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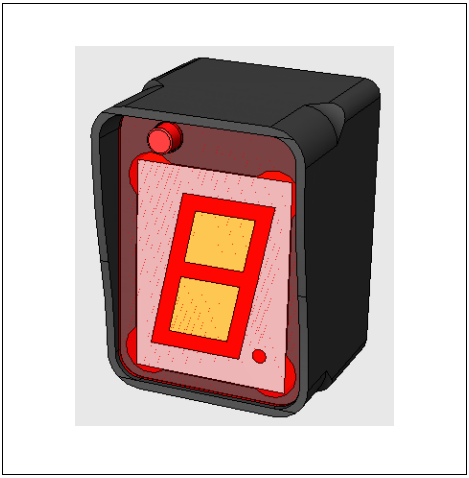


CTM Racing

Installation and operation manual

INTRODUCTION

Congratulations on your purchase of the CTM Racing gear indicator!

This CTM Racing gear indicator also features a flash light function that indicates both the gear inserted and whenever the rpm level required to change gear has been reached and/or exceeded.

The device is composed of a red colored high-efficiency luminous display housed in an aluminium case machined from solid with an attractive design and one single programming key, a box containing the control electronics (eBox), and connection wiring between the various components and the motorcycle's electric system made using materials and connectors designed for application in the automotive sector.

This gear indicator also offers the possibility to set brightness to 2 different values: one for the day, one for the night.

NOTE

If this manual is not complete or does not contain all the information you require, please contact us without hesitation. We are at your disposal for every clarification and for any suggestions regarding both this manual and our products.

ATTENTION

- The CTM Racing is not an approved device for use on the public road
- The use of the CTM Racing increases stress on the vehicle transmission system
- Incorrect installation of the electrical part can detrimentally affect the proper operation and/or integrity of the CTM Racing and/or of the vehicle's electrical system.
- The installation of the CTM Racing must be carried out by an engineer familiar with electrical circuits

SP electronics declines all responsibility as regards the points listed above and any consequences of them, in relation to any damage caused to any part of the vehicle, to the rider or to transported third parties arising out of the installation and/or use of devices described in this manual.

WARNING

- The specifications of this product can be subject to modification without notice.
- The contents of this manual can be subject to modification without notice.
- The manufacturer and its suppliers do not assume any responsibility towards the purchaser or towards anyone else in relation to any damages, expenses, loss of profits or any other damage resulting from the use of this product.
- The contents of this manual may not be reproduced without the manufacturer's permission.

CONFORMITY OF THE SYSTEM

The CTM racing has been designed and built in compliance with the directives of EC regulations governing electronic devices. It does not contain dangerous substances or parts which could directly damage the surrounding objects. The product does not give rise to any combustion or explosion risk.

NOTE

The CTM racing has been designed, realized and assembled in Italy by SP electronics.

INSTALLATION

Mechanical installation

The CTM Racing gear indicator must be installed near the dashboard in order to be visible from any position the driver takes in the saddle and can even be fastened with Velcro for automobiles or minimum 2 mm thick bi-adhesive tape.

Although the exact installation position is up to you, we advise you to have the operation performed by a trusted mechanic.

Electrical Installation

ATTENTION!

The installation of the CTM Racing must be carried out by an engineer familiar with electrical circuits. It is dangerous to modify the original wiring of the motorbike without adequate experience of the subject.

You are advised to disconnect the positive terminal of the battery before starting the installation procedure and for the whole duration of the same.

From harness wire of CTM Racing you have four wires:

Color	*Function*
Red	Feed
Black	Ground
Blue	Rpm signal
Yellow	Speed signal

Each of these wires should be connected to the harness wire of your motorbike associated with the use indicated in the table.

Your motorbike's wire colour indication for the use indicated in the table can be found in the database on our website:

http://www.spelectronics.it/database/

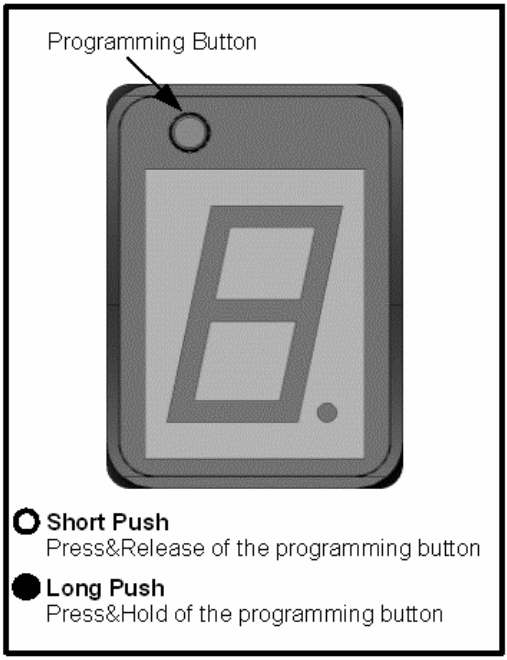
The information in the on-line database will help you to connect the device on the basis of the make, model and year of construction of the motorbike.

Once you have completed the steps described above, the device will be ready for optimum operation and will not lose the defined settings and programming even if the bike's battery is disconnected. If you have any doubts or problems, contact us at the following addresses:

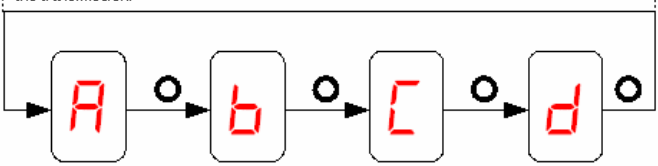
Tel. **+39 0445 334 677**

Mail: **info@spelectronics.it**

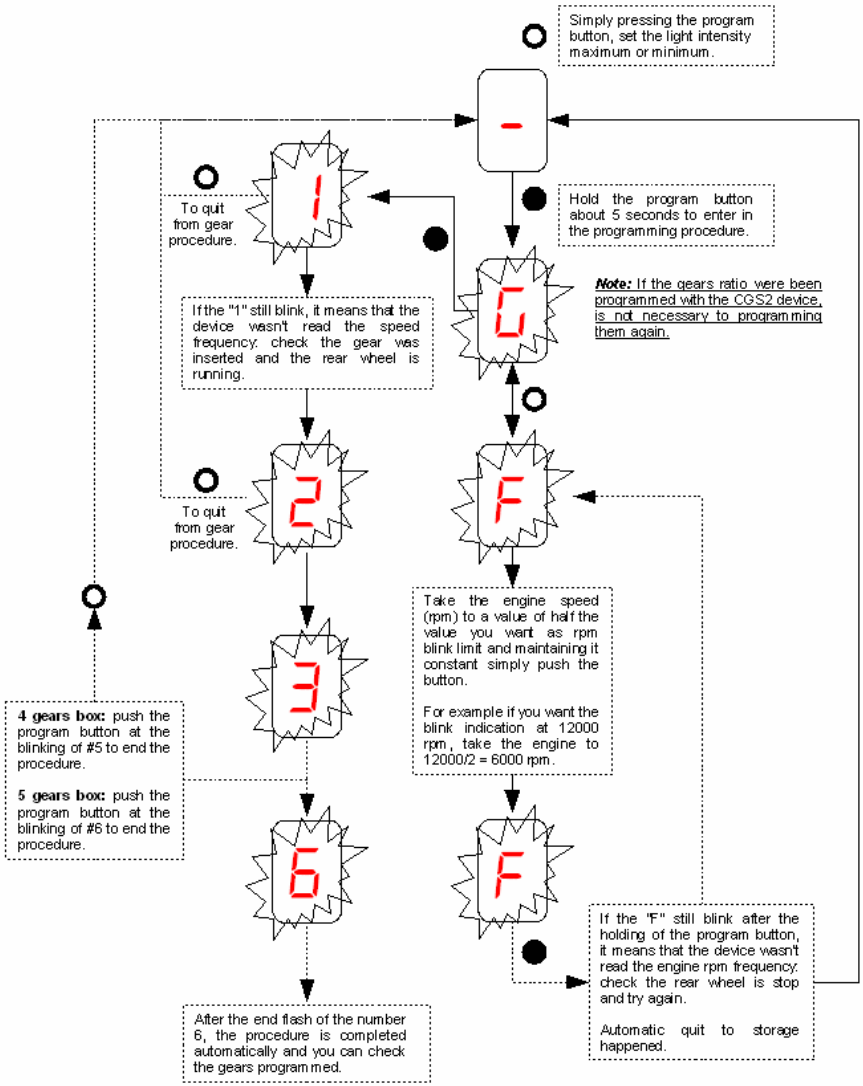
Multi-Gear-Ratio first indications:



During the time of start up device, simply by pressing the programming button, is possible to choose in a cyclic mode between four different memory locations (A-b-C-d) to acquisition and storage the gears ratio. Leave appear the memory location that you want, you proceed to use the device CGS2 automatically after about 5 seconds. This feature allows you to program up to four different sets of gears ratio and call each time they are replaced parts of the transmission.



Multi-Gear-Ratio Configuations:



TECHNICAL FEATURES

Supply Voltage		9 – 16 Vdc
Maximum Current Consumption[1]		120 mA
Display material		Light Alloy
Dimension	eBox	58 x 40 x 16
	Display	35 x 25 x 25
Weight		100 g
Working temperature		-20/+70 °C
Resistant to water (not by immersion) and vibrations		

The CTM Racing is powered by the battery voltage of the bike.

In normal operation the engine is running the energy required by CTM Racing in no case is influential on vehicle performance and battery charge.

NOTA
If the vehicle remains unused for a long period is a good idea to disconnect the battery terminals. This is regardless of the presence of CTM Racing.

1 *Feed to 12 V.*