HEALTECH electronics

GIpro w/ATRE

- Electronic Gear Indicator with Advanced Timing Retard Eliminator -

Specifically designed for Kawasaki ZX-10R (2004+), ZX-14 / ZZR1400 (2006+), Concours 14 / 1400GTR (2008+), Vulcan 2000 / VN2000 (2004-2007)

User's Guide

1. Foreword

Congratulations on your purchase of a GIpro unit.
The GIpro from HealTech Electronics Ltd. is not only the most advanced gear indicator on the market, but also the best TRE device available for selected Kawasaki motorcycles.

This product will fit Kawasaki motorcycles with Gear Position Sensor (GPS).

You can also install the unit on recent bikes equipped with OEM gear indicator if you need a larger gear indicator e.g. for track use.

2. Warranty

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

Should you not be entirely satisfied for any reason, our dealers are offering a **30-day money-back guarantee** *(all parts must be returned in original condition for full refund*).
Furthermore the product is covered by our **2-year replacement guarantee** from the date of purchase. *(The unit should not be damaged or subjected to over-voltage.*)

Please contact us in warranty issues at support@healtech-electronics.com regardless of the place of purchase.

3. Electrical Specifications

- Supply voltage: +9V to +16V
- Reverse polarity and transient protection on all leads
- Supply current in stand-by: 4 mA @ 12V
- Maximum supply current: 85 mA @ 12V

4. List of Features

Fast and accurate
Instant and accurate indication of selected gear for added control and safety. It's not like competing products that all suffer from lag and incorrect readings.

Quick installation
Plug-n-go wiring harness, easy to mount display
Complete installation can be done in about 40 minutes.

Built-in Advanced TRE
Recent high power Kawasaki bikes use different ignition timings in each gear to conform to local regulations for noise and emissions. As a result, ignition timings are retarded in lower gears.

With activated TRE (Timing Retard Eliminator) both part throttle response and acceleration are improved in gears 1 through 4. Engine performance is also improved at full throttle below 6000 rpm on the ZX14.

Even if TRE is activated, it automatically switches off in Neutral for smooth idle operation.

By the touch of a button on the GIpro, the rider can switch instantly between four modes. There is visual confirmation of the selected mode.

If a TRE device is installed on a bike equipped with OEM gear indicator, the bike's indicator will show the mapped gear. However, the GIpro will indicate the gear selected regardless whether the built-in TRE is activated or not.

To comply with regulations for noise and emission, do not activate TRE on public roads.

Large, effective display
1 inch, extra bright display, housed in a compact box.

Simple, one button operation
All functions can be easily accessed with the button under the display. No need to insert a separate "programming key" or grounding a wire, like on other indicators.

Auto Brightness Control
The brightness of the display varies with the ambient light intensity. The sensitivity of the sensor can be even fine tuned if desired.

Auto Learn function
Unit is pre-programmed to fit most Kawasaki bikes and it works out of the box. However, if needed, the unit learns the gear positions automatically.

Auto Stand-by
This feature makes it possible to connect the power lead directly to the battery terminal. When ignition is turned off, the unit enters into low power mode and consumes 4mA only.

Robust design
- Waterproof housing
- Microchip on board, full SMD-design
- Flash memory to store user settings even with the battery disconnected
- In case of connection or power failure, the TRE mode reverts back to Normal operation
- Only inspected, high quality components are built in
- Each unit is extensively tested prior to shipping, guaranteed to work

5. How to's

5.1. Activating the display

When the ignition switch is ON and the engine switch is in RUN position, the display will indicate the actual gear selected.

5.2. Reviewing and Changing TRE mode

1. Activate the display *(refer to section 5.1)*
2. Press and release the button.
   The current TRE mode is displayed (blinking) for 3 seconds. The indication can be one of the followings:
   - **-** : Normal Mode, TRE is not active
   - **1** : TRE Active in all gears. Recommended for ZX-10R *(also for 1400cc models with secondary throttle plates removed)*
   - **2** : TRE Active in all gears. Recommended for VN2000
   - **3** : TRE Active in all gears. Recommended for 1400cc models
   - **4** : Same as mode 3 but TRE Active in 2-6 gears only

   Note: Please try all modes to see which works best for your bike. When the best setting is obtained, PC3 remapping is recommended but not required.

3.a. If you don't want to change the TRE mode, wait until the display stops blinking (3 seconds). The display goes back to normal operation.

3.b. If you'd like to change the setting, press and release the button while the display is blinking. You can cycle through the five TRE modes by pressing the button repeatedly. When the desired TRE mode is blinking on the display, wait for three seconds. The unit will work according to the TRE mode selected, and the display goes back to normal operation.

Notes:
- For your own safety, do not review or change TRE mode while riding.
- To comply with regulations, do not activate TRE mode on public roads.

5.3. Starting the Auto-Learning procedure

If the display does not indicate the gears selected correctly, start the Auto-Learning procedure:

1. If you have a stand, raise the rear wheel off the ground. Otherwise, sit on the bike.
2. Activate the display *(refer to section 5.1)*. Make sure that the engine stop switch is in RUN position. Do not start the engine.
3. Select Neutral.
4. Press the button and keep it depressed until "**L**" (Learning) appears on the display.
5. Release the button. If the gear box is in Neutral, "**L**" starts blinking and Auto-Learning procedure starts.
6. After a few seconds, the next gear to be learned is blinking on the display (**1**, **2**, **3**, **4**, **5** or **6**). Select the gear indicated on the display. In order to change gear with engine off, move the rear wheel back and forth while pushing the gear selector. If needed, start the engine (bike must be on stand), and keep the clutch lever pulled in – do NOT forget that the bike is in gear!
   "**L**" is blinking while the selected gear is being learned.
   Repeat this step until all gears have been learned.
   If you'd like to start over the process, press the button once, then go to step 3.
7. If all six gears have been learned, "**U**" (Update) is blinking on the display for a few seconds. If your bike has less than 6 gears, press and release the button. The unit saves the new gear positions to Flash memory, then the display goes back to normal operation.

5.4. Resetting the unit

The Reset will clear the following data, and factory defaults will be restored:

- Gear Positions recorded
- TRE mode (default is Normal mode, i.e. TRE off)
- Auto Brightness Control Sensitivity Level (default is 4)

1. Activate the display *(refer to section 5.1).*
2. Press the button and keep it depressed until "**L**" (Learning) appears on the display.
3. Press and release the button again to terminate the Auto-Learning procedure. "**U**" (Update) is blinking on a display for a few seconds. Factory default values have been restored.

Note: The unit retains all settings when the battery is disconnected or removed.

5.5. Checking whether pre-set (default) or custom (taught) Gear Positions are in use

Disconnect and reconnect the power lead on the battery terminal to restart the unit.

Whenever the unit is powered up, the display indicates either "**d**" (default) or the number of gears taught (**5** or **6**) for about 1 second, then the actual gear selected will be shown.

5.6. Checking and Adjusting the Sensitivity of the Auto Brightness Controller

The sensitivity can be adjusted in 10 levels, from **0** to **9**.
Level **4** is the default value. Decrease the level if you'd prefer less brightness, and increase the level if more brightness is desired.

If you decrease the Sensitivity Level in low ambient light, or increase it in strong daylight, you may not notice a difference in display brightness because it may be already at minimum or maximum setting.

If you set the level to **9**, the Auto Brightness Controller will be disabled and the brightness will be always at maximum, regardless of the ambient light intensity.

1. Select Neutral and have the ignition key in OFF position. The display is blank.
2. Depress the button then turn the ignition ON.
3. Release the button after about 3 seconds, when "**A**" (Adjust) is displayed.
4. The current Sensitivity Level is shown on the display (blinking).

5.a. If you don't want to change the Sensitivity Level, wait until the display stops blinking. After 3 seconds, the display goes back to normal operation.

5.b. If you'd like to change the setting, press and release the button while the display is blinking. You can cycle through the values by pressing the button repeatedly. When the desired Sensitivity Level is blinking on the display, wait for three seconds. The display goes back to normal operation, and the new Sensitivity Level will be in effect.

5.7. Cleaning the display

The LED display is protected by a Plexiglas filter element. Wipe clean it with wet sponge.
To avoid scratching the filter, do not clean with dry cloth.

The unit is waterproof, however, do not spray high pressure water directly on the display.