Manual Mercury Series(M)

# Warning [Please read carefully.]

- This product is designed for use on 12V vehicles. Do not install this product on vehicles with 24V systems.
- Have this product installed by the retail store or dealer where it was purchased. Installation by the customer will void the warranty.
- Do not disassemble or modify this product. Such actions will not only void the warranty but also damage or destroy the product.
- Do not operate during driving.
- Do not perform installation of this product immediately after the engine has been switched off. The engine and exhaust system are extremely hot at this time and can cause burns if touched.

# Main Features

- High Contrast Vertical Alignment liquid crystal Screen, no shadows when the backlight is turned off.
- A warning value (arbitrary) can be set and the warning buzzer can be selected from three variations or turn off.
- The buzzer can be selected in three loud levels.
- 7 Colors backlights can be selected, and it can memory the setting in the both daytime and night mode.
- Brightness can be selected in 5 different levels, and it can memory the setting in the both daytime and night mode.
- Three different types indicator movement can be selected.
- Data obtained during driving (peak value and warning value) can be stored up, and the peak value can be reviewed and cleared.

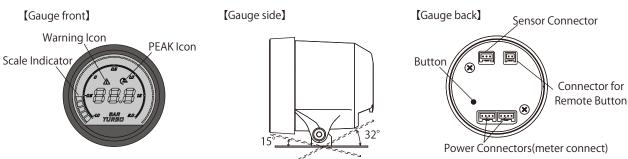
# Product Specifications

### Technical informations

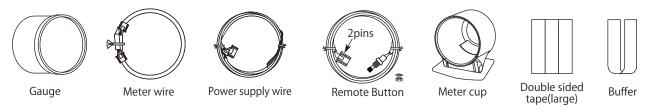
Power-supply voltage: 10V to 15V DC(12V vehicles only)

• Current consumption: +B line: MAX 120mA

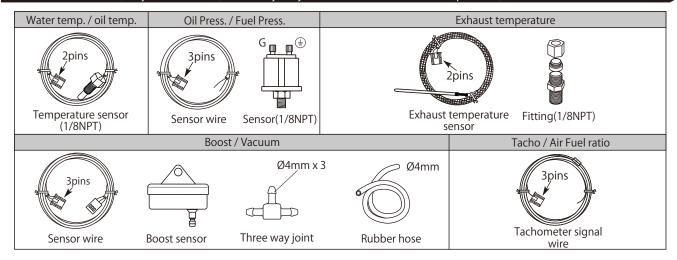
IGN line: MAX 120mA ILM line: MAX 2mA

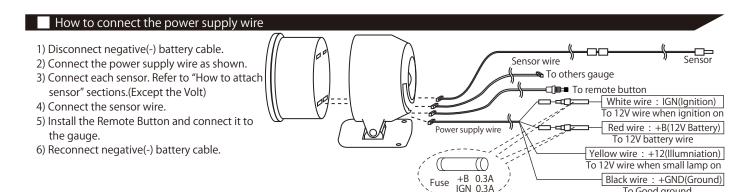


## Common Parts (Only for reference, the reality may be different with the below pictures)



### Individual Parts (Only for reference, the reality may be different with the below pictures)





## Installation

### How to install Volts gauge

• There is no sensor in the Volts gauge set, so just connect the power supply wire. Refer to "How to connect the power supply wire"

# Radiator Upper hose

How to install Water Temp. sensor (Use a commercial sensor attachment.)

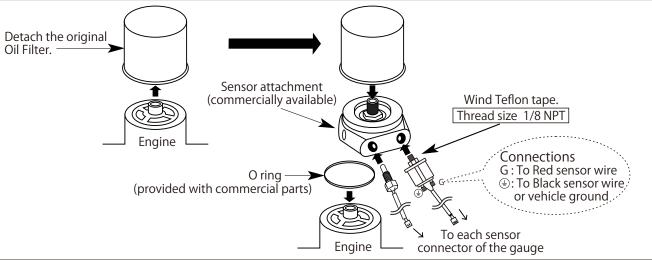
\*Cut the upper hose and connect the sensor attachment between hoses.

(commercially available)

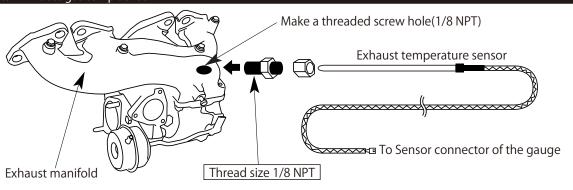
To Good ground

Sensor attachment Attach tightly with clamps. (commercially available) (commercially available) Wind Teflon tape. Thread size 1/8 NPT ™ To Sensor connector of the gauge

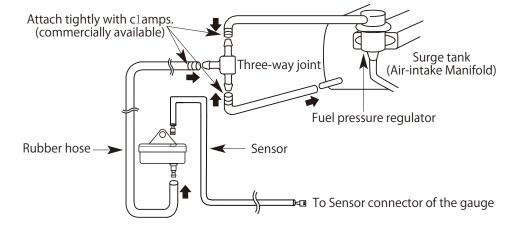
How to install Oil Temp. and Oil Press. sensor (Use a commercial sensor attachment.)



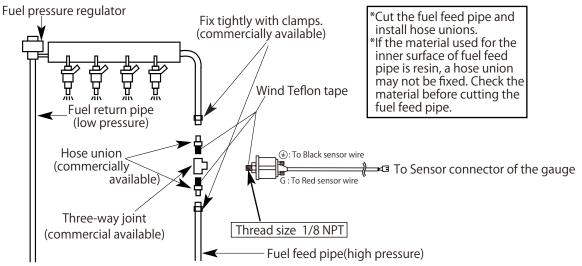
### How to install Exhaust gas temp sensor



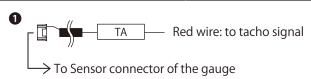
### How to install Boost / Vacuum sensor.

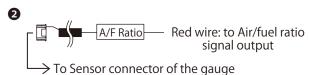


# How to install Fuel Press. sensor (Use a commercial Three-way joint.)

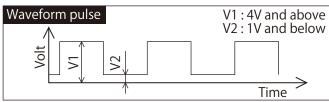


# How to install Tachometer / Speedometer/ Air Fuel ratio.





• Connect the Yellow wire to tachometer signal wire of ECU of your vehicle. The TA signal needs to meet the requirements of the following graph.

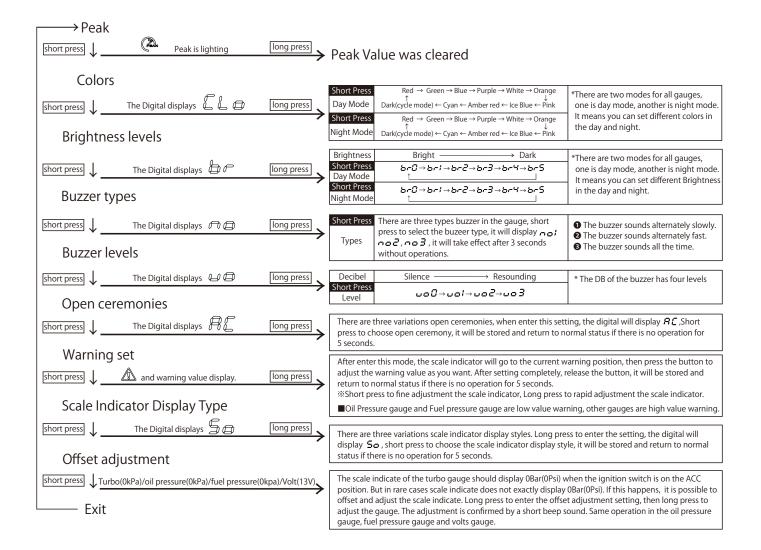


2 Connect the red wire to the output signal wire of the Air/Fuel ratio controller or ECU.

## Operation

# Common Button Operation

- There is a Button in the backside of the gauge, the remote button is included, they are used to review and clear peak value, change the colors, adjust the brightness, choose the buzzer, set the warning and etc, the remote button is same function as the button in the gauge.
- 2 Short press to switch between different functions settings, long press until buzzer sounds, then enter the setting mode. It will return to normal status when the button is released after 5seconds.



# Individual Button Operation

- $\begin{tabular}{l} \textbf{O} Cylinder setting of the tachometer.} \end{tabular}$ 
  - Long press to enter the Cylinder setting when the gauge is in the real mode. The scale indicator will go to the number of Current cylinder number, the default is 4 cylinders, short press to choose the cylinder number to suit for your vehicle. Release the button for 5 seconds, the setting will take effect.
- 2 Input signals of the Air/Fuel Ratio gauge.

There are two different input signals of the Air/Fuel Ratio gauge, they are narrowband(0-1v) and wideband(0-5), long press to enter the setting when the gauge is in the real mode, the digital will display  $RS_{\omega}$  (wideband) or  $R:_{\omega}$  (narrowband), short press to choose the signal type, then release the button for 5 seconds, the setting will take effect.

**3** Boost response rate adjustment.

This gauge is high response rate as fast as mechanical boost gauge, so when too much pressure being forced inside the gauge, the scale indicator maybe rattle/shaky, there are three ways to slove this problem:

- 1. Insert a restrictor inside the nylon tube.
- 2. Find another vacuum/turbo source.
- 3. Slow down the response rate, long press the button when the gauge is in the real mode, then short press to adjust the scale indicator, the response rate is slow down from 0 clock to 40.(0 is fastest, 40 is slowest.)