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

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

After installation, make sure to carry out “Initial Settings”.
After having installed this product, make sure to make settings for your car’s special characteristics by carrying out the “Initial Settings” on Page 5. If the “Initial Settings” are not carried out, a Check Engine Light may go on. Also, the unit will remain in NORMAL Mode even if the Mode is switched.

Worried about Installation?
If you are worried about carrying out wiring or other installation procedures please consult your dealer.

Only use 3-drive Specialized Harness.
Using another type of harness will cause troubles and failure; use only the 3-drive specialized harness.

Set to NORMAL Mode upon Removal of Product.
When uninstalling the product, make sure to return it to normal (NORMAL) Mode before carrying out any work. Reconnecting this product in a different mode may cause the Check Engine Light to come on.

Modifying this Product is Forbidden.
Under no circumstances should modifications or changes be made to this product. Doing so may cause damage not only to the product, but to the car and the operation of the car in which it is installed.

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

• When making initial settings make sure to stop the engine and place in Parking or Neutral. It is dangerous to carry out these settings while the engine is running.
• 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.
• While driving DO NOT operate switches or pay prolonged attention to the display; it is extremely dangerous.

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

• PIVOT Corporation accepts no responsibility, in any manner whatsoever, for damage and/or trouble to your vehicle or product, nor for any accidents that are the result of the misuse of this product.
• Please confirm that the type of vehicle you wish to install into is listed in the “List of Specialized Harnesses by Car Model for 3-drive · COMPACT”.
• When installing this product, we recommend that if technical knowledge becomes necessary please consult a qualified mechanic.
• If the device is improperly installed or settings have been improperly made a Check Engine Light may go on.
• Do not use electrotap.
• Wiring should be carried out using the attached “cut connector” or by soldering, make sure to securely insulate all wiring parts with insulation tape, and confirm that no wires are sticking out.
• Please wipe with a soft dry cloth (a lens cloth).
• Please do not use alcohol or benzine.
This may cause damage to the painted surface or cracks in the plastic.
• Do not, in any manner, process, take apart, or make changes to this product.
Please check the contents of the package

Main Unit [60×22.5×55 (D) mm]  Black Extension Cord  Double-sided Tapes [25×35mm] >2  Cut Connectors ×4  Zip tie ×2  User’s Manual (This Book)

Features

Control Acceleration and Fuel Efficiency!

SPORTS Mode is for higher response driving. ECO Mode is for better fuel efficiency, more comfort or when on slippery roads.

Select the kind of response to match your driving.

3-drive COMPACT enables changing the response for electronic throttle car models and gives you, the driver, the freedom to select the type of acceleration response you need or desire: quick acceleration for speedy driving to slower acceleration for ECO-driving.

Performance

<table>
<thead>
<tr>
<th></th>
<th>SPORTS MODE</th>
<th>ECO MODE</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIGH</td>
<td>High response for sporty situations. (ideal for circuit, mountain driving, etc...)</td>
<td></td>
</tr>
<tr>
<td>LOW</td>
<td>Low response for Eco-driving situations. (perfect for city and fuel conscious driving)</td>
<td></td>
</tr>
</tbody>
</table>

NORMAL MODE Standard Performance.

ACCELERATION MONITOR Displays the amount of pressure on the accelerator and helps to prevent poor fuel efficiency due to over acceleration.

3 MODES 12 STEPS One-touch selection between 3 modes and 12 steps. (SPORTS Mode = 7 steps, ECO Mode = 5 steps)

COMPACT ALL-IN-ONE BODY This compact all-in-one body makes it possible to install out of the way places such as storage box or near the steering wheel.

MODE MEMORY + SAFETY START Select from three modes in which to start the engine: “Same as Last” Mode, “Normal” Mode or in “Safety” Mode which restarts the engine in SP3 mode when the setting is SP4 or above.

EASY INSTALLATION Easy installation using the specialized model specific harness. (sold separately)

Improved Results in ECO Mode

3-drive COMPACT in ECO Mode reduces the output signal at full throttle to 80% of that when using a standard unit, hence increasing fuel efficiency.

Graph = Comparison of Change for 3-drive COMPACT and FLAT (SUZUKI SWIFT (ZC31S))

Note: Even in ECO Mode, if rapid acceleration is carried out over and over again fuel efficiency will not increase.

Safety

1. Prevents sudden starts by reverting to same response as under normal setting.
2. Normal Control when in Reverse. (wiring where necessary)
3. Returns to Normal in case of faulty wiring or circuitry. (See Note 1)

Note 1: When using the Diagnostic Monitoring Connector for running tests, disconnecting the OBD connector will not cause any harm to the car.

Examples of Throttle Opening

SP7 = MAX. SPORTS Mode (7 steps) W= For models with wire-type throttle
Ec5 = MAX. ECO Mode (5 steps) nor = Standard Performance

SUZUKI SWIFT (ZC31S)

Note: Fine tune control with 7 steps for SPORTS Mode and 5 for ECO Mode. In some car models with a Valvematic engine, control is carried out by the exhaust valve rather than the throttle valve.
**Connecting The Wires**

### Procedure 1: Connecting The Wires

#### Preparation for Wiring

Only disconnect the accelerator connector after having waited at least 15 minutes from the time that the ignition was turned OFF.

Depending on the type of vehicle, if the connector is disconnected before the ECU power is switched OFF the Check Engine Light may go on. (How to Turn Off the Check Engine Light = Page 7)

#### Turn the ignition to the OFF position

**OFF**

#### Passage of over 15 minutes

**Accelerator Connector**

**Disconnect the connector**

---

#### Basic Wiring

When installing, make sure to use the correct Specialized Harness for your model of car.

![Basic Wiring Diagram](diagram)

**Connect to Power**

Connect the OBD Connector with the ignition in the OFF position.

**Connect to the Diagnostic Monitoring Connector.**

**Note 1:** If a separate device is already connected to the Diagnostic Monitoring Connector, it is possible to connect the cable directly to the power source.

**Note 2:** If the cable is not long enough, use the extension cable “THC-EC (sold separately for ¥1,500).”

---

**Connect to Power**

Connect to the Diagnostic Monitoring Connector.

![Connect to Power Diagram](diagram)

**Note:** When using the Diagnostic Monitoring Connector for running tests, disconnecting the OBD connector will not cause any harm to the car.

---

**If Power comes from Other Source**

If the diagnostic monitoring connector cannot be used for safety purposes when the ignition is in the ON position under normal conditions, please follow the wiring directions as written below.

1. **Cut the Red and Black wires coming from the OBD connector.**

2. **Connect the Red wire either way in accordance with the intended use and the Black wire to the Earth.**

![Wiring Diagram](diagram)

---

**Normal Power (Permanent 12V)**

Display OFF linked to ECU

**OR**

**IGN (12V with the ignition ON)**

Display OFF linked to the ignition

---

**Data** Placement Diagram for Diagnostic Monitoring Connector

[Diagram]

---

**TOYOTA**

NISSAN

HONDA

MITSUBISHI

BMW, MINI

MAZDA

SUBARU

SUZUKI

DAIHATSU

VW, AUDI

---

**CAUTION**

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

---

**Notes about using the OBD Connector.**

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

In such cases, use a zip tie to push or pull the connector.

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

---

**Point of Installation 1**

Connect to Power

Connect to the OBD Connector on the Car.

Connect to the Diagnostic Monitoring Connector.

---

**Point of Installation 2**

If Power comes from Other Source

Cut the Red and Black wires coming from the OBD connector.

Connect the Red wire either way in accordance with the intended use and the Black wire to the Earth.
Troubleshooting

Before Using

Initial Settings

Connecting The Wires

Installing The Product

How to Operate

Control Features

Troubleshooting

Part Names

1 UP Switch
   • For Adjusting the Change Ratio for each Mode.
   • For Mode Settings when Restarting the Engine.

2 DOWN Switch

3 Display
   • Mode Display
   • Degree of Acceleration Display (10–100%)
   • Settings Displays

4 SET Switch
   • For Settings

5 MODE Switch
   • For Switching Modes

About Wiring for Reverse

⚠️ Usually there is no need to wire to reverse.

When put into reverse, the degree of acceleration is small and quick acceleration will not occur; it is not necessary to wire for reverse.

Wiring Method

Pull out the black wire from the black tube in which the wires are bundles and cut off the insulation tube at the tip. Connect the supplied extension wire to the cut off black wire and wire to signal for the backup light.

<table>
<thead>
<tr>
<th>Main Unit</th>
<th>Black wire for Backup light signal</th>
<th>Cut off Black tube</th>
</tr>
</thead>
</table>

| Procedure 2 | Installing The Product |

Do not use magnetic holders, such as for a smartphone, to prevent malfunction.

Please be sure to bundle away all wires with tape not to get damaged by any steel plate or screws as this may cause short circuit.

Wiring place: Backup Light Signal

<table>
<thead>
<tr>
<th>Check Wiring</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Wiring place: Backup Light Signal</th>
</tr>
</thead>
<tbody>
<tr>
<td>When the ignition in the ON position (engine not running) and in P (Parking) or N (Neutral) = 0V</td>
</tr>
<tr>
<td>R (Reverse) = 12V</td>
</tr>
</tbody>
</table>

Turning off the Display

This product is interlocked with the ECU (engine computer) power. Depending on the model of car; the display may remain on for up to 15 minutes even after the ignition has been turned to the OFF position; this is normal. (For connection using the OBD connector or for connection to Normal Power)
Initial Settings (Degree of Acceleration Setting)
Make sure to carry out these settings.

Before making the “Initial Settings”
1. Make settings only after having completed all wiring (connector installation).
2. Make settings with the ignition in the ON position (engine not running) and the gear in P (Parking) or N (Neutral).

[Making the Settings]

### Operational Procedure

<table>
<thead>
<tr>
<th>1</th>
<th>Turn the ignition to the ON position. (Engine not running)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Press the SET switch for 12 seconds or longer to change the display to “0”.</td>
</tr>
<tr>
<td>3</td>
<td>When “0” appears release the SET switch.</td>
</tr>
<tr>
<td>4</td>
<td>Pedal is not pressed down. (Release the accelerator to 0%)</td>
</tr>
<tr>
<td>5</td>
<td>Press the SET switch.</td>
</tr>
<tr>
<td>6</td>
<td>Pedal is completely pressed down. (Press in on the accelerator to 100%)</td>
</tr>
</tbody>
</table>

### Main Unit Display Area

<table>
<thead>
<tr>
<th>1</th>
<th>nor (nor Display)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Blink</td>
</tr>
<tr>
<td>3</td>
<td>(e.g.)</td>
</tr>
<tr>
<td>4</td>
<td>(e.g.) (See Note 1)</td>
</tr>
<tr>
<td>5</td>
<td>Voltage Display (e.g. = L1.5)</td>
</tr>
<tr>
<td>6</td>
<td>(e.g.) (See Note 1)</td>
</tr>
<tr>
<td>7</td>
<td>SET (Set to 100%)</td>
</tr>
<tr>
<td>8</td>
<td>100 (100 Display)</td>
</tr>
<tr>
<td>9</td>
<td>nor (nor Display)</td>
</tr>
</tbody>
</table>

### Operational Procedure

<table>
<thead>
<tr>
<th>7</th>
<th>With the accelerator at 100%, press the SET switch.</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>Once the display changes to 100 release the accelerator.</td>
</tr>
<tr>
<td>9</td>
<td>Setting Completed</td>
</tr>
</tbody>
</table>

If the device is re-installed into a different vehicle, make sure to carry out these settings again.

After having finished settings and the battery or wires have been disconnected it is not necessary to carry out “Initial Settings”.

Check the Settings

<table>
<thead>
<tr>
<th>Do not press in on pedal</th>
<th>nor (nor Display)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Press down on pedal</td>
<td>100 (100 Display)</td>
</tr>
</tbody>
</table>

Note: If the display is incorrect, start again from step 2 above.

If after the “Err” is shown the display returns to as shown in 1 ("L1.5" or so on), it means that the degree of acceleration settings have not been confirmed properly. Re-do the settings from step 4.

Note 1: The values shown in the display will vary depending on the type of car.
How to Operate

Switching the Mode and Change Ratio

It is possible to switch between NORMAL, ECO and SPORTS Modes, as well as, switch the change ratios respectively within ECO and SPORTS Modes.

1. Engine START.

2. The mode will change with each pressing of the MODE Switch.
   - ECO Mode
   - NORMAL Mode
   - SPORTS Mode
   Note: For safety, when changing modes always go through NORMAL (NORMAL) one time.

3. When Switching Modes and Ec is displayed, the ratio will change with each pressing of the UP/DOWN switch.

4. When Switching Modes and Sp is displayed, the ratio will change with each pressing of the UP/DOWN switch.

Even if the mode is switched the respective change ratio settings will not be changed. For more details about the modes when restarting the engine see Page 7 [Mode Settings for when Restarting the Engine].

Examples of changes in fuel consumption and response depending on change ratios

<table>
<thead>
<tr>
<th>SPORTS</th>
<th>(NORMAL)</th>
<th>ECO</th>
</tr>
</thead>
<tbody>
<tr>
<td>RESPONSE</td>
<td>Good</td>
<td>Bad</td>
</tr>
<tr>
<td>FUEL EFFICIENCY</td>
<td>Good</td>
<td>Bad</td>
</tr>
</tbody>
</table>

Note: ECO Mode increases fuel efficiency over normal conditions by suppressing rapid acceleration; if rapid acceleration is purposefully carried out fuel efficiency will be reduced. The changes in response will be greater as the vehicle’s power is greater.

Degree of Acceleration Monitor

Displays the amount of pressure placed on the accelerator pedal. (output signal) [10–100%, 1% unit]

- Degree of Acceleration Monitor shows the rate of acceleration output to the ECU where 0 represents the pedal not being pressed in and 100 equals when the pedal is fully pressed down.
- The display will show when degree is above 10%.

Example:

- ECO Mode: Increases fuel efficiency over normal conditions by suppressing rapid acceleration.
- SPORTS Mode: Increases acceleration output based on the degree of pressure applied to the accelerator pedal.

Basic Control Features

The changes within each mode will be controlled smoothly without perceptible steps.

Acceleration output signal based on amount of pressure placed on accelerator pedal

Note: When in ECO Mode, even if the accelerator is stepped on a full 100% the output signal will only be 80%. Depending on characteristics of the accelerator or on how the accelerator is stepped on the display may read up to 99%.

USE 1 Check acceleration during ECO driving

To ensure reduced fuel consumption during acceleration, the degree of acceleration should be between 15% and 25%. To further improve results, use ECO Mode when wishing to save fuel.

USE 2 Check acceleration during regular driving

Please use to check the degree of acceleration for any type of driving, not just ECO Mode.

USE 3 Check control status

With the ignition in the ON position and under NORMAL Mode press in the pedal until it reaches 40% (A40). If the mode is changed to SP7 the display should read 67% (A67) and if placed in Ec5 the display should change to 20% (A20).

[See the above Graph of “Basic Control Features”] Note: The actual display may differ slightly.
**About Safety Mode**

If the change ratio for SPORTS Mode has been set at SP4 or higher, when the ignition is turned OFF, to improve safety the ratio will be automatically changed from SP4 or higher to SP3 even if when the ignition is turned OFF the unit is in NORMAL Mode or ECO Mode.

- **In SPORTS Mode when the ignition is turned OFF**

  - Changes automatically and starts.
  - Starts same as last time.

- **In NORMAL or ECO-Mode when the ignition is turned OFF**

  - Starts same as last time.

  - Changes Automatically

**Troubleshooting**

<table>
<thead>
<tr>
<th>Trouble</th>
<th>Possible Causes</th>
<th>Possible Solutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>The ignition is set to ON but the display will not light up.</td>
<td>Poor connection of (OBD Connector) and (6-pin Connector).</td>
<td>Please reconfirm whether wiring and connections are correct or not.</td>
</tr>
<tr>
<td></td>
<td>The (Red) and (Black) wire may have been improperly wired or there is a poor connection.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Poor connection of (Specialized Harness).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A Check Engine Light has gone on.</td>
<td>The accelerator connector or (Specialized Harness) was disconnected with the ignition in the ON position or within 15 minutes after having turned the ignition to the OFF position.</td>
</tr>
<tr>
<td></td>
<td>The &quot;Initial Settings&quot; have not been properly carried out.</td>
<td>Make the settings by following the directions under “Initial Settings” found on Page 5 of this Manual, and follow the directions &quot;How to Turn Off the Check Engine Light&quot; as below to turn off the lamp.</td>
</tr>
<tr>
<td>While making &quot;Initial Settings&quot; an Err appears in the display.</td>
<td>The &quot;Initial Settings&quot; have not been properly carried out.</td>
<td>Make the settings by following the directions under “Initial Settings” found on page 5 of this Manual.</td>
</tr>
<tr>
<td>Even if the mode is changed, the changes cannot be felt.</td>
<td>The &quot;Initial Settings&quot; have not been properly carried out.</td>
<td>Make the settings by following the directions under “Initial Settings” found on page 5 of this Manual.</td>
</tr>
<tr>
<td>When in reverse, nor (dot blink) does not appear in the display.</td>
<td>The wiring to reverse was carried out improperly or there is a bad connection.</td>
<td>Please reconfirm whether wiring and connections are correct or not.</td>
</tr>
<tr>
<td></td>
<td>The unit is connected to the reverse wire of a navigation system from another company.</td>
<td>Follow the instructions for wiring to reverse found in the User’s Manual (See page 4).</td>
</tr>
<tr>
<td></td>
<td>The back up lights have been changed to LED lamps.</td>
<td>• Replace the back up lights with the original lights.</td>
</tr>
<tr>
<td></td>
<td>The mode and/or the setting can not be saved.</td>
<td>• Do not carry out wiring for Reverse Gear.</td>
</tr>
<tr>
<td>The ignition has been turned OFF immediately after having finished the settings or changing the mode.</td>
<td></td>
<td>After having made settings or changing the mode, wait for at least two seconds before turning the ignition OFF.</td>
</tr>
<tr>
<td>The engine has been turned OFF but the display remain on.</td>
<td>This product is interlocked with the ECU (engine computer) power. Depending on the model of car, the display may remain on for up to 15 minutes even after the ignition has been turned to the OFF position; this is normal.</td>
<td></td>
</tr>
</tbody>
</table>

**How to Turn Off the Check Engine Light.**

- If the Check Engine Light comes on due to some operational mistake, please follow the directions below to turn it off.
  1. Under normal conditions, start and stop the engine several times.
  2. If that does not turn off the lamp, disconnect the cable from terminal of the battery for about 10 minutes.
  3. If that does not turn off the lamp, please consult your local car dealer and have them turn it off.

---

**Note**

- **Main Unit Display Area**

  - Setting into SPORTS Mode.
  - Press the SET switch until the current setting will be displayed.
  - The mode will change with each pressing of the UP/DOWN switch.
  - If no operation is carried out for 5 seconds, the display returns to show the mode.
  - Setting Completed
Overview of Change Characteristics

Note: Data are actual measurements for operations using a Swift Sports engine. Wire Type beginning at 3% is for when bypassing device. Characteristics will differ slightly depending upon make and model of car.

W = For models with wire-type throttle

nor = Standard Performance

Degree of Acceleration (%)

<table>
<thead>
<tr>
<th>W</th>
<th>nor</th>
<th>SP4</th>
<th>SP5</th>
</tr>
</thead>
<tbody>
<tr>
<td>SP6</td>
<td>nor</td>
<td>SP7</td>
<td></td>
</tr>
</tbody>
</table>

SP1–3 = Condition similar to wire throttle (degree of acceleration at app. 10 - 35%)

SP4–7 = Above + high throttle (degree of acceleration at around or above 35%)

Example of Changes in SPORTS Mode

Example of Changes in ECO Mode

Ec1–5 = Low Acceleration (for all degrees of acceleration)

(Note) • 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.