

GIpro DS-series G2

Installation and Operation Manual

Model GPDT-S01

1. Foreword

Congratulations on your purchase of a GIpro DS gear position indicator. The GIpro products from HealTech Electronics Ltd. are the most advanced gear position indicators on the market today.

This product connects to the self-diagnosis connector. It makes the installation very simple. Due to the advanced microprocessor and sophisticated firmware, the GIpro DS offers faster and more reliable readings than competing products. The unit is also the smallest, most compact gear indicator available, making it easy to mount at the instrument cluster.

2. Specifications

- Supply voltage: +8V to +24V
- Maximum supply current at 12V: 80 mA
- Reverse polarity and transient protection on all leads
- Unit size: 20 x 30 x 13 mm (0.7 x 1.2 x 0.5 inches)
- Operating temp: -40C to +80C (-40F to +176F)
- Waterproof (IP68)

3. Features

Fast and accurate

Instant and accurate indication of the selected gear for added control and safety. The sampling period can be adjusted to make the response quicker or slower, depending on shift speed and signal conditions.

Touch control

All settings can be done via the touch sensor so there's no opening on the housing, it is completely sealed and encapsulated in epoxy.

The touch sensitive area is on the TOP of the unit. However, after programming, the unit can be mounted even with the top side stuck to the dashboard (via the sticky pads supplied) and will function properly. It can also be used with the optional GIpro Mount.

Quick installation

Plug 'n Go wiring harness, easy to mount display.

Complete installation can be done within 30 minutes on most Suzuki models.

Bright and effective display

Extra bright LED display, housed in a compact box. Available in 5 colors.

Auto brightness control

The brightness of the display is adjusted automatically according to the ambient light intensity. The sensitivity of the sensor can be fine-tuned in the menu.

Works out-of-the-box

The GPDT-S01 does not require any setup, it works right after installation.

Compatibility

Compatible with all HealTech and most aftermarket products, including quick shifters.

Robust design

- Full SMT-design, encapsulated in epoxy
- Flash memory to store user settings even with the battery disconnected
- Only inspected, high quality components are built in
- Each unit is extensively tested prior to shipping, guaranteed to work
- 100% waterproof (IP68)

4. Installation

- Find the **6-pole WHITE self-diagnosis connector**, usually near the ECM module. This connector is also referred as "SDS" or "Mode select switch coupler" in the Suzuki manuals.
It may have a black cap or "dummy" plug (without wires) attached to it.
- Detach the cover (cap or dummy plug) and connect the GIpro plug.
- Route the cable to the mounting location along the frame.
- Peel the green plastic off from the back of the unit, and mount the display.
- Secure the cable with the cable ties supplied.

5. Operation

The unit reads the gear position value from the ECM. For this reason, this GIpro model is fully functional after installation, no need to setup and it can't be re-programmed.

Have the ignition switch ON, engine stop switch in RUN position and the side-stand in upright position. The display will indicate the actual gear selected.

Note: This product will not work if there is a TRE device installed on the motorcycle, or the Gear Position Switch of the bike is faulty or modified.

We have another product, the GIpro/ATRE for customers who want a gear position indicator with built-in Advanced TRE function to improve performance.

If the indicated gear position is wrong, it will show up the same way with a Diagnostic tool. This can happen when the Gear Position Sensor (GPS) on the bike is failing.

6. Setup (menu)

There are several parameters which can be changed or fine-tuned under the menu.

Sign	Function	Description	See chapter
<i>C</i>	Code	Reading the firmware version	6.1
<i>F</i>	Filtering	Adjusting the filtering (sampling period)	6.2
<i>b</i>	Brightness	Adjusting the sensitivity of the light sensor	6.3
<i>u</i>	Upside down	Flipping the display upside down	6.4
<i>d</i>	Defaults	Resetting all values to factory defaults	6.5

To access the menu, follow these steps, in this order:

- The TOP side of the housing is the touch sensitive area so it must be kept free, away from all objects. If the unit is in a mount, remove it first.
- Have the gearbox in Neutral.
- Have the ignition OFF (the display must be blank).
- Turn the ignition ON and the engine stop switch to RUN position (the display should count up and then show "0"). Wait at least 2 seconds.
- With your index finger (without gloves) tap the top side of the unit and hold your finger until the first menu sign shows up. Remove your finger now.

Note: If the gearbox is switched to a gear then accessing the menu will be disabled even if you shift back to neutral. Cycle the ignition key to start over.

To review or change a parameter, use the following controls:

- *Short tap* (tap and release the touch sensor): next menu item / increasing the value
- *Long tap* (hold your finger on the touch sensor until the display changes): select / ok

6.1. Reading the firmware version

In the menu, select the "C" sign and do a *long tap*.

After this command, the firmware version number is shown (5 digits) repeatedly. If you contact us for support please let us know this number.

To exit, do a *long tap* again or turn the ignition key off.

6.2. Adjusting the filtering

In the menu, select the "F" sign and do a *long tap*.

The filtering (sampling period) can be adjusted to make the response quicker or slower during a gear change. It can be adjusted in 10 steps (from 0 to 9).

The factory default value is **3**.

- If the shift speed is quick (e.g. a quick shifter is used) and the indicated gears are always correct then DECREASE the value for faster response.
- If you notice that sometimes wrong gear is indicated momentarily during a gearshift or under hard acceleration, INCREASE the value for slower response.

Note: if wrong gear is displayed even with the filtering set to 9, there's a problem with the Gear Position Sensor (GPS) on the bike and it has to be replaced.

6.3. Adjusting the sensitivity of the light sensor

In the menu, select the "b" sign and do a *long tap*.

The ambient light sensor sensitivity can be adjusted in 10 steps (from 0 to 9).

The factory default value is **4**. DECREASE the value if you'd prefer less brightness. INCREASE the value if more brightness is desired.

Note: If you set the value to 9, the brightness will be always at maximum, regardless of the ambient light intensity.

6.4. Flipping the display upside down (or vice versa)

In the menu, select the "u" sign and do a *long tap*.

The display is flipped.

6.5. Resetting all values to factory defaults

In the menu, select the "d" sign and do a *long tap*.

This command will restore the factory defaults:

- Filtering: 3
- Brightness: 4
- Upside down: normal view

7. Cleaning the display

Clean the display with wet sponge. Use pure water only, without any detergents.

Do not clean with dry cloth as it may scratch the front face. Do not spray high pressure water directly on the display.

8. Warranty

The unit is completely sealed and epoxy encapsulated, which gives extreme protection for the internal parts from shocks, vibrations and water.

To ensure trouble-free operation from the start, all units have been extensively tested prior to shipment.

Our dealers are offering a 30-day money-back guarantee on HealTech products, thus you will get your money back if the product does not fulfill your expectations. (All parts must be returned in original condition for full refund.)

Furthermore the product is covered by our 2-year replacement warranty from the date of purchase.