



MFD 7" Touch User's manual



Table of Contents

1. Included in the box.....	2
2. Mounting of the display.....	3
2.1 Bracket installation.....	3
2.2 Flush mount installation, alternative 1.....	4
2.3 Flush mount installation, alternative 2.....	6
3. Electrical installation.....	9
3.1 NMEA2000 connection.....	9
4. Settings & Configuration.....	9
4.1 Language.....	9
4.2 Alarm settings.....	10
4.3 Unit settings.....	10
4.4 Style settings.....	10
4.5 About.....	10
5. Supported NMEA2000 & J1939 Parameter Group Number (PGN).....	11
5.1 NMEA2000.....	11
5.2 J1939.....	11
6. Technical specifications.....	11

Wema MFD is a 7" TFT dedicated multi functional display with a colour touch display which shows real time engine data. The display has several options with 3 different display pages to choose from. The gauge can receive information from the NMEA2000 network or J1939.

1. Included in the box

- Wema MFD 7" Touch display
- NMEA2000 cable
- Bracket
- 4 pcs of M4x30 bolts and nuts for flush mount installation
- User's manual

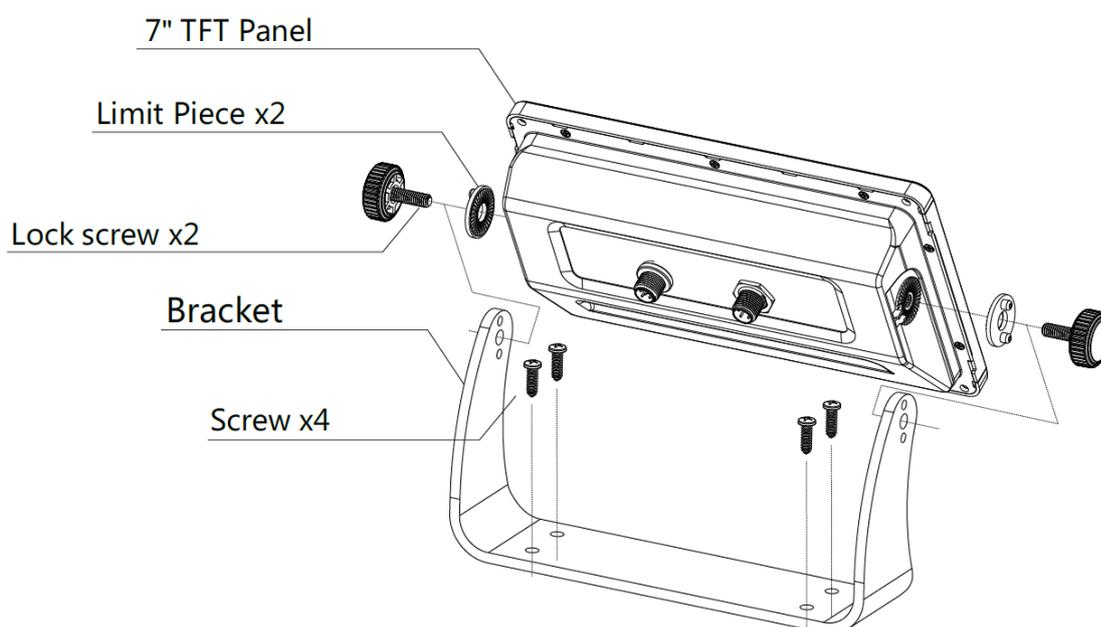


2. Mounting of the display

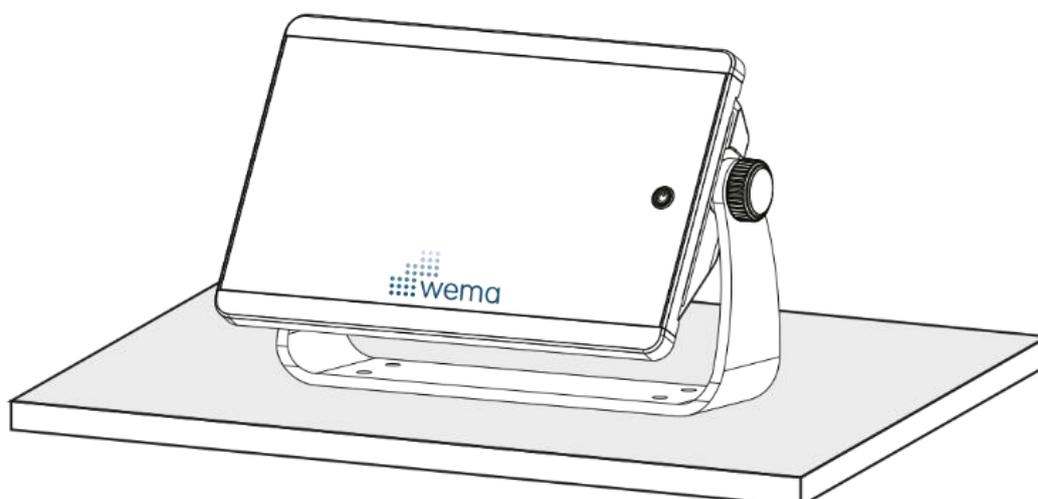
The Wema MFD 7" can be installed either with the bracket (see part 2.1) or flush mounted (see part 2.2 and 2.3).

2.1 Bracket installation

1. Make sure there is enough space for the display and the cable.
2. Mount the bracket using 4 pcs 5,5 mm screws according to picture 1 below.
3. Mount the display on the bracket using the two lock screws according to picture 1 below.
4. Installation is done according to picture 2 below.



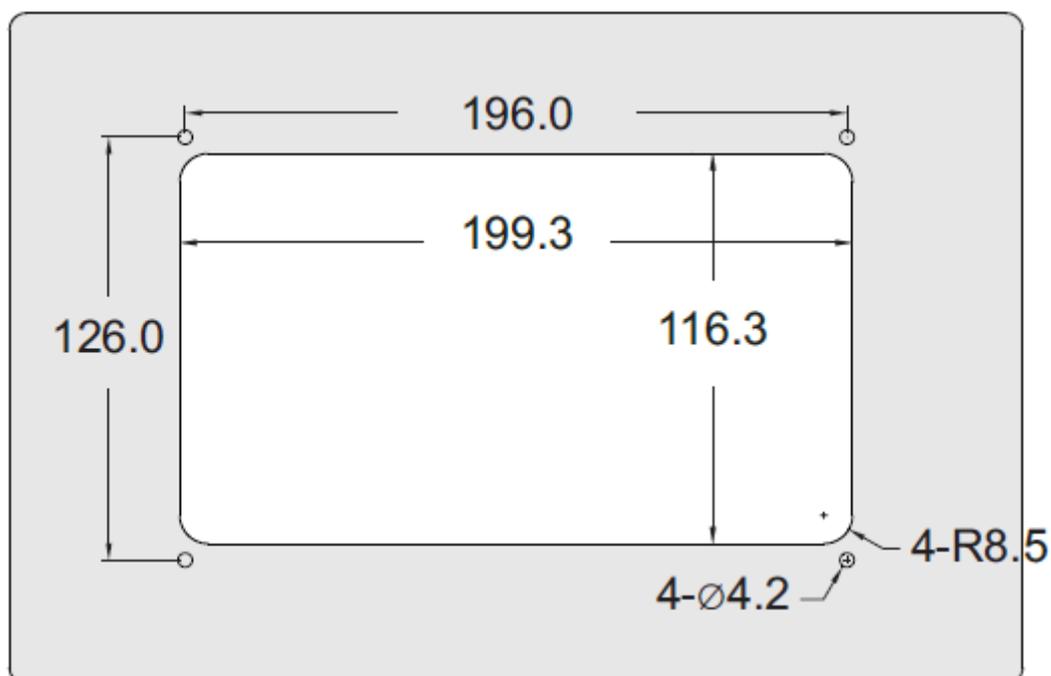
Picture 1



Picture 2

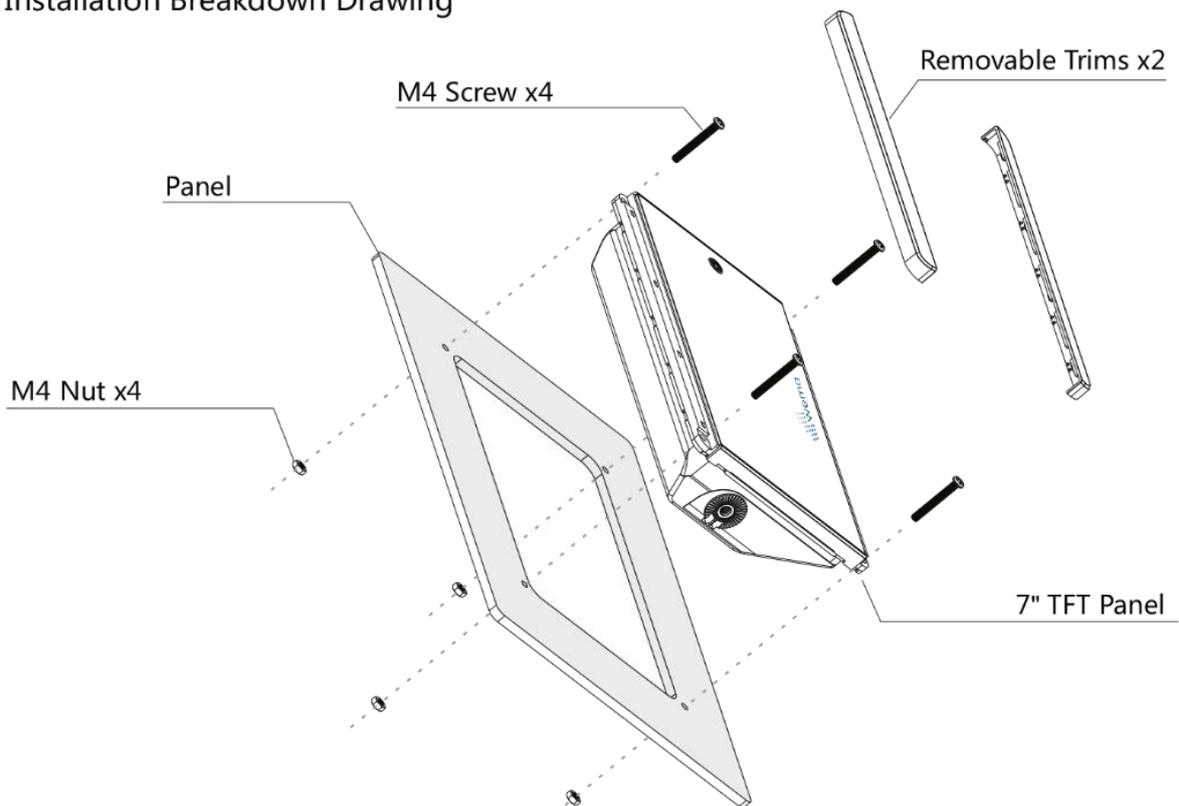
2.2 Flush mount installation, alternative 1

1. Make sure there is enough space for the gauge and the cable. You will need a minimum clearance at 150 mm behind the instrument panel to fit the MFD.
If a Wema L-connector (part no 220025) is used, you will only be needing a 85 mm clearance behind the panel.
2. Cut a 199,3x116,3 mm hole according to picture 3 below.
3. Drill four 4,2 mm holes for the M4 fastening bolts according to picture 3 below.
4. Connect the NMEA2000 drop cable to the left connector (when seeing the display from the back side) if you can't access it afterwards.
5. Insert the MFD from the front and tighten the four M4x30 mm bolts according to picture 4.
6. Attach the two trims/ covers for bolts according to picture 4.
7. Installation is done according to picture 5.

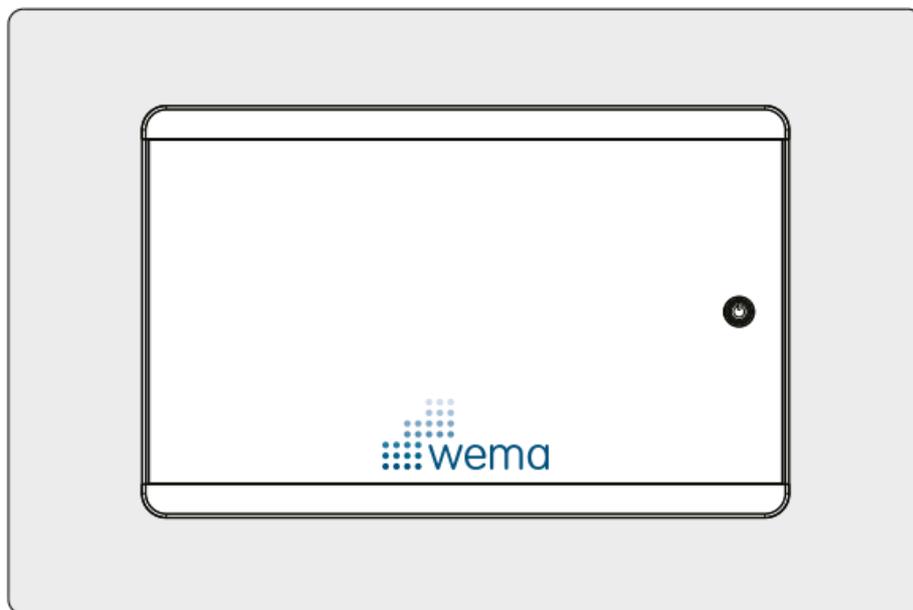


Picture 3

Installation Breakdown Drawing



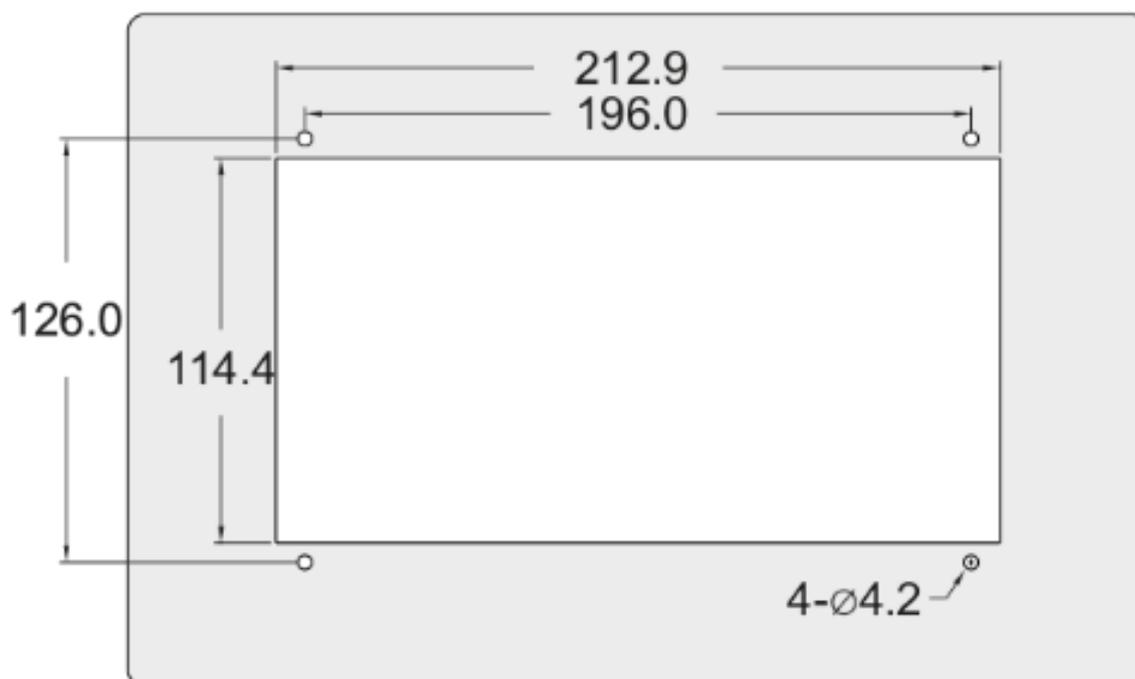
Picture 4



Picture 5

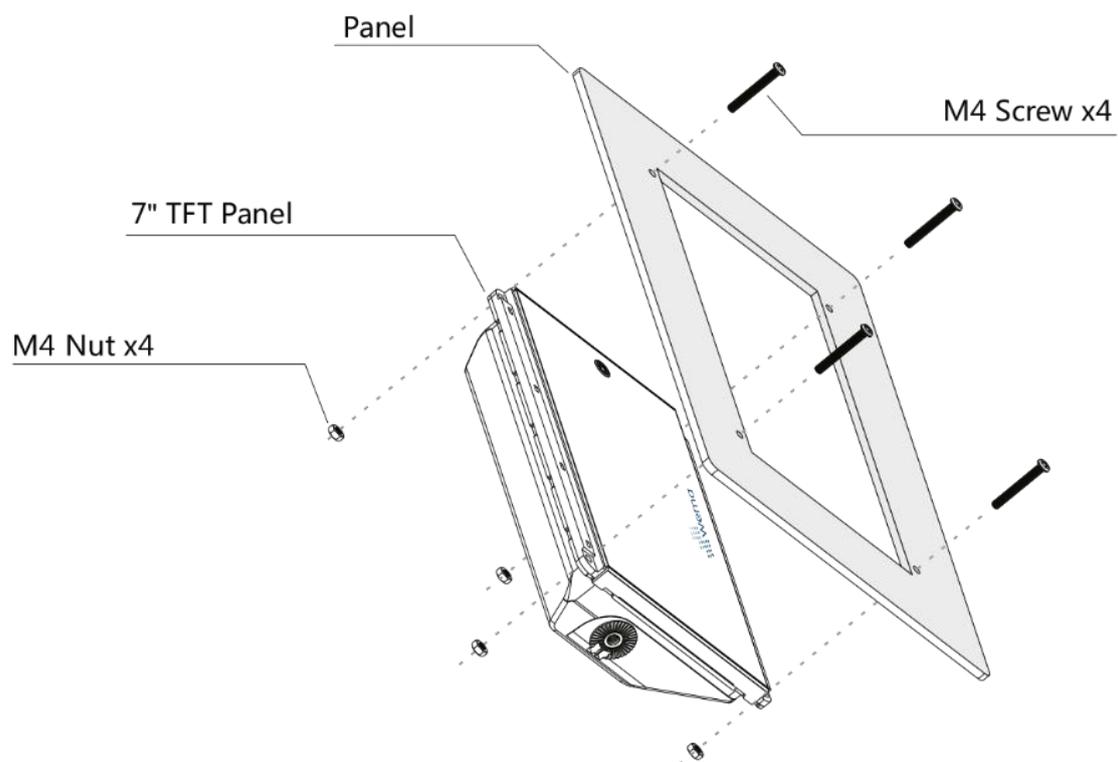
2.2 Flush mount installation, alternative 2

1. Make sure there is enough space for the gauge and the cable. You will need a minimum clearance at 157 mm behind the instrument panel to fit the MFD.
If a Wema L-connector (part no 220025) is used, you will only be needing a 92 mm clearance behind the panel.
2. Cut a 212,9x114,3 mm hole according to picture 6 below.
3. Drill four 4,2 mm holes for the M4 fastening bolts according to picture 6 below, OR if there is enough thickness of the instrument panel it is possible to screws from the backside, so it won't be any visible screws from the front.
4. Insert the MFD from the backside and tighten the four M4x30 mm bolts or screws according to picture 7.
5. Connect the NMEA2000 drop cable to the left connector (when seeing the display from the back side).
6. Installation is done according to picture 8 or 9, depending on your preferred installation method with bolts or screws.

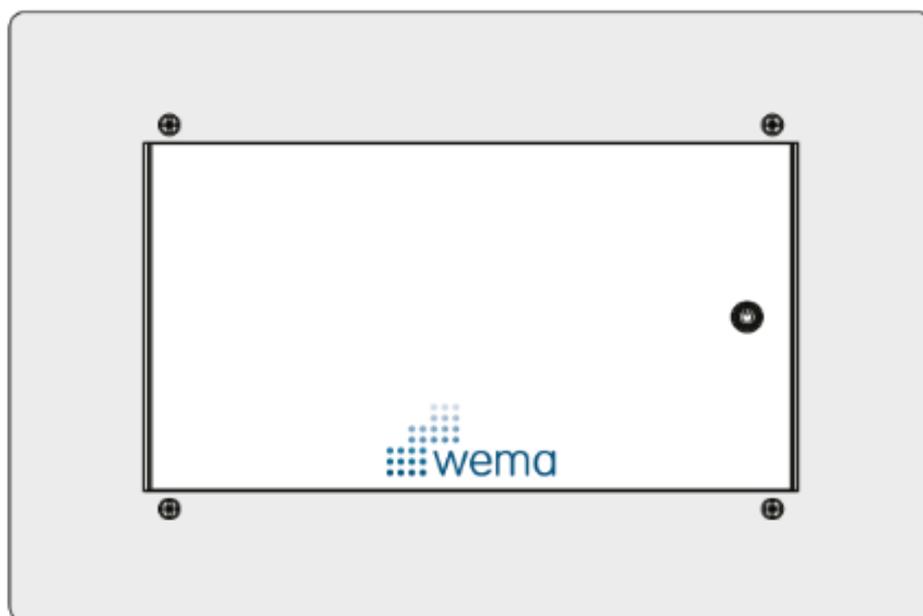


Picture 6

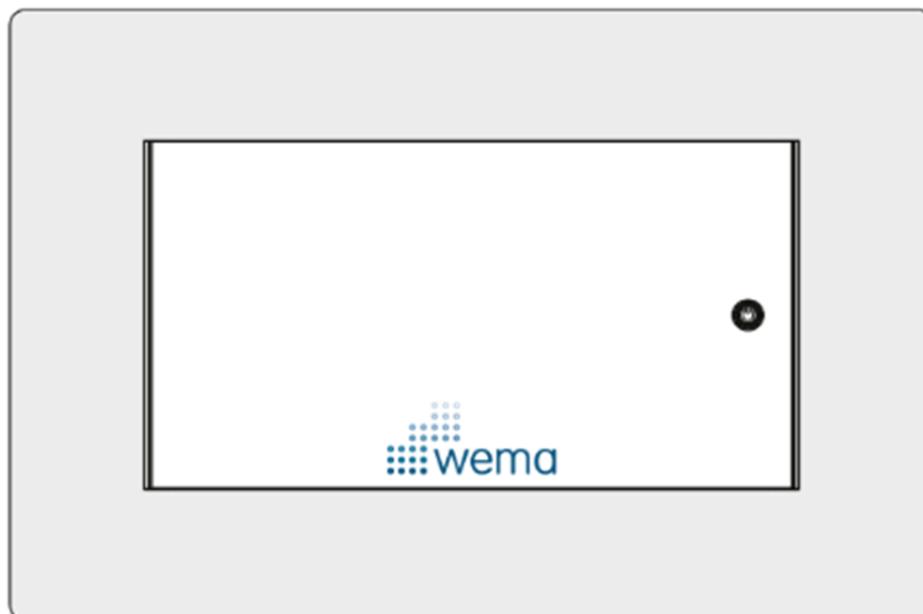
Installation Breakdown Drawing



Picture 7



Picture 8



Picture 9 (installation with screws from the back side)

3. Electrical installation

The Wema MFD needs to be connected to a proper NMEA2000 network according to part 3.1.

3.1 NMEA2000 connection

1. Connect the NMEA2000 drop cable to the left connector (when seeing the display from the back side) and the male connector of the drop cable to the T-connector in the NMEA2000 backbone.
2. If the NMEA2000 is powered the Wema MFD will start up.

4. Settings & Configuration

Enter the Settings by pressing the symbol  which is found in right corner of the display. The settings are divided into seven sub-settings as follows;

- Language
- Alarm settings
- Unit settings
- Style settings
- About

Below are the different settings explained in detail.

4.1 Language

English is the set language.

4.2 Alarm settings

- **Engine instance:** Instancing is where you assign an Instance number to engines and sensors (if there are several of the same kind). The NMEA2000 protocol goes from port to starboard. If there are several engines on the vessel you need to give them different Instance numbers. Start with port engine which should be called "0" and starboard should be "1".
- **Coolant temp.:** Choose the temperature for coolant water alarm. Normal alarm level is 95°C. If the vessel has two engines, each engine's coolant temperature alarm level must be set.
- **Oil pressure:** Choose the level for oil pressure alarm. If the vessel has two engines, each engine's oil pressure alarm level must be set.
- **Fuel level:** Choose the level for fuel level alarm.
- **Fresh water level:** Choose the level for fresh water level alarm.
- **Black water level:** Choose the level for black water level alarm.
- **Voltage:** Choose the level for voltage alarm. Normal is 10,5 volt.

Press back arrow when all alarm settings are done and you will return to the main setting menu.

4.3 Unit settings

- **Speed:** Speed unit can be set on either Knots or Km/h.
The speed range can be set on either 15, 30 or 60.
- **Tacho:** The RPM range can be set on either 4000, 6000 or 8000 RPM.
- **Temp.:** Temperature unit can be set on either Celsius or Fahrenheit.
- **Press.:** Pressure unit can be set on either Bar or PSI.

Press OK to save all unit settings.

4.4 Style settings

- **Style settings:** There are three different styles to choose between. It is also possible to change style using the right and left arrows on the gauge page.
- **Colour settings:** There are four different background colours to choose between; White, Black, Blue or Grey.
- **Brightness:** There are ten different levels of brightness that can be set.

4.5 About

- **Version:** Current version is 1.01
- **SW version:** Current version is 2.03
- **Demo mode:** The MFD has a demo mode which is switched on/off.



5. Supported NMEA2000 & J1939 Parameter Group Number (PGN)

5.1 NMEA2000

PGN	PGN name
127488	Engine Parameters, Rapid Update: Engine Speed (RPM)/ Engine trim
127489	Engine Parameters, Dynamic: Engine temp. Oil pressure/ Total engine hours
127505	Fluid Level: Fuel level/ Fresh water level/ Black water level (Sewage)
127508	Battery Status: Battery Voltage
127245	Rudder: Rudder Position
129026	COG & SOG, Rapid Update: Course Over Ground/ Speed Over Ground

5.2 J1939

PGN	PGN name
65279	Fuel level
65263	Engine Oil Pressure
65262	Engine Coolant Temperature
65253	Engine Hours

6. Technical specifications

- Dimension: 7" TFT sunlight viewable touch screen
- Screen resolution: 800x480 px
- Outer dimension: 212x116 mm
- Depth: Up to 157 mm (incl. cable and connector)
- Operating temperature -20 to +70°C
- IP rating: IP67
- Power supply: 12 V (via the NMEA2000 network)
- LEN= 4



