

# PREVIEW

# KODEN

Marine Radar

# MDC-5000 Series

**Powerful and Precise  
Professional Grade**



## Features

- ▶ Clear image with High-speed sampling in short range
- ▶ CFAR, auto GAIN and STC with simple operation
- ▶ Improved visibility by PROCESS and VIDEO functions
- ▶ Built-in AIS interface for displays up to 500 targets
- ▶ Built-in TT (ARPA) tracks up to 50 targets
- ▶ C-Map chart (NT or MAX) can be displayed with the radar image (Chart: Owner supplied)
- ▶ Black Box type connects to any XGA and UXGA type display
- ▶ Output power: 4 models (4kW, 6kW, 12kW, 25kW)

## SPECIFICATIONS

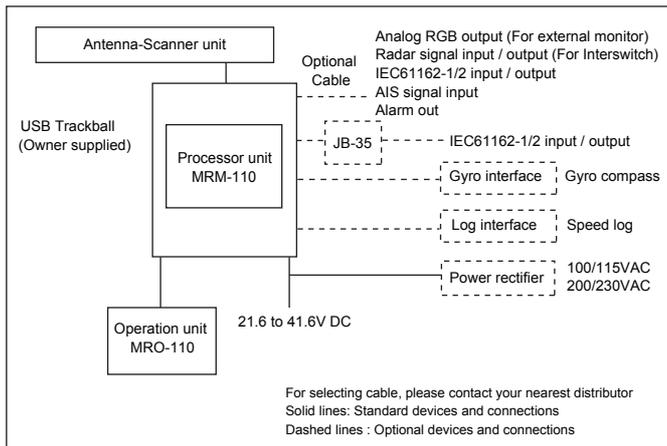
Antenna-scanner unit				
Model	MDC-5004	MDC-5006 / 5060	MDC-5012 / 5010	MDC-5025 / 5020
Type	RB806	RB807 / RB717A	RB808 / RB718A	RB809 / RB719A
Antenna type	Open antenna			
Antenna length	3 feet / 4 feet / 6 feet	4 feet / 6 feet	4 feet / 6 feet / 9 feet	4 feet / 6 feet / 9 feet
Output power (Peak)	4 kW	6 kW	12 kW	25 kW
Output frequency	9410 MHz $\pm$ 30 MHz			
Horizontal beam width	3 feet : 2.5° / 4 feet : 1.8° / 6 feet : 1.2° / 9 feet : 0.8°			
Vertical beam width	3,4, 6 feet : 22° / 9 feet : 25°			
Rotation	24 rpm or 48 rpm		24 rpm or 42 rpm	
IF center frequency	60 MHz			
Range accuracy	8 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 $\mu$ s, 0.15 $\mu$ s, 0.3 $\mu$ s, 0.5 $\mu$ s, 1.0 $\mu$ s (4kW only) 0.08 $\mu$ s, 0.15 $\mu$ s, 0.3 $\mu$ s, 0.4 $\mu$ s, 0.6 $\mu$ s, 0.8 $\mu$ s, 1.2 $\mu$ s (6kW,12kW,25kW)			
<b>Environmental</b>				
Operating temperature	-25°C to +55°C			
Water Protection	IPX6			

Processor unit												
Processor unit	MRM-110											
Display resolution	1024 x 768 pixels (XGA)											
Off-centering	Max. 75 %											
Range Scales	0.125	0.25	0.5	0.75	1.5	3	6	12	24	48	64	96
Range interval	0.0625	0.125	0.25	0.5	1	2	4	8	16	16		
	(48 NM: 4 kW only, 64 NM: 6 kW, 12 kW only, 96 NM: 25 kW only)											
Presentation modes	Head-up, North-up (True motion)*, North-up (Relative motion)*, Course-up (True motion)*, Course-up (Relative motion)*											
Video levels	16											
Range unit	NM, km, sm, kt, ky											
Functions	Chart overlay, CFAR (Clutter rejection), Interference rejection, Target expansion, Process (Averaging), VRM, EBL, Parallel index, Cursor position, Bearing (true/relative), Trail (true/relative)*, Own ship past track*, MAP (Event mark* etc.), Analog RGB output											
Input data format and sentences	IEC61162-1 / -2 BWC, DBT, DPT, DTM, GGA, GLC, GLL, GNS, HDG, HDT, HDM, MTW, RMA, RMB, RMC, ROT, RTE, THS, VBW, VDR, VHW, VTG, WPL, XTE, ZDA											
Output data format and sentences	IEC61162-1 / -2 DTM, EVE, GLL, HBT, HDT, ROT, RSD, OSD, POS, THS, TLL, TLD, TTM, VBR, VDR, VHW, VTG, ZDA											
AIS interface*	500 Targets											
TT (ARPA)*	Auto / Manual 50 Targets											
Power supply	21.6 to 41.6 VDC											
Power Consumption (at 24 VDC)	100 W or less	130 W or less	150 W or less	200 W or less								

Environmental	
Operating temperature	-15°C to +55°C
Water Protection	Processor unit (MRM-110) : IPX0 Operation unit (MRO-110) : IP23

\* Requires heading, speed, and / or position signal input from external equipment including GPS Compass depending on application of user.

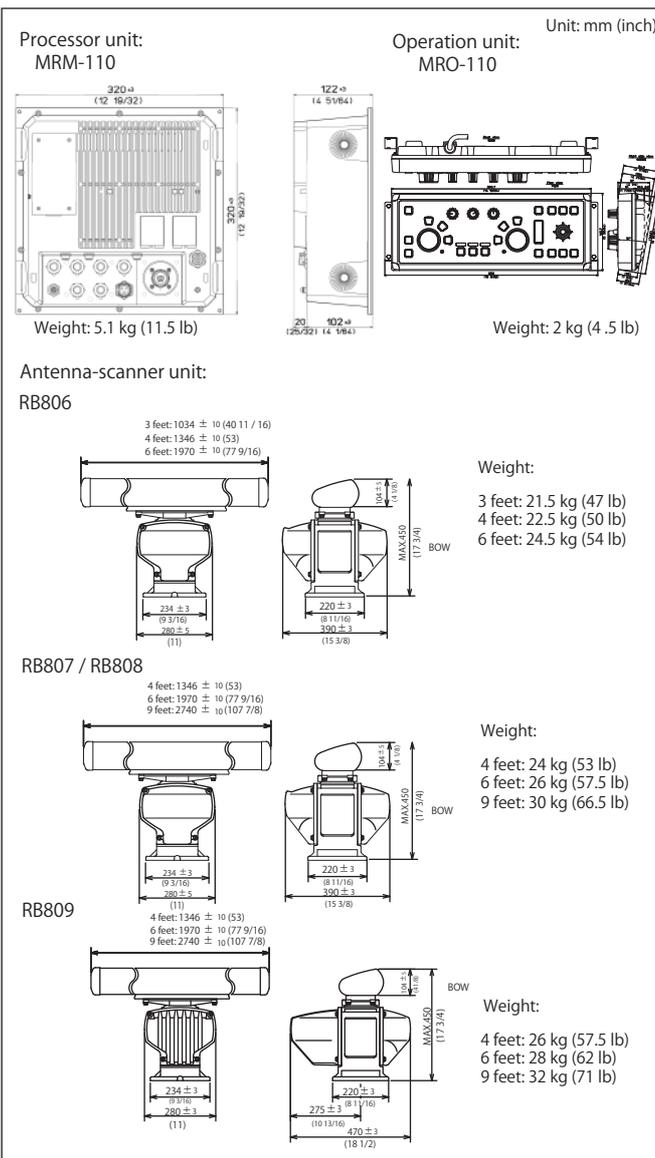
## CONNECTIONS



## EQUIPMENT LIST

Standard Equipment		
Scanner unit	RB806	4 kW
	RB807	6 kW
	RB808	12 kW
	RB809	25 kW
Antenna unit	RW701A-03	3 feet
	RW701A-04	4 feet
	RW701A-06	6 feet
	RW701B-09	9 feet
Processor unit	MRM-110	
Operation unit	MRO-110	With 2 m connecting cable
Connecting cable(RB807 / RB808 / RB809) (RB806 only)	CW-845-15	15 m with connectors on both ends
	242J159098B-15M	
DC power cable	CW-259-2M	2 m
Operation manual, Installation manual, Quick reference, Installation material, Fuse		
<b>Option</b>		
Gyro interface unit, Log interface unit, Power rectifier- AC power cable, Connecting cables, Junction Box		

## 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