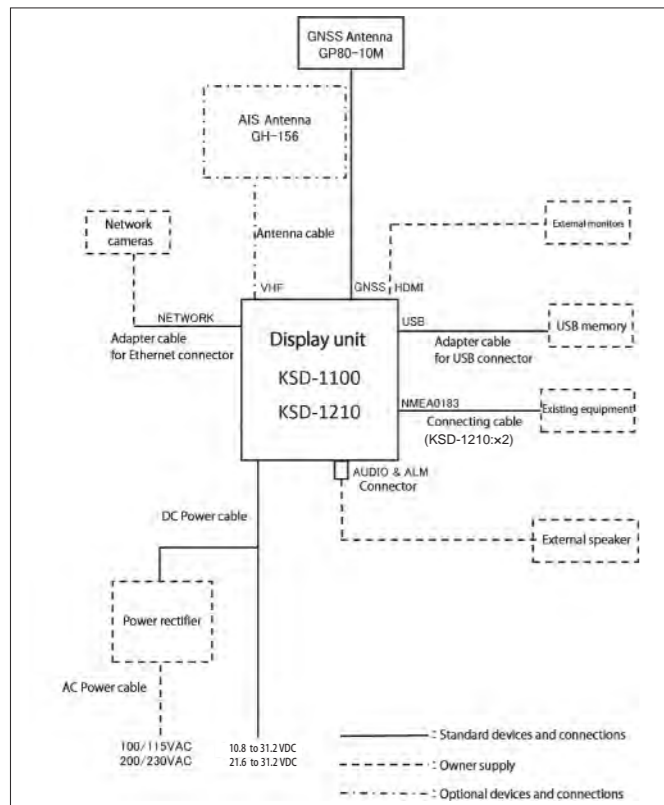


SPECIFICATIONS

Model	KSD-1100	KSD-1210
Operation System	Android 5.1 with OpenGL ES 3.0 & OpenCL 1.1	
CPU	Cortex-A17 Quad core	
CPU Speed	1.8 GHz 32 bit	
RAM	2GB DDR3 1333MHz	
Flash Memory	16GB	
Display Size and type	10.1 inch Capacitive multi touch screen	21.5 inch Capacitive multi touch screen
Brightness	600 cd/m ² (Max)	800 cd/m ² (Max)
Display Resolution	1280 x 800 (WXGA)	1920 x 1080 (1080P)
Power supply	10.8 VDC to 31.2 VDC	21.6 VDC to 31.2 VDC
Power Consumption	15W	60W
GNSS	GPS / BDS / GPS & BDS Position accuracy < 10m, 95% typical Cold start time: 32 sec or less, Warm start time: 1 sec or less	
Audio power	1W	3W
MicroSD Card Slot	2 ports (Support MicroSD card 32GB or less)	
Bluetooth	BT 4.0	
Wi-Fi	802.11 b/g/n	
Input data formats and sentences	NMEA0183 DPT, GGA, GLL, HDT, MTW, MWD, MWV, RMC, THS, VTG, ZDA	
Output data formats and sentences	NMEA0183 APB, BOD, BWC, DPT, GGA, GLL, GSA, GSV, HDT, MTW, MWD, MWV, RMB, RMC, THS, VTG, WPL, XTE, ZDA	
NMEA ports	Total: 4 ports Input: 2 Output: 1 Input / Output: 1 (Output: AIS fixed)	Total: 7 ports Input: 4 Output: 2 (GNSS or AIS or GNSS & AIS fixed: 1) AIS Output: 1
Audio output	1	
Alarm output	1	
LAN net work	1000 Mbps	
Operating Temperature	-15°C to +55°C	
AIS Class B		
Frequency	156.025 to 162.025 MHz	
Bandwidth	25 kHz	
Modulation	GMSK / FM	
Data rate	9600 bps	
Number of AIS transmitter	1 channel	
Number of AIS receiver	2 channels: Channel A CH87B (161.975MHz), Channel B CH88B (162.025MHz)	
Output power	2W	
Rx sensitivity	< -107 dBm @ PER<20%	

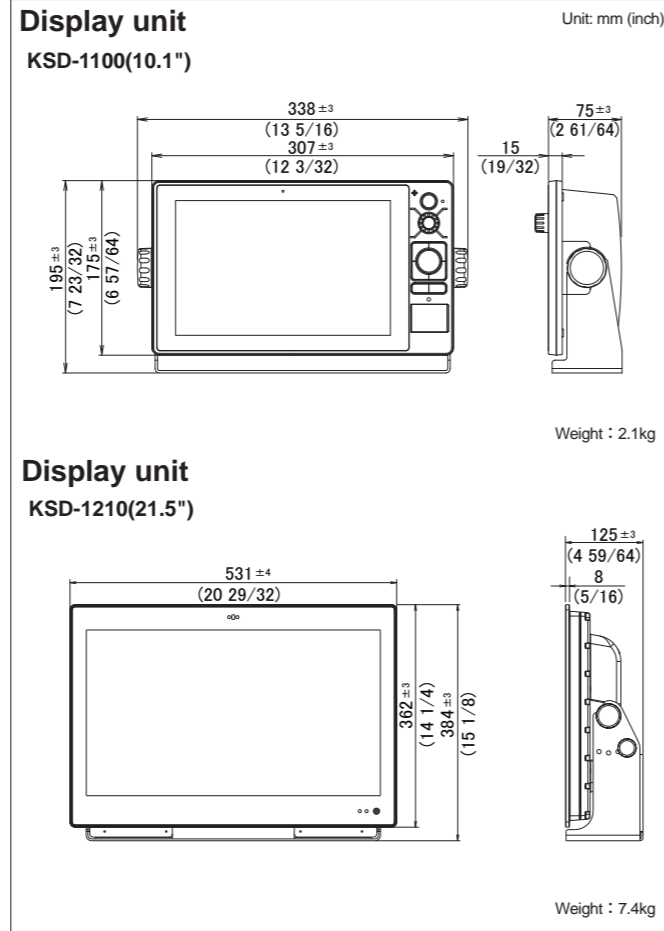
CONNECTIONS



EQUIPMENT LIST

Standard Equipment	Display unit	1
	DC power cable	1
	Connecting cable (KSD-1100)	1
	Connecting cable (KSD-1210)	2
	GNSS Antenna	1
	Adapter cable for USB connector	1
Options	Adapter cable for Ethernet connector	1
	Operation Manual, Connector, Connector cap, Installation material	
	AIS Antenna, AIS Mounting bracket Set	

DIMENSIONS AND WEIGHT



• Design and specifications are subject to change without notice.

KODEN

10.1-inch / 21.5-inch
Multi Function Display

KSD-1100 / 1210



AIS Class B

Built-in Class B AIS transceiver essential for safe navigation

Various screen displays

AIS radar screen which is easy to get the AIS information using ring markers / Dashboard to display various data / NAVI and PLOT data management / Tide information, etc., are possible.

Video surveillance

By installing network cameras*, it is possible to monitor onboard and outboard conditions up to four screens.

Chart display

Support variety charts of C-MAP (MAX), original chart, ENC chart. It also supports to overlay satellite images on the chart.

Easy operation

Easy touch screen and mouse* operation
The KSD-1100 is equipped with an operation panel.

*Owner supplied

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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:

The touch screen makes it easy to use! Easy to see! Affordable!
AIS Class B Transceiver integrated multifunction display

KSD series Multi Function Display provide an intelligent system and multi-task operation networking solution. It supports Ethernet, Wi-Fi to realize update software online and other cloud services.

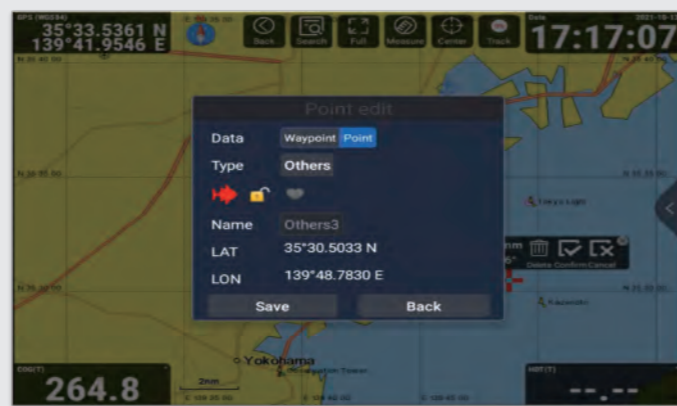
Chart Plotter

Compact and easy to use chart plotter. There are three kinds of chart ; C-MAP, ENC and original chart. (C-MAP & ENC are owner supply.)

Chart screen images



Original Chart



Plot Window



C-MAP MAX



ENC

Comfortable operations



Screen Operation



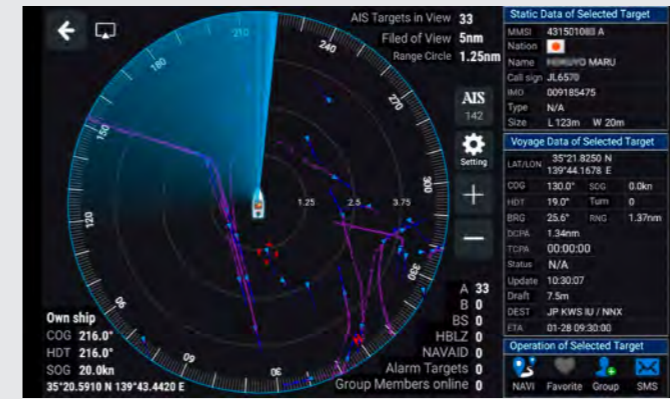
Panel Operation



Mouse Operation

Built-in AIS Class B Transceiver

Equipped with AIS (Automatic Identification System) Class B essential for safe navigation. The AIS target will be overlaid on chart with customer setting. AIS Class B transceiver will automatic transmit the own ship position, speed, course, MMSI, SMS etc.



AIS Radar

AIS targets overlaid on the chart, variable rang rings around own ship is shown by setting radius, it is for user reference easily to observe AIS targets real-time dynamic information.



AIS Group Management

AIS group management helps user to do real-time monitoring COG, SOG, HDG, distance moved and other dynamic information of each member by groups.

Dual monitor

You can connect to a sub-monitor to display a screen different from the main screen.

Dual screen images



Sub-Monitor



Chart plotter and Dash Board



Chart plotter and AIS Radar

Other screen images



AIS Target on Chart



Sailing Data



AIS List