

# USER'S MANUAL

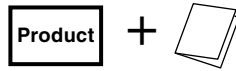
CAN Data Communication Multi-Gauge

# X2R

MULTI GAUGE ø60

Thank you for purchasing this PIVOT product.  
Please read this manual carefully before installation and use.  
Please keep this manual for future reference.

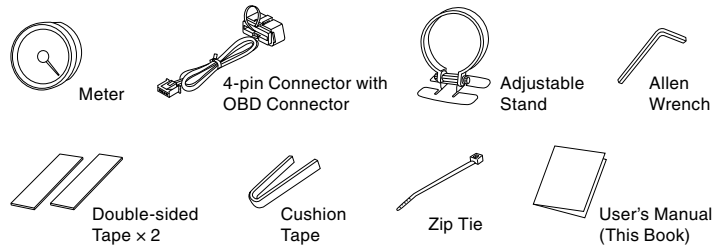
- If this product is given to another user, make sure to include this User's Manual.



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## Please check the contents of the package



**1. In the following circumstances the unit cannot be installed; doing so may cause damage.**

- The ECU is different from the standard for that model.
- If a sub-computer is being used.

**2. Cannot be used in combination with other company's products that use Diagnostic Monitoring Connectors.**

### **WARNING**

Improper use or disregard of these warnings may result in the injury or death of people.

- **Do not work in areas where there is excessive exhaust.**

Due to vehicle exhaust emission poisoning or fire may result in a damage to humans.

- **Do not crush the cable.**

Please be careful that the cable does not get crushed by the seat rail or car door steel plate, nor cut by any sharp steel plate as this may cause a poor connection or an electric short leading to fire or other danger.

- **Do not operate while driving.**

Operating or checking the display during driving may cause an accident; please use with the utmost consideration for safety.

- **Please securely fasten the product and be sure to store bundle away all wires with tape, etc...**

It is very dangerous to pull tangled wires by force or allow tangled wires to interfere with driving.

### **CAUTION**

Improper use or disregard of these warnings may cause injury to persons, damage the product and other things.

- **This product is for DC12V cars;**

Installation cannot be carried out on cars with other voltage batteries.

- **Just after installation do not exert any strong force on the product.**

When double-sided tape is used for an installation be warned that when hot the tape temporarily loses adhesiveness.

- **Do Not Use Chemical Cleansers.**

If the unit gets dirty please wipe with a soft cloth to remove any dirt. Do not use chemical cleansers such as thinner, benzene, or alcohol.

- **Do not install the product in any place subject to high temperature or any place where water may be splashed.**

- **Make sure to replace all screws and parts to their original place.**

- **Do not install the product in a place where it will cause distraction.**

- **Do not, in any manner, process, take apart, or make changes to this product.**

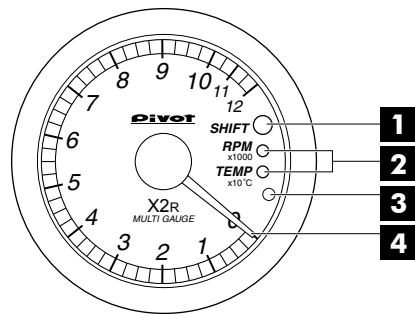
# Features

The X2R Multi Gauge, uses a simple connection to the Diagnostic Monitoring Connector, making it possible to analyze CAN data transmissions and display Engine Rotation, Water Temperature and Shift Lamp.

<b>Smooth Action</b>	New Controller provides needle action quick and smooth.	<b>Stepping Drive</b>	Stepping motor drive brings you a high-performance display with no hunching or overshooting.
<b>2 in 1 Display</b>	With just one unit switch between two displays; Engine Rotation and Water Temperature.	<b>Easy-to-read translucent LED</b>	Clear even transmissive LED light (LED will normally remain illuminated while in operation).
<b>Peak Hold</b>	Save and display peak reading (only Water Temperature).	<b>Easy Installation</b>	Coupler connection to the Diagnostic Monitoring Connector for easy-installation.
<b>Shift Lamp</b>	Upon exceeding the set Shift Point (RPM) the lamp begins to blink.		

# Part Names

- 1 Shift Lamp** Blinks upon exceeding set Shift Point.
- 2 Mode Lamp** The lamp for the current mode will light up.
- 3 Switch** Use to change modes, reset the peak value, and Shift Point settings.
- 4 Needle** Shows the current values and peak value.



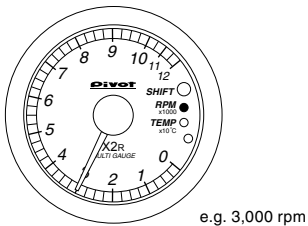
### Turning off the Illumination

This product is interlocked with the ECU (engine computer) power. Depending on the model of car, the illumination may remain on for up to 3 minutes even after the engine has been turned off; this is normal.

# Displays and Uses

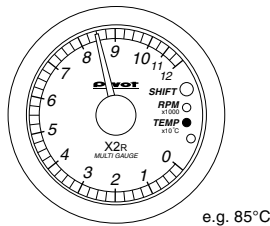
## 1. Engine Rotation

**Display** 0 to 12,000 rpm  
**Use** ● Check Engine Rotation and so on



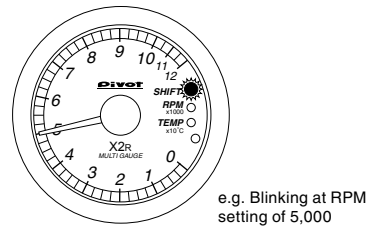
## 2. Water Temperature

**Display** 0°C to 120°C  
**Use** ● Prevention of overheating  
 ● Check Heating and so on



## 3. Shift Lamp

**Setting Range** 3,000 to 10,000 rpm  
**Use** ● Prevent Over Revving  
 ● For Eco-Driving and so on



## 4. Peak Hold

**Use** ● Check Highest Water Temp

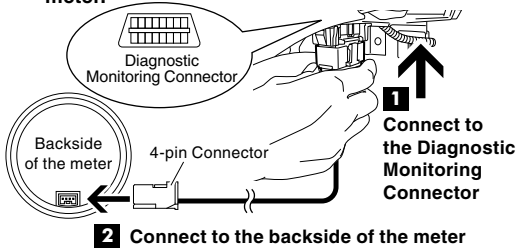
### Opening Demo

During the Opening Demo, the needle will move slightly to minus several times. Then it will move to the maximum value and finally to reading for current measurement item.

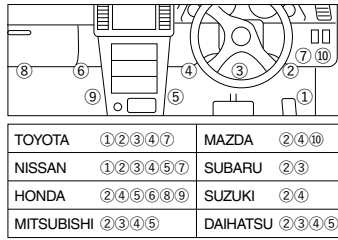
※ Due to analysis time for the CAN data transmission it may take up to 5 seconds from engine start before the opening demo begins.

# Connecting The Connector

- 1 Insert the OBD Connector to the Diagnostic Monitoring Connector.
- 2 Insert the 4-pin Connector to the backside of the meter.



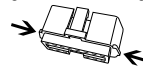
## [Data] Placement Diagram for Diagnostic Monitoring Connector



- ① By the accelerator pedal
- ② At the right foot of the driver seat (with lid)
- ③ At foot of driver seat in the center
- ④ At the left foot of the driver seat (with lid)
- ⑤ At the right side of the center console
- ⑥ At the right foot of the passenger seat
- ⑦ Behind the panel by the steering wheel (with lid)
- ⑧ At the left foot of the passenger seat
- ⑨ At the left side of the center console
- ⑩ Panel to right of steering wheel (upper part of small storage box)

## [Reference] Notes about using the OBD Connector

Make sure to grip the distended portions when pulling it out or inserting it.

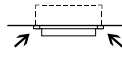


### CAUTION

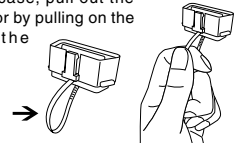
Do not pull on the wires when trying to remove the connector; the wires may become disconnected.

If you unable to get a grip on the distended portions.

With some car models it may be difficult to get a good grip on the connector.



In such case, pull out the connector by pulling on the end of the zip tie.



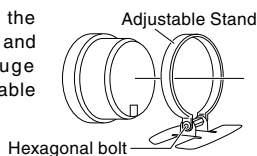
# Fastening The Product

Install in an easy-to-view location.

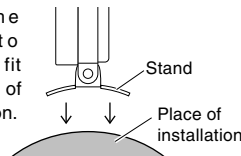
## A. Installation with the Adjustable Stand

Fasten using the double-sided tape. (On top of the steering column cover or dashboard.)

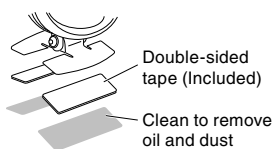
- 1 Slightly loosen the Hexagonal bolt and install the gauge into the Adjustable Stand.



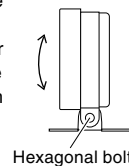
- 2 Bend the stand to securely fit the place of installation.



- 3 Fasten using the double-sided tape. (Clean the surface; removing all oil and dust.)

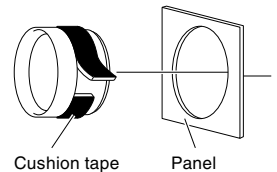


- 4 After deciding the position and angle of the meter face, fasten the Hexagonal bolt on both sides to secure.



## B. Mount into the Panel

- 1 Wrap the cushion tape around the base of the meter.
- 2 Press into the 60 mm hole in the panel.



# Basic Operation

- 1 Key Switch ON (Engine start)



- 2 Opening Demo

- 3 Engine Rotation / Water Temp display (Shift Lamp blinks)



- 4 Key Switch OFF (Engine stop)

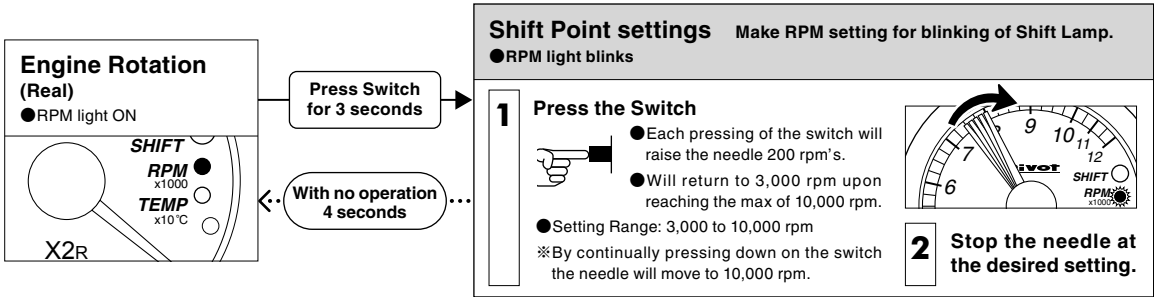
- 5 Meter OFF
  - The needle stops in the vicinity of 0.



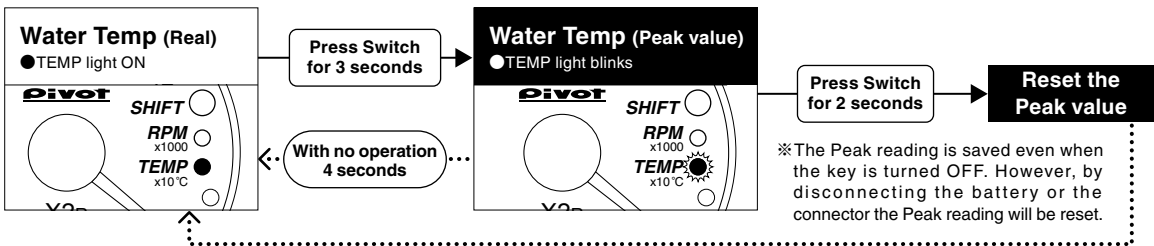
**!** Due to analyzation time for the CAN data transmission it may take up to 5 seconds from engine start before the opening demo begins.

# Switching Modes and Settings

Each pressing of the switch will change the display between Engine Rotation and Water Temperature.



The mode will change with each pressing of the switch.



## Troubleshooting

Trouble	Possible Causes	Possible Solutions
Does not work with Engine start.	Poor connection of 4-pin Connector or OBD Connector.	Please reconfirm whether wiring and connections are correct or not.
	The unit has been installed into an incompatible car model.	Please check the "Fitting List".
Upon starting up, the unit will start in the newly changed mode.	Because after changing modes, if the car's engine is turned off within 3 seconds, the new setting will not be stored, make sure to wait at least 3 seconds before turning the engine off.	
Before the opening demo starts the needle briefly moves.	This is due to a special characteristic of the meter and is not a malfunction.	
The displayed values are different from the standard meter.	Due to the ECU information received, the displayed values on this product may differ from those of standard or other meters.	
The Shift Lamp does not light up.	The engine rotation has not reached the set Shift Point.	See above "Shift Point settings" and make any necessary changes in the Shift Point.

※Our products have already been recognized as our Industrial Property or are in the process of receiving Industrial Property status.  
 ※We plan in the near future to take all possible legal measures to protect against unfair competition from look-alike products using similar designs, regulating characteristics, circuitry and circuitry layout.  
 ※We strictly prohibit the unlicensed use of the PIVOT trademark and the unauthorized use of PIVOT User's Manual.