

## TRANSMITTING HEADING DEVICES / TMC SYSTEM

# MD71TMC TRANSMITTING MAGNETIC COMPASS SYSTEM - ADVANCED

SKU: F071100

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## FEATURES

- **Provides Digital Heading Data from a Ship's Magnetic Compass**
- **Unparalleled Accuracy and Intuitive Operator Controls**
- **Correction of Magnetic Deviation and Variation**
- **Automatic Sensor-to-Compass Calibration**
- **Magnetic Sensors Fully sealed to IEC 60945 Exposed Area Classification**
- **Industry Proven Design**
- **Bright OLED display provides high contrast and wide viewing angles**

Increasingly, Maritime Authorities are accepting the use of Transmitting Heading Device (THD) Systems on board vessels.

Marine Data offers two types of THD system:

- A system which senses the angular position of a ship's magnetic compass card; known as a Transmitting Magnetic Compass System (TMC)
- A system which directly senses the Earth's magnetic field; known as an Electro-Magnetic Compass System (EMC)

## OVERVIEW

The MD71TMC is a Transmitting Magnetic Compass (TMC) System which uses the latest technology to accurately process and convert the ship's magnetic compass heading to NMEA 0183 heading data with unparalleled accuracy to one or more Heading Repeaters (Compass Repeaters) at any convenient location on a vessel.

Instead of using inflexible and bulky optical apparatus (reflectors, periscopes etc.) to view the magnetic compass, electronic remote displays may be used in the form of a Compass Repeater.

TMC systems from Marine Data are simple and intuitive to use, with quick and easy installation and on-board calibration.

## APPLICATIONS

- Provides a digital NMEA heading output to drive a Heading Repeater (or other devices) at a convenient location
- An elegant alternative to using an optical reflector in a ship's magnetic compass installation

## ACCESSORIES

- [MD54](#) - Compass Sensor Adhesive Mount
- [MD58](#) - Compass Sensor Bracket Mount
- [MD71TB](#) - Trunnion Bracket Kit for Display & Control Head
- [MD96JB/8](#) - Junction Box to supply power and act as breakout box for 2x NMEA 0813 data channels
- [MD94DDU](#) - Data Distribution Unit to supply power and for feeding several Heading Repeaters

## RELATED PRODUCTS

- [MD97TMC](#) - Standard Transmitting Magnetic Compass System
- [MD71EMC](#) - Electro-magnetic Compass System

## PHYSICAL

<b>Weight &amp; Dimensions:</b>	MD71THD: H 96; W 96; D 35 (mm); 0.50 kg MD97CSP: L 146; W 64; D 41 (mm); 0.35 kg MD52A/B: H 18; Ø 69 (mm); 0.12 kg <i>Excludes cables &amp; connectors</i>
<b>Mounting:</b>	MD71THD: Panel mount; Trunnion (optional) MD52A/B: MD54 or MD58 Mountings direct to compass
<b>Connections:</b>	MD71THD: 15-way D-type plug; 9-way D-type socket; MD52A/B: Buccaneer™ type male MD97CSP: Buccaneer™ type female; 1x Gland
<b>Finish:</b>	Jet Black (RAL9005) Fine-texture Powder Coat

## ELECTRICAL

<b>Power Supply:</b>	24 V dc; 6 W
<b>Data Output:</b>	2x NMEA 0183 Data Channels
<b>Data Sentences:</b>	HDT, HDG and HDM

## APPROVALS

<b>Conforms with:</b>	IEC 60945; IEC 61162-1
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## OPERATIONAL

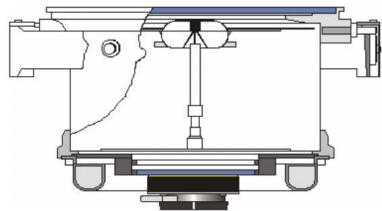
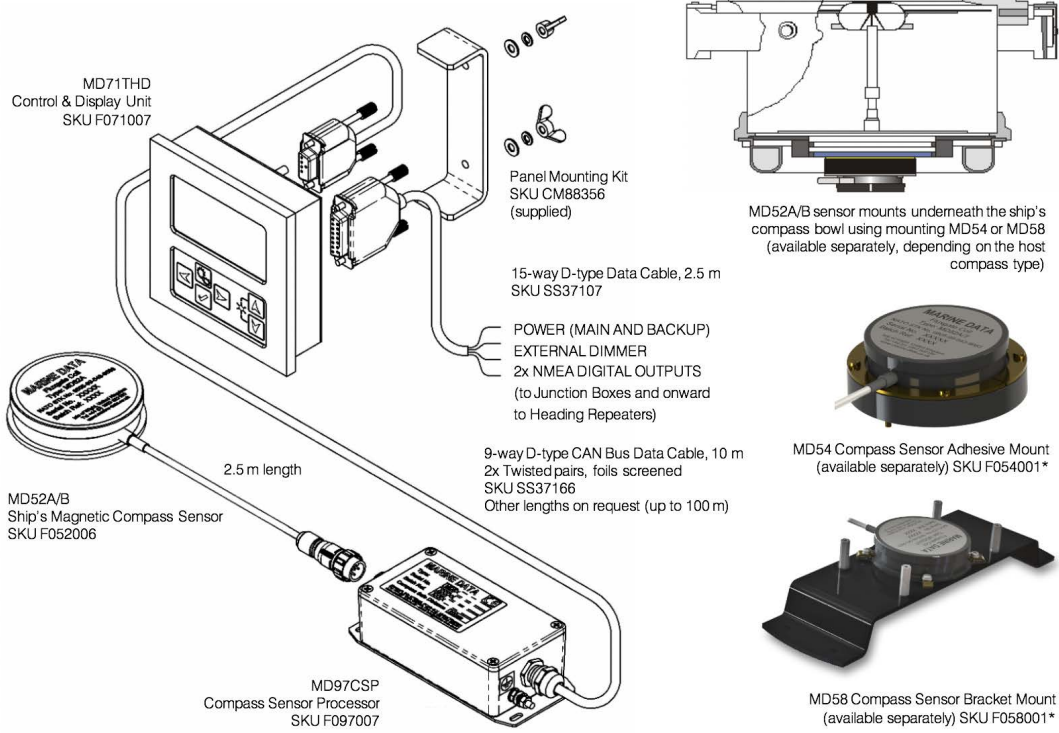
<b>Performance:</b>	± 1.0° resolution
<b>Accuracy:</b>	≤ 0.5° after ADC (depending on sensor)
<b>Display:</b>	2.7" (128 x 64 pixels); OLED - Yellow
<b>Alarms:</b>	Audible sounder

## ENVIRONMENTAL

<b>IEC 60945 Equipment Category:</b>	MD71THD: Protected Area MD97CSP: Exposed Area MD52A/B: Exposed Area
<b>Operating temp:</b>	-15°C to +55°C
<b>Storage temp:</b>	-25° C to +70° C
<b>RoHS:</b>	Compliant
<b>Compass Safe Distance:</b>	(MD71THD & MD97CSP): 50cm

## ADDITIONAL

<b>Supplied:</b>	Panel Mounting Kit
<b>Supplied:</b>	15-way D-type data cable, 2.5 m
<b>Supplied:</b>	9-way D-type CAN Bus data cable; 10 m



MD52A/B sensor mounts underneath the ship's compass bowl using mounting MD54 or MD58 (available separately, depending on the host compass type)



MD54 Compass Sensor Adhesive Mount (available separately) SKU F054001\*



MD58 Compass Sensor Bracket Mount (available separately) SKU F058001\*

\*One sensor mount is a required option (available separately) - depending on the type of host magnetic compass; please contact Marine Data to obtain the correct mount

\*\*The MD71THD Control and Display Unit can display the heading in numeric form as a basic heading repeater (compass repeater). However, we always recommend using a dedicated Marine Data Heading Repeater suitable for the precise purpose to which it will be put (e.g. a repeater for steering the vessel; a repeater for taking bearings; a repeater to be mounted on the bridge wing, etc.)



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