

LOWRANCE

SIMRAD

B&G

# GPS Antenna With built-in Heading Sensor

## Installation Guide ENGLISH

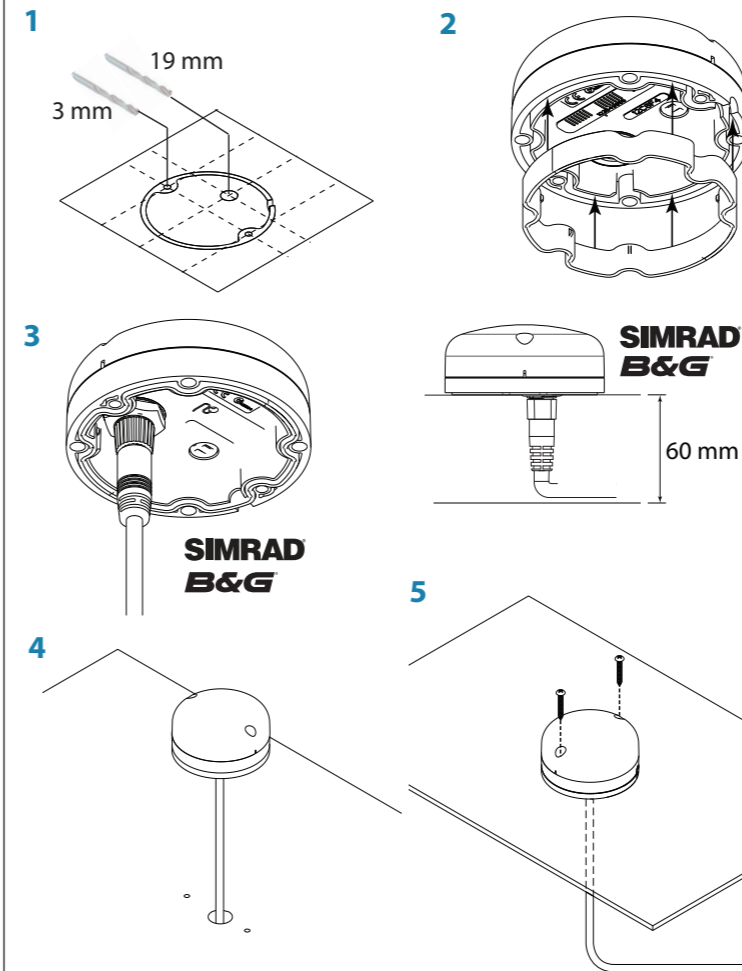


www.lowrance.com | www.simrad-yachting.com | www.bandg.com

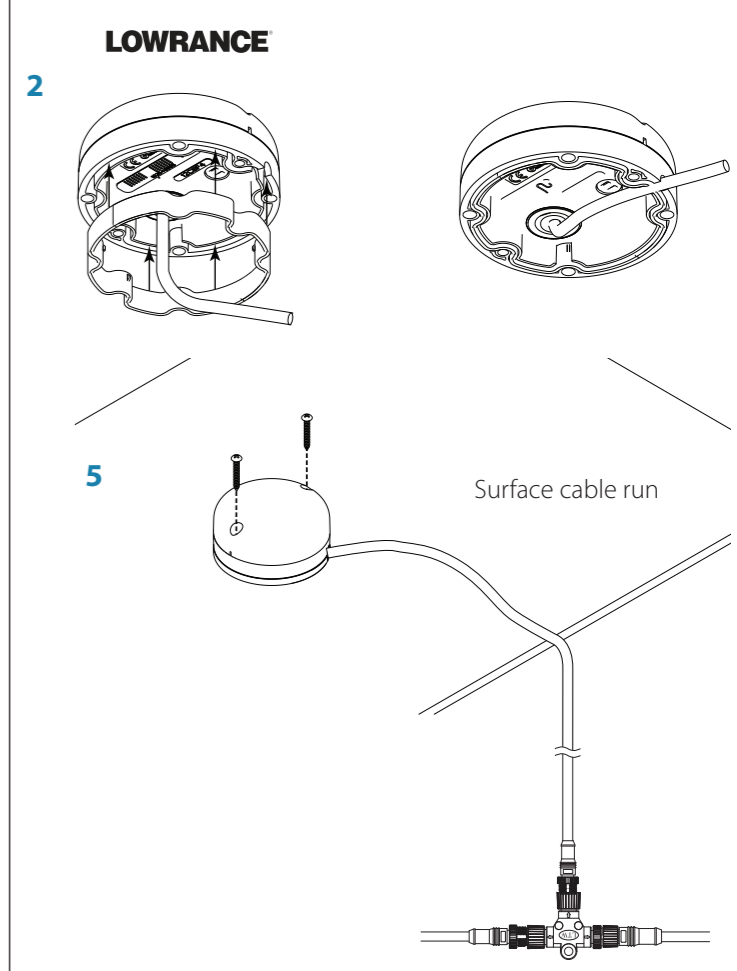
### Supplied parts

Lowrance® Point-1	Simrad® GS25	B&G® ZG100
Attached NMEA 2000® Drop cable 1.2 m (4 ft) + NMEA 2000® Drop cable 4.5 m (15 ft)	NMEA 2000® Drop cable 4.5 m (15 ft)	NMEA 2000® Drop cable 1.8 m (6 ft)

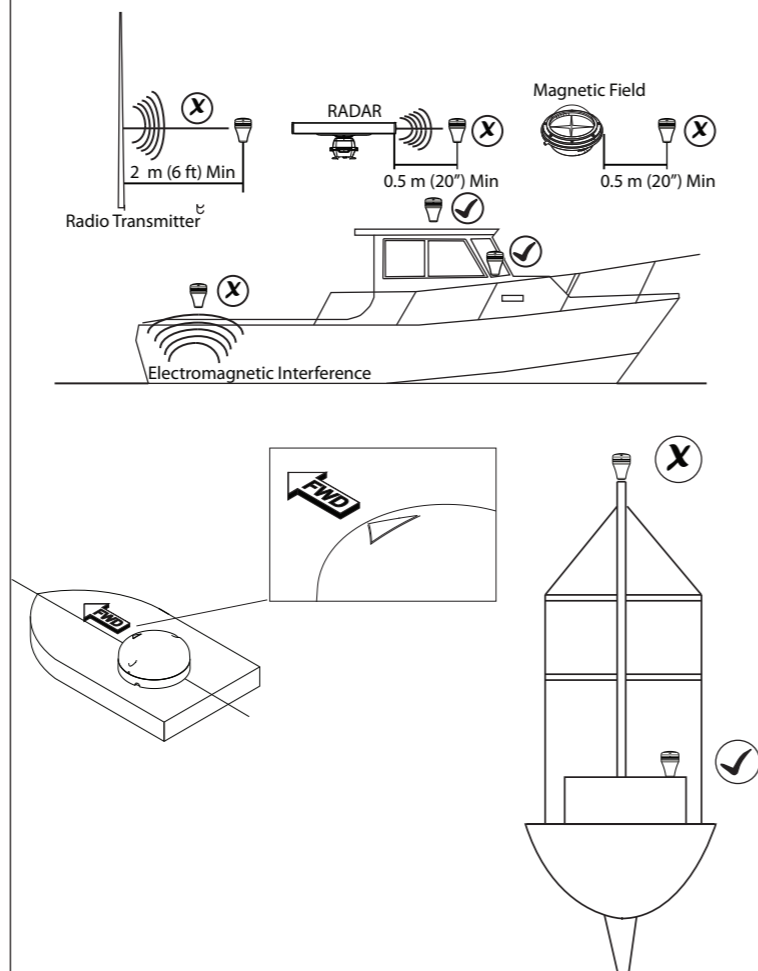
### Surface mount the antenna



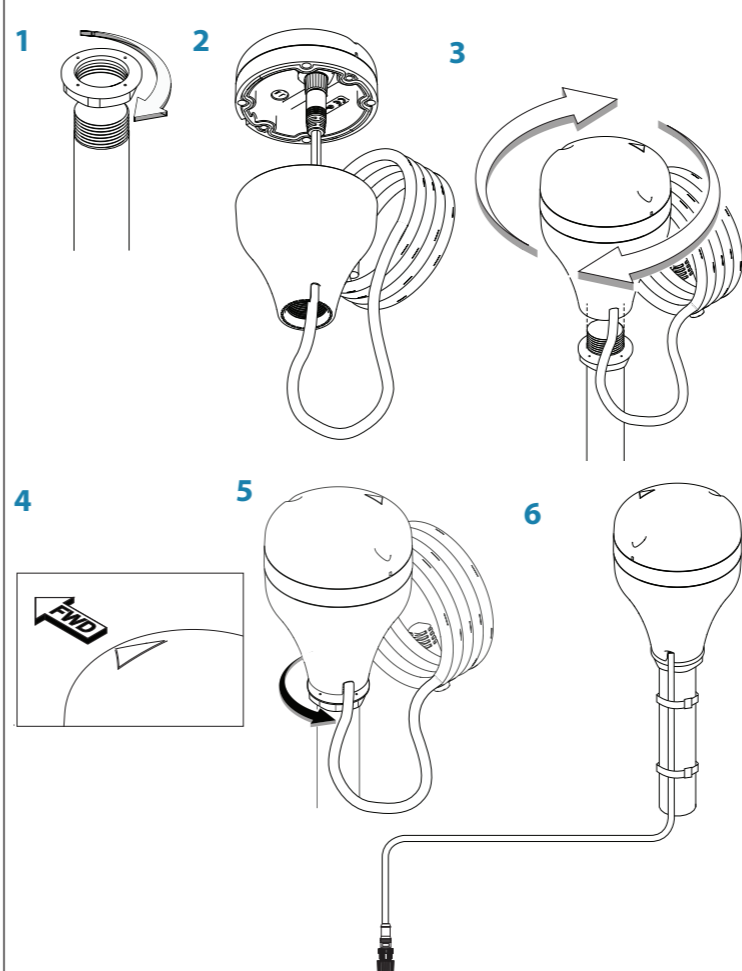
### Surface mount: Surface cable run



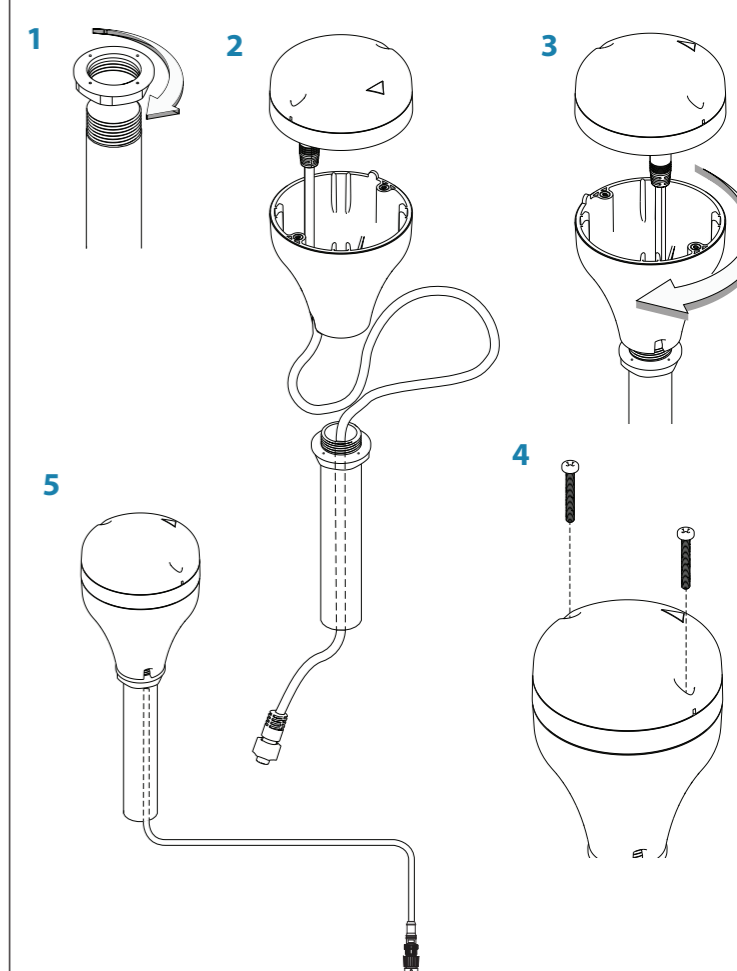
### Antenna mounting location



### Pole mount (external cable)



### Pole mount (Internal cable)



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## Specifications

### General

Receiver type	L1, C/A code, 1.575 GHz frequency/L2 C/A code, 1.602 GHz frequency
Channels	32 channels
Position update rate	Up to 10 Hz (1,5,10)
Horizontal accuracy	3 m (9,8 ft)
Heading accuracy	+/- 3°
Rate of turn accuracy	+/- 3°
Roll/Pitch accuracy at 30°	+/- 1°
Cold start	50 sec
Start-up time	3 sec
Satellite reacquisition	5 sec

### Environmental

Operating temperature	-25° C to +60° C (-13° F to +140° F)
Storage temperature	-40° C to +85° C (-40° F to +185° F)
Splash proof	IPX7
Humidity	40° C, 93% RH, operating

### Electrical

Input voltage	9 V DC - 18 V DC
Reverse polarity protection	Yes
Power consumption	< than 2 W
Current consumption	< 100 mA at 12 V DC
Dimensions	90 mm (diam) x 38 mm (height) 3.54" (diam) x 1.50" (height)
Weight	0.14 Kg (0.3 lbs) aprox
Power/Data cable	NMEA 2000® thru NMEA 2000® network
Antenna connector	NMEA 2000® Micro C
Mounting	Flush mount / Standard pole mount

### Communications

Data I/O Protocol	NMEA 2000®
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### NMEA 2000® PGNs

PGN Number	PGN Title
126992	System time
129025	Position, Rapid update
129026	COG & SOG RU
129029	Position data
129539	GNS DOP
129540	GNS Satellites in view
127258	Magnetic variation
127250	Compass heading (Vessel heading)
127251	Rate of turn
127257	Attitude

## Compliance Statements

**WARNING:** The user is cautioned that any changes or modifications not expressly approved by the part responsible for compliance would void the user's authority to operate the equipment.

Navico declare under our sole responsibility that the product conforms with the requirements of:

- Comply with CE under RED 2014/53/EU Directive.
- Comply with the requirements of level 2 devices of the Radiocommunications (Electromagnetic Compatibility) standard 2017.

The relevant Declaration of Conformity is available in the following website under model documentation section:  
www.lowrance.com, www.simrad-yachting.com, www.bandg.com

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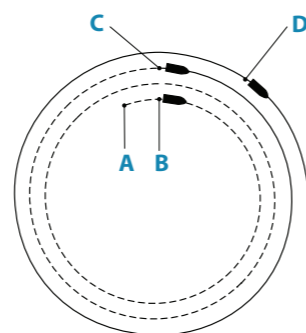
## Heading sensor calibration

The built in heading sensor will need to be calibrated before use to compensate for local magnetic fields on your vessel for accurate chart with radar overlay.

### Auto Calibrate mode

Before the heading sensor calibration is started, make sure that there is enough open water around for the vessel to make multiple full turns. The calibration should be done in calm sea conditions and with minimal wind to obtain best results.

<b>A</b>	Disconnect then reconnect the sensors NMEA 2000® cable.
<b>B</b>	Make two consecutive turns of 360 degrees. The completion of these two turns automatically activates the Auto Calibration procedure.
<b>C</b>	Continue with a smooth third turn and a quarter (of at least 390 degrees) within 2 to 5 minutes, to complete the calibration.
<b>D</b>	Calibration should be complete. If the time is outside the limits, the calibration is void and the radar overlay may not appear accurate on your chart. Repeat steps A-D if calibration fails.



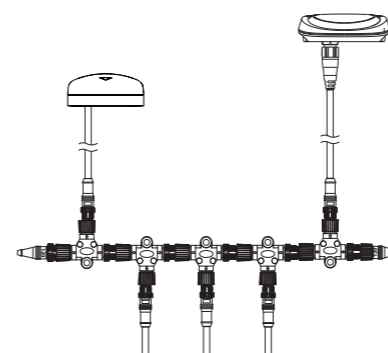
## Calibration from a Multifunction display

Calibration can be performed from a compatible Multifunction display, instrument display or autopilot controller. For more information, refer to the documentation for your display unit.

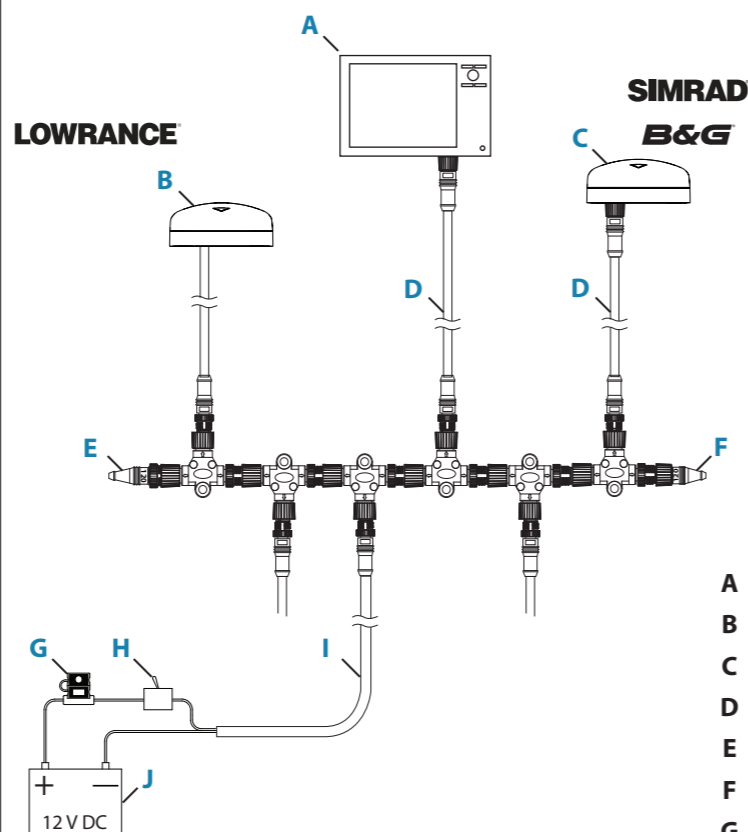
## Multiple heading sensors on the network

**WARNING:** Point-1 is a heading sensor and GPS antenna. By default, Point-1 is a heading sensor if there are no other heading sensors on the network. If there are two Point-1 units on the network, only one can be a heading sensor, the other will function as a GPS antenna. In this case, the Point-1 unit that is used as the heading sensor must be set to instance '1'.

If there is a Point-1 unit and another heading sensor on the network, such as Precision-9, the latter would be the heading sensor by default. If you have multiple Simrad® GS25 or B&G® ZG100 heading sensors on the network, your MFD will only receive data from the heading sensor set as the compass source in the system.

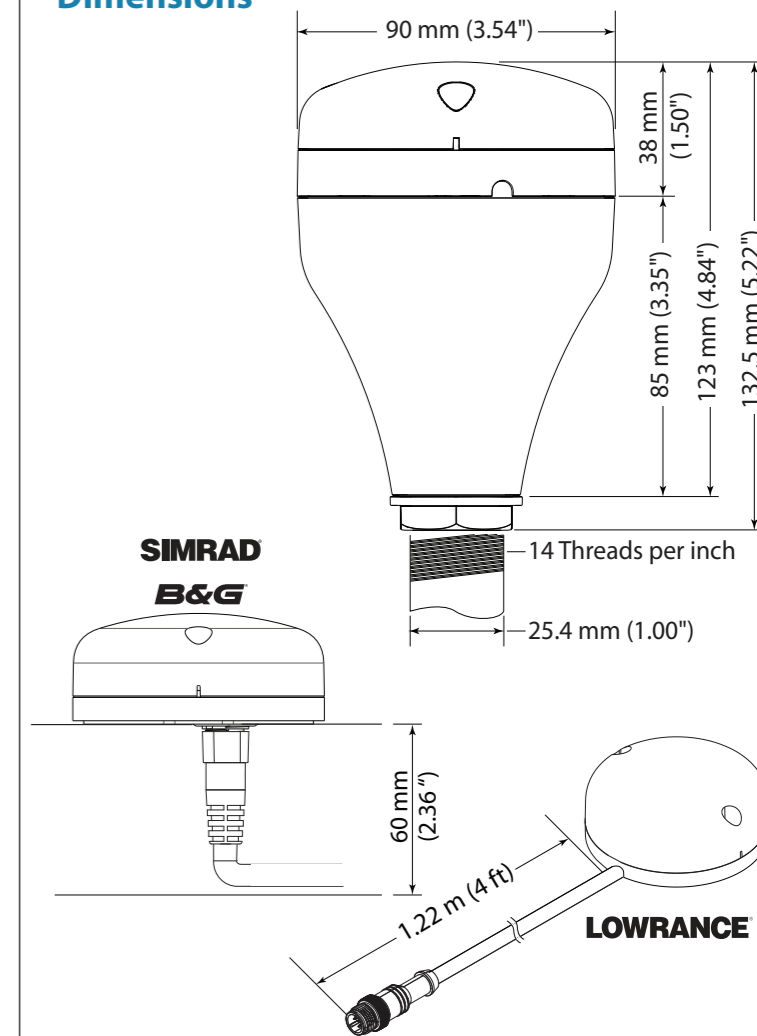


## Connection



- A** Multifunction display
- B** Lowrance® Point -1 or Baja has molded cable 1.2 m (4 ft)
- C** Simrad® GS25 or B&G® ZG100 : Requires NMEA 2000® Drop cable (D)
- D** NMEA 2000® drop cable max length 4.55 m (15 ft)
- E** 120 Ohm Terminator (male)
- F** 120 Ohm Terminator (female)
- G** Fuse (5 Amp)
- H** Switch
- I** NMEA 2000® Power cable 1.8 m (6 ft)
- J** 12 V DC Power supply

## Dimensions



## Heading sensor application

This sensor includes an electronic heading sensor to provide chart stabilization, course over ground at low speeds, and overlay of radar on charts.

✓	Acceptable performance for the application.
✗	A rate stabilized heading sensor such as Precision-9 will provide the most robust performance for demanding applications.
	<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  Point-1 GS25 ZG100         </div> <div style="text-align: center;">  Precision-9 compass         </div> </div>
	<div style="display: flex; justify-content: space-around;"> <div>✓</div> <div>✓</div> </div>
	<div style="display: flex; justify-content: space-around;"> <div>✗</div> <div>✓</div> </div>
	<div style="display: flex; justify-content: space-around;"> <div>✗</div> <div>✓</div> </div>

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