

KODEN

8.4-inch Color LCD
Marine Radar

MDC-900A Series

8" REVOLUTION !



MDC-900A Series

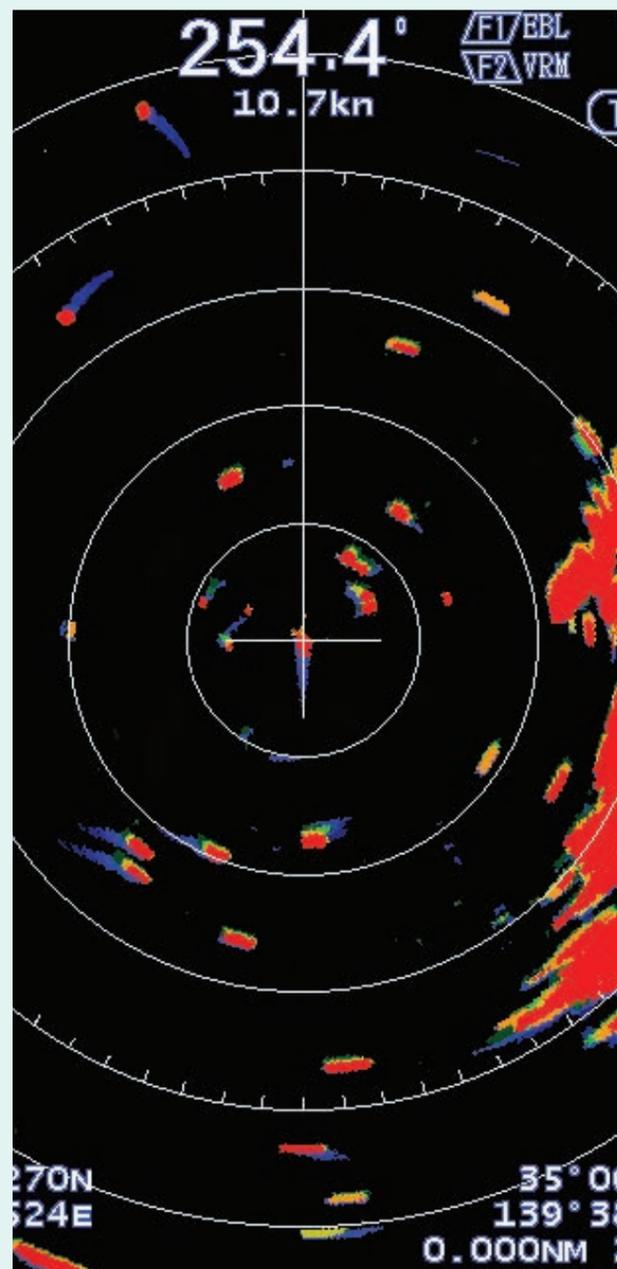
High-performance, sophisticated signal processing, usually found only in larger professional grade radars.

- MDC-904A: 4 kW, 1.2 feet Radome
- MDC-941A: 4 kW, 2 feet Radome
- MDC-940A: 4 kW, 3, 4 feet Open



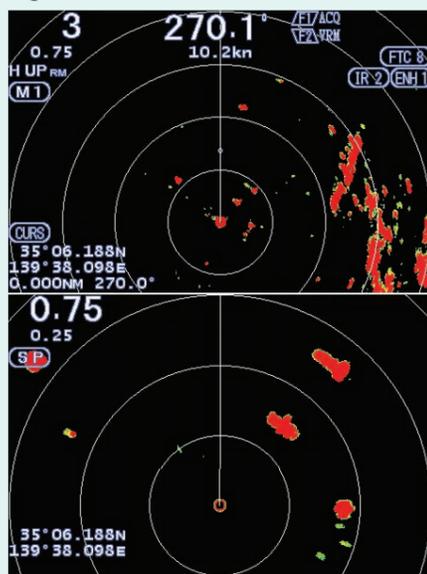
▶ True trail function

The display shows exactly the movement of other vessels like drawing tails, while land and buoys are shown as stationary objects even while your vessel is moving. This makes it easy for you to distinguish moving from stationary objects.



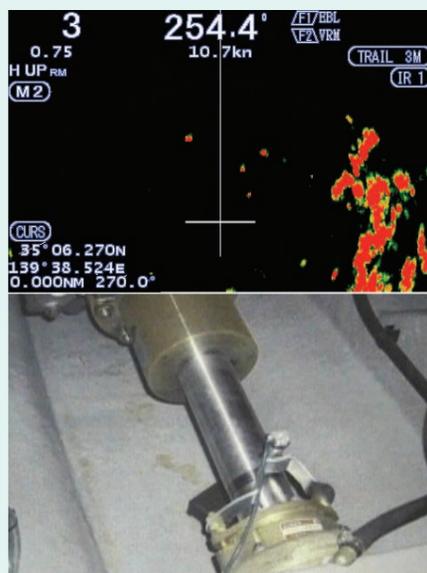
▶ Dual range display

Exclusive dual range radar feature lets you view split-screen display of both long and short-range targets simultaneously. It's like having two radars in one.



▶ CCD Camera input

Accepts CCD camera input, with which you can watch above deck and below deck any time you are steering.

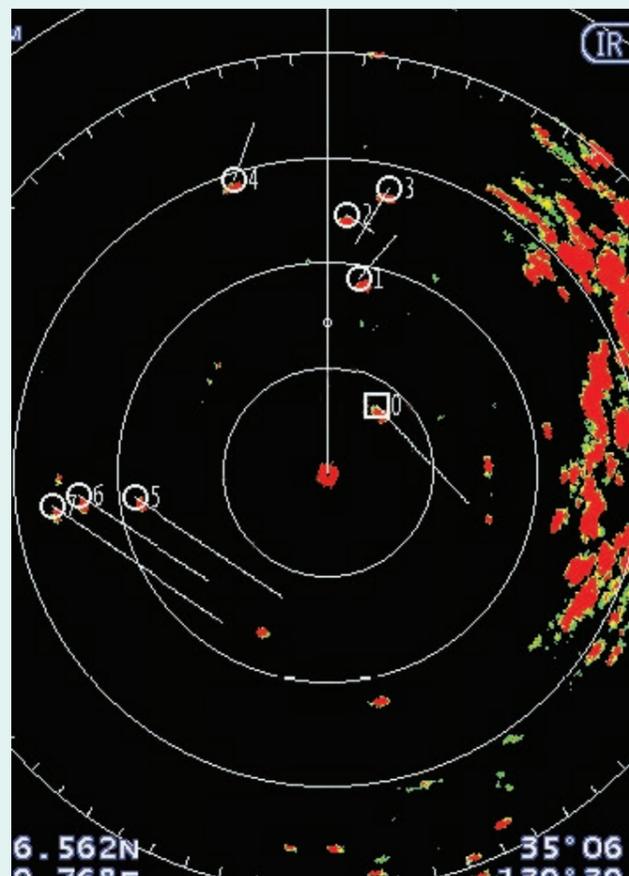


▶ ATA with up to 50 targets as option

The convenient ATA (Automatic Tracking Aid) function comes as option.

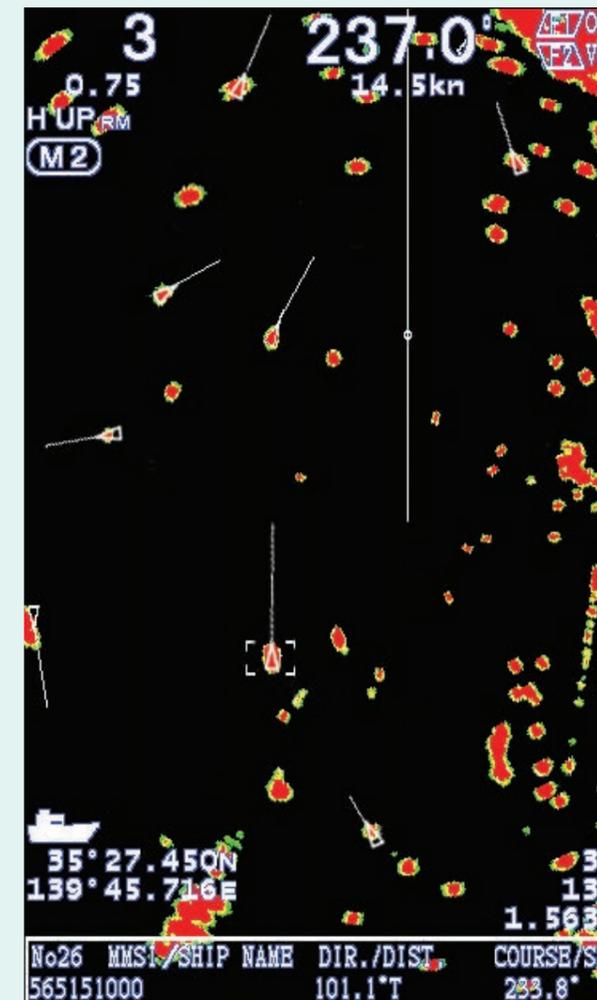
The latest movements of other vessels can be shown instantaneously in vector form and numeric form, ensuring safe navigation.

When the automatic acquisition zone is set, up to 50 targets entering the zone will be locked automatically.



▶ AIS interface up to 100 targets as option

When connected with an AIS receiver, the radar displays information on up to 100 targets including the name, heading, and speed of each vessel with an AIS transmitter mounted.



Other features

- Direct bonding of Anti-Reflecting coating filter to LCD for increasing visibility and preventing condensation.
- Real time smooth Head-up indication.
- RGB output available for connecting external monitor. You can monitor the Radar even when you are away from steering.
- Easy operation with dedicated control knobs for Gain and STC.
- New sleek, compact case design can be mounted almost anywhere.
- Built-in flush-mounting system for easy installation, as you can mount screws from front side.



SPECIFICATIONS

Antenna-Scanner unit

Model	MDC-904A	MDC-941A	MDC-940A
Type	RB804	RB805	RB806
Antenna type	Radome		Open
Antenna length	1.2 feet	2 feet	3 feet 4 feet
Output power (Peak)	4 kW		
Output frequency	9410 MHz ± 30 MHz		
Horizontal beam width	5.9°	3.9°	2.5° 1.8°
Vertical beam width	25°		22°
Rotation	24 rpm or 48 rpm		24 rpm or 48 rpm*
IF center frequency	60 MHz		
Range accuracy	8 meters or 1% of the range scale selected, whichever is the greater		
Bearing accuracy	1° or less		
Minimum detecting distance	within 25 m		
Range resolution	within 25 m		
Warm-up time	2 min		
Pulse width	0.08 μs, 0.15 μs, 0.3 μs, 0.5 μs, 1 μs		

Environmental

Operating temperature	-25°C to +55°C
Water protection	IPX6

Display unit

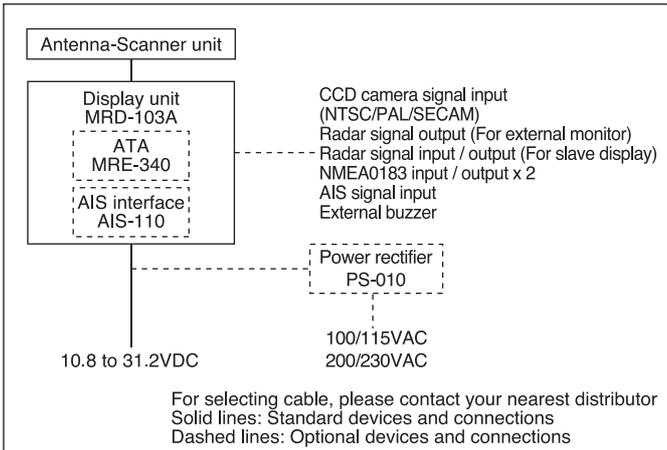
Model	MDC-904A	MDC-941A	MDC-940A
Display unit	MRD-103A		
LCD size and type	8.4" color TFT LCD		
Effective diameter	127.4 mm		
Display resolution	480 × 640 pixels (VGA)		
Off-centering	Max.66%		
Echo area	2 types (Full screen, Inside of effective diameter)		
Basic ranges	0.0625 to 32 NM		0.0625 to 48 NM
Range scales	0.0625:0.125:0.25:0.5:0.75:1:1.5:2:3:4:6:8:12:16:24:32:48		
Range ring interval	0.03125:0.0625:0.125:0.25:0.5:1:2:3:4:6:8:12		
Presentation modes	Head-up, North-up (True motion)***, North-up (Relative motion)***, Course-up (True motion)***, Course-up (Relative motion)***, WayPoint-up***		
Indication system	PPI, PPI/PPI, PPI/NAV		
Video level	8 levels (colors)		
Range unit	NM, sm, km		
Alarms	Echo (IN / OUT), ATA / AIS (CPA / TCPA), etc.		
Functions	Interference rejection, Target expansion, VRM, EBL, Parallel index, Cursor position (Lat / Lon)****, Trail****, RGB Monitor output, Slave display monitor input/output, External Buzzer output, Accepts CCD camera input, Dual display		
Input data format and sentences	NMEA 0183 Ver.1.5 / 2.0 / 3.0 BEC, BWC, BWR, DPT, DBT, GGA, GLL, GNS, HDG, HDM, HDT, MTW, MWD, MWV, RMA, RMB, RMC, VHW, VTG, XTE		
Output data format and sentences	NMEA 0183 Ver.2.0 TTM, TLL		
NMEA ports	Total 2: input and output		
ATA(TT)**** (Option)	50 targets		
AIS interface**** (Option)	100 targets		
Power supply	10.8 to 31.2 VDC		
Power consumption (at 24 VDC)	55 W or less		70 W or less

Environmental

Operating temperature	-15°C to +55°C
Water protection	IPX5

- * 48 rpm requires for input voltage of 24 VDC or more
- ** Requires bearing data input.
- *** Requires waypoint data, bearing and latitude / longitude data input.
- **** Requires bearing data, ship's speed data and latitude / longitude data input.

CONNECTIONS



EQUIPMENT LIST

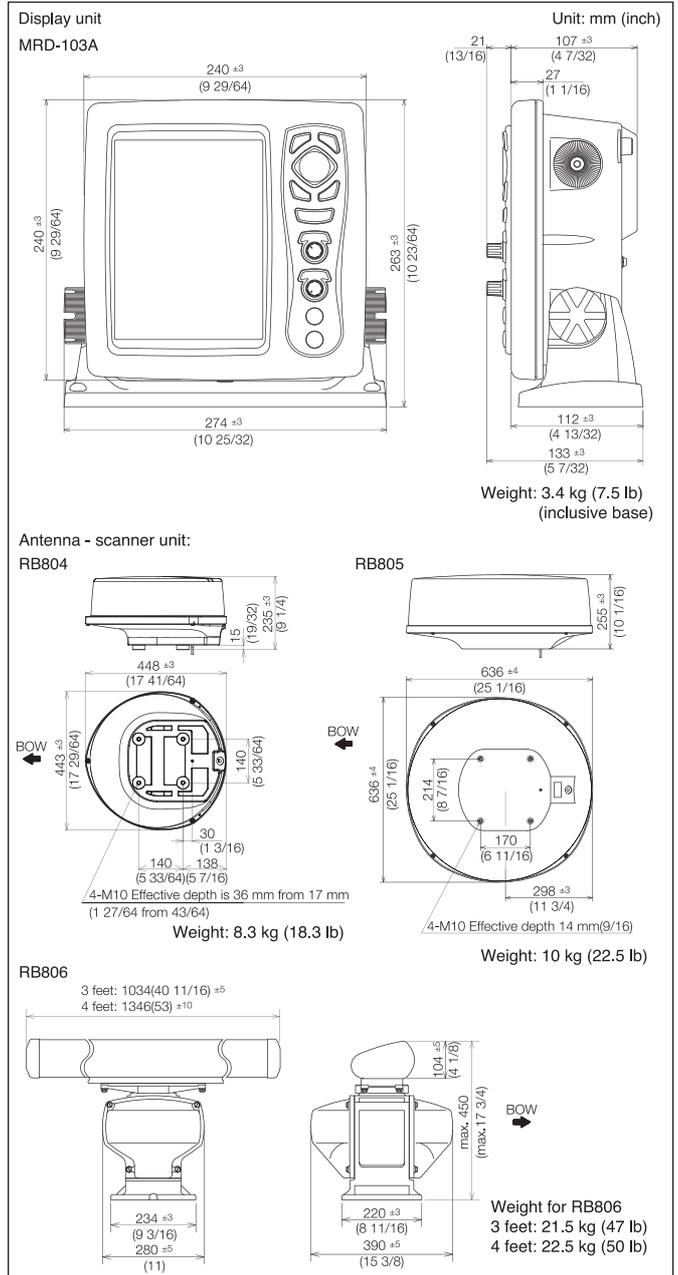
Standard Equipment

Antenna-Scanner unit	Radome	RB804	1.2 feet	4 kW	MDC-904A
		RB805	2 feet	4 kW	MDC-941A
	Open	RB806	3, 4 feet	4 kW	MDC-940A
	Antenna	RW701A-03	3 feet		MDC-940A
		RW701A-04	4 feet		MDC-940A
Display unit		MRD-103A	with hard cover		
Connecting cable		242J158055A-10M	10 m, MDC-904A / 941A		
		242J159098A-10M	10 m, MDC-940A		
DC power cable		CW-265-2M	2 m		

Option

ATA, AIS interface, CCD camera cable, Gyro/Log interface, Power rectifier, AC power cable, Connecting cable

DIMENSIONS AND WEIGHT



* Design and specifications are subject to change without notice.

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Safety precaution

To ensure proper and safe use of the equipment, please carefully read and follow the instructions in the Operation Manual.

For details, please contact: