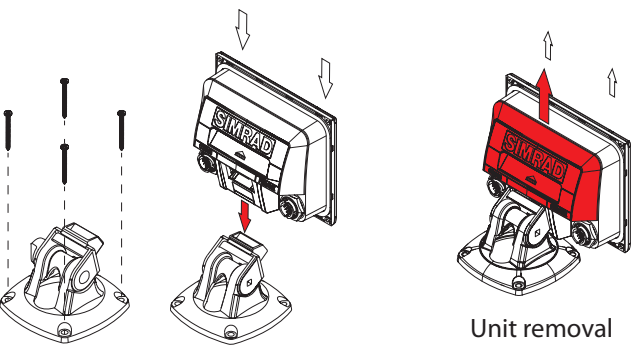


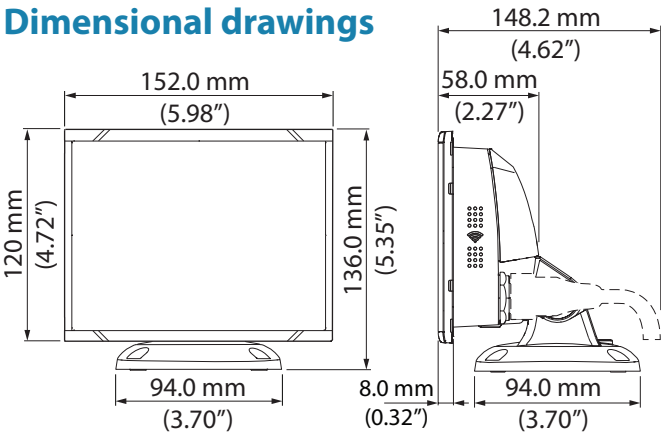
Technical specification

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	650 mA/320 mA at 12 V DC (backlight full/off) 350 mA/190 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	IPX6, IPX7	
Category	Protected	
Shock, vibration and humidity	According to IEC 60945	
Interface/Connectivity		
Ethernet	1x (RJ45) 100Base-TXS, 8P8C connector, IPv4	
Lightweight Ethernet protocol	IEE 802.3	
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	
Datagram types	NkPgN and UdPbC	
Physical		
Compass Safe Distance - Metric, imperial	0.6 m (1.97 ft)	
Weight (display only)	0.54 kg (1.18 lbs)	

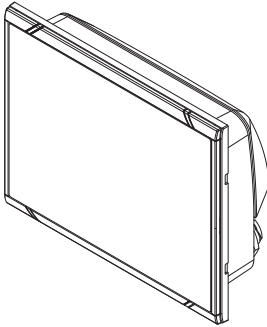
Bracket mounting



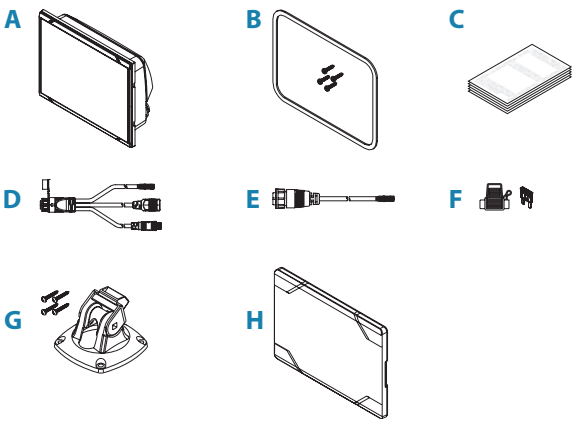
Dimensional drawings



P2005
Installation Guide

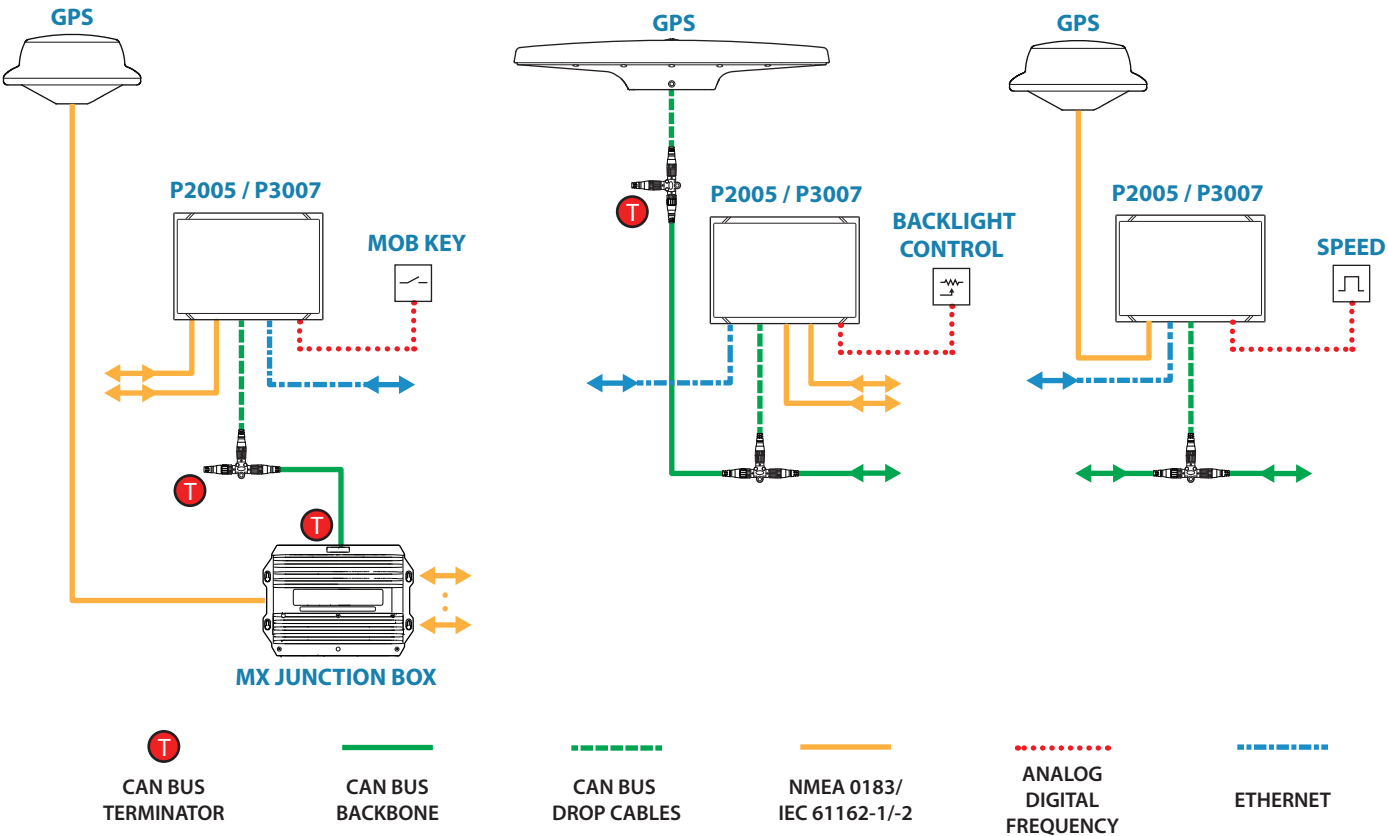


Parts



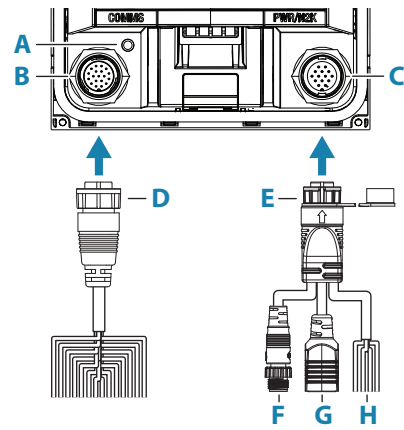
- A. P2005 unit
- B. Panel mounting kit
- C. Documentation
- D. 3-way adapter cable
- E. Communication cable
- F. Fuse kit
- G. Bracket kit
- H. Suncover (sold separately)

System example



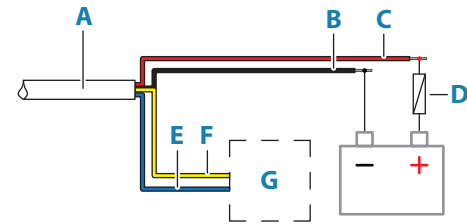
Connector overview

- A. Grounding, M4 threaded insert
- B. Comms (communication), 19-pin connector
- C. Power, external alarm, NMEA 2000 and Ethernet, 14-pin connector
- D. Communication cable
- E. 3-way adapter cable
- F. NMEA 2000, Micro-C connector
- G. Ethernet, RJ45 Ethernet connector
- H. Power and external alarm



Power and external alarm

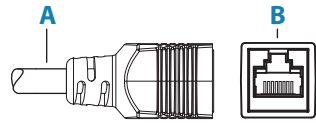
- A. 3-way adapter cable
- B. DC negative - black
- C. +12/24 V DC - red
- D. Fuse (3 A)
- E. Power failure alarm output (contact return) - blue
- F. Power failure alarm output (N/C isolated contact) - yellow
- G. Alert management system



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

Ethernet

- A. 3-way adapter cable
- B. RJ-45 connector

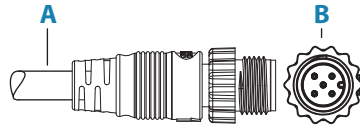


→ **Note:** Network switches can be used to extend the network. Routers and repeater hubs shall not be used.

Network traffic filtering by external managed switch supports IGMP version 2.

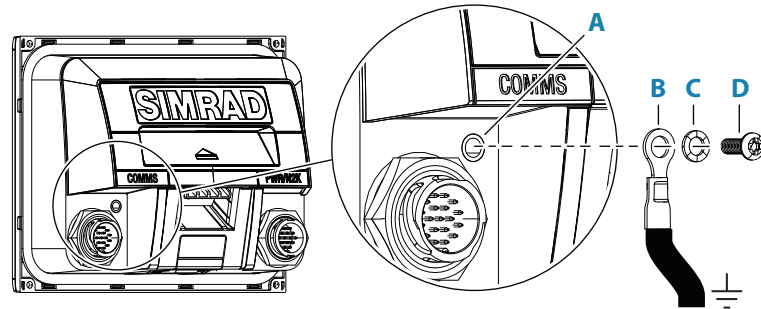
NMEA 2000

- A. 3-way adapter cable
- B. 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)



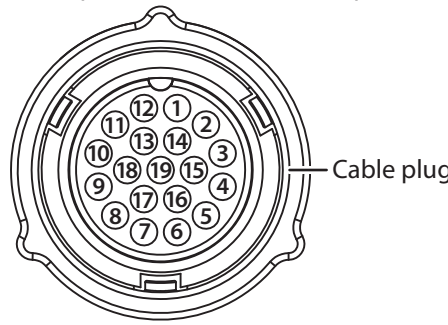
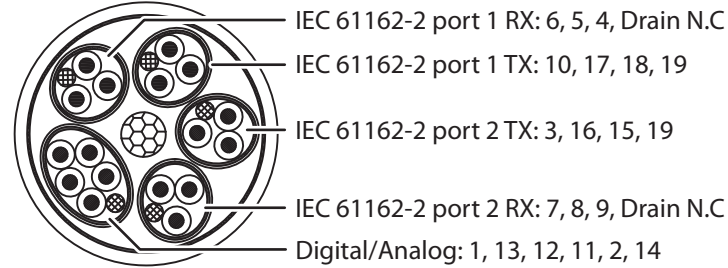
→ **Note:** It is recommended that the unit ground is connected to the vessel's bonded ground or a non-bonded RF ground.

For more information on alerts, refer to the Operator manual.

For product manuals, technical specifications, certificates and declarations, refer to: www.navico-commercial.com

Communication cable

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

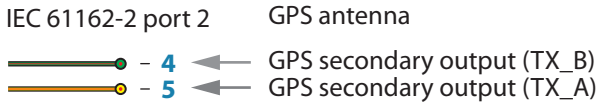
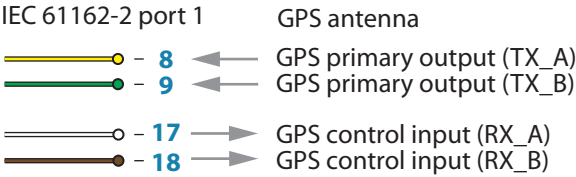


IEC 61162-2

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

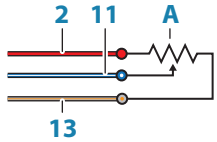


Analog input

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)



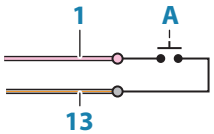
Digital input

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

