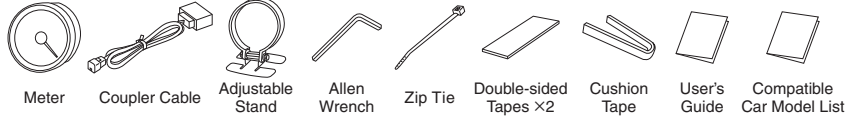


USER'S GUIDE

Please check the contents of the package

Thank you for purchasing PIVOT "X3" "X3R". Please read these instructions carefully before installing or using this device. Please do not lose this user's guide, as you will held liable for the cost of reissuing it.



<p>CAUTION Improper use or disregard of these warnings may result in the injury or death of people.</p> <p>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.</p> <p>Please securely fasten the product to a stable place It is very dangerous if, while in use, the product falls off and interferes with braking.</p> <p>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.</p> <p>Do not operate while driving Operating or checking the display during driving may cause an accident; please use with the utmost consideration for safety.</p>	<p>NOTE Improper use or disregard of these warnings may cause injury to persons, damage the product and other things.</p> <p>This product is for DC12V cars; Installation cannot be carried out on cars with other voltage batteries.</p> <p>Do not, in any manner, process, take apart, or make changes to this product</p> <p>Make sure to replace all screws and parts to their original place 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.</p> <p>Do not install the product in any place subject to high temperature or any place where water may be splashed Do not install the product in a place where it will cause distraction</p>
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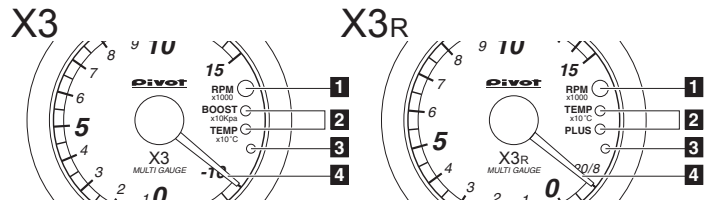
1. The display will not be proper if the ECU being used is not the standard one or if a sub-computer is being used, even in compatible car models.
2. Cannot be used in combination with products that use another company's diagnostic monitoring connectors.
3. For details about using in combination with other PIVOT products please see our Web Site at http://pivotjp.com/information/obd_conjunction-e.html.

FEATURES

- NO need for hassling with pipes and wires**.....Coupler connection to the diagnostic monitoring connector for easy-installation.
- Easy-to-read Multi-gauge Display**.....One Unit gives you Three Types of Shift Lamp.
- Stepping Drive**.....Stepping Motor Drive brings you a High-Performance Display with No Hunching or Overshooting.
- Easy-to-install**.....Extra thin cables and double-sided tape make it possible to install almost anywhere, including implanting.
- Easy-to-read illumination design**
- NO need to make any car model settings**

PART NAMES AND FUNCTIONS

- 1 Shift Lamp**
Lamp comes on at set point to notify the shift point.
- 2 Mode Lamp**
The lamp for the current mode will light up.
- 3 Switch**
Use to switch modes and make settings.
- 4 Needle**
Shows the current values and settings Displays.



DISPLAYS FOR X3 AND X3R

<p>1. Engine Revolution Display Range : 0 ~ 15000rpm</p>	<p>X3</p> <p>Ex:3000rpm</p>	<p>X3R</p> <p>Ex:3000rpm</p>
<p>2. Shift Lamp Setting Range : 2000 ~ 10000rpm ※ 1 (About DAIHATSU Car)</p>	<p>Ex:6000rpm</p>	<p>Ex:6000rpm</p>
<p>3. Water Temp Display Range : -40°C ~ 150°C</p>	<p>Ex:95°C</p>	<p>Ex:95°C</p>

<p>4. Displays by Device Model</p> <p>X3. BOOST (Absolute Pressure Display) Normal aspiration cars will only display minus pressure (-100Kpa to 0) Display Range : -100 ~ 150Kpa</p>	<p>TURBO</p> <p>Ex:70Kpa</p>	<p>NA</p> <p>Ex:-80Kpa</p>
<p>X3R. PLUS MODE</p> <p>AT OIL TEMP = TOYOTA Display Range : -20 ~ 150°C</p> <p>BATTERY NISSAN / HONDA / MITSUBISHI / SUBARU / SUZUKI / DAIHATSU Display Range : 8 ~ 18V</p>	<p>AT OIL TEMP</p> <p>Ex:70°C</p>	<p>BATTERY</p> <p>Ex:12V</p>

Opening Demo → Display → Stop
Turning the key ON will display the opening demo one time, and will stop when key is switched OFF.

Illumination (Dial Lighting)
Dial will normally remain illuminated while in operation.

1. The first time the key is turned ON after installation, the unit must judge the type of car model being used and hence it may take up to 40 seconds for the display to come on. From the second time, the display will take less than 15 seconds to appear.

2. It may also take up to 15 seconds for the display to turn off after the key has been switched OFF.

CONNECTING THE COUPLER

Preparation Before installation, please check the installation position on the separate sheet "Compatible Car Model List".

With the engine running, insert the coupler to the connector on the car.

※ In some car models, when the engine is turned off even upon insertion the display will not come on. Therefore it may be necessary to connect the coupler while the engine is on.

Notes about using the OBD2 Connector.

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

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 cases, use a lock tie to push or pull the connector.

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

METER INSTALLATION

Install in an easy-to-view location.

A Installation with the Adjustable Stand		When using the provided Band Holder to install on the dashboard.		B Installation with the Cushion Tape
	<p>Fasten using the double-sided tape. (On top of the steering column cover or dashboard.)</p>	<p>Holder Band</p> <p>Hexagonal Bolt with Washer</p>	<p>Double-sided Tape</p> <p>Clean to remove oil & dust</p> <p>Hexagonal Bolt</p>	<p>Cushion Tape</p> <p>Panel</p> <p>Wrap the cushion tape around the base of the meter and forcibly insert into the 60mm hole in the panel.</p>
<p>1. Installing the Adjustable Stand</p> <p>① Place the stand's holder band around the back of the meter.</p> <p>NOTE : If you cannot get the band around the meter, loosen the hexagonal bolt and expand the band.</p> <p>② After getting the band in place, tighten the hexagonal bolt to secure the band.</p>		<p>2. Installing to the Car</p> <p>① Bend the stand to securely fit the place of installation.</p> <p>② Clean the surface, removing all oil or dust.</p> <p>③ Fasten using the double-sided tape.</p> <p>※ Please be sure about where you wish to install the meter, as it is not advisable to reuse double-sided tape.</p>		<p>④ After deciding the position and angle of the meter face, fasten the hexagonal bolts on both sides to secure.</p>

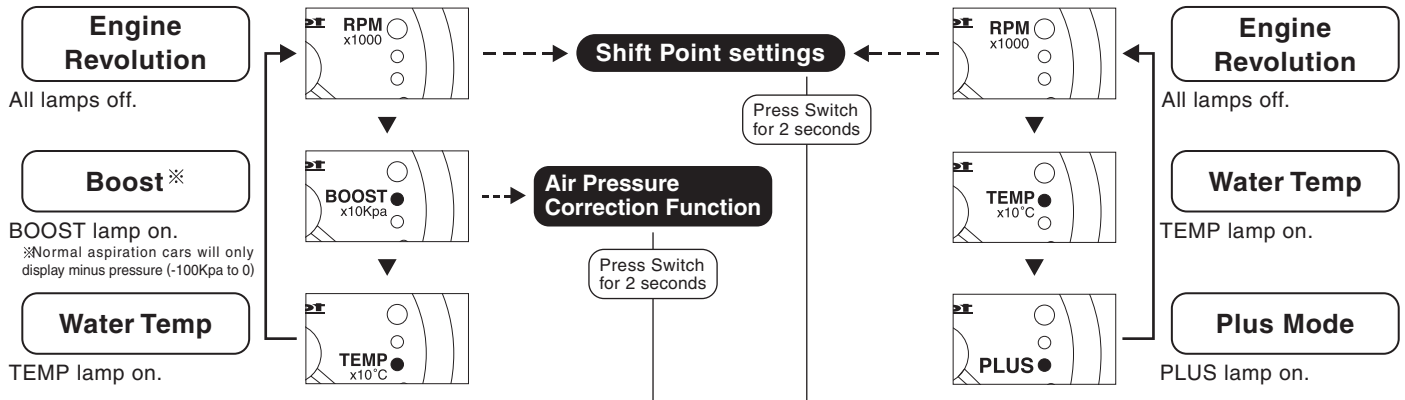
BASIC OPERATIONS

※After installing this product, there is no need to make any car model settings.

X3

With the key ON, after the opening operation, each pressing of the switch will change the display.

X3R



Shift Point settings

If the switch is pressed for longer than two seconds during the RPM display, the display will change to Shift Point settings.

During setting, the shift lamp will blink.

1 Setting
-By pressing the switch it is possible to make RPM settings in units of 500 rpm within the range of 2000 ~ 10000 rpm.

2 Setting Completed
-After two seconds of non-operation the settings will be finalized and the display will change to show RPM.

※ **1 About DAIHATSU Cars** (Includes all OEM car models)

The shift lamp will light up even when displays other than just the engine rpm are on, except for in some models of Daihatsu cars, in which due to the signal design, the shift lamp will not light up when the boost display in on.

Does not light up during boost display	·BOON M301S (K3-VE), M300S (1KR-FE) ·MIRAGINO L650/660S(EF-VE)	·MOVE L152S (JB-DET)
Lights up even during boost display	·COPEL L880K (JB-DET) ·TANTO L350/360S (EF-DET)	·MIRA·MIRA AVY L250/260S (EF-VE) ·MOVE L150/160S (EF-VE)

Air Pressure Correction Function

In the following cases, no correction is necessary.

- When the display of the ideal absolute pressure (including altitude pressure differences) is desired.
- When using in an area where altitude is low (under 200m).

Due to characteristics of the car sensor, the boost display for the X3 has an [Absolute Pressure Display] which takes in altitude differences. This is preferable to the normal gauge which shows relative pressure without taking into account differences in pressure due to altitude. But because of this, a difference will be exhibited between a standard gauge and the X3. In order to correct this error, it is possible to enter the altitude for the area in which the unit is being used and the difference will automatically be adjusted.

How to make Air Pressure Corrections

Pressing the switch for longer than two seconds during the BOOST pressure display will open the pressure correction function.

- Entering the Altitude**
·Press the switch to move the needle to the correct altitude.
- Completing the Correction**
·If the switch is not touched for more than two seconds, the correction will automatically occur.

※ Enter the altitude by rounding up or down to the next unit on the scale (x100).

Correction Example: If the altitude is 630 m = point on scale should be 6. If the altitude is 680 m = point on scale should be 7. If the altitude is 1120 m = point on scale should be 11.

Example of error in Display
If 100Kpa at an altitude of 500 m.

! Check a map or the Internet for the altitude of the area where you are using the unit.
Reference : <http://lab.uribou.net/II2h/>

Differences in Mechanical Gauge (relative pressure) Display by Altitude
※ Ex: 100Kpa (according to ICAO standards)

Altitude(m)	100	200	300	400	500	600	700	800
Difference with X3 display (Kpa)	-1.2	-2.4	-3.6	-4.7	-5.9	-7.1	-8.2	-9.4
X3 Display	98.8	97.6	96.4	95.3	94.1	92.9	91.8	90.6

About absolute pressure and relative pressure

Normal boost meters have been designed following mainstream mechanics and until now have displayed only [Relative Pressure] which does not include differences in pressure due to altitude. The X3 allows the user to see [Absolute Pressure], which includes the differences in pressure due to altitude and this more accurate information allows for better and more suitable engine control.

TROUBLESHOOTING

Please note that for some models of car in which the Boost display has been stated to be impossible, the display will work but the values shown will not be accurate nor correct.

Trouble	Possible Causes	Possible Solutions
Does not work with the key ON.	Poor connection of coupler.	Check the coupler connections or conditions.
	The unit has been installed into an incompatible car model.	Please check the list of compatible car models.
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 boost pressure display is different from the standard or other gauge.	This product's boost meter reads absolute pressure and may differ from a meter using relative pressure. (For details about the basic operations please see the section entitled "Air Pressure Correction Function")	