

USER'S GUIDE

X2M

MULTI GAUGE ø60

EURO SPEC

Thank you for purchasing PIVOT "X2M" for BMW MINI.

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>⚠ NOTE Improper use or disregard of these warnings may cause injury to persons, damage the product and other things.</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>Please 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.</p>	<p>This product is for DC12V cars; Installation cannot be carried out on cars with other voltage batteries.</p> <p>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 Use Chemical Cleaners If the unit gets dirty do not use chemical cleansers such as thinner, benzene, or alcohol; please wipe with a soft cloth to remove any dirt.</p> <p>Do not install the product in any place subject to high temperature or any place where water may be splashed</p>	<p>Make sure to replace all screws and parts to their original place</p> <p>Do not install the product in a place where it will cause distraction</p> <p>Do not, in any manner, process, take apart, or make changes to this product</p>

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

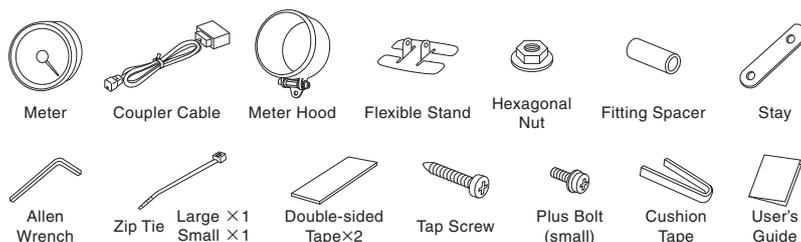
http://pivotjp.com/information/obd_conjunction-e.html

COMPATIBLE CAR MODELS

Cars that are after model changes are not compatible.

Vehicle	Model Year	Model	
ONE	2001.10 ~ 2007.1	GH-RA16	Compatible
COOPER		GH-RA16	
COOPER S		GH-RE16	
COOPER CB		GH-RF16	
COOPER S CB		GH-RH16	
COOPER	2007.2~	ABA-MF16	Incompatible
COOPER S		ABA-MF16S	

Check the contents



FEATURES

Orange Illumination	Same Standard Orange Illumination.
Smooth Action	New Controller provides needle action quick and smooth.
2 in 1 Display	Switch between 2 types of display in the same unit. 1. Boost (Normal aspiration cars will only display minus pressure) 2. Water Temperature
Peak Hold	Save and display peak reading after reset.
New Design	New design allows for easy viewing of Boost and Vacuum.
Easy-installation	It is possible to connect directly using the coupler to the diagnostic monitoring connector meaning there is no need for troublesome wiring.
Air Pressure Correction	The altitude adjustment function makes it possible to correct for differences in the absolute pressure display and relative pressure display.
Stepping Drive	Stepping motor drive brings you a high-performance display with no hunching or overshooting.
Affordably Priced	Two types of display at a total cost of 24,800 yen means each type is only 12,400 yen and that translated into a great buy.



Time for display turning on

Due to communication with the ECU, from the time the engine is started to the time the display comes on may take about 5 seconds.

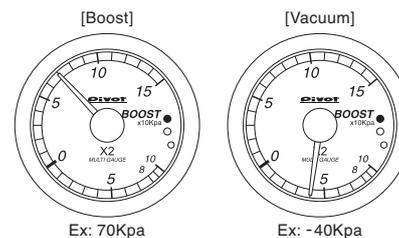
The display will go off at the same time the engine stops after the key has been turned to OFF.

Displays and Uses

1. Boost (Absolute pressure display)

▶ Display -100~150Kpa (Normal aspiration cars will only display minus pressure)

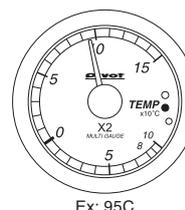
▶ Use ●Check Boost (TURBO)
●For Eco-driving [Vacuum] (TURBO/NA)



2. Water Temp

▶ Display -40C~150C

▶ Use ●Prevention of overheating
●Check Heating etc.



3. Peak Hold

▶ Use ●Check Momentary Maximum Boost (TURBO)
●Check Highest Water Temperature

Opening Demo

Turning the key ON (engine start) will display the opening demo one time.

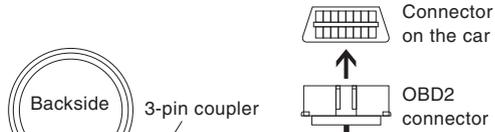
Illumination (Dial lighting)

The illumination is always on while driving, but because it is a low energy LED this no effect on the vehicle performance or battery life.

CONNECTING THE COUPLER

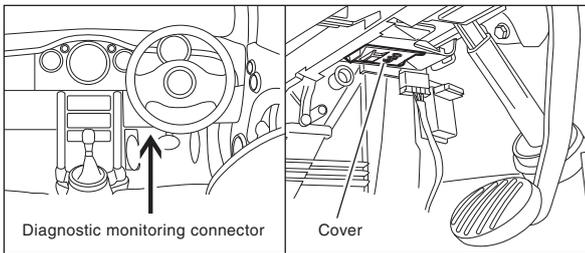
With the engine running, insert the OBD2 connector to the connector on the car.

※Installing while the engine is stopped may cause the unit to work improperly.

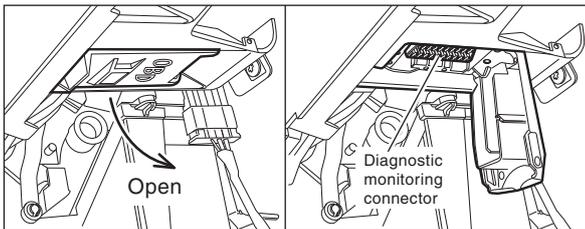


※When inserting, make sure that the diagnostic monitoring connector is placed in the proper direction.

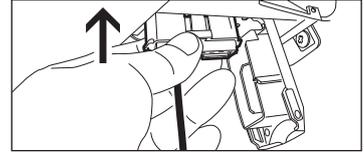
1 Locate the diagnostic monitoring connector position



2 Open the cover

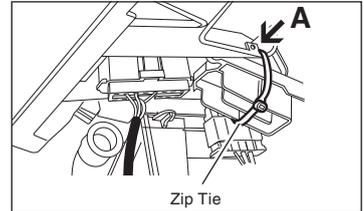


3 Completely insert the coupler



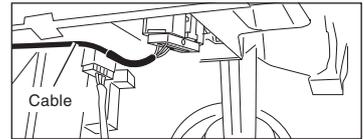
4 Fasten the cover

Fasten down the cover by wrapping the included self-locking zip tie around the cover and hooking around part A (as shown).



5 Fasten the cable

Make sure to lay and fasten the cable in such a way as to not cause any accidents or interfere with driving.



[REFERENCE] Notes about using the OBD2 connector

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

NOTE

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

METER INSTALLATION



For Single-meter Cars (Installation A~C)

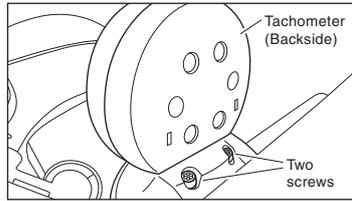
We suggest installing our meter to the right side of the standard tachometer using the provided meter hood. However it can be placed anywhere you desire and may be used in conjunction with meter hoods and installed as a regular type meter.

Installation A	Installing to the right side of the tachometer
<p>Affix the supplied meter hood to the back of the standard tachometer. (For Single-meter Cars)</p>	

1 Remove the standard tachometer

Unscrew the two screws from the base at the back of the tachometer and remove the gauge.

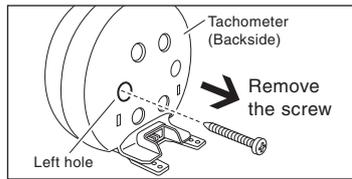
※Make sure not to lose any removed parts.



2 Unscrew the screws at the back of the tachometer

Remove the screw from the left hole at the back of the tachometer.

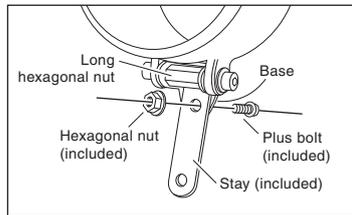
※Put the bolt store in a safe place.



3 Fix the stay to the meter hood

① Insert the provided stay between the base and the long hexagonal nut on the meter hood.

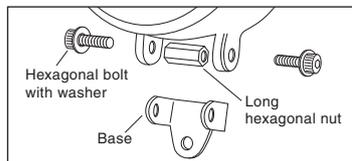
② Fasten using the supplied plus bolt (small) and the hexagonal nut.



Installation B	Installing to the dashboard
<p>Fasten using the flexible stand and double-sided tape.</p>	

1 Remove the base of the meter hood

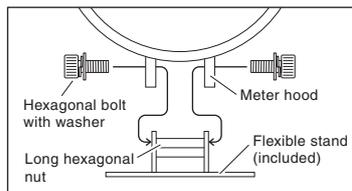
※Make sure not to lose any removed parts.



2 Affix the flexible stand

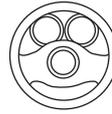
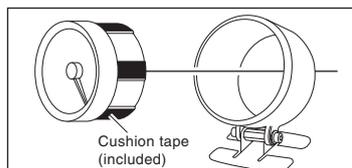
① Insert the long hexagonal nut between the two legs of the flexible stand.

② Firm fix by tightening hexagonal bolts.



3 Fasten the meter to the meter hood

Fasten the supplied cushion tape to the meter case and fix the meter hood.

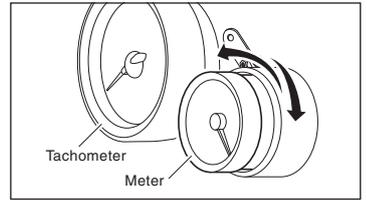


For Dual-meter Cars (Installation B·C)

Since there is no space available to the right of the tachometer, we suggest using the provided flexible stand and install to a place on the dashboard or to another desired open spot.

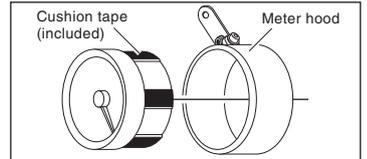
4 Decide the angle for inserting the meter

Insert the meter into the meter hood and decide the angle of insertion of the meter by aligning the hole of the stay with the screw hole at the back of the tachometer from which the screw was removed in 2 above.



5 Fasten the meter to the meter hood

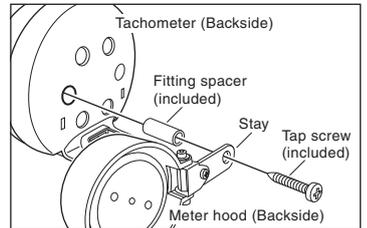
Fasten the supplied cushion tape to the meter case and fix the meter hood at the angle that was decided in 4 above.



6 Fix the meter hood with the screw

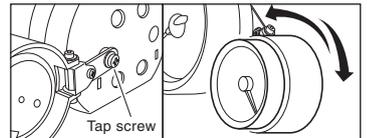
① Insert the supplied fitting spacer in the screw hole from where the screw was taken from the tachometer in 2 above.

② Match the hole of the stay with the screw hole and use the supplied tap screw to fasten the stay.



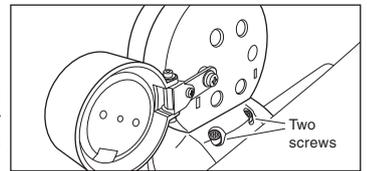
7 Adjustment of meter angle

Loosen the tap screw in 6 above to decide the angle. Fasten the tap screw to secure.



8 Return the tachometer to its original position

Return the tachometer to its original place by going in the reverse order from 1 above, and securely fasten with the two screws.



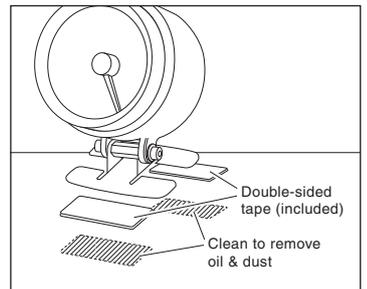
4 Installing to the car

① Bend the stand to securely fit the place of installation.

② Clean the surface; removing all oil or dust.

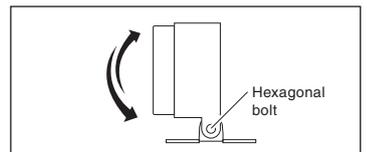
③ Fasten using the double-sided tape.

※Please be sure about where you wish to install the meter, as it is not advisable to reuse double-sided tape.



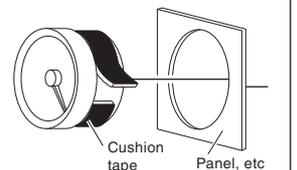
5 Adjustment of meter angle

Loosen the hexagonal bolt to decide the angle. After deciding the angle of the meter face, fasten the hexagonal bolts on both sides to secure.



Installation C Installing into the front panel

Wrap the cushion tape around the base of the meter and forcibly insert into the 60 mm hole in the panel.



PART NAMES

1 Mode Lamp

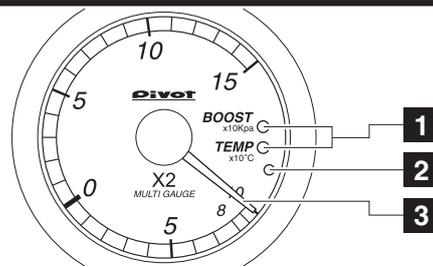
The lamp for the current mode will light up.

2 Switch

Use to switch modes and make settings.

3 Needle

Shows the current values and settings displays.



BASIC OPERATIONS

Switching Modes

1 Key ON (Engine start)



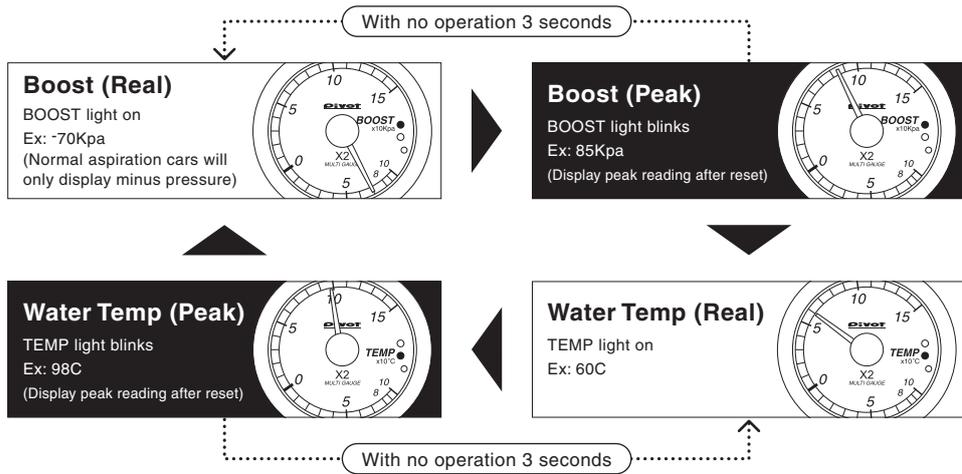
START

2 Opening Demo

3 Each pressing of the switch will change the display



Press



How to Erase Peak Readings

During the boost (peak) display

During the water temperature (peak) display

Press switch for 3 seconds

Press 3 sec

Reset Peak Boost Reading

Reset Peak Water Temperature Reading

Return to real display

Return to real display

※ Peak readings are all saved even when the key is turned OFF.

※ By disconnecting the battery or the connector it is possible to erase all peak readings.

Air Pressure Correction Function (There is usually no need to make adjustments.)

Due to characteristics of the car sensor, the boost display for the X2M 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 X2M. 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.

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

[Correction example]

· If the altitude is 630m
= point on scale should be 6



· If the altitude is 680m
= point on scale should be 7



· If the altitude is 1120m
= point on scale should be 11



Check a map or the Internet for the altitude of the area where you are using the unit.

Reference : <http://lab.urbou.net/112h/>

How to make Air Pressure Corrections

During the boost (real) display

Press switch for 2 seconds



Air Pressure Correction Function

※ The mode light blinks intermittently



※ If no operation is carried out for 2 seconds, the boost (real) display will return to view.

Press the switch to move the needle to the correct altitude



If the switch is not touched for more than two seconds, the correction will automatically occur.

TROUBLESHOOTING

Trouble	Possible Causes	Possible Solutions
Engine is running but the meter does not work.	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 display is incorrect.	The OBD2 connector was inserted while the engine off.	Disconnect the OBD2 connector and reconnect it while the engine is on.
	The battery was changed or the minus terminal was disconnected.	
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')	