

# K-Astral Series Quick Installation Manual



This manual is applied to K-Astral 8(A/C/X/S), K-Astral 12(A/C/X/S)

## Packing List

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

- Display Unit X 1 (including Screen Protection Cover)
- Bracket X 1
- 8 pin Power/Data Cable X 1
- Transparent Protective Cover X 1
- Quick Start Manual X 1
- Quick Installation Manual X 1
- Panel Cutout Template X 1
- Silicone Mounting Template X 1
- Spare Fuse X 2
- Bracket Mounting Screws(Stainless Steel) X 4
- Panel Mounting Machine Screws(Stainless Steel) X 4
- Panel Mounting Wood Screws(Stainless Steel) X 4
- Hex Nuts X 4
- Washers X 4
- Bracket Locking Knob X 2

## Chart Features

- Waypoints: Up to 12,000 (with symbols or names);  
10 most recent displayed
- Routes: 30 routes, up to 170 points per route
- Tracks: Auto record 80,000 points; 10 track lines  
(up to 8,000 points each)

- Alarms: 8 types — Cross Track Error (XTE), anchor drag, zone arrival, speed, voltage, timer, Wind Speed Alarm (AWS)
- Palette: Normal / Night / Daylight / Paper chart
- Projection: Mercator
- Position Format: Longitude / Latitude
- Maps: Worldwide Basemap
- External Maps: K-Chart / Navionics+ / C-MAP® DISCOVER™ X and REVEAL™ X
- User Data Storage: Internal memory or SD card
- Recording Interval: 1s–99h / 0.01–9.99 NM
- Chart Scale: 0.002–500 NM

## NMEA0183 Sentences Supported

- ◆ **INPUT:** auto scan baudrate  
GGA, GLL, GSA, GSV, RMC, HDG, HDM, HDT, THS, ZDA, MTW, VWR, VWT, MWD, VDO, VDM, MTA, DBT, DPT, MWV, WPL, XDR, BOD, VTG, BWR, BWC, XTE, VWR, VPW, AAM, RMB.
- ◆ **OUTPUT Baudrate: Selectable** 4800, 9600, 19200, 38400  
GGA, GLL, RMC, GSA, GSV, AAM, APA, APB, BOD, BWC, BWR, DBT, DPT, HDT, MTW, RMB, VTG, WPL, XTE, ZDA, ZTG, ZDL, MWD, VPW, VWR, VWT, HDM, THS, MWV, XDR, VDO, VDM, TLL.
- ◆ **Outputs for Autopilot:** APA, APB, XTE, BOD

## NMEA2000&OneNet PGN Supported

- Transmit & Receive:** 126992, 126993, 126996, 126998, 127237, 127238, 127245, 127250, 127251, 127252, 127257, 127258, 127488, 127489, 127493, 127506, 127508, 127513, 128006, 128007, 128008, 128259, 128267, 128275, 129025, 129026, 129029, 129033, 129038, 129039, 129040, 129041, 129044, 129283, 129284, 129285, 129291, 129539, 129540, 129793, 129794, 129795, 129797, 129798, 129801, 129802, 129808, 129809, 129810, 129811, 129812, 130306, 130310, 130311, 130312, 130578, 126208, 126464, 059392, 059904, 060160, 060416, 060928, 065240
- Receive:** 127497, 127498, 127505, 130314

## Power Supply

Series	Input Voltage	Max Power	Rated Current at 12V
K-Astral 12	10.5–31.2 V	24 W	2A
K-Astral 12A/C/X/S	10.5–31.2 V	24 W	2A
K-Astral 8	10.5–31.2 V	24 W	2A
K-Astral 8A/C/X/S	10.5–31.2 V	24 W	2A

## Physical Parameters

Series	Dimensions (L×W×H)	Weight	Display	Resolution	Display Area (W×H)
K-Astral 8 Series	276.1×165.9×81.9 mm (10.87×6.53×3.05 in.)	1.1 kg (2.4 lbs)	8" TFT LCD	1024×768	162.05×121.54 mm (6.38×4.79 in.)
K-Astral 12 Series	369.9×234.9×84.8 mm (14.56×9.25×3.17 in.)	2.4 kg (5.5 lbs)	12.1" TFT LCD	1024×768	245.76×184.32 mm (9.68×7.26 in.)

## Environmental Ratings (8 & 12 Series):

Water Rating: Display Unit IPX6  
 Operating Temperature: Display Unit -15°C to +55°C

## Radar Display Unit Parameters

Range scale (nm): Range, Range interval and number of Rings:  
 0.125(0.0625,2), 0.25(0.125,2), 0.5(0.125,4),  
 0.75(0.25,3), 1(0.25,4), 1.5(0.25,6), 2(0.5,4),  
 3(0.5,6), 4(1,4), 6(1,6), 8(2,4), 12(2,6), 16(4,4),  
 24(4,6), 36(6,6)

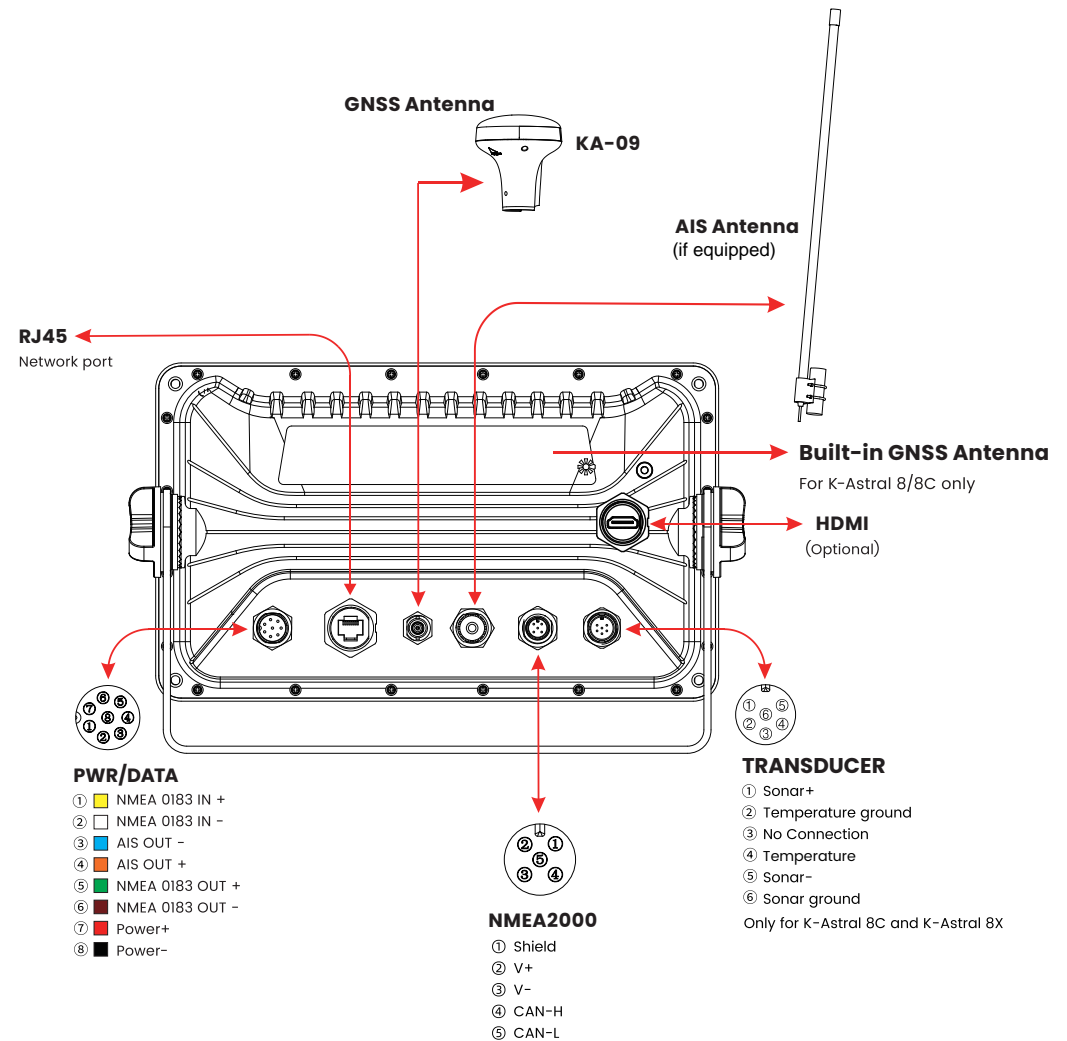
Range ring accuracy: 0.9% or range in use or 8 m, whichever is higher

Minimum range: Better than 25 m

Markers: Heading line, Bearing scale, Range ring, VRM, EBL  
 Tuning indicator, Cursor, Alarm zone, North mark  
 (heading sensor input required)

Alphanumeric indication: Range, Range ring interval, Pulselength,  
 Interference rejection (IR), VRM, EBL, stand-by  
 (sT-BY), Radar alarm, Echo stretch (Es), Range  
 to cursor, Bearing to cursor, Echo trailing (TRAIL),  
 Trail time, Trail elapsed time, Navigation data  
 (navigation input required), heading (HDG, heading  
 sensor input required)

## K-Astral 8 Series Interconnections



# K-Astral 12 Series Interconnections

