

TOTAL NAVIGATOR

## **KTN-70A / KTN-70AF**



KTN-70AF is a model with a versatile function of Plotter Fish Finder.

These models can be connected to a Radar and has a built-in AIS receiver, enabling you to sail effectively and safely.



### **Features**

- ▶ 7-inch wide color LCD display
- ▶ High accuracy built in chart
- ► Radar ATA target overlay
- ► AIS information overlay
- ► Easy waypoints transfer to Radar

## KTN-70A / KTN-70AF

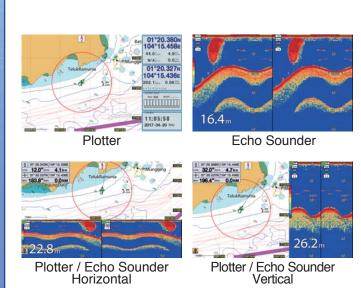
### **Easy to operate**



**Operation key** 

By using both single function keys and shortcut keys, you can quickly learn how to operate KTN-70A / 70AF.

## Various presentation modes



The screen width of the Echo Sounder image can be adjusted from 30 to 70% on the screen of Plotter / Echo Sounder.

(KTN-70AF only)

# Other ship track display



By connecting to a Radar with ATA function, up to 50 others' tracks chased by ATA can be seen in the display. You can customize settings such as color and type of track for each ship in the display.

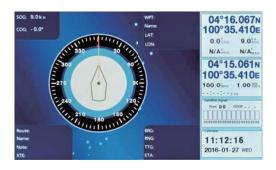
## **AIS display function**



As KTN-70A / 70AF has a built-in AIS receiver, by connecting to an Antenna, up to 400 AIS symbols can be seen in the display.

You can check how AIS-equipped ships move in the display, which makes your voyage safer.

## Compass and data display



The graphical display enables you to determine easily where you go and how the wind blows\*.

You can check information about the waypoint such as the distance, the direction, the route and ETA.

\*Wind data input required

## Waypoint and route display



By connecting to a Radar, waypoint destination and route can be transferred to the Radar.

By comparing the Radar and the Plotter displays, you can more easily determine the position relation between the waypoint and route.

## Save important data in your SD card



You can save data such as Waypoints, Marks, Tracks, Other Ship's Tracks, Routes, Drawings and Beacons in a general SD card as well as the internal memory.

You can transfer the data to the other KTN-70A / 70AF. It is recommended that you save important data in your SD card.

## Connection image between KTN-70A / 70AF & Radar





MDC-2000

KTN-70A / 70AF

MDC-900 MDC-

### **SPECIFICATIONS**

#### General

| acriciai                       |  |  |  |
|--------------------------------|--|--|--|
| Display size and type          | 7-inch color LCD   |  |  |
| Display resolution             | 800 × 480 (WVGA)   |  |  |
| Languages                      | Burmese, English, Indonesian, Japanese, Korean, Malay, Portuguese, Spa<br>Simplified Chinese, Traditional Chinese, Tagalog, Thai, Turkish, Vietnames |  |  |
| Input data format & sentences  | NMEA0183 Ver.1.5 / 2.0<br>DPT, GGA, GLL, HDG, HDT, MTW, MWD, MWV, RMC, TLL, TTM, VTG, ZDA  |  |  |
| Output data format & sentences | NMEA0183 Ver.1.5 / 2.0, AIS sentence<br>APB, BOD, BWC, DPT, GGA, GLL, HDT, MTW, MWD, MWV, RMA, RM<br>RMC, RTE, TLL, VTG, XTE, ZDA                    |  |  |
| NMEA ports                     | Total 2: input and output  |  |  |
| Power supply                   | 10.8 to 31.2 VDC   |  |  |
| Power consumption              | 25 W or less (24 VDC)  |  |  |
| Operating temperature          | -15°C to +55°C   |  |  |
| Water protection               | Display unit: IPX5, Antenna unit: IPX6   |  |  |

#### **Plotter**

| Basic ranges            | 0.01 to 200NM   |  |  |
|-------------------------|---|--|--|
| Range units             | Distance: km / NM, Speed: km / h / kn, Depth: m / ft / fm / l.fm  |  |  |
| Presentation modes      | Plotter (Full screen, with information window), Compass, Data   |  |  |
| Track Log / Save points | 400,000 /10,000 (1 Block / Max 20,000)  |  |  |
| Mark Waypoints / WPT    | 100,000   |  |  |
| Alarms                  | CPA / TCPA / Anchor watch / XTE / Arrival / Over speed / Drawing / Distance to turn waypoint / Lower depth / Higher depth / Water temperature |  |  |

### **Echo Sounder (KTN-70AF)**

| Output power        | 600W   |  |  |
|---------------------|--|--|--|
| Output frequency    | 50 / 200 kHz   |  |  |
| Basic ranges        | 0 to 400(m), 0 to 1200(ft), 0 to 260(fm), 0 to 280(l.fm)   |  |  |
| Zoom ranges         | 2.5 to 200(m), 5 to 640(ft), 2.5 to 110(fm), 2.5 to 130(l.fm)  |  |  |
| Shift step          | 1(m, ft, fm, l.fm)   |  |  |
| Range units         | m / ft / fm / l.fm   |  |  |
| Presentation modes  | Plotter, Sounder (Hi / Low / Dual frequency / H: Zoom / L: Zoom)<br>Plotter / Sounder (3:1 Vertical / 3:1 Horizontal), Compass, Data |  |  |
| Presentation colors | 16 colors / 8 colors / Monochrome  |  |  |
| Alarms              | Bottom / Fish  |  |  |
| Image speed         | 7 steps + stop   |  |  |
| Zoom type           | Bottom / B.D.(Bottom discrimination) / Zoom  |  |  |
| Auto functions      | Gain / Range / Shift   |  |  |

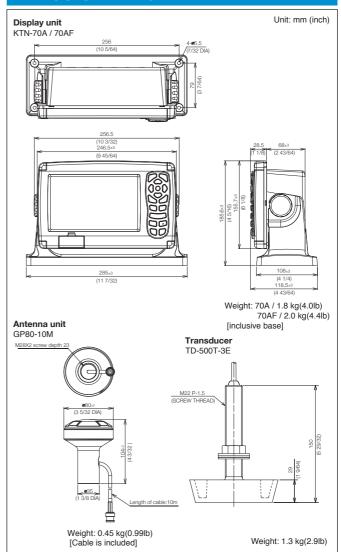
### **EQUIPMENT LIST**

| Standard components | Display unit   | 1     |
|---------------------|--|-------|
|                     | GPS antenna (with Antenna holder)                      | 1 set |
|                     | DC power cable (2m)                                    | 1     |
|                     | Installation material (Tapping screw for installation) | 1 set |
|                     | Operation manual (with Quick reference)                | 1     |
|                     | 6 Pin connector  | 1     |
|                     | Transducer (KTN-70AF only)                             | 1     |
| Options             | RADAR connecting cable                                 |       |
| Owner supply        | AIS antenna and cable                                  | 1     |

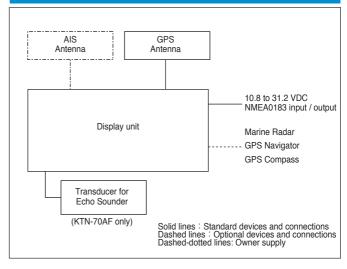
The corresponding areas of the map are as follows.

- · Southeast Asia area and Indian area · East Asia area and South Korea
- · Africa area

#### **DIMENSIONS AND WEIGHT**



### **CONNECTIONS**



• 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: