

MDC-721/741/740

*Ultimate choice
for navigation!*

*High quality compact radar,
offering crisp and clear picture.*

MDC-721: 1.2 ft, 2 kW, Radome

MDC-741: 2 ft, 4 kW, Radome

MDC-740: 3 ft/4 ft, 4 kW, Open Antenna



FEATURES

• Semi-3D display

Radar echoes are shown as realistic visual impressions. The amplitude of echo is determined by its signal strength and is painted on the Mercator type coordinate. The semi-3D display is shown together with normal radar screen.

• Auto gain and clutter controls as standard

Using the AUTO key, your radar settings are automatic for the gain and rain/sea clutter. The radar's computer expertly sets Gain, STC, and FTC levels, allowing the operator to concentrate on other chores. Previously, these features were found only in larger and more expensive radar systems.

• High speed antenna

You can select your antenna rotation speed to 48 rpm via the menu. A vital feature for fast moving ship navigating congested waters, rivers, canal, etc.

• ATA option

The Automatic Tracking Aid feature is available as an option. Using this option your radar tracks up to 10 targets, providing the latest collision avoidance information in vector form.

• Semi-continuous range scales

Closely separated range scales are available via the menu. The scale value increases or decreases by approximately 10 % of the range in use. This feature is quite essential for the navigation in congested waters, which requires constant vigilance.

• On screen Multi-languages

Sixteen languages are available as standard and can be selected via the menu. These include; Chinese, Danish, English, French, German, Greek, Italian, Japanese, Korean, Norwegian, Portuguese, Russian, Spanish, Swedish, Turkish and Thai.

• One-key-one-function plus menu operation

Six dedicated key switches are provided for fundamental radar controls, such as range scale, brilliance, Gain, STC and FTC. Plus, a variety of additional functions are also available via the menu.

• User defined keys

Frequently used functions can be assigned to seven user-defined keys. Available functions total 24, and are assorted in 4 groups. You can customize this radar to your own operational needs.

• Rotary control

One large rotary control is provided for quick and easy operation controlling EBL, VRM, Gain, STC and FTC. No more cumbersome key controls are needed, such as, up and down, right and left.

• Splash proof display

The display unit can be installed even in a place where water splash protection is not good such as, the fly bridge, open deck, etc.

SPECIFICATIONS

Antenna unit

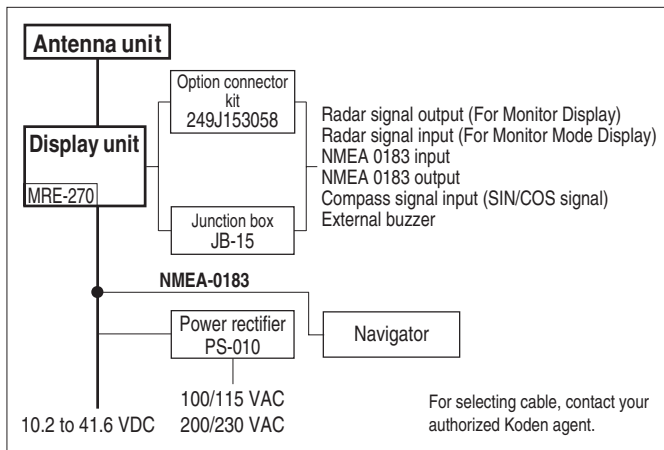
| | | | |
|------------------------------|--------------------------------------|-----------------|-------------------------------|
| Model | MDC-721 | MDC-741 | MDC-740 |
| Aerial | 1.2 feet (radome) | 2 feet (radome) | 3 feet/4 feet (Open scan) |
| Peak power output | 2 kW (1.5 kW:S pulse) | 4 kW | |
| Transmitting frequency | 9445 ± 30 MHz | 9410 ± 30 MHz | |
| Beam width | Horizontal | 6.0 ° | 3.9 ° |
| | Vertical | 25 ° | 22 ° |
| Rotation | 24 rpm ± 20 % | 24 or 48 rpm | 24 or 48 rpm (24 VDC or more) |
| Pulse length (µsec)/ | S 0.12 / 2000 | 0.08/2,000 | |
| PRF (Hz) | M | 0.3 / 1,500 | 0.25/1,500 |
| | L | 0.8 / 600 | 0.8/600 |
| IF center frequency | 60 MHz | | |
| Noise figure | 6.5 dB or less | | |
| Operating temperature | -25 °C to +55 °C (-13 °F to +131 °F) | | |
| Operation in wind (relative) | 100 knots | | |

Display unit

| | | | |
|-------------------------|--|--|--|
| Display | 7-inch color LCD (TFT) | | |
| Resolution | 640 x 480 pixels | | |
| Video level | 4 levels | | |
| Indication system | PPI, PPI + semi-3D, ALL PPI | | |
| Presentation modes | Head up, *north up, **course up, ***true motion | | |
| Range scales (nm) | 0.125 0.25 0.5 0.75 1.5 3 6 12 24 (36) (48) | | |
| Rings interval (nm) | 0.0625 0.125 0.25 0.5 0.5 1.0 2.0 4.0 8.0 (12.0)(12.0) (36)/(12.0): MDC-741, (48)/(12.0): MDC-740 | | |
| Off-center | Can be 100% off-centered over the full range | | |
| Echo trail interval | Continuous, 15, 30 sec., 1, 3, 6 min. | | |
| Alarm | IN and OUT alarms | | |
| Minimum range | Better than 25 m on 0.125 nm range | | |
| Range discrimination | Better than 25 m | | |
| Range accuracy | Better than 8 m (26 feet) or 0.9% of the maximum range of the scale in use, whichever is the greater | | |
| Bearing accuracy | Better than ± 1 ° | | |
| Navigation data display | Boat position (Latitude/longitude), bearing and speed | | |
| Other functions | Gain, STC, FTC, auto tuning, heading marker off, Interference rejection, target expansion, zoom, two VRMs, two EBLs (0.1 ° step), floating EBL/VRM, cursor position (latitude/longitude), parallel cursor, bearing (true/relative), distance unit (nm/km), signal processing, location memory, intermittent transmission | | |
| Input data format | NMEA-0183 (BER, BEW, BPI, BWC, BWR, DBT, DPT, GGA, GLL, HDG, HDM, HDT, HSC, MTW, RMA, RMB, RMC, VHW, VTG, XTE) | | |
| Power supply | 10.2 to 41.6 VDC | | |
| Power consumption | 45 W/(MDC-721)/55 W(MDC-741)/70 W(MDC-740) or less | | |
| Operating temperature | 0 °C to +55 °C (+32 °F to +131 °F) | | |

* North up, **course up mode : Bearing data from an electric compass, a gyro compass or a navigator is required.
 *** True motion : Speed data from a speed log, and Bearing data from an electric compass, a gyro compass or a navigator is required.

CONNECTIONS



EQUIPMENT LIST

Standard Equipment List

| | | | |
|------------------------|-----------------|------------------------------------|--------------------|
| Antenna unit | RB714A | 1.2 feet, MDC-721 | 1 |
| | RB715A | 2 feet, MDC-741 | |
| Aerial | RW701A-03 | 3 feet, MDC-740 | |
| | RW701A-04 | 4 feet, MDC-740 | |
| Transceiver | RB716A | MDC-740 | |
| Display unit | MRD-99 | With hood and hard cover | |
| Connecting cable | 242J160680A-10M | With two connectors, MDC-721 | 10 m (32 13/16 ft) |
| | 242J158055A-10M | With two connectors, MDC-741 | |
| | 242J159098A-10M | With two connectors, MDC-740 | |
| DC power cable | 242J158054-2M | With a connector and one end plain | 2 m (6 9/16 ft) |
| Spare parts kit | | | 1 set |
| Installation materials | | | 1 set |
| Operation manual | | | 1 |

Note: Other cable length selections available : 15 m, 20 m, 30 m.

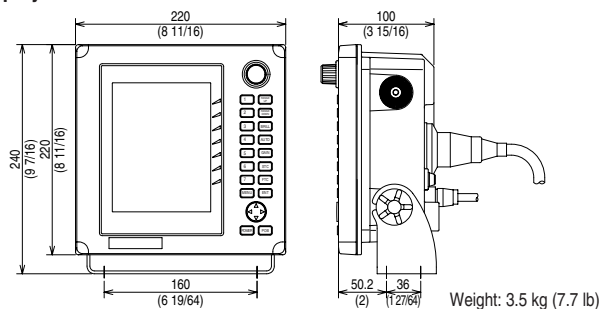
Option

| | | |
|----------------------|------------|---|
| ATA module kit | MRE-270 | With connecting cable |
| Option connector kit | 249J153058 | |
| Junction box | JB-15 | For external connection, with 1.5 m cable |
| Power rectifier | PS-010 | With two 5 A fuses |
| AC power cable | VV-2D8-3M | 3 m (9 13/16 ft), both ends plain |

DIMENSIONS AND WEIGHT

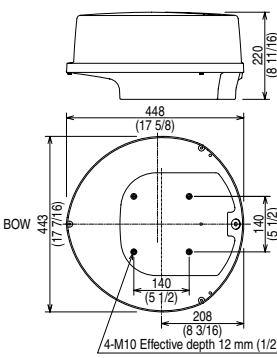
Display unit MRD-99

Unit: mm (inch)

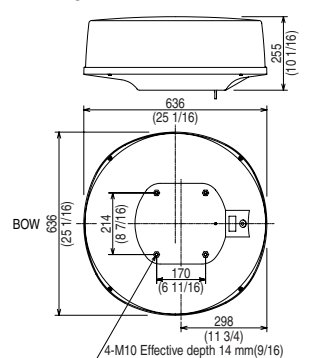


Antenna unit

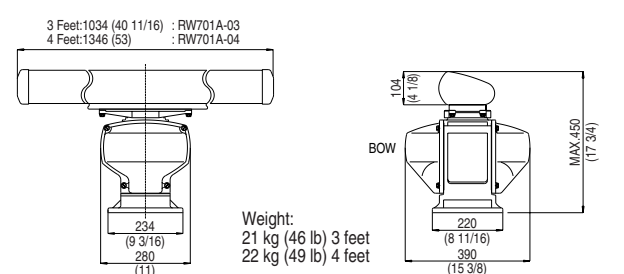
RB714A



RB715A



RB716A



* Specifications subject to change without notice.

KODEN

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Certified to ISO 9001 (TUV PRODUCT SERVICE)



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:

offered by Busse-Yachtshop.com

OMDC721/741/740-00 01 X SI 2Y1
 OMD721/741/740-03 03 VII SI 2Y4
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