

12.1-inch /15-inch Color LCD
Marine Radar

KODEN

MDC-5200/5500 Series

**Powerful and Precise
Professional Grade**



MDC-5200



MDC-5500

MDC-5200

MDC-5500 Series

MDC-5200 / 5500 series have superior performance and functions of large grade radars. High resolution XGA display with anti-reflection coating makes clear image.

Model	12.1-inch Display type				15-inch Display type			
Standard model	MDC-5240	MDC-5260	MDC-5210	MDC-5220	MDC-5540	MDC-5560	MDC-5510	MDC-5520
CE model	MDC-5204	MDC-5206	MDC-5212	MDC-5225	MDC-5504	MDC-5506	MDC-5512	MDC-5525

Features

- Clear image with High-speed sampling in short range.
 - Auto GAIN with simple operation.
 - Improved visibility by auto STC.
 - Simple and easy operation by remote trackball via USB.
 - Built-in AIS interface for displays up to 1000 targets.
 - Built-in TT(ARPA) tracks up to 100 targets.
- C-Map chart(NT MAX) can be overlaid on the radar screen. (Chart : owner supplied)

Map Overlay

C-Map chart (NT MAX)** can be 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.

AIS

 Built-in AIS interface for displaying up to 1000 targets.

TT (ARPA)

 Built-in TT (ARPA) tracks up to 100 targets. Selectable auto acquisition or manual acquisition.

Data Display

Own ship / Target data

Target and Map information

C-MAP SD Card



Standard model

MDC-5240 / 5540	: 4 kW	3 feet / 4 feet Open
MDC-5260 / 5560	: 6 kW	4 feet / 6 feet Open
MDC-5210 / 5510	: 12 kW	4 feet / 6 feet Open
MDC-5220 / 5520	: 25 kW	6 feet / 9 feet Open

CE model

MDC-5204 / 5504	: 4 kW	3 feet / 4 feet / 6 feet Open
MDC-5206 / 5506	: 6 kW	4 feet / 6 feet Open
MDC-5212	: 12 kW	4 feet / 6 feet Open
MDC-5512	: 12 kW	4 feet / 6 feet / 9 feet Open
MDC-5225	: 25 kW	4 feet / 6 feet Open
MDC-5525	: 25 kW	4 feet / 6 feet / 9 feet Open

Standard model

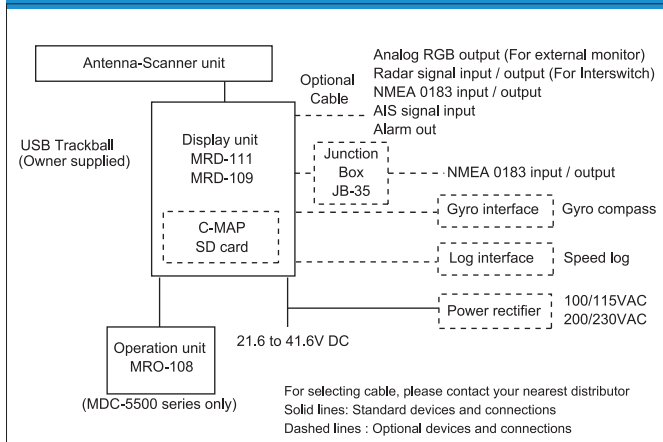
SPECIFICATIONS

Antenna-scanner unit				
Model	MDC-5240 / MDC-5540	MDC-5260 / MDC-5560	MDC-5210 / MDC-5510	MDC-5220 / MDC-5520
Scanner unit	RB716A	RB717A	RB718A	RB719A
Antenna type	Open antenna			
Antenna length	3 feet / 4 feet	4 feet / 6 feet	4 feet / 6 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			
IF center frequency	60 MHz			
Range accuracy	8 meters or 1% of the range scale selected, whichever is the greater			
Minimum detecting distance	Within 20 m			
Range resolution	Within 20 m			
Warm-up time	2 min			3 min
Pulse width	RB716A	0.08 to 0.15us, 0.08us, 0.15us, 0.3us, 0.5us, 1.0us		
	RB717A RB718A	0.08us, 0.25us, 0.5us, 0.7us, 1.0us		
	RB719A	0.08us, 0.3us, 0.6us, 0.8us, 1.2us		
Environmental				
Operating temperature	-25°C to +55°C			
Water Protection	IPX6			

Display unit			
Model	MDC-5200 Series		MDC-5500 Series
Display unit	MRD-111		MRD-109
Display size and type	12.1" color TFT LCD		15" color TFT LCD
Effective diameter	184 mm		228 mm
Display resolution	768 x 1024 pixels (XGA)		
Off-centering	Max. 75 %		
Echo area	2 types (Full screen, Inside of effective diameter)		
Basic Range	0.125 to 48 NM	0.125 to 64 NM	0.125 to 96 NM
Range Scales	0.125, 0.25, 0.5, 0.75, 1.5, 3, 6, 12, 24, 48, 64, 96	0.125, 0.25, 0.5, 1, 2, 4, 8, 16, 16	
Range interval	(48 NM: 4 kW, 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, kf, ky		
Functions	Map overlay*, CFAR (Clutter rejection), Interference rejection, Target expansion, Process (Averaging), VRM, EBL, Parallel index, ERBL, Cursor position, Bearing (true*/relative), Trail (true / relative)*, Own ship past track*, MAP/Event mark* etc., Analog RGB output		
Input data format and sentences	NMEA 0183 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	NMEA 0183 DTM, EVE, GLL, HBT, HDT, ROT, RSD, OSD, POS, THS, TLB, TLL, TTD, TTM, VBW, VDR, VHW, VTG, ZDA		
AIS interface*	1,000 Targets (Standard)		
TT (ARPA)*	Auto / Manual 100 Targets (Standard)		
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
Environmental			
Operating temperature	-15°C to +55°C		
Water Protection	Display unit : IPX5, Operation unit : IP23 (MDC-5500 series)		

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

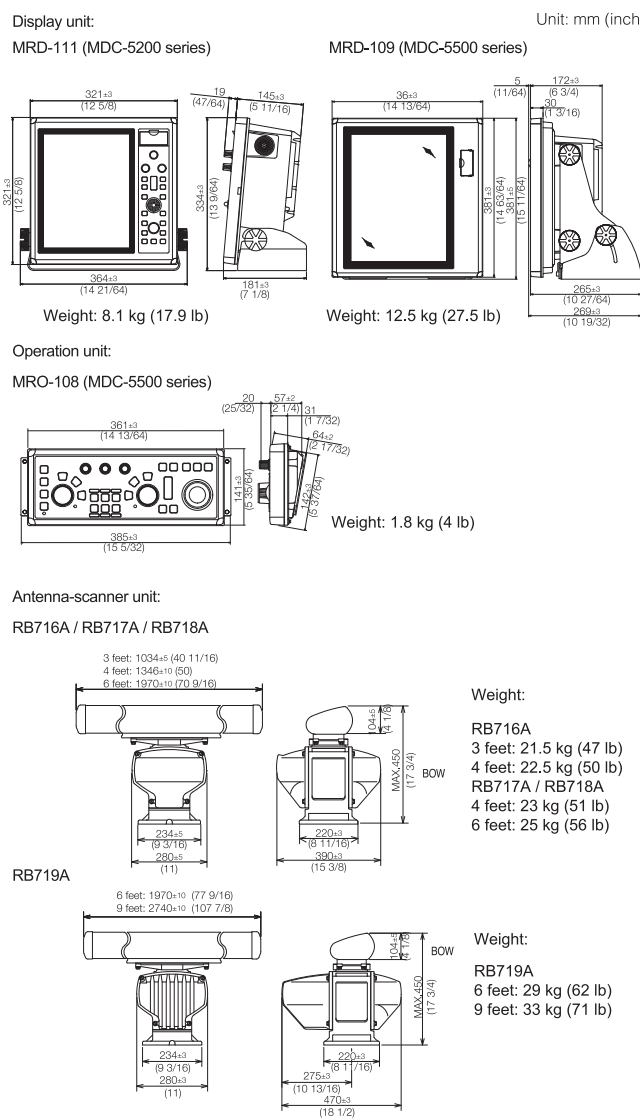
CONNECTIONS



EQUIPMENT LIST

Standard Equipment			
Antenna-Scanner unit	Scanner unit	RB716A	4 kW
		RB717A	6 kW
		RB718A	12 kW
		RB719A	25 kW
	Antenna unit	RW701A-03	3 feet
Display unit (MDC-5200 Series) (MDC-5500 Series)		RW701A-04	4 feet
		RW701A-06	6 feet
		RW701B-09	9 feet
		MRD-111	
Operation unit (MDC-5500 only)		MRD-109	
		MRO-108	With 2 m connecting cable
Connecting cable		242J159098B-15M	15 m with connectors on both ends
DC power cable		CW-259-2M	2 m
Operation manual, Quick reference, Installation manual, Installation material, Fuse			
Option			
Gyro interface unit, Log interface unit, Power rectifier, AC power cable, Connecting cables, Junction Box			

DIMENSIONS AND WEIGHT



SPECIFICATIONS

Antenna-scanner unit

Model	MDC-5204 / MDC-5504	MDC-5206 / MDC-5506	MDC-5212 / MDC-5512	MDC-5225 / MDC-5525
Scanner unit	RB806	RB807	RB808	RB809
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 20 m			
Range resolution	Within 20 m			
Warm-up time	2 min			3 min
Pulse width	RB806	0.08us, 0.2us, 0.3us, 0.6us, 1.2us		
	RB807 RB808 RB809	0.08us, 0.15us, 0.3us, 0.4us, 0.6us, 0.8us, 1.2us		
Environmental				
Operating temperature	-25°C to +55°C			
Water Protection	IPX6			

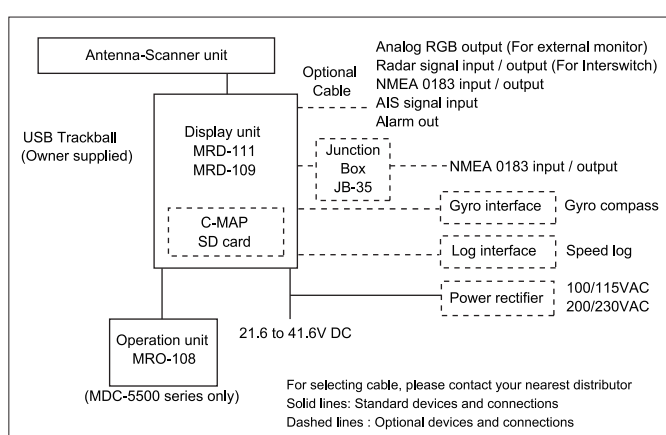
Display unit

Model	MDC-5200 Series	MDC-5500 Series
Display unit	MRD-111	MRD-109
Display size and type	12.1" color TFT LCD	15" color TFT LCD
Effective diameter	184 mm	228 mm
Display resolution	768 x 1024 pixels (XGA)	
	Max. 75 %	
Echo area	2 types (Full screen, Inside of effective diameter)	
Basic Range	0.125 to 48 NM	0.125 to 64 NM
Range Scales	0.125, 0.25, 0.5, 0.75, 1.5, 3, 6, 12, 24, 48, 64, 96	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	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	Map overlay*, CFAR (Clutter rejection), Interference rejection, Target expansion, Process (Averaging), VRM, EBL, Parallel index, ERBL, Cursor position, Bearing (true/relative), Trail (true/relative)*, Own ship past track*, MAP („Event mark“ etc.), Analog RGB output	
Input data format and sentences	NMEA 0183 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	NMEA 0183 DTM, EVE, GLL, HBT, HDT, ROT, RSD, OSD, POS, THS, TLB, TLL, TTD, TTM, VBW, VDR, VHW, VTG, ZDA	
AIS interface*	1,000 Targets (Standard)	
TT (ARPA)*	Auto / Manual 100 Targets (Standard)	
Power supply	21.6 to 41.6 VDC	
Power Consumption (at 24 VDC)	100 W or less	130 W or less
	130 W or less	150 W or less
	150 W or less	200 W or less
Environmental		
Operating temperature	-15°C to +55°C	
Water Protection	Display unit : IPX5, Operation unit : IP23 (MDC-5500 series)	

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

** MDC-5500 Series only

CONNECTIONS



EQUIPMENT LIST

Standard Equipment

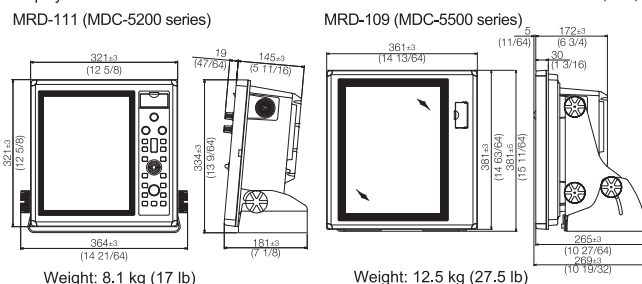
Antenna-Scanner unit	Scanner unit	RB806	4 kW
		RB807	6 kW
		RB808	12 kW
		RB809	25 kW
	Antenna unit	RW701A-03	3 feet
		RW701A-04	4 feet
		RW701A-06	6 feet
		RW701B-09	9 feet
Display unit (MDC-5200 Series)		MRD-111	
(MDC-5500 Series)		MRD-109	
Operation unit (MDC-5500 only)		MRO-108	With 2 m connecting cable
Connecting cable (RB807 / RB808 / RB809)		CW-845	15 m with connectors on both ends
(RB806 only)		242J159098B-15M	
DC power cable		CW-259-2M	2 m
Operation manual, Quick reference, Installation manual, Installation material, Fuse			

Option

Gyro interface unit, Log interface unit, Power rectifier, AC power cable, Connecting cables, Junction Box

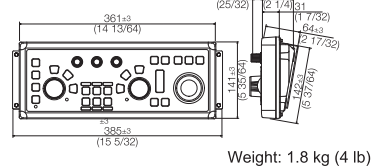
DIMENSIONS AND WEIGHT

Display unit: Unit: mm (inch)



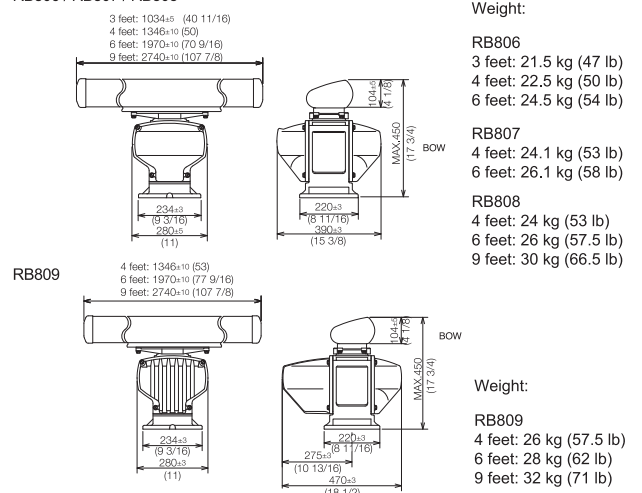
Operation unit:

MRO-108 (MDC-5500 series)



Antenna-scanner unit:

RB806 / RB807 / RB808



• Design and specifications are subject to change without notice.

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

For details, please contact: