

Thank you for purchasing the Gizzmo TR2 Shift Light. This manual contains operating instructions and installation procedures that are needed for the fitting and operation of this product.



INSTIZUCTION MANUAL





Gizzmo TR2 Shift light

The Gizzmo TR2 Shift light is unique in bringing the features of an advanced aftermarket tachometer into any conventional tacho. The Gizzmo TR2 Shift light allows any conventional tachometer to have a peak rpm recall that can be displayed via the factory tachometer in addition to having a two stage shift light and 4 brightness settings and an opening ceremony.

Once installed, whenever the ignition is switched on, the Gizzmo TR2 Shift light will display the second stage shift light setting and then first stage shift light setting, by indicating the rpm position on the tacho and flashing the corresponding LED's. This sequence will occur whenever the ignition is turned on.

IMPORTANT APPLICATION NOTE:

Some, but very, very few, vehicles utilise an impulse type Tachometer, typically older Toyota's. These Vehicles will either require a slight Tachometer modification or will require the TR2 to run in dual stage mode which will remove the Tach interfacing functionality.

Operating Instructions

Warnings:

- 1: Incorrect installation can damage this product
- 2: Gizzmo Electronics will not warranty any item that has been damaged due to incorrect installation or misuse of product.
- 3: Never disassemble, modify, or tamper with unit. Failure may cause injury fire and void warranty.



Start up Sequence

When ignition is turned on the tacho will...

- 1. Display second stage shift point whilst flashing the second stage shift light then...
- 2. Display first stage shift point whilst flashing first stage shift light then...
- 3. Return to running mode.

About the Peak Recall Function

The Gizzmo TR2 Shift light allows the user to display the peak rpm for the current trip e.g. current trip being since ignition key ignition was last switched on simply by briefly pressing the mode button once. If you press the mode button again whilst the peak rpm is being displayed it will reset the max recall.

Installation Instructions

Red - 12v ECU Positive Yellow - ECU Negative

Green - Tacho Signal in (from ECU) Tacho Blue - Signal out (to the tachometer)

The signal to the tacho runs in series THROUGH the Gizzmo TR2 shift light. The tacho signal enters the shift light via the green wire. The signal then passes through the shift light and continues out through the blue wire to the tachometer. Power and earth signals are best taken from the engine ECU. The tacho signal is best taken from the rear of the instrument cluster or engine ECU where applicable.

An auto electrician should carry out the installation of this product.

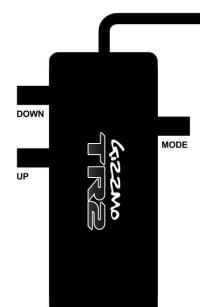
To Switch between Tach Recall and Dual Stage modes

With the key OFF, hold down all 3 of the TR2's buttons, and while doing so, turn ON the ignition. Continue to hold down all the buttons until the TR2's LED's start flashing, and then you can release the buttons.



In normal Tach Recall mode

Under normal running conditions the UP and DOWN buttons will adjust the TR2's brightness whilst in setting mode they will adjust the shift points as outlined below



Pressing the MODE button once will display the Peak rpm reached since last starting the vehicle; you can press it again whilst displaying the rpm recall to erase the present max rpm. Holding the MODE button will enter you into the setting mode outlined below

Setting the shift points in Tach Recall mode

- 1. Start and idle the vehicle
- 2. Hold the MODE button in for 2 seconds, the center LED will start flashing
- 3. If you wish to change the SECOND stage shift point, briefly push the UP or DOWN button which toggles between the first and second stages. The second stage LEDs will start flashing.
- 4. Having now selected which shift point you want to adjust, briefly press the MODE button, you will notice the LED's start flashing differently to confirm your selection.
- 5. Press and hold the UP or DOWN buttons to adjust the tachomter needle to the desired shift point.
- 6. Briefly press the MODE button to save and exit the setting mode returning you into the normal running mode.



Setting the shift points in Dual Stage mode

- 1. Start and idle the vehicle.
- Increase the engine revs to a half of the desired shift rpm. If you are wishing to set the FIRST stage, briefly press the UP button once OR if you want to set the SECOND stage, press the DOWN button once. The TR2 will automatically sve the setting.

Troubleshooting

- The shift light does not flash when ignition switched on.

 Check to make sure power and earth are connected, to the correct wires and that the connections are sound.
- The tacho does not work, or does not move as per the operating instructions, but the shift light does flash the opening ceremony.
 - Check the connections between the tacho and the shift light are correct. If they are, try fitting the supplied resistor in between the TR2's red and blue wires. If the tach still does not work, the vehicle may be fitted with and impulse type tachometer which will only work with a slight modification.
- The shift light flashes erratically and/or at the wrong time.

 The unit is receiving excessive ignition noise. Try a different 12v ignition source and/or tacho input signal.
- The shift light does the opening ceremony but does not operate with engine RPM.
 - Check the Tachometer input signal with a scope. Try fitting the supplied resistor between the tach recalls 'Green' & 'Red' wires. If this does not work, try fitting the resistor between the 'Green' & 'Yellow' wires, if still the tachometer does not work, Please contact your Gizzmo national distributor.



About The Warranty

Gizzmo Electronics Limited Limited Warranties Statement Effective 1 January 2003

All Products manufactured or distributed by Gizzmo Electronics are subject to the following Limited Express Warranties, and no others:

For a period of one year from and after the date of purchase of a new Gizzmo Electronics product, Gizzmo Electronics warranties and guarantees only to the original purchase/user that such a product will be free from defects of material and workmanship in the manufacturing process. Gizzmo Electronics, at its sole option, shall replace the defective product. This express warranty shall be inapplicable to any product not properly installed and properly used by the purchaser/user or to any product damaged or impaired be external forces. This is the extent of Warranties available on this product. Gizzmo Electronics shall have no liability whatsoever for consequential damages following from the use of any defective product or by reason the failure of any product. Gizzmo Electronics specifically disclaims and disavows all other warranties, express or implied including, without limitation, all Warranties of fitness for a particular propose, Warranties of Description, Warranties of Merchantability, Trade Usage or Warranties of Trade Usage.