

TECHNICAL DOCUMENTATION 27/10/2005

**Mini Logger** 

Notes: MyChron Light TGLog technical documentation, dimensions and pinout - Version 1.02

**MyChron** Light TG<sup>Log</sup>



Figure 1: MyChron Light TGLog and its junction box

### Introduction

MyChron Light TGLog represents the evolution of MyChron Light TG. This new instrument, designed and developed for bike applications, provides the racer with a new, handy instrument. The new MyChron Light TGLog has a beautiful 128 x 64 pixels graphic display. This new gauge has also an auto power off feature after 20 minutes of inactivity.

The instrument kit composed of:

- MyChron Light TGLog display unit
- Junction Box
- 1 RPM Sensor
- 1 Speed sensor
- 1 Temperature Sensor (Thermoresistor)
- IR Transmitter and receiver
- USB Data download kit and Race Studio 2 software

### Your MyChron Light TGLog has:

- built in clock and calendar
- built in database for laps management
- capability of up to 10.000 laps storage
- 24 hours of sampling at 10 Hz

### Your **MyChron Light TGLog** samples:

- Lap Time
- RPM
- Speed
- 1 Temperature
- Throttle position

The gauge is powered with a 9 V internal battery.



Data is stored in the 8 Mbytes non-volatile internal memory and is downloaded to a PC through an USB cable. Data stored in its memory will be analyzed thanks to the software "Race Studio Analysis".

### **Installation notes**

- We recommend You to choose a place where the instrument will not be in contact with oil or fuel. Make sure that the gauge is not installed too close to heat sources.
- MyChron Light TGLog Display unit can be installed using four M3 anti-vibration mountings, fixed in the threads on the back of the system or a strip of Velcro. This because MyChron Light TGLog suffers for vibrations.
- MyChron Light TGLog Junction box can be installed behind the number plate using a piece of Velcro. To know the pinout of the junction box connectors, please refer to the technical table at the end of this datasheet.

### **MyChron Light TGLog Configuration**

• **MyChron Light TGLog** is only configurable via keyboard. Pressing "MENU" button (the first on the left), you can scroll all configuration functions. Here they are quickly explained.

Clear Test Data	This function allows you to clear the memory of your MyChron Light
	TG Log.
Session Mode	You can choose between Lap Counter, Qualify mode and Race Mode.
Min Lap Time	This function allows you to set the instrument obscuring time; accepted
	values are between 3 and 180.
Track	You can select a Track name, enter a new one (up to 50), see where
	best laps have been done and clear all.
Configure	This function allows you to: see Total running time (Total and partial run
	and odometer), set date and time, set split type (Elapsed Vs, Section
	Vs, +/- Previous Lap, Actual, Accumulative), enter racer's name, set
	display setup (contrast, rolling number, screensaver), see system
	information (instrument name, firmware version and serial number).
MAX RPM	Set Max RPM; accepted values are from 8.000 to 24.000.
RPM Factor	Set RPM factor (choose between*1, /2, *2)
Temp Unit	Set Temperature Unit of measure (°C or °F)
Speed Unit	Set Speed Unit of measure (km/h or mph)
Wheel Circ	Set the wheel circumference in mm or in inches
Wheel Pulse	Set the number of pulses for wheel revolution (between 0 and 99)



### How to connect MyChron Light TGLog to the PC

To connect your **MyChron Light TGLog** to the PC, please use the USB data download cable and plug it both in the display unit USB port and in the PC USB port, as shown in **Figure 2**.

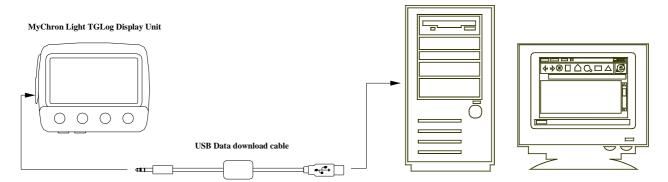


Figure 2: How to connect MyChron Light TG Log to the PC

### How to change MyChron Light TGLog battery

**MyChron Light TGLog** battery is contained in the instrument junction box. To change the battery, please unscrew the lateral screw located on the external side of the junction box and replace the battery.

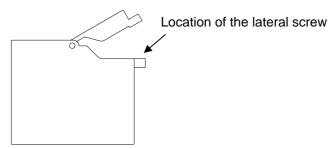


Figure 3: MyChron Light TG Log Junction Box (Top view)



### How to download and Analyze stored data

**MyChron Light TGLog** can download stored data in a Pc through USB cable using **Race Studio 2**, the software properly designed and developed by AIM to manage its instruments and analyze stored data.

To download Stored Data, please run Race Studio 2. This window appears



Connect Your **MyChron Light TGLog** to the PC USB port through the USB cable and switch it on.

Then click on "Download" Button on the top toolbar or press "F4" button.

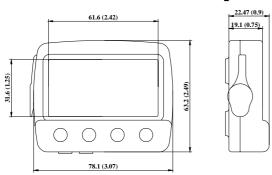
A waiting bar, showing download status, appears.

When download is finish, to analyze stored data you need to run **Race Studio Analysis**. You can do so pressing "F5" button, clicking on "Analysis" button on the top toolbar or running the software from the related icon you find on your Pc Desktop.

For further information related to Race **Studio Analysis**, please refer to the proper manual you find in **Race Studio 2** CD Rom or you can freely download from our website <a href="https://www.aim-sportline.com">www.aim-sportline.com</a>.



## **Dimensions in millimetres [inches]**



MyChron Light TGLog Display Unit

# RPM - Power Throttle Temp. Speed Speed Temp. Speed Tem

MyChron Light TGLog Junction Box

# **Connector Details (RPM Signal)**

Pin	Function	Pin	Function
1	RPM – Spark	3	V battery
2	Plug GND	-	GND RPM >8 V

# **Connector Details (Temp. - TR)**

Pin	Function	Pin	Function
1 2	n.c. GND	3	Thermoresistor

# **Connector Details (Throttle)**

Pin	Function	Pin	Function
1 2	Throttle GND	•	+VB V Ref. 4.5 Volt

# **Connector Details (Speed)**

Pin	Function	Pin	Function
1	Speed GND		+VB n.c.







Female Binder connectors pinout (external view): 5 pins (left), 4 pins (centre) and 3 pins (right)

# **Specifications**

Internal battery Storage Capacity Internal memory PC interface PC connection  9 V Battery Up to 10.000 laps/24 hours sampling at 10 Hz 8 Mb non volatile USB port USB Cable (300 kb/sec)	

Other characteristics	Value
TGLog Display unit Dimensions	78.1 x 63.2 x 22.4 mm
Graphic Display dimensions	61.6 x 31.6 mm
Display dot pitch	0.42 x 0.42 mm
Display resolution	128 x 64 pixel
Junction Box Dimensions	75.4 x 89.1 x 24 mm
Environmental	IP 65