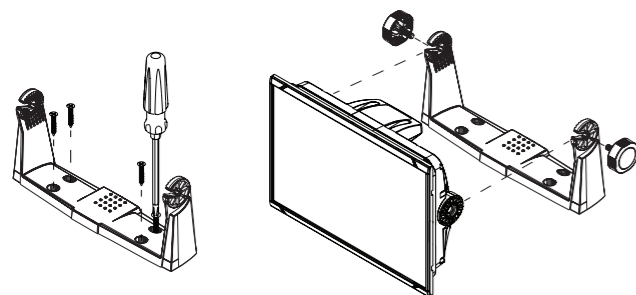


Technical specification

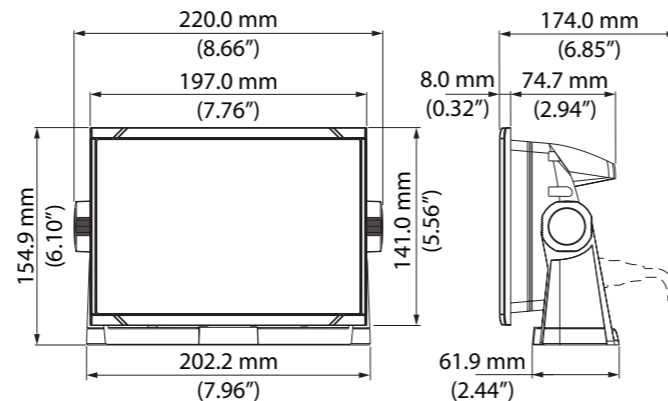
Display	
Resolution	800 x 480
Brightness	>1200 nits
Touch screen	Full touch screen (multi-touch)
Viewing angles (typical value at contrast ratio = 10)	Left/right: 70°, top: 50°, bottom: 60°
Electrical	
Supply voltage	12/24 V DC (9.0 - 31.2 V DC min - max)
Power consumption	680 mA/ 330 mA at 12 V DC (backlight full/off) 380 mA/200 mA at 24 V DC (backlight full/off)
Recommended fuse rating (12 V / 24 V)	3 A
Environmental	
Temperature range	-15°C to +55°C (5°F to 131°F)
Storage temperature	-20°C to +60°C (4°F to 140°F)
Waterproof rating	IPX2
Category	Protected
Shock, vibration and humidity	According to IEC 60945
Interface/Connectivity	
Ethernet	1x (RJ45) 100Base-TXS, 8P8C connector, IPv4
Maximum data rate	450 sps addressed to device, 500 sps unintended
Buffer capacity	Dynamic serial buffer
NMEA 2000	1x (Micro-C, 1 LEN)
Data card reader	1x slot (microSD)
Comms	
IEC 61162-2 ports	2x
Digital input	1x
Analog input	1x
Power output (+16 V DC, 70 mA)	1x
Physical	
Compass Safe Distance - Metric, imperial	0.9 m (2.95 ft)
Weight (display only)	1.32 kg (2.91 lbs)

For product manuals, technical specifications, certificates and declarations, refer to the product website:
<http://www.navico-commercial.com>

Bracket mounting

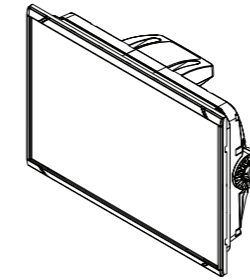


Dimensional drawings

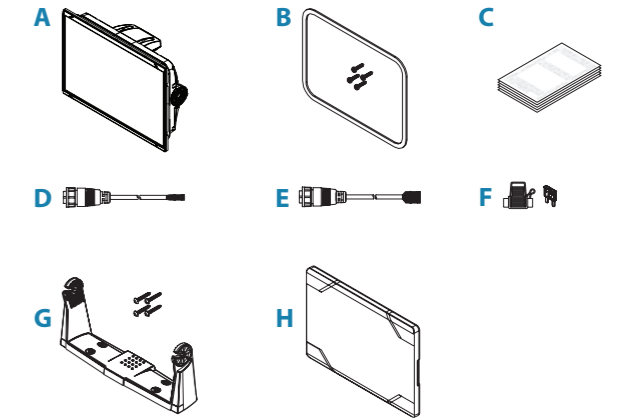


SIMRAD

P3007 Installation Guide

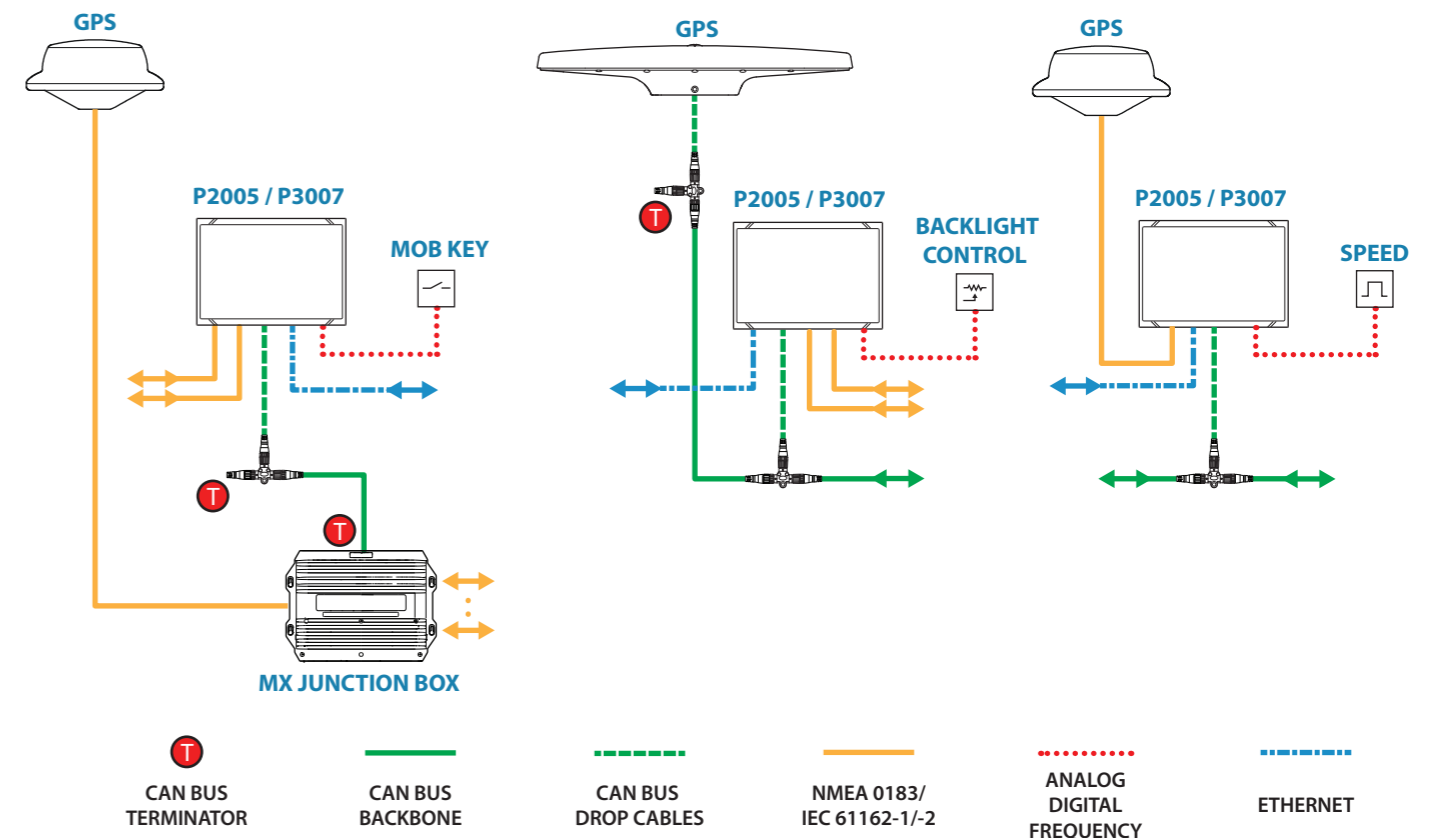


Parts



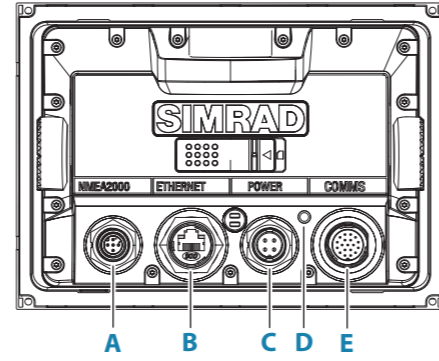
- A. P3007 unit
- B. Panel mounting kit
- C. Documentation
- D. Power cable
- E. Communication cable
- F. Fuse kit
- G. Bracket kit
- H. Suncover (sold separately)

System examples



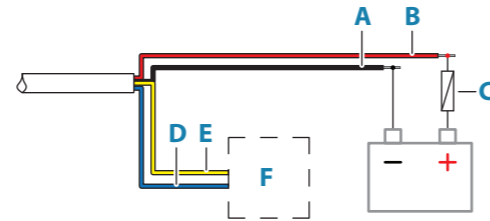
Connector overview

- A. NMEA 2000, Micro-C connector
- B. Ethernet, RJ45 connector
- C. Power and external alarm, 4-pin connector
- D. Ground, M4 threaded insert
- E. Comms (communication), 19-pin connector



Power and external alarm

- A. DC negative - black
- B. +12/24 V DC - red
- C. Fuse (3 A)
- D. Alarm output negative return - blue
- E. Alarm output (N/C isolated contact) - yellow
- F. Alert management system



→ **Note:** Refer to the technical specification for electrical details.

Ethernet

The unit is equipped with a standard RJ-45 connector.

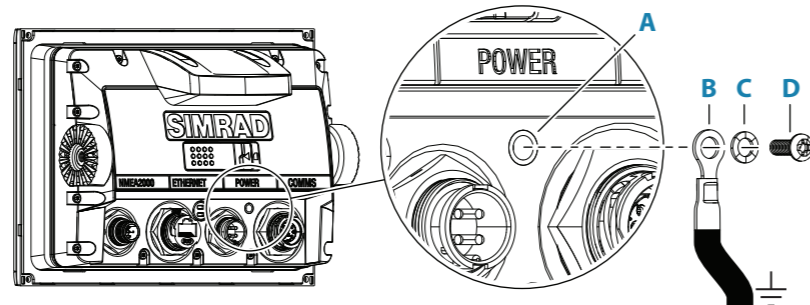
→ **Note:** Network switches can be used to extend the network. Routers and repeater hubs shall not be used.

NMEA 2000

The unit is equipped with a standard Micro-C connector.

Grounding

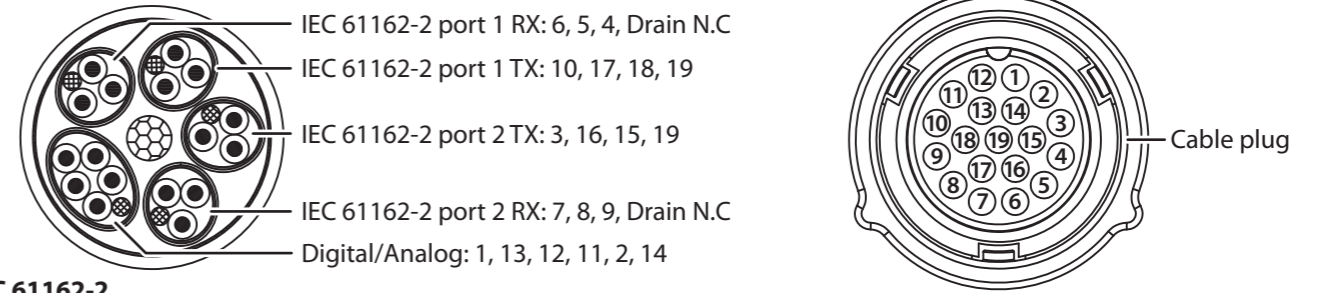
- A. Ground, M4 threaded insert
- B. Grounding cable, min. 0.82 mm² (18 AWG)
- C. Star washer
- D. Screw (M4-7 X 6 mm)



→ **Note:** It is recommended that the unit ground is connected to the vessel's bonded ground or a non-bonded RF ground.

Communication cable

Refer to the Operator Manual for software setup. Wiring illustrations only include the required wires for the example.



IEC 61162-2

Pin/Wire	Color	IEC 61162-2 port 1
10	black	TX common
17	white	talker (TX_A)
18	brown	talker (TX_B)
19	drain (gray shrink tube)	TX drain
7	black/white	RX common
8	yellow	listener (RX_A)
9	green	listener (RX_B)
N.C	drain (purple shrink tube)	RX drain

Pin/Wire	Color	IEC 61162-2 port 2
3	black/red	TX common
16	white/red	talker (TX_A)
15	brown/red	talker (TX_B)
19	drain (blue shrink tube)	TX drain
6	brown/red	RX common
5	yellow/red	listener (RX_A)
4	green/red	listener (RX_B)
N.C	drain (orange shrink tube)	RX drain

Direct antenna connection

- IEC 61162-2 port 1 GPS antenna
- 8 ← GPS primary output (TX_A)
 - 9 ← GPS primary output (TX_B)
 - 17 → GPS control input (RX_A)
 - 18 → GPS control input (RX_B)

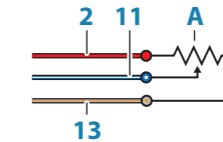
- IEC 61162-2 port 2 GPS antenna
- 4 ← GPS secondary output (TX_B)
 - 5 ← GPS secondary output (TX_A)

Analog input

The analog port can be configured for backlight control.

Pin/wire	Color	Backlight control
2	red	+16 V DC (max. 70 mA)
11	blue/white	signal in
12	blue/red	not used
13	gray/orange	ground
14	drain (clear shrink tube)	not used

A. Potentiometer (10 k - 100 k Ohm, 0.1 W)



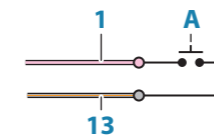
Digital input

The digital port can be used for either speed input or as an external MOB key.

Pin/wire	Color	Speed log	MOB
1	pink	signal in	signal in
13	grey/orange	ground	ground
14	drain (clear shrink tube)	not used	not used

MOB

A. Momentary push button



Speed

A speed log that outputs 200 pulses per nautical mile can be connected to the digital port.

A. Speed log (200 pulses/NM)

B. Ship's ground

