

ONWA[®]

MARINE ELECTRONICS



KP-38A (5-inch)



KP-39A (7-inch)

MODEL

KP-38A/KP-39A

GPS Chart Plotter with built-in Class B+ AIS Transponder



Built-in AIS Transponder



K-CHART
Free detailed sea map



Support C-Map MAX



Compatible with Navionics+



exactTrax TRACKING SERVICE



AIS MESSAGING



AIS TRACK RECORDING



SD Card System Update



Display AIS Info

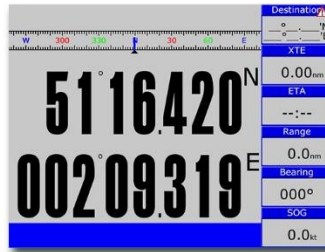
IP66
Ingress Protection

NMEA0183
NMEA Interface

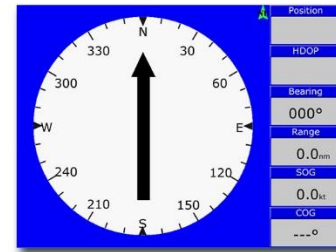
▶ DIFFERENT DISPLAY MODES



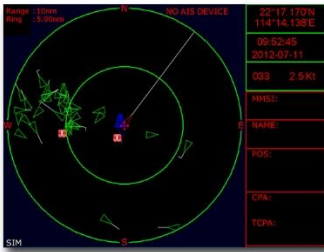
Plotter



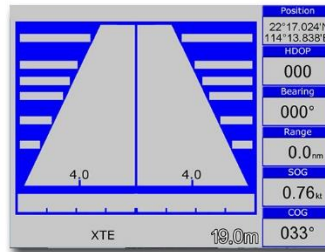
Navigation Data



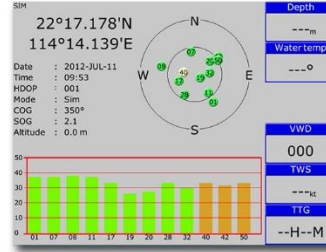
Compass



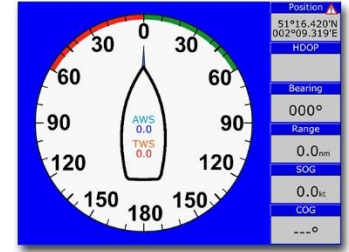
AIS



Highway



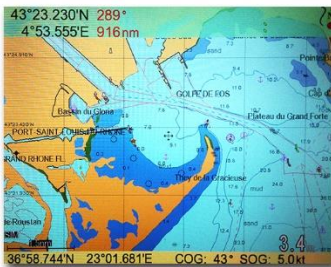
Satellite



Wind

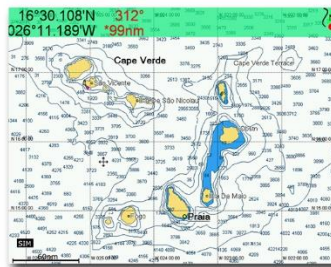
▶ GPS CHART PLOTTER

Compatible with the following mapping systems:



K-Chart Mapping System

ONWA Chart Plotters are compatible with K-Chart Mapping and displays worldwide Electronic Charts that users can use for FREE.



C-Map Max

ONWA Chart Plotters are also compatible with C-Map Max showing Nautical Charts



Navionics+

ONWA Chart Plotters when used with Navionics+ charts shows Nautical Charts and Sonar Charts. Advance options also include: Highlight Shallow Area, Adjust Contour Density and Shallow Fishing Range

Standard
Accessory



GPS Patch Antenna
with 4m cable (SMA connector)
Ingress Protection IP66

Optional
Accessory



KA-07
External GPS Antenna
with 10m cable
(Specify when ordering)

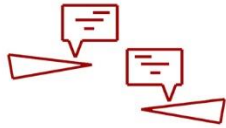
➤ AIS FEATURES



Class B+ AIS Technology

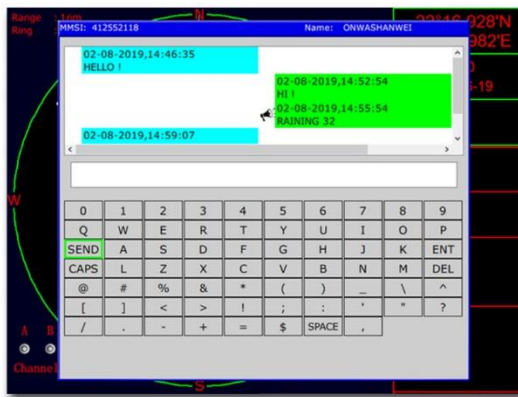
- **SOTDMA Technology** - Same technology used by Class A
 - Guaranteed time slot allocation
- **5W Transmission Power** - increases the range and AIS Satellite reception enabling Global tracking
- **Increased Transmission Rate** (Based on speed)

AIS Messaging



- Can send and receive composed messages between ONWA AIS plotters (Applicable for Plotters sold from September 2019 Onwards only)
- Messages can be Broadcasted or can be sent to a specific MMSI no.
- Message History and number of Unread messages can be viewed when a contact is selected
- Pop-up Box for Incoming Message Alert

NOTE: Contacts Shown are compatible ONWA AIS plotters with AIS Messaging Capability only
(Applicable for plotters sold from August 2019 onwards only)



Chat Sample

(Speaker icon shown when sent message is sent via Broadcast)



Chat History

can be viewed once specific MMSI is selected

exactTrax™

exactTrax Tracking

- > Integrated with exactTrax AIS satellite tracking technology service which provides the ability to track fishing boats and small commercial vessels with AIS Class B type transceivers across the globe



ExactTrax showing position of a vessel sailing for 1 week from Hong kong to Malaysia in multi-hour vessel track

NOTE: In order to use exactTrax, user must avail ExactEarth Service

AIS Target Tracking



- ONWA AIS Plotters now has the ability to record tracks of AIS Targets
- > **Auto AIS saved tracks:** Automatically records nearest 10 AIS targets within 1nm (1,000 Max records, once 1,000 records is reached, earliest record will be deleted)
 - > **Manual AIS saved tracks:** Record Manually selected AIS targets, Max = 10 targets/records
- Recorded tracks are useful when checking the records during an accident
 - Recorded tracks can be saved as a route



Points in the track shows the location, date, time, SOG and COG, etc.



Recorded Track saved as a route

CPA and TCPA Alarm



Alarm that helps the user to be aware of nearby vessels stating possible CPA and TCPA. The unit alarms until acknowledged

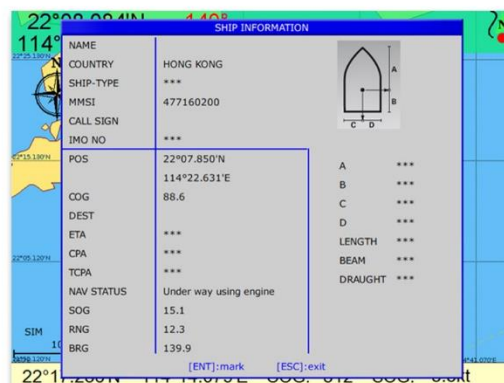
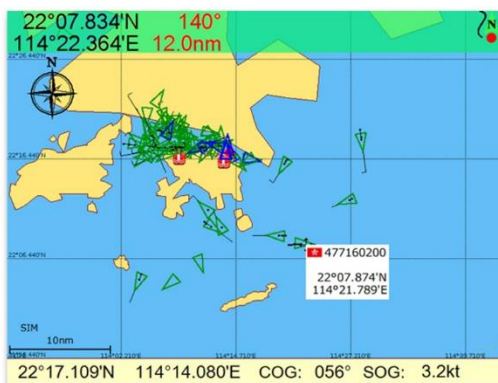
Vessel List

AIS SHIP LIST					Received targets: 41	
No.	NATION	MMSI	NAME	DIST	COG	TYP
000		050000002	HOSN WANG WEI YI	21.8	0.0	NET
001		009102242		0.1	***	B
002		009103057		0.1	0.0	B
003		009010120		0.1	0.0	B
004		009102360		0.2	0.0	B
005		000000083		1.3	0.0	A
006	HONG KONG	477995063		1.4	256.9	A
007	HONG KONG	477995066		1.8	340.1	A
008	BAHAMAS	308768000		1.9	71.1	A
009	HONG KONG	477995065		1.9	204.2	A
010	CHINA	413468840		2.2	101.7	A
011	HONG KONG	477995026		2.7	128.9	A
012	HONG KONG	477995032		2.8	0.0	A
013	HONG KONG	477995028		3.4	257.1	A
014	HONG KONG	477995070		4.1	71.0	A
015	HONG KONG	477995071		4.2	319.7	A
016	HONG KONG	477995126		4.2	175.4	A
017	HONG KONG	477995029		4.3	293.7	A

Shows nearby vessels, distance to your vessel and information. Selecting a target from the list shows the vessels details

AIS Targets Overlay in the Plotter Screen

Targets are overlaid in the Plotter screen and shows nearby AIS, pointing the cursor at one target shows the MMSI number and Location, selecting the target shows the targets ship details



PLOTTER CHARACTERISTICS

Waypoints/icons	12000 user waypoints with name, symbol 3 system waypoints: MOB, Start , Cursor 10 proximity waypoints
Routes	30 routes waypoint up to 170 points each, plus MOB and Track Navigation or GOTO Track modes
Tracks	8,000 points automatic track log;; 10 saved tracks (up to 8000 track points each) lets you retrace your path in both directions
Alarms	XTE, Anchor drag, arrival, speed, voltage, proximity waypoint, Timer and AIS (CPA and TCPA) alarm
Drawing	1000 Drawing Marks; 2000 Drawing Lines (40 points each); 1000 Drawing Place Name; 8 Colors for Drawing
Palette	Normal Daylight exposed to sunlight Night in dark environment NOAA paperchart colors Built-in Worldwide Tide data
Tides	Lat/Lon
Position format	Worldwide
Basemap	Compatible with K-Chart 2.0, K-Chart 3.0, C-Map Max and Navionics+
External Map	Internal backup of user settings or external SD-card
User data storage	5secs to 60 mins or 0.01 to 10nm
Plot Interval	0.001 to 700nm
Plotting scales	700 targets display
AIS	1000 Automatically saved tracks (100 points each) 10 Manually saved tracks (300 points each)
AIS Target Tracking	On/off (Available for C-Map only) Sunrise/Sunset Moonrise/Moonset
Perspective View	
Celestial	

NMEA SENTENCE SUPPORTED

INPUT: (Auto scan Baudrate)
GGA, GLL, GSA, GSV, RMC, HDG, HDM, HDT
VTG, ZDA, MTW, VWR, VWT, MWD, VPW, VHW
TLL, TTM, VDO, VDM, GNS, MTA
RMA, DBT, DPT, MWV, BWC, XTE, ZDL, WPL, AAM,
APB, BOD, RMB, DSC, MDA, RPM, XDR

OUTPUT:
Baudrate : Selectable 4800, 9600, 19200, 38400
GGA, GLL, RMC, GSA, GSV, AAM, APA
APB, BOD, BWC, BWR, DBT, DPT, HDT
MTW, RMB, TLL, VTG, WPL, XTE, ZDA
ZTG, ZDL, MWD, VPW, VWR, VWT
Outputs for autopilot:
APA, APB, BOD, XTE

EQUIPMENT LIST

Display unit
Quick manual
Mounting Bracket
GPS Patch Antenna with 4m cable (SMA connector)
Standard Accessories Pack

OPTIONAL ACCESSORIES

GPS antenna KA-07
VHF Antenna (KA-159) (For AIS communication)
KC-2W (N2K to NMEA0183 Bidirectional converter)
KW-360 Ultrasonic Weather Station
KA-GC9A (Heading Sensor)

GPS RECEIVER CHARACTERISTICS

Receiver	50 parallel channel GNSS receiver continuously tracks and uses up to 50 satellites to compute and update your position
Acquisition time	Cold start: 29 seconds Hot start: 1 second
Update rate	1 second
Accuracy	Position: 3 meters(95%) without S/A Velocity: 0.1 meter/sec without S/A
SBAS	Supported
Satellite System	GPS and BeiDou
Dynamics	Altitude: 18,000 m Velocity: 515 m/s WGS 84 & User defined GPS Patch Antenna
Datum	
Antenna	

GPS INTERFACE

GPS Data	RS232 input/output, NMEA 0183 V3.01 and V4.11
GPS Input Baudrate	Auto Scan (4800, 9600, 19200 and 38400)
GPS Output Baudrate	Selectable among 4800, 9600, 19200 and 38400

AIS INTERFACE

AIS Data:	RS232 output VDO, VDM, GGA, GSA, GSV and VTG
AIS Output Baudrate:	38,400

AIS CHARACTERISTICS

Frequency Rate	156.025 MHz~162.025 MHz
Access Scheme	SOTDMA
Channel Bandwidth	25 KHz
Modulation	GMSK
Data Rate	9,600 bps
Number of AIS Transmitter	1
Number of AIS Receiver	2
AIS Channel 1	CH 87B (161.975 MHz)
AIS Channel 2	CH 88B (162.025 MHz)
Tx Power Output	> 5 Watt (37 dBm ± 1.5 dB)
RX Sensitivity	< -107dBm @ 20% PER
RX Message Format	AIS Class A and B messages
Comply Standard	IEC-62287 IEC 62287-2 Ed. 2.0:2017

POWER SUPPLY

10.5 to 30VDC, current drain 1.5A at 12V

PHYSICAL

Size	KP-38A: 169(H)mm X 198.1mm(W) X 77mm(D) KP-39A: 187(H)mm X 250.1mm(W) X 88mm(D)
Weight	KP-38A: 0.8Kg KP-39A: 1.03Kg
Display	KP-38A: 5-inch Color TFT dayview LCD 800x480 pixels KP-39A: 7-inch Color TFT dayview LCD 800x480 pixels
Waterproofing	Display unit: IP66 Antenna unit: IP66
Temperature range	Display unit: -15°C to +55°C Antenna unit: -25°C to +70°C



KA-07
GPS Antenna



KC-2W
N2K (NMEA2000) and NMEA0183
Bidirectional Converter



KW-360
Ultrasonic Weather
Station/Anemometer

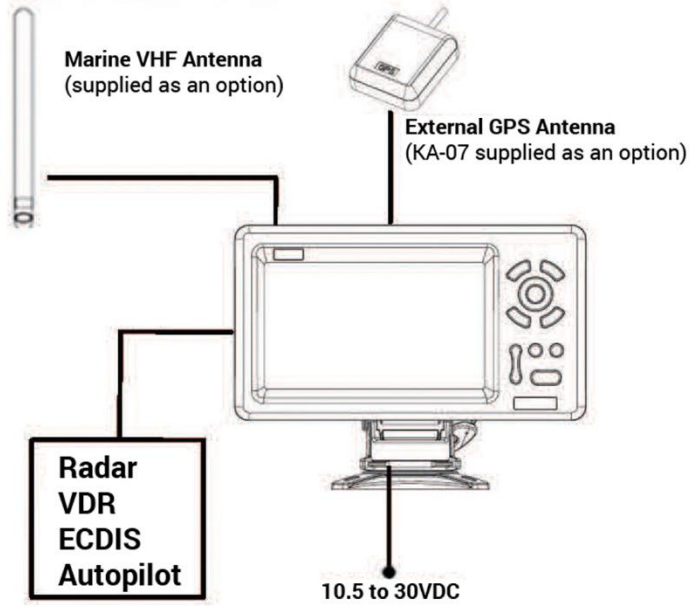


KA-GC9A
9-Axis Electronic Compass
with built-in High Accuracy
GPS Module



KA-159
VHF Antenna

INTERCONNECTION DIAGRAM



DIMENSIONS (DISPLAY UNIT)

