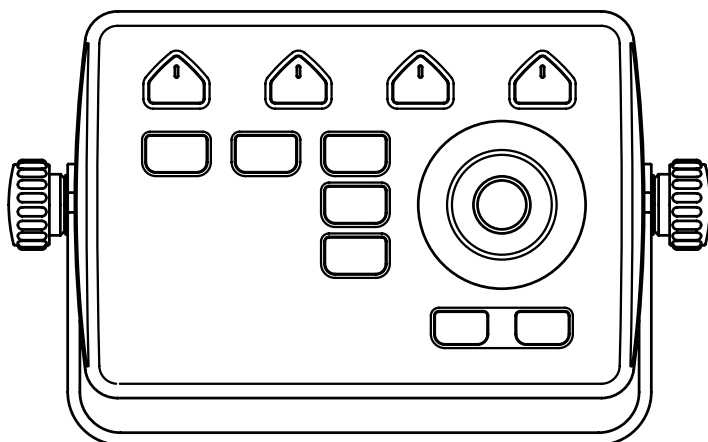




MMMC1LZAX022

LORENZ



MAGNUM Pro HD

WARNING AND INSTALLATION MANUAL

1. Warranty and warnings

Faser Srl warrants every units to be free from defects in material and workmanship under normal use and service for a period of 24 months from original retail purchase. During the warranty period, **Faser Srl** will repair or replace any component which fails in normal use without charges for parts or labour. Technological developments, modifications and upgrades of software are not covered by warranty (except commercial decision). To receive warranty service, contact your local authorized dealer for shipping instructions. The device should be securely packed with its tracking code clearly written on the outside of the package, shipping to be paid by the customer. Include a copy of the original sales receipt as the proof of purchase. This limited warranty does not extend to any device which has been subjected to misuse, neglect, accident, incorrect wiring or improper installation. **Faser Srl** reserves the right to repair or replace the device at its sole discretion.

For more warranty information please see the web site: www.lorenzmarine.com

For technical advice or assistance contact:










Faser Srl

Via Maestri del Lavoro d'Italia 8, 17019 Varazze (SV), Italy

P.IVA 01252330095

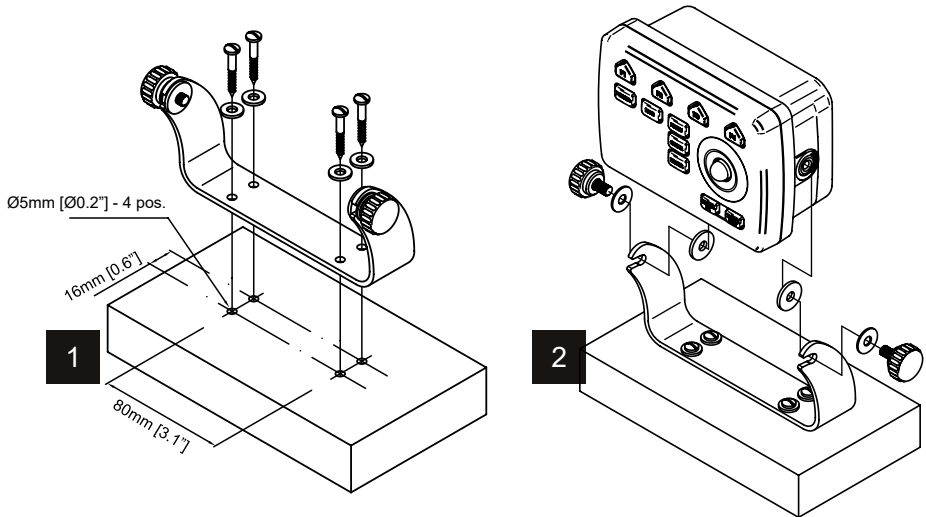
Tel. +39-019-93-27-05

info@lorenzmarine.com

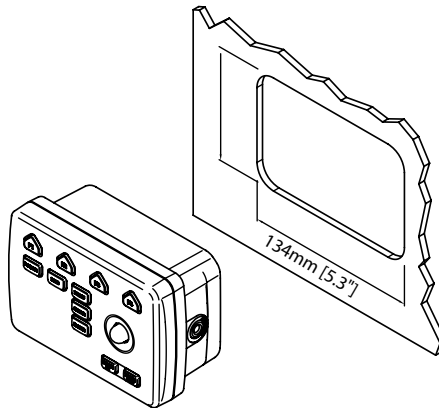
	Electronic charts displayed by the device are believed to be accurate and reliable, but they are not intended to replace official charts which should remain your main reference for all the matters related to the execution of safe navigation. For this reason we would like to remind you that you are required to carry on board and use the officially published and approved nautical charts.
	Please be aware that the serial ports are not opto-isolated and therefore the peripherals are electrically connected to the device. This allows the connection of high speed peripherals, like Fish Finder. If you are connecting a NMEA0183 peripheral and you would like to isolate it from the device, you have to add the opto-isolator externally.
	If water leaks into the equipment, immediately turn off the power at the switchboard. Fire or electrical shock can result.
	If the equipment is giving off smoke or fire, immediately turn off the power at the switchboard. Fire or electrical shock can result.
	Do not open the equipment. The equipment uses high voltage that can cause electrical shock.
	Keep the SD card slot's door closed to avoid water intrusion into the device
	Extensive exposure to heat may result in damage to the device.
	Please read through the device manual before the first operation. If you have any questions, please contact the Company's customer service or your local dealer.
	C-MAP media is available from C-MAP Authorized Resellers.

2. Installation

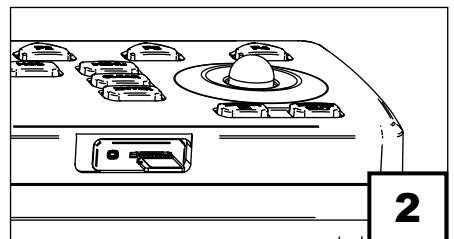
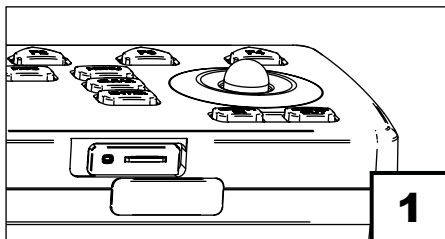
2.1 Bracket Mount



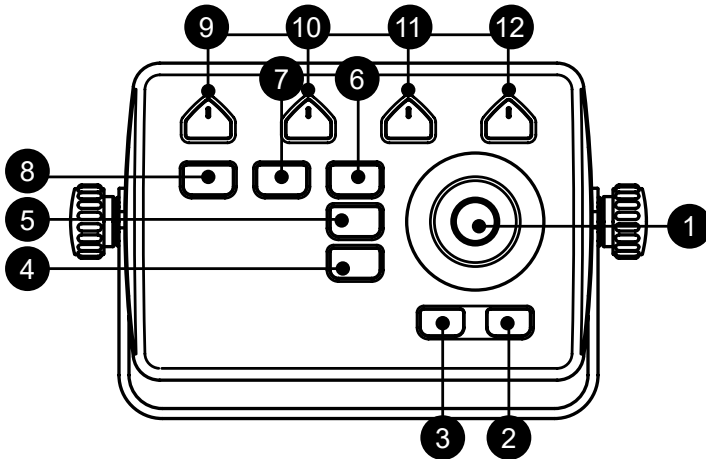
2.2 Panel Mount



2.3 How to insert the MicroSD

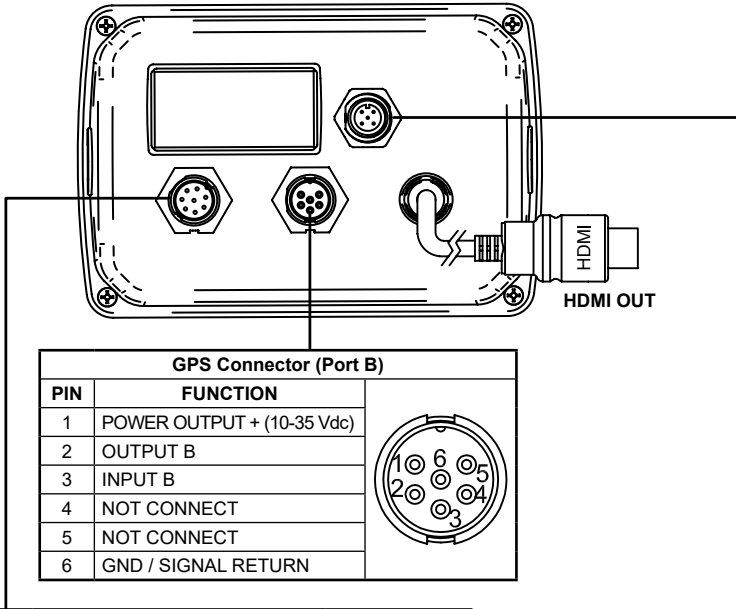


3. Keyboard

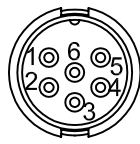


- 1 The joystick can move the cursor around the map or through menu items. Press [UP], [DOWN], [LEFT] or [RIGHT].
 - 2 [ZOOM OUT]
Change the scale of the map zooming out.
 - 3 [ZOOM IN]
Change the scale of the map zooming in.
 - 4 [ENTER]
Push it to confirm your choice. When on map page, it opens the contextual menu of a map object.
 - 5 [CLEAR]
Short press: exits from the current menu (back).
Long press: allows to come on the main page or, if you are on map page and the cursor is away from the boat position, centers the map on the boat position (home mode).
 - 6 [MENU] – [PAGE]
Short press: Menu – opens the main menu if pressed on one of the main pages (Map, Fish Finder, GPS status, Engine monitor). It selects the top bar control buttons if pressed on full menu pages such as Marks, Routes, Tracks and others.
Long press: Page – shows the main pages, it is the quicker way to switch between pages.
 - 7 [MOB]
Is a special key dedicated to man-over-board situation. Pressing MOB places a MOB mark on the current boat position and starts navigation to that place.
 - 8 [POWER] – [DAY / NIGHT]
Short press: allows switching Day/Night modes.
Long press: turns the device on/off when pressed and held in.
- [F1 – F4] are special keys. Each key can perform two functions: a short press performs the fixed function labeled on the keys unit face and on icon in the key. A long press (hold) executes the second function which can be customized. Read the software manual to learn how to customize the function keys.
- 9 [F1] – [EVENT]
Short press: Event – to add a new event.
 - 10 [F2] – [TRACK]
Short press: Track – start and stop the track.
 - 11 [F3] – [GOTO]
Short press: Go To – to navigate to a destination (desired position on map).
 - 12 [F4] – [PAGE]
Short press: Page – shows the main pages, it is the quicker way to switch between pages.

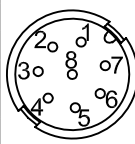
4. Connections scheme




GPS Connector (Port B)	
PIN	FUNCTION
1	POWER OUTPUT + (10-35 Vdc)
2	OUTPUT B
3	INPUT B
4	NOT CONNECT
5	NOT CONNECT
6	GND / SIGNAL RETURN



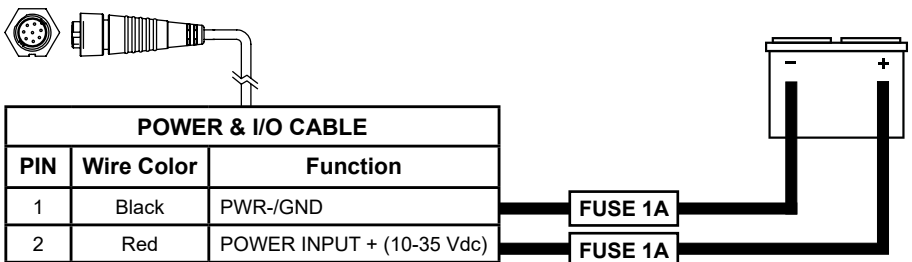
Power & I/O Connector (Port A and C)	
PIN	FUNCTION
1	PWR-/GND
2	POWER INPUT + (10-35 Vdc)
3	INPUT A
4	COMMON
5	OUTPUT C
6	OUTPUT A
7	INPUT C
8	EXTERNAL ALARM OUTPUT +



NMEA 2000 Connector	
PIN	FUNCTION
1	NOT CONNECT
2	POWER +
3	POWER -
4	SIGNAL H
5	SIGNAL L

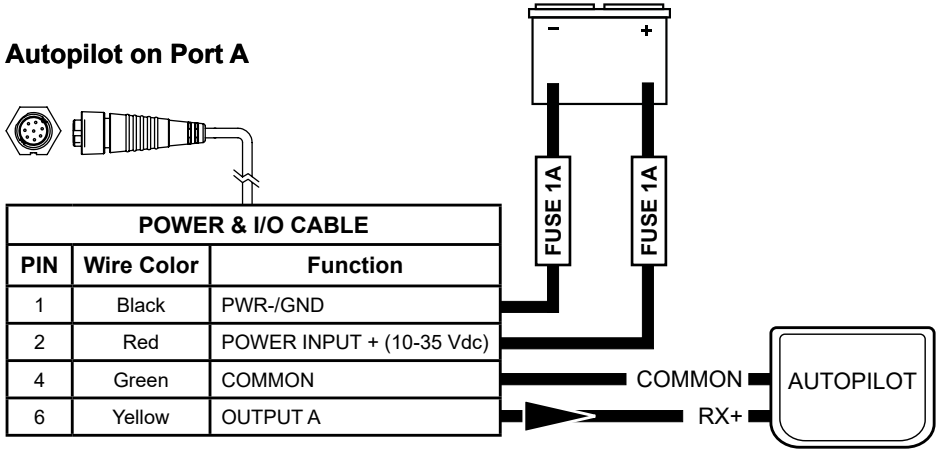


4.1 Power supply connection only

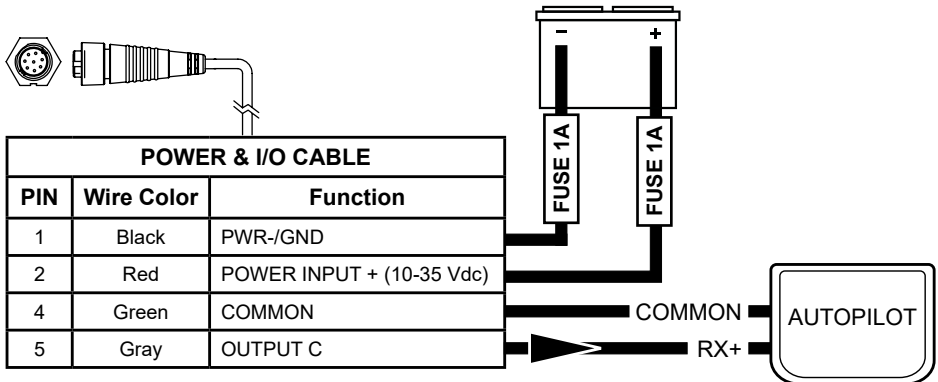


4.2 Autopilot Connections

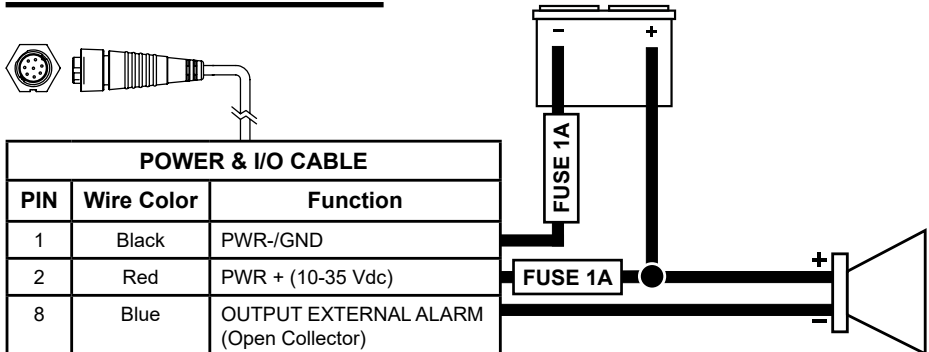
Autopilot on Port A



Autopilot on Port C



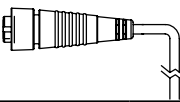
4.3 External alarm connection



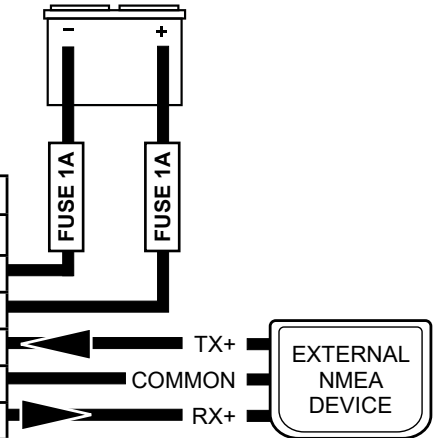
Note: Current MAX 300 mA

4.4 NMEA0183 Connections

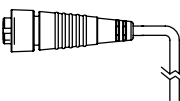
External NMEA on Port A



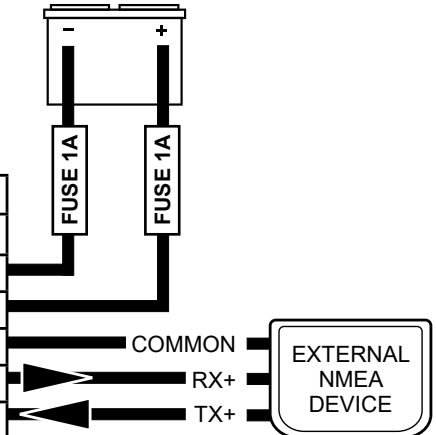
POWER & I/O CABLE		
PIN	Wire Color	Function
1	Black	PWR-/GND
2	Red	POWER INPUT + (10-35 Vdc)
3	White	INPUT A
4	Green	COMMON
6	Yellow	OUTPUT A



External NMEA on Port C



POWER & I/O CABLE		
PIN	Wire Color	Function
1	Black	PWR-/GND
2	Red	POWER INPUT + (10-35 Vdc)
4	Green	COMMON
5	Gray	OUTPUT C
7	Brown	INPUT C



5. Technical specifications

- Dimensions: 172.5 x 106.5 x 84.4 mm (6.8" x 4.2" x 3.3") with holder
- Weight: 350 g (12.3 oz)
- Back-lit keyboard
- Integrated remote control receiver (radio IF 2.4 Ghz)
- External GPS connector
- NMEA 2000
- NMEA 0183: 2x Rx/Tx on power cable
- External alarm
- Built-in HDMI video input cable (compatible with any HDMI display)
- Memory slot: MicroSD
- Wireless LAN connection compatibility*
- Mounting options: Bracket and flush mount
- Waterproof IPX6
- Supply Voltage: 10-35 Vdc
- Operating temperature: -10°C / +60°C
- Storage temperature: -20°C / +80°C
- Transmitting frequency range: 2400 - 2483 MHz
- Maximum transmitting power: 1mW (or 100mW*)
- Maximum power consumption: 4W (or 6.5W*)

*Wireless LAN version

6. Product conformity information

6.1 FCC compliant

This equipment has been tested and found to comply with the limits for a class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Changes or modifications not expressly approved by the AvMap Satellite Navigation could void the user's authority to operate the equipment.

Compliance information statement

Identification of the product	Name	P/N
	Magnum Pro HD Magnum Pro HD Wireless LAN version	P3MC1000LZ P3MC100WLZ
Certified components	Remote control receiver: FCC ID: CU9- P3MC1000 Built-in WiFi and BT wireless module (Wireless LAN version only): FCC ID: Z64-WL18SBMOD	
Applicable compliance statements	This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.	
Responsible party	Name	AvMap Satellite Navigation Inc
	Address	25 Enterprise Zone Drive, Riverhead, NY 11901, USA
	Phone	+1-800-363-2627
	Website	www.avmap.us

6.2 Simplified EU declaration of conformity

Hereby,
Faser Srl, Via Maestri del Lavoro d'Italia 8, 17019 Varazze (SV), Italy declares that the radio equipments in the following table are in compliance with Directive 2014/53/EU.

Magnum Pro HD	P3MC1000LZ
Magnum Pro HD Wireless LAN version	P3MC100WLZ

The full text of the EU declaration of conformity for every single product is available at the following internet address: eudeclaration.avmap.it