

19-inch Color LCD Marine Radar MDC-2900 Series

Expand your professional world

SPECIFICATIONS

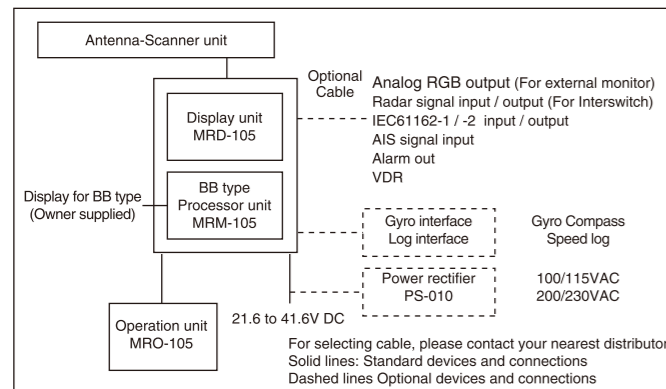
Antenna-Scanner unit			
Model	MDC-2960 / BB	MDC-2910 / BB	MDC-2920 / BB
Antenna type	Open antenna		
Antenna length	4 feet / 6 feet		
Power output (Peak)	6 kW	12 kW	25 kW
Output frequency	9410 MHz ± 30MHz		
Horizontal beam width	4 feet: 1.8° / 6 feet: 1.2°		
Vertical beam width	22°		
Rotation	24 rpm or 48 rpm		
IF center frequency	60 MHz		
Range accuracy	7 meters or 1% of the range scale selected, whichever is the greater		
Minimum detecting distance	within 40 m		
Range resolution	within 40 m		
Warm-up time	2 min	3 min	
Pulse width	0.08 us, 0.15 us, 0.3 us, 0.6 us, 1.2 us		
Environmental			
Water protection	IPX6		
Operating temperature	-25°C to +55°C		

Display unit / Processor unit for BB type			
Model	MDC-2960 / BB	MDC-2910 / BB	MDC-2920 / BB
Basic range	0.125 to 72 NM	0.125 to 72 NM	0.125 to 96 NM
Display unit	MRD-105**		
Display size / type	19 inch color TFT LCD**		
Processor unit (BB type only)	MRM-105		
Effective diameter	278 mm		
Display resolution	1280 x 1024 pixels		
Off-centering	Max. 72%		
Echo area	2 types (Full screen, Inside of effective diameter)		
Presentation modes	Head-up, North-up*, Course-up*		
Range Rings interval	0.0625(0.125,0.25), 0.125(0.5,0.75), 0.25(1.5), 0.5(3), 1(6), 2(12), 4(24), 8(48), 12(72), 16(96) (): Range scales		
Range scales	0.125,0.25,0.5,0.75,1.5,3,6,12,24,48,(72),(96) nm 72nm: 6kW 12kW only, 96nm: 25kW only.		
Video level	8 levels		
Distance unit	NM, km, SM		
Functions	C-Map chart, CFAR (Clutter rejection), Interference rejection, Entrance (Target expansion), Process (Averaging), VRM, EBL, Parallel index, ERBL, Cursor position (Lat/Lon), Bearing (true/relative), Trail* (true/relative), Own ship past track, MAP (Event mark, etc), Analog RGB output		
Input / Output data format	IEC61162-1/-2		
Input data sentence	BWC, DBT, DPT, DTM, GGA, GLC, GLL, GNS, HDG, HDT, HDM, MTW, RMA, RMB, RMC, RTE, THS, VBW, VDR, VHW, VTG, WPL, XTE, ZDA		
Output data sentence	RSD, OSD, TLB, TTD, TTM		
AIS interface	254 Targets*		
ATA***	Auto/Manual 60 Targets*		
Power supply	21.6 to 41.6 VDC		
Power consumption(at 24VDC)	130W or less	150W or less	200W or less

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

* Requires heading, speed, and / or position signal input from external equipment including GPS Compass depending on application of user.
** Deselect BB type
*** ATA is called TT (Target Tracking) in the new IMO regulation.

CONNECTIONS

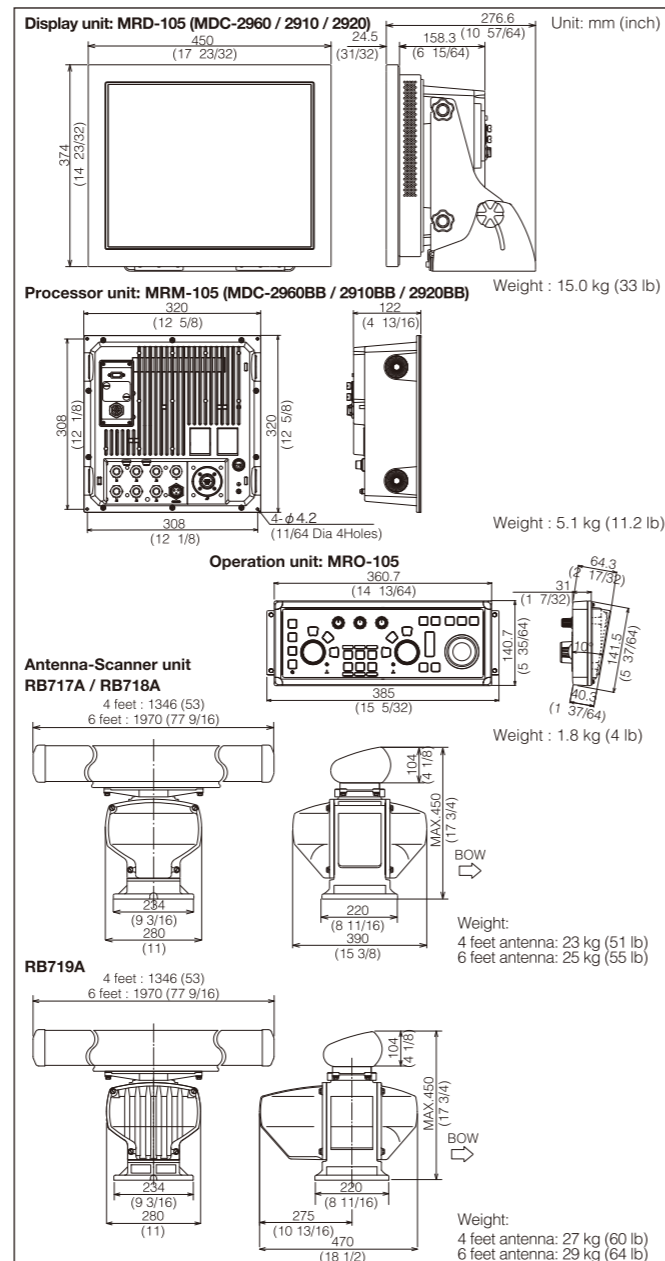


EQUIPMENT LIST

Standard Equipment			
Scanner unit	RB717A	6 kW	MDC-2960 / BB
	RB718A	12 kW	MDC-2910 / BB
	RB719A	25 kW	MDC-2920 / BB
Antenna unit	RW701A-04	4 feet	
	RW701A-06	6 feet	
Display unit	MRD-105**		
Processor unit (BB type only)	MRM-105		
Operation unit	MRO-105	With 2 m connecting cable	
Connecting cable	242J159098B-15M	15 m with connectors on both ends	
DC power cable	CW-259-2M	2m	
Operation manual, Installation manual, Installation material, Fuse			

Option
Gyro interface unit, Log interface unit, Power rectifier, AC power cable, Connecting cables
** Deselect BB type

DIMENSIONS AND WEIGHT



• Design and specifications are subject to change without notice.



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:

MDC-2900 Series

MDC-2960 / MDC-2960BB : 6 kW 4 feet / 6 feet Open
 MDC-2910 / MDC-2910BB : 12 kW 4 feet / 6 feet Open
 MDC-2920 / MDC-2920BB : 25 kW 4 feet / 6 feet Open

MDC-2900 Series provides outstanding performance and clear image with 19-inch high resolution SXGA display plus anti-reflection coating. MDC-2900BB Black Box radars connect to any SXGA type display (owner supplied).

These radars feature sophisticated "Strong Signal Processing" for real-time presentation and superior target discrimination. This special signal processing provides a steady image even in case of unstable targets.

Other superior features are Enhance (ENH), Interference Rejection (IR), Range Rings (RR), VRM, EBL, Trail (True/Rel), Off centering, Echo alarm, NAV line, Coast line, Route map, Guard zone, Monitor output, VDR output. Interswitch function for connecting two radar displays without an extra device. ARPA functions except Trial maneuver function are provided.

Map Overlay

C-Map chart (NT+ or NT MAX)** is overlaid on the radar screen to provide clear radar pictures of coastlines, buoys, and other features. C-Map NT MAX "World Wide" back ground chart is built-in as standard.
 **Owner supplied. Basic chart information only. Extra features of C-Map such as photo indication are not available.

New Parallel Index Lines (PI)

Each parallel lines can be used independently, User can move each line and adjust the length freely.

New Electronic Range and Bearing Line (ERBL)

User can control the cursor freely by trackball and measure the distance and direction from the cursor to the dotted line extended.

Data Display

- Own vessel information
- Target setting information
- Target information
- Subsidiary information
- Alarm information

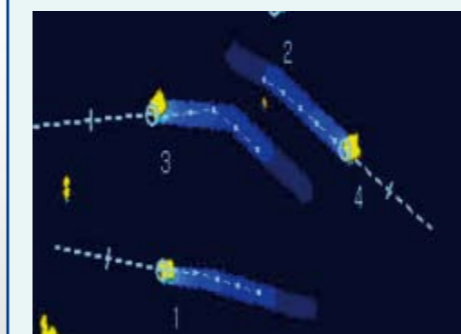
ATA

Built-in ATA* (Automatic Tracking Aid) tracks up to 60 targets. Selectable auto capture or manual capture.
 *ATA is called TT (Target Tracking) in the new IMO regulation.

AIS

Built-in AIS interface for displaying up to 254 targets.

New True Trail Function

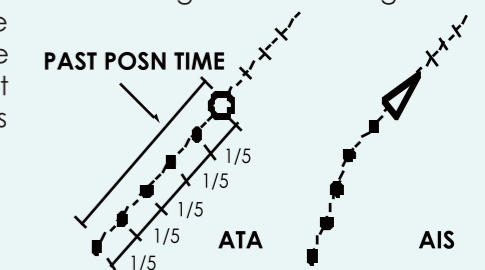


Clearly identifies moving targets from stationary targets. The display shows exact movement of other vessels like drawing tails. Even when your range is changed, a new trail appears past drawing tails. 3 types of shape is available.



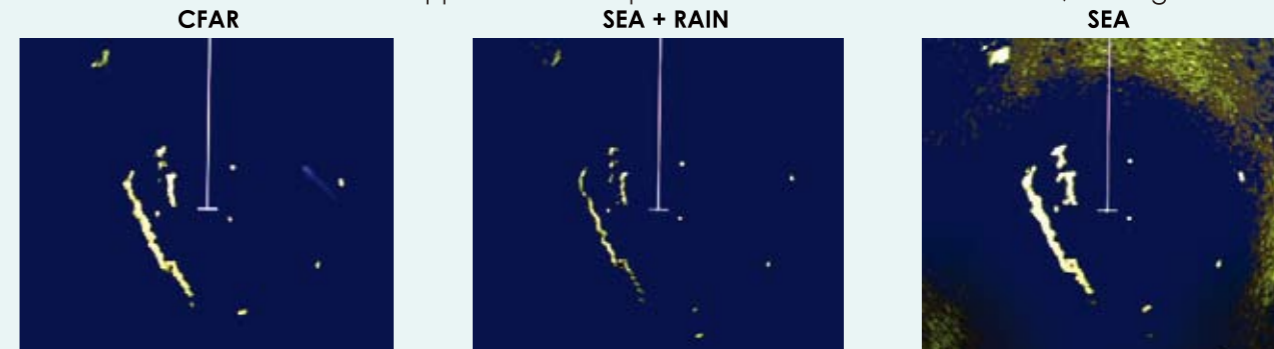
PAST POSN (Past position)

Showing past position with 5 dots for the ATA targets and AIS targets.



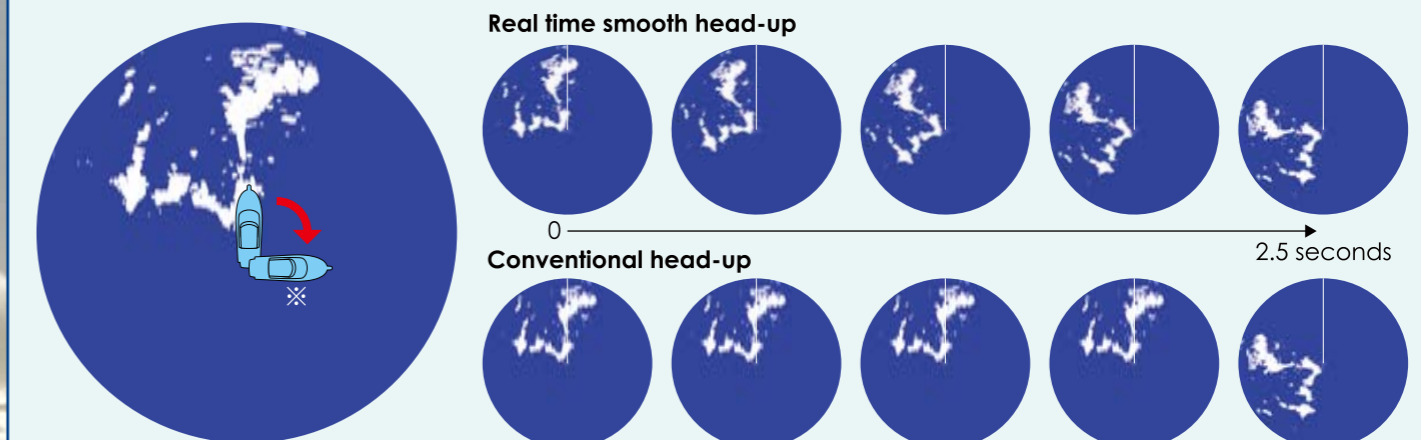
New CFAR Function

This function is Semi-automatic clutter suppression. In comparison with conventional SEA + RAIN, the targets will not shrink.



Real-time Smooth Head-Up Presentation

Display the exact direction and position of the target in real time. When own vessel changes heading, the radar image will rotate smoothly in real time, unlike conventional rotation where the image redraws with each radar sweep.



※ In case own vessel changes heading 90 degrees to the right, during one rotation of antenna in 2.5 seconds (24 rpm)

Easy Operation

Designed for easy access to all system functions with well-arranged keyboard. Six programmable function keys let user customize set-up of various functions. GAIN, STC, FTC, EBL, and VRM are adjustable with one touch by using control knobs. Trackball control with two-color LED lamp for quick-operation day or night.



Two-color LED lamp for Night

