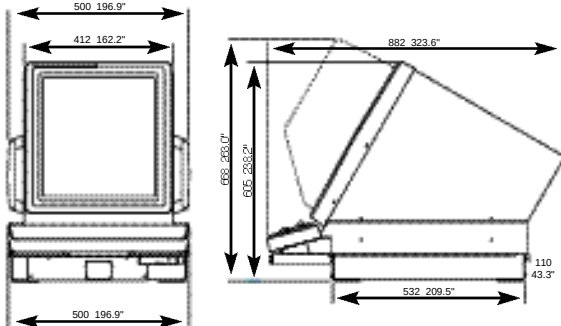
Programmable on-screen "Tow Icon."

ANTENNA UNIT FOR FR-2125V

XN20AF: 38 kg 86 lb
XN24AF: 42 kg 93 lb



DISPLAY UNIT 54 kg 119 lb



INTERCONNECTION DIAGRAM

