

Install Guide for **GPX-HA1** Harness Kit

For use with the following motorcycles:

HARLEY Davidson with Magneti Marelli or VDO ignition module AND digital trip/odo

BUELL ALL models with digital trip/odo

Disclaimer: Do not attempt to install the product if you don't have basic mechanical 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. Locate the **Speed Sensor coupler**.

The Speed Sensor is usually located on the top, or the side of the gearbox and reads the revolution of the countershaft.

The 3-pole **grey** speed sensor coupler is situated 10-30 cm (4"-12") away from sensor. The connector is usually accessible by removing a side cover or fairing.

If the speedometer is driven off the front wheel, the sensor coupler is usually in the headlight bucket.

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 (you might need to use a small flathead screwdriver to get the coupler apart). Rotate the wheels while ignition is on. The speedometer should indicate 0. If so, turn the ignition off 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.

2. After separating the Speed Sensor coupler, **plug in** both the male and female 3-pole GIpro harness connectors. Make sure the connectors are fully seated.

*If you have a **SpeedoHealer** installed, you have to connect the plugs in-line in the following order:*

Speed sensor female plug → GIpro → SH → bike male plug

3. Find the following wire to get RPM signal from:

H-D	<p>Crankshaft Position Sensor signal wire. The CKP sensor (pickup coil) is mounted at the side of the crankcase. Trace the cable until you find the 2-pole sensor connector. The signal wire is usually Red color.</p>
Buell	<p>CAM Position Sensor signal wire. The CAM sensor (pickup coil) is mounted at the side of the crankcase. Trace the cable until you find the 3-pole black sensor connector. The signal wire is Green/White (Green wire with thin White stripe). Inspect the wire colors at both sides of the connector. Alternatively, if the bike does not have CAM sensor (e.g. Buell Blast), find the signal wire that goes from the ECU connector to the ignition coil (usually Pink).</p>

4. Peel off the black sleeve (tape), leaving about 3 cm (1.2") of this wire exposed.
5. Connect the Gipro **Black/Green** wire to this wire, using the **Red wire tap** connector supplied.

Usage: Place the unstripped run wire (shown in the table above) inside the run channel. Close the side cover until latched. Cut off the excess length, then insert the unstripped tap wire (Black/Green) 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.

6. Connect the 4-pole Gipro harness connector to the Gipro display connector.
7. Check whether everything is installed and working properly:
- **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. Check the connections at the speed sensor connector.)
 - **Rotate the wheels →** the display should indicate a rolling wheel.
(If not, the display is not receiving the speed signal. Check the connection at the speed sensor connector.)
 - **Start the engine →** "**L**" should flash **faster** for a few seconds.
(If not, the display is not receiving the RPM signal. Check the wire tap.)

Turn the ignition Off. If the tests still fail, disconnect the 3-pole and 4-pole connectors and check whether the connector pins are bent or pushed out of position. Spray some WD40 into the plugs.

8. Peel off the green plastic from the back of the unit, and mount the display.
9. Neatly route the Gipro harness from the 3-pole plugs 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.
10. Use black tape to secure and isolate the 4-pole connectors. To minimize cable stress, use the supplied cable ties to fasten the unit and harness to other cables.