

KP-25 Series and KP-27 Series Quick Installation Manual



This manual is applied to KP-25 and KP-27

Verifying the contents

When you first time open the box of your plotter please confirm you have following items inside the box :

- Display unit(including installation bracket and ear clamp)
- GPS patch antenna
- Panel Cutout Pattern
- Quick start and installation manual
- Face mask and Panel Installation Sticker
- Standard accessories pack (one 8-core Power/Data Cable ,2 spare fuses, 4 bracket mounting screws , 8 panel mounting screws)

Plotter characteristics

Waypoints/icons:	12,000 waypoints with name, symbol, 10 proximity waypoint
Routes:	30 routes up to 170 waypoints each, plus MOB and Track Navigation or Goto Track modes
Tracks:	8,000 points automatic track log; 10 saved tracks(up to 8,000 track points each). lets you retrace your path in both directions.
Drawing Marks:	1000
Drawing Lines:	2000
Drawing Placename:	1000
Alarms:	XTE, Anchor drag, arrival, speed, voltage, proximity waypoint and time, AIS alarm.
Pallete:	Normal , Daylight exposed to sunlight , Night in dark environment , NOAA paper chart colors

Tides:	Built-in worldwide tide data
Position format:	Lat/Lon
Basemap:	Worldwide
External Map :	Compatible with K-Chart2.0, K-Chart3.0, C-Map Max and Navionics+
User data storage :	Internal backup of user settings or external SD card
AIS :	700 AIS targets display
AIS target tracking :	10 Manually saved tracks(300 points each)
AIS alarm :	CPA and TCPA
GPS Interface :	RS232/RS422 input / output, NMEA0183 V3.01 and V4.11

NMEA0183 Sentences 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, XTE, BOD

NMEA2000 PGN supported

GNSS :	126992, 129026, 129540, 129033, 129029, 127250, 127258, 129025, 129539, 129291, 129044
AIS :	129810, 129809, 129798, 129793, 129040, 129039, 129038, 129041, 129802, 129801, 129794, 129795, 129797
Sounder :	128267
Navigation :	127237, 129284, 129283, 127245, 127251, 128259, 128275
Environment :	130306, 130310, 130311, 130312

GNSS receiver characteristics

Receiver:	50 parallel channel GNSS receiver continuously tracks and uses up to 50 satellites to compute and update your position
GNSS:	Support GPS, Beidou and GLONASS (For KP-25, KP-25F, KP-27, KP-27F)Support GPS and Beidou (For KP-25A, KP-25X, KP-27A, KP-27X)
Acquisition time :	Cold start : 29 seconds , Hot start : 1 second
Update rate :	1 sec or 0.1 sec. selectable (For KP-25, KP-25F, KP-27 , KP-27F) 1 sec. (For KP-25A, KP-25X, KP-27A , KP-27X)
Accuracy:	Position : 3 meters (95%) without S/A Velocity : 0.1 meter/sec. without S/A
Dynamics :	Altitude : 18,000 meters , Velocity : 515 meter/sec.
Datum :	WGS84 , User define (For KP-25, KP-25F, KP-27, KP-27F)
SBAS :	Supported (For all models)
QZSS :	Supported (For all models)

ClassB+ AIS module characteristics (For KP-25A, KP-25X, KP-27A and KP-27X)

Frequency :	156.026MHz ~ 162.025MHz
Technology:	SOTDMA
Channel Bandwidth :	25KHz
Modulation :	GMSK
Data Rate :	9,600bps
No. of Transmitter :	1
No. of Receiver :	2
AIS Channel 1 :	CH87B (161.975MHz)
AIS Channel 2 :	CH88B (162.025 MHz)
TX Power Output :	>5 Watt (37dBm +/-1.5dB)
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
AIS Interface:	RS232/RS422 output, NMEA 0183 v3.01 / V4.11
AIS output sentences:	GGA, GSA, GSV, RMC, VDO, VDM (Baudrate : 38400)

HD Fishfinder Characteristics (For KP-25F, KP-25X, KP-27F and KP-27X)

Echo Color:	16 colors (including background color) according to echo intensity. The background color is selectable from blue, white and black.
Basic Range:	Meters 5/10/20/40/80/150/200/300/600/1000 Feet 15/30/60/120/200/400/600/1000/2000/3000 Fathoms 3/5/10/20/40/80/100/150/300/600
Range Shift:	Up to 1000 meters (3000 feet, 600 fathoms)
Auto Mode:	Automatic adjustment of range and gain
Display Mode:	High Frequency (200KHz), Low Frequency (50KHz), Dual (200K and 50K 1/2display on each), Zoom (200KHz and 50KHz zoom) and A-scope Display
Zoom Display:	Marker Zoom, Bottom Zoom and Bottom-lock Expansion
TX Frequency:	50 and 200kHz (alternately transmitted)
Power Output:	600W
Interference Rejecter:	Rejects unwanted signals by comparing last and present echoes in strength.
Alarm:	Fish and Bottom alarms, Temperature alarm (sensor required)

Physical:

size:	KP-25 Series: 143.1(H)mm X 215.3mm(W) X 63.1mm(D) KP-27 Series: 155.1(H)mm X 241.3mm(W) X 62.9mm(D)
-------	--

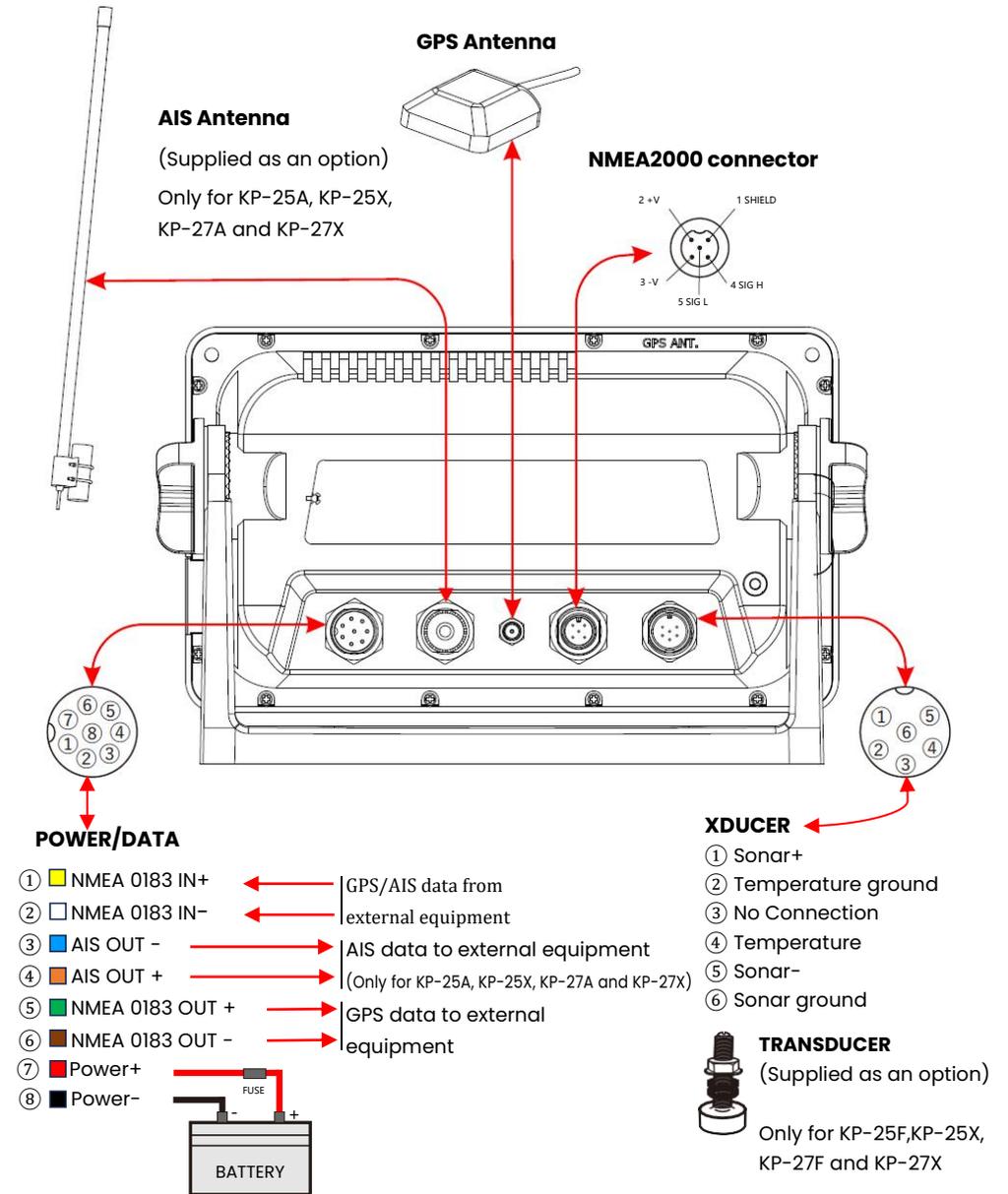
Waterproofing : Display unit & GPS antenna: IPX6

Temperature range : Display unit : -15°C to +55°C

GPS antenna : -25°C to +70°C

Power Supply: 10.5 to 35VDC, current drain < 1.0A at 12V

Interconnections



For more details please download the full manual from <http://www.onwamarine.com>

All specifications are subject to change without further notice!



Please consider the environment before printing the manual