

Marine Mobile Digital Gauges

for Yamaha & other engines

USER MANUAL
V1.07 – May 2020

by www.mobilegauges.com

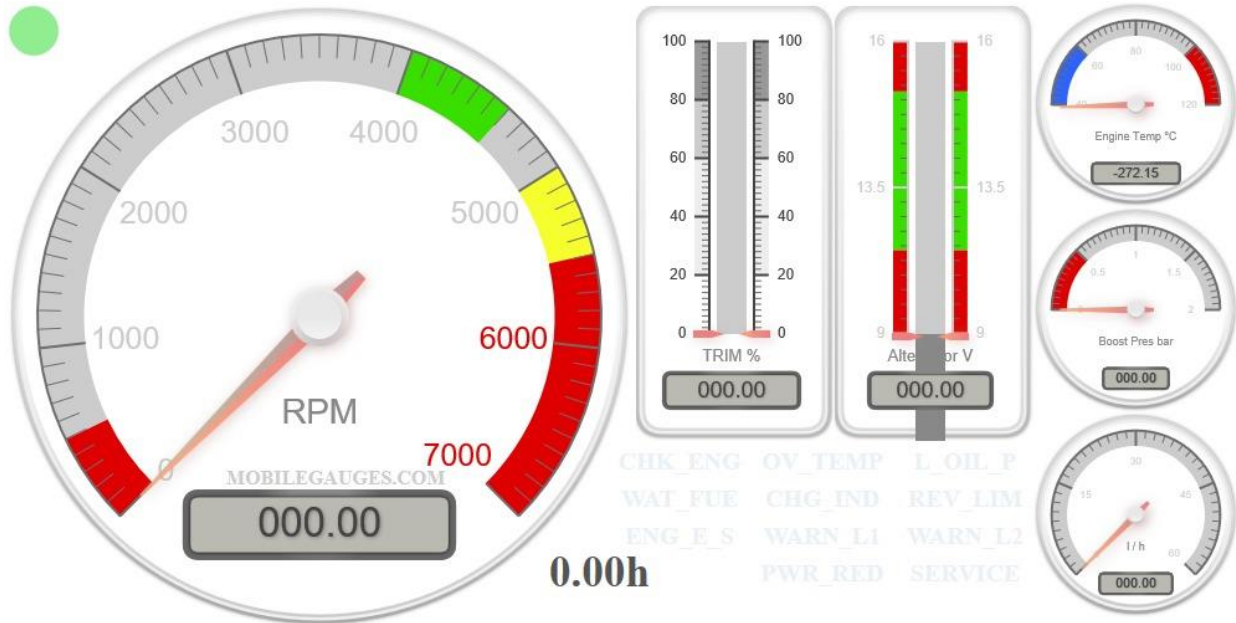
Hardware version V1.2

Firmware version V2.1

1. Introduction

Description

Marine Mobile Digital Gauges was designed to offer engine information directly on your mobile, tablet or laptop via Wi-Fi.



Available information is:

- ENGINE RPM
- ENGINE TRIM*
- ENGINE WORKING HOURS
- GEAR*
- ALTERNATOR VOLTAGE
- Engine TEMPERATURE
- BOOST PRESSURE
- FUEL FLOW
- ERROR CODES
- *check engine user manual if digital information is available. Some manufacturers offer this as an option so it might not be available by the motor output.

Features

- Small form factor 95 x 50 x 18 mm
- Waterproof
- Option for plug and play for supported engines
- Power consumption ~150mA @12V
- Range in open space up to 25m
- No maintenance
- Reverse polarity protection up to 2 min reverse polarity connection
- 2.4GHz Wi-Fi connection
- Firmware updates over Wi-Fi network

Package content:

1 x Marine Mobile Digital Gauge with 0.5m wire length

1 x User manual

1x Warranty form



Options by request to be included:

- plug and play connection to specific engine type
- spare connector
- extra cable length
- customized display (can be done at any time by firmware update).
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2. Wiring description

Marine Mobile Digital Gauges has a purple cable with default length of 0.5m, longer cable can be available by request. This cable is internally electrical shielded and there are two twisted pairs of cable: White – Brown/or/Blue and Yellow/or/Red – Green/or/Black. This cable is CAN bus rated by manufacturer.

Wire description:

White: CAN High

Brown or Blue: CAN Low

Red or Yellow: +VBat or Positive power supply.

Black or Green: -GND or Negative power supply.

3. Installation instructions

a. Installation of a generic Marine Mobile Digital Gauges

Identify on your engine the connector which offers following signals: CAN H and CAN L. Wiring should be as follows:

Marine Mobile Digital Gauges	Engine
White : CAN High	CAN High – usually White**
Brown or Blue : CAN Low	CAN Low – usually Blue**
Red or Yellow***: + Vbat	Vbat – usually RED**
Black or Green***: GND	GND – usually black**

**please refer to user manual or to wiring diagram of your engine to identify the right connection points.

***cable manufacturers have different color schemes. Make sure to double check before power everything up

Before connecting we highly recommend measuring the power supply cabled with a multimeter to make sure you have the right voltage source.

Hint: Power supply lines can be taken over the diagnosis connector as they are usually protected by motor fuse and it is enabled after ignition key is on. Please refer to user manual or wiring diagram of your engine to check the connection points.

Make sure to secure cables to a rigid point in order to avoid vibration pulling out cables from the connector pins.

b. Installation of an engine type Marine Mobile Digital Gauges

If you purchased plug-n-play variant for a different type of motor, connections are already made on Marine Mobile Digital Gauges with proper connectors for your motor type.

Identify on your motor the corresponding connectors, remove the dummy caps from those connectors and plug in Marine Mobile Digital Gauges thru the connectors provided.

We highly recommend to double check connections and to follow additional steps presented at point 3.a.

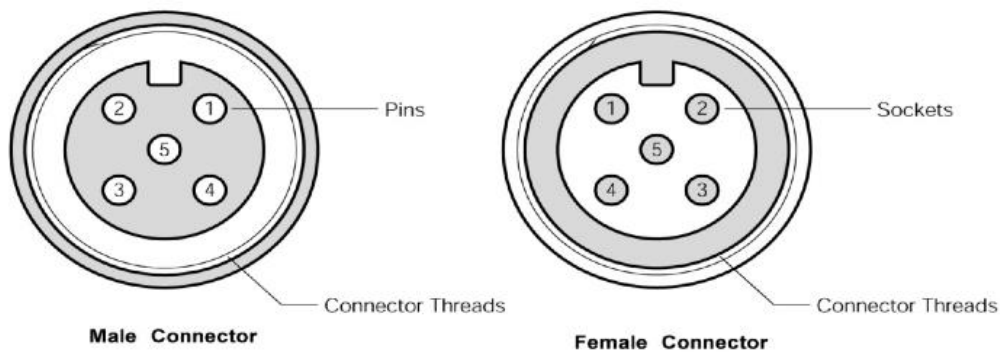
Make sure to secure cables to a rigid point in order to avoid vibration pulling out cables from the connector pins.

Final Installation dispositions: We **highly recommend installing** your Marine Mobile Digital Gauges at an authorized technician or service. Contact your dealer or manufacturer for a recommendation for technician or service even if you have a generic or plug-n-play version. Contact your dealer or manufacturer to help you step by step on the installation. Installation by yourself is possible and full responsibility of installation and operation is taken by you and dealer or manufacturer are not responsible for any problems occurring during these steps. Proof of installation at an authorized center or authorized person might be requested if any complains are made.

Yamaha connectors:



Micro C connector types:



4. Operation description

The device is needed to be connected to boat power supply Positive and Negative and to engine CAN network ** via CAN HIGH and CAN LOW.

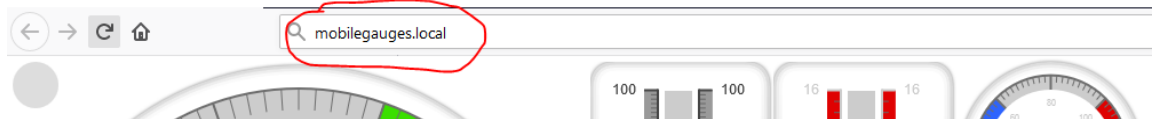
Note : some engines needs extra power supply for CAN Network because they are isolated CAN networks.

- I. After correct connection to the engine, supply engine with power (you can apply power supply to the engine but **do not start your engine without water supplied to cooling system**, for correct operation of your engine refer to engine manufacturer use manual).
- II. connect via Wi-Fi with your mobile, laptop, tablet, or other devices with Wi-Fi capabilities,

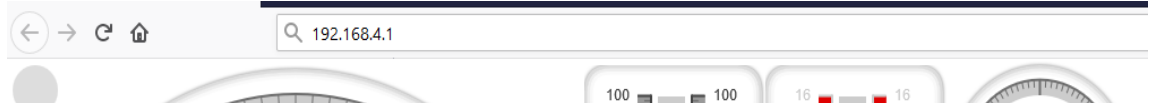


- III. access the web address specified on the label of your product (usually <http://mobilegauges.local> or IP:192.168.4.1 you can simply type gauges.local or IP:192.168.4.1 on browser) via a browser like Google Chrome, Opera, Mozilla, etc. (the application is not supported on **Internet Explorer**. We recommend using Google Chrome).

<http://mobilegauges.local>



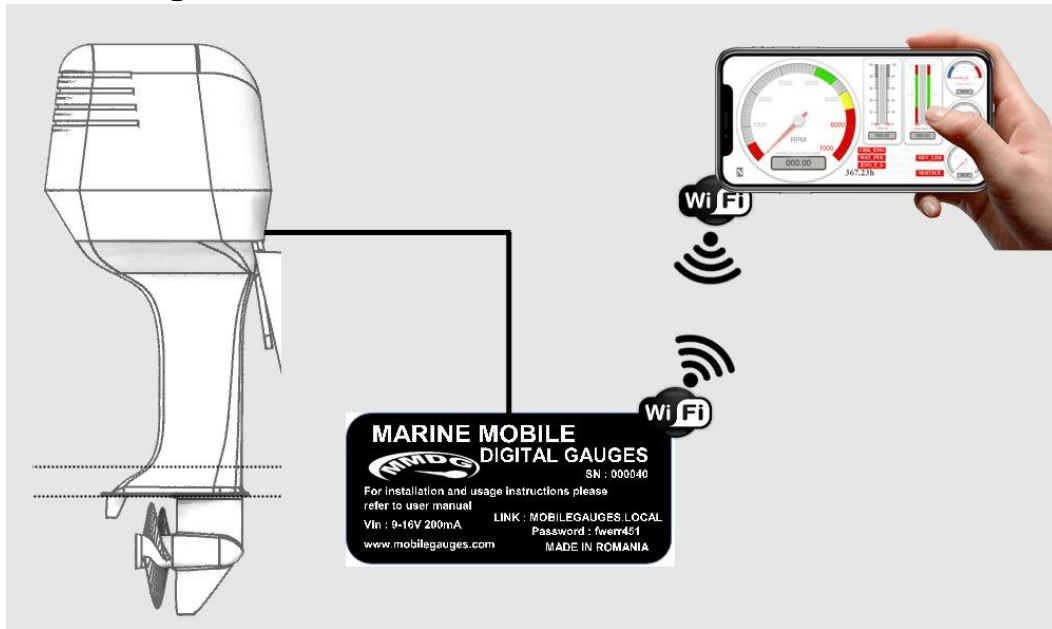
<http://192.168.4.1>



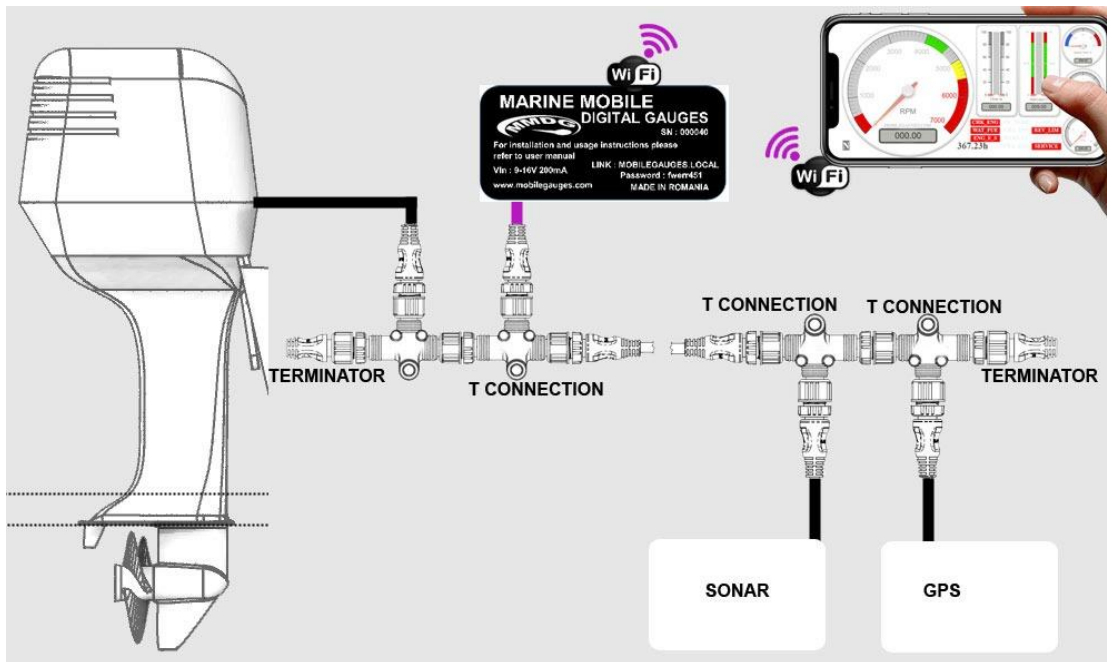
- IV. enjoy your new digital Marine Mobile Digital Gauges.

5. Connection architecture

a) Direct engine connection



b) Network connection



6. Compatible engines:

Yamaha engines:

2006 & newer: F50, T50, F60, T60, F75, F90,
F115, LF115, F150, LF150,
F200, LF200, F225, F225, F250, LF250.

2006 & newer: Z150, LZ150, VZ150, Z175,
Z200, LZ200, VZ225, Z250, LZ250, VZ250,
Z300, LZ300, VZ300.

Volvo engines:

Models equipped with Volvo-Penta Gateway (part Number 3889757),
You can connect Marine Mobile Digital Gauges to Volvo-Penta gateway.

Mercury engines:

Models equipped with Mercury-Mercruiser Gateway CAN P MUL (part
Number 98-8M0151748 & 8M0165589), You can connect Marine Mobile
Digital Gauges to Mercury gateway.

Other engines:

All other engines equipped with a gateway with CAN communication.
You can connect Marine Mobile Digital Gauges to Mercury gateway.

Note: If you do not find your engine in the lists above please contact
manufacturer, dealer or user support for checking if your engine is
compatible or not with the Marine Mobile Digital Gauges.

7. Warranty Exemptions

Conditions disqualifying a product from Warranty include but are not limited to the following:

- Any defect caused by misuse, improper installation
- Any defect caused by software, virus or improper use of self-made and non-public software;
- Any product beyond the limited free replacement and repair period;
- Any unauthorized modification to the supporting setting files, or any authorized disassembly;
- Any defect caused by improper use in the working conditions beyond those stated in the literature (for example: working conditions that are too hot/cold, wet/dry; microwave exposure; instable electric current and voltage and so on)
- Any defect caused by personal disaster or improper maintenance, such as mechanical damage, serious oxidation and rusting, rat damage, over exertion and so on;
- Any defect caused by transportation or loading during returning voyage;
- Any natural disaster such as earthquake, fire, flood, thunder strike and so on;
- Any other defects that are not caused by workmanship, technique, product quality and the like;

Conditions that Disqualify Product from Warranty in the external power supply include:

- The returned power supply has obvious damage, fissure, broken legs, severe deformation;
- The returned power cord is broken, has naked core and damages like this.