KODEN

GNSS Compass
KC-1400

Safe navigation with multi-GNSS compass system

Features

▶ **Compatible with GPS / QZSS, Galileo, BeiDou, GLONASS**

▶ **Highly accurate heading, position, speed, rolling, pitching and heaving data**

▶ **SBAS (MSAS / WAAS / EGNOS) enabled**

▶ **10,000 waypoints, 100 routes and 3,000 track points**

▶ **Built-in high-precision gyro sensor for backup**

▶ **Equipped with four data ports of NMEA0183 x 3, LAN (IEC61162-450) x 1**

▶ **4.3-inch high-resolution Color LCD**
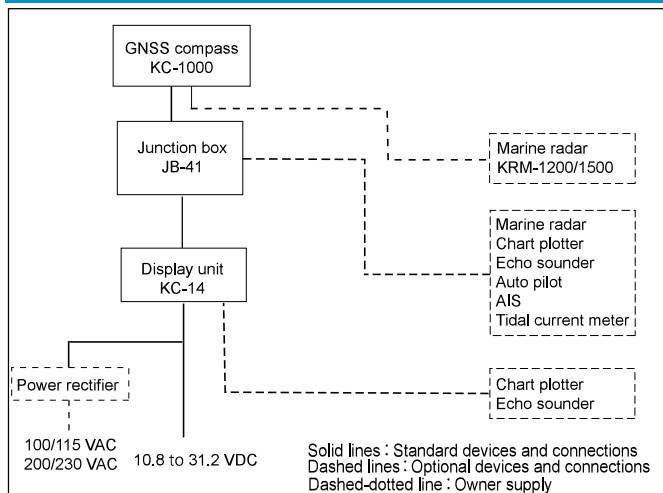
▶ **Equipped with numeric keypad**

SPECIFICATIONS

Model		KC-1400	
	Display unit	KC-14	
	GNSS compass	KC-1000	
Display size and type		4.3-inch color LCD (480x272 dots, effective picture area: 95.04x53.86 mm)	
Receiving frequency		1575.4200 MHz / 1561.0980 MHz / 1602.5625 MHz	
Receiving channel		72 channels	
Received signal		GPS QZSS Galileo SBAS	1575.4200 MHz	L1 C/A L1C/A, L1S E1 B/C L1 C/A
		BeiDou	1561.0980 MHz	B1
		GLONASS	1602.5625 MHz	L1 OF
Sensitivity		-148 dBm or less	
Setting time		90 seconds or less (standard)	
Time to position fix		50 seconds or less (standard)	
Accuracy	Heading	0.5° rms or less	
	Position	GPS: 10m (2 drms, SA: OFF, PDOP: 3 or less) SBAS: 3m (2 drms, SA: OFF, PDOP: 3 or less)	
	Velocity	1 m / sec (rms, SA: OFF, PDOP: 3 or less)	
Heading resolution		0.1°	
Maximum rate of turn		45° / sec	
Maximum role/pitch angle		30°	
Maximum follow-up acceleration		1 g	
Base line length		0.5 m	
Presentation mode		Compass 1, Compass 2, ROT, NAV1, NAV2, NAV3, Navigation Graph, Highway, Plotter, POB	
Position data display		Latitude/longitude in increments of 0.0001 minutes, converted Loran C LOPs, converted Loran A LOPs, converted Decca LOPs	
Navigational display		Speed, Course, Distance/Bearing/XTD/CDI/Time to Waypoint, Present time (UTC or LOC), Satellite status, Distance/Bearing between two points, POB display	
Instant (event) memory		1,000 points	
Waypoint memory		9,000 points	
Route memory		100 routes reverse trail possible	
Alarm		GNSS Fix, ANCH, PROX, XTD, CDI	
Compensation		Heading, Latitude/Longitude, LOP, Time difference, Pitch/Roll	
Magnetic compensation		Automatic or Manual	
Parameters		Sailing mode (Great circle / Rhumb Line), Position display (L/L Lop), Language, LOP (Loran C, Loran A, Decca), Memory of waypoints and name (up to 10 letters), Selection of measuring unit (nm, sm, km), Position/Velocity/Heading/Pitching/Rolling/ROT/Heaving averaging constant	
Output data format and sentences		NMEA 0183 Ver.2.0, IEC 61162-1ed5, IEC 61162-450 AAM, APB, ATT, BOD, BWC, DTM, GBS, GGA, GLL, GNS, GSA, GSV, HDM, HDT, HVE, RMC, ROT, RTE, THS, VTG, WPL, XTE, ZDA, PKODG21, ALC, HBT (DATA3/4 only)	
Power supply		10.8 to 31.2 VDC	
Power consumption (24 VDC)		12W or less	

Environmental

Operating temperature	Display unit	-15°C to +55°C
	GNSS compass	-25°C to +55°C
Water protection	Display unit	IPX4
	GNSS compass	IPX6

CONNECTIONS

GNSS compass KC-1000

Junction box JB-41

Marine radar KRM-1200/1500

Marine radar
Chart plotter
Echo sounder
Auto pilot
AIS
Tidal current meter

Display unit KC-14

Chart plotter
Echo sounder

Power rectifier

100/115 VAC
200/230 VAC 10.8 to 31.2 VDC

Solid lines : Standard devices and connections
Dashed lines : Optional devices and connections
Dashed-dotted line : Owner supply

EQUIPMENT LIST

Standard Equipment

Display unit	KC-14	With mounting bracket and hard cover
GNSS compass	KC-1000	With bird protector
DC power cable	CW-276-2M	With 5-pin connector and one end plain
Connecting cable	CW-430-5M	6-pin water resistant connector and one end plain
NMEA cable	CW-427-15M	12-pin water resistant connector and one end plain
Junction box	JB-41	For connection between Display unit and GNSS compass
Operation Manual, Installation material		

Option

Connecting cable, Junction box, Power rectifier, AC power cable, LAN cable,
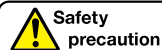NMEA extension cable, LAN extension cable

DIMENSIONS AND WEIGHT
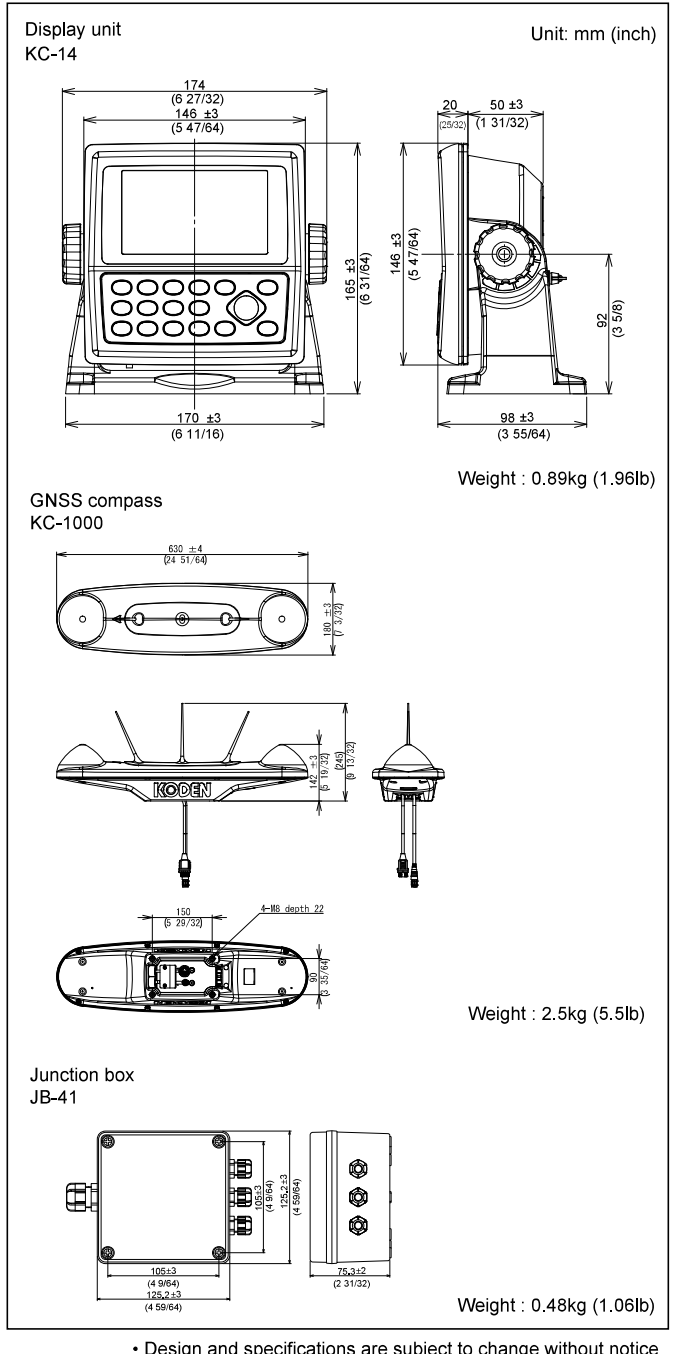
Display unit
KC-14   Unit: mm (inch)

Weight : 0.89kg (1.96lb)

GNSS compass
KC-1000

Weight : 2.5kg (5.5lb)

Junction box
JB-41

Weight : 0.48kg (1.06lb)

• Design and specifications are subject to change without notice.

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: