

Install Guide for **GPX-U01** Harness Kit

Compatibility:

This is a Universal Harness Kit and will fit all motorcycles and vehicles which have an electronic speedometer (either analogue or digital readout). The speedometer is electronic if the odo/tripmeter has LCD readout.

Please check our application list to see if we have a specific Harness Kit available for your motorcycle.

1. Overview

You need to connect 4 wires to the bike's wiring harness. Good quality quick connectors are supplied (4 pcs wire taps). No need to cut any wires and no need for soldering.

All connections can be done either under the fuel tank, at the ECU box or behind the instrument cluster.

The table below shows the connection overview:

GIpro wire	Connect to
Red	+12V switched power lead
Black	Ground lead or chassis ground
White	Speed Signal, tap anywhere between the Speed Sensor and instrument cluster. On some ABS models, tap the speed signal anywhere between the ABS computer and ECU box.
Green	Tacho signal, tap anywhere between the ECU box and instrument cluster. Alternatively, tap the signal wire from the 2-wire Crankshaft Sensor (Pickup coil), anywhere between the sensor and ECU box.

To complete the install, it is recommended that you consult with your dealer and/or refer to the Service Manual available for your bike.

Due to the large number of bike models and vehicles compatible with this Kit, model specific wire colors and install instructions are not described in this document.

2. Installation

Disclaimer: Do not attempt to install the product if you don't have basic mechanical and electrical skills. HealTech Electronics Ltd. and its distributors shall not be liable for any loss or damage caused by improper installation. If in doubt, please consult with your dealer.

1. The ignition key should be in OFF position. Remove the seat, raise and support the fuel tank.

2. **Locate** the Speed Sensor coupler.

Most motorcycles have the speed sensor mounted on the gearbox. Others have the sensor mounted either at the front or at the rear wheel.

Trace the cable until you find the speed sensor coupler. It is a 3-pole connector (except BMW, which use 2-pole).

If in doubt, check the bike's Service Manual or ask your dealer for the location of the Speed Sensor coupler.

Confirmation:

Separate the Speed Sensor coupler. Rotate the wheels while the ignition is on. The speedometer should indicate 0. If so, turn the ignition off, reconnect the coupler and proceed to the next step. Otherwise, if the speedometer registers a speed other than 0, you have not disconnected the correct coupler and need to look again.

ABS models:

Some bikes equipped with ABS do not have a speed sensor (e.g. Yamaha FJR1300 2006+, VMAX 2009+, Ducati ST4 2005+). The speed signal is generated by the ABS computer. On these bikes, tap the speed signal wire between the ABS computer and ECU box. Refer to the bike's Service Manual for the wiring.

3. **Identify** the wires of the speed sensor by using a voltmeter, or refer to the Service Manual for the wiring.

The speed sensor has 3 wires (except BMW):

- The **Ground** wire should have continuity to chassis ground, when ignition is turned off.
- The **Power** wire should be constant 5V to 12V, when ignition is turned on.
- Voltage on the **Signal** wire should cycle between 0V and 5V when the wheel is rotated.

4. **Connect** the GIpro **Black** wire to the Ground wire of the sensor, using the **Red wire tap** connector supplied.

Usage: Place the unstripped run wire (sensor ground) inside the run channel. Close the side cover until latched. Cut off the excess length, then insert the unstripped tap wire (Black) completely and check its position. Insert the blade (u-contact) and press down by finger pressure. Then, fully depress the u-contact with pliers. Close the hinged top cover until latched.

Alternatively, connect the GIpro Black wire to chassis ground.

5. **Connect** the GIpro **Red** wire to a switched +12V power lead, such as the hot wire of the rear brake light switch, or to a power lead at the fusebox. You can use the Power lead of the speed sensor if its voltage is higher than 9V. Again, use the Red wire tap connector supplied.
6. Connect the 4-pole GIpro harness connector to the GIpro display connector.
7. Check whether the Power and Ground connections are correct:
Test #1:
Select Neutral and turn ignition On →
The GIpro display should count from **6** to **1**, then “L” flashes slowly.
(If not, the display is not receiving power and/or ground.)
8. **Connect** the GIpro **White** wire to the Signal wire of the speed sensor (or to the speed signal wire from the ABS computer). As before, use the Red wire tap connector supplied.
Test #2:
Rotate the wheels → the GIpro display should indicate a rolling wheel.
(If not, the display is not receiving the speed signal.)
9. **Connect** the GIpro **Green** wire to the Signal wire of the **Crankshaft sensor** (Pickup coil). The Crankshaft sensor is inside the crankcase, usually near the alternator. It has two wires. Alternatively, tap the tacho signal wire near the ECU box. Again, use the Red wire tap connector supplied.
Test #3:
Start the engine → “L” should flash **faster** for a few seconds.
(If not, the display is not receiving the RPM signal.)
10. Peel off the green plastic from the back of the unit, and mount the display.
11. Neatly route the GIpro harness from the wire taps to the mounting location, preferably along the frame.
Do not bend the harness near the 4-pole connectors.
Do not route the harness very close to the exhaust pipe or cylinder head.
12. Use black tape to secure and isolate the 4-pole connectors.
13. To minimize cable stress, use the supplied cable ties to fasten the unit and harness to other cables.
14. If all tests work fine, refer to the User's Guide for setup instructions.