

Dear MyChron Light TG Owner

Your new Instrument is the evolution of MyChron Light MCL. This new instrument merges all functionalities and values of MyChron Light MCL with the new graphic display and gives you a lot of new useful functions like histograms and different time counter settings.

The small size of **MyChron Light TG** allows you to install it anywhere without problems.

MyChron Light TG standard version is a plug and play instrument. There is nothing you need to do: only switch it on and it starts recording. Moreover, the automatic switch off after 20 minutes of inactivity avoid undesired battery exhaustion.

Your pocket **MyChron Light TG** will be on your side in every race, exactly like AIM customer service, that is present at almost all major races throughout the country and every day from 9.00 am to 5.00 pm.

For any doubt, information or question, please visit our website: www.aim-sportline.com.

Thank you for your purchase of MyChron Light TG.



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Getting Started with MyChron Light TG

Aim developed and tested your **MyChron Light TG** to give you precise and accurate results. Your **MyChron Light TG** is always ready with you. Here are the parts of your kit:

MyChron Light TG standard kit:

- MyChron Light TG display unit with green display
- Infrared Lap Transmitter and Receiver.
- Two 3 volts internal round batteries

MyChron Light TG optional:

- Backlight (only on externally powered version)
- Blue display (on externally powered version)
- External power cables (external power version)
- Infrared Split Transmitters
- USB data download cable and Light Analyzer software.

Please note: on the externally powered version, the backlight switches automatically on when you switch on your lap timer and cannot be switched off.



MyChron Light TG and it's parts

Although your **MyChron Light TG** is a plug and play instrument, we suggest you to read carefully these few notes, to be sure that your instrument is always at its best. In **figure 1** you see, **MyChron Light TG** kit.



Figure 1 - MyChron Light TG display unit and IR receiver.

In the middle of the picture is the graphic display, while on the right is the Infrared receiver. It contains the two 3 Volts batteries that power both the receiver and the lap timer. The receiver needs an Infrared Transmitter placed on the side of the track and has to "see" it so please, place the "receiving eye", circled in **Figure 1**, pointed to the transmitter.



The Display

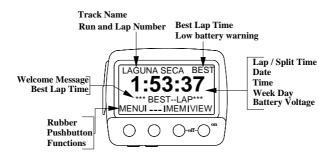


Figure 2 - Description of MyChron Light TG display

MyChron Light TG has various pages that can show different information, namely:

- on **top row**: track name, run and lap number, best lap time, low battery warning; battery charge status appears at power on and disappears after one minute; it re-appears if battery charge status is low;
- 2 on central row: lap and split times, date, time, battery voltage. Use "VIEW" button to switch among the pages;



- 3 this row shows welcome message at power on and disappears after one minute; it re-appears showing best lap time when recorded
- 4 the **bottom row** shows keyboard functions.

Please note: graphic display colour is different in the two versions of **MyChron Light TG**: standard version (internally powered) has a green background display, while optional externally powered version has a blue background display.



The Keyboard



Figure 3 - MyChron Light TG keyboard

MyChron Light TG keyboard has four rubber pushbuttons used to configure it, recall recorded data and clear the internal memory.

The four pushbuttons are used to:

- 1 Activate "Menu" function, scroll down among all functions options, increase digit values.
- 2 Scroll functions options, increase digit values.
- 3 See best lap time and all information about lap times, enter any function, save changes. Pressed together with button 4 switches off MyChron Light TG.
- 4 Switch on MyChron Light TG, see date, time, week day and battery voltage; discard changes; exit any selected function. If pressed together with 3 button switches off MyChron Light TG.



To run the system in **DEMO MODE**, please switch on the lap timer and then press buttons "1" and "2".

DEMO MODE

text appears and your **MyChron Light TG** runs in **DEMO**MODE.

Please note: you cannot run the system in **DEMO MODE** if the lap timer is already switched on: you must switch it off and then already on. To stop **DEMO MODE**, please switch off your **MyChron Light TG**.

Your MyChron Light TG has an automatic auto-power off function that switches it off after 20 minutes of inactivity. This duration time has been expressly increased to allow MyChron Light TG to be used on particularly long tracks (like Nurbürgring for instance). This function is only present on the standard version; externally powered version does not have AUTO POWER OFF function. Moreover, please note: running in DEMO MODE DISABLES AUTO-POWER OFF FUNCTION



The Infrared Transmitters

Your **MyChron Light TG** is an intelligent lap timer and can detect the signals of two different transmitters: the lap transmitter and the split transmitter. These two objects differs in the kind of signal they emit; **MyChron Light TG** can distinguish their signals, and thereby record a split time or a lap time.

With these new useful transmitters you will no more throw away all your data if only missing one signal.

While with the old transmitters lap signal and split signal where the same and if you missed one signal your instrument shifted start / finish line, with these new ones, also if you miss a split or a lap signal, when the instrument gets the next lap signal it re-starts calculating splits and laps correctly and does no more shift start / finish line.

Your standard kit includes one transmitter, the lap one. The split transmitter is optional.



How to install MyChron Light TG

Please follow carefully these few instructions in order to preserve your instrument and record reliable data.

- Choose a place where the lap timer will not be in contact with oil or fuel nor too close to heat sources.
- Your MyChron Light TG can suffer vibrations, this is why it is arranged with four thread holes (highlighted with four arrows in figure 4) you can use to install it.

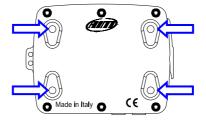


Figure 4 - MyChron Light TG rear view

If you have bought an **optional externally powered version** of **MyChron Light TG**, you will find two cables coming out from the bottom of the lap timer, you should connect these cables to an external 7-15 V power source



(the car / bike battery for instance). Please connect the red wire to the battery positive pole (+) and the black one to the battery negative pole (-)

How to power the lap timer

Your **MyChron Light TG** standard version is powered by two 3 volts round batteries inserted in the case of the infrared receiver.

Please note: round batteries are given as equipment.

To change the batteries, please unscrew the four screws located on top of the Infrared Receiver case (highlighted with two arrows and two circles in **figure 10**) and substitute the two batteries.



Figure 5 - Position of screws of IR receiver case



How to switch on / off the lap timer

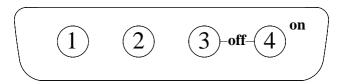


Figure 6 - MyChron Light TG keyboard

To switch on your MyChron Light TG, please press the pushbutton on the right of the keyboard (button number 4 in figure 6).

To switch off your MyChron light TG, please press button 4 together with the one on its left (to say buttons 3 and 4 of the keyboard's figure).

Please note: your MyChron Light TG standard version has an auto-power off option that switches off the lap timer after 20 minutes of inactivity. Optional externally powered version does not have this option and, moreover, DEMO MODE disables auto-power off function.



On track

As you switch on your **MyChron light TG** for the first time it shows some information. Here they are shown:

AIM MyChron TG

** V 13.11 **

S.N. 0000000123

- The first row shows instrument's name
- The second row shows firmware version
- The third row shows instrument's serial number.

After a few seconds the display turns to display mode. As in figure 7.



Figure 7 - MyChron Light TG in display mode



Configuration functions

Before starting, please configure your **MyChron Light TG**, in order to get correct data. Here is the procedure to do it. To enter "configuration mode", please push "MENU" button. The following list of configurable functions appears:

- 1. Clear test data
- 2. Mode
- 3. Obscuring time
- 4. Track
- 5. Configure

Please use "DOWN" and "UP" button to select the function you want to set and then press "OK" button to set it.

In the following pages is explained how to set all functions.

Note: configurable functions list, above reported, is from here onwards called first list.



Clear test data

Clear Test data function allows you to clear the memory of your **MyChron Light TG**. If you want to clear test data, please:

- enter configuration Menu pressing MENU button.
- Clear test data option is the first of the first list.
 Please press "OK" button.
- A text asking for confirmation appears:

"Confirm clear?"

you have two options: press "YES" button to clear or "NO" button not to. When **MyChron Light TG** is clearing its memory, a wait bar showing clearing status, together with

Test data cleared

text appears

Please note: we strongly recommend you to clear lap timer memory frequently and after each download.



Mode

Mode function allows you to set lap timer recording mode. If you want to set your lap timer mode, please

- Select mode in the first list and press "OK";
- The following list appears:
 - Lap counter
 - Qualify
 - Race

You can set all parameters. Please use "DOWN" and "UP" buttons to select one option and "OK" button to enter it.

Lap counter This option allows you to set a lap counter.

Qualify

Set to this option **MyChron Light TG** shows the remaining time to the end of the qualifying session. The system asks you to enter session duration time in minutes. Accepted values are between 5 and 60.

Race

Set to this option **MyChron Light TG** shows how many laps remain to the end of the race The system asks you to enter the race number of laps.



Obscuring time

Obscuring time function allows you to decide whether to capture split times or not. The obscuring time is a period during which the Infrared receiver, after having acquired lap/split marker, is "blind" and cannot detect markers. If you do not wish to capture split times on a track where more than one transmitter is positioned, please set the obscuring time to a value of about 5 seconds lower than the track best lap time. If, on the contrary, you wish to capture split times, please set these parameters to a low value: the minimum value the instrument accepts is 3, while the maximum is 180. If you want to set obscuring time, please:

- select obscuring time function in the first list.
- use "DEC-", and "INC+" buttons to set digit numbers, "OK" button to save changes and "CANC" to discard changes.

Here follows three examples of Obscuring time configuration.



Example 1) The track is equipped with only one lap transmitter

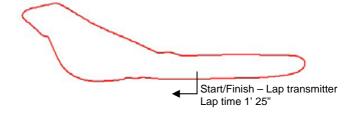


Figure 8 - The track has only one lap transmitter

In this case you cannot acquire split times because the track is not equipped with split transmitters. We recommend to set the following value:

 Obscuring time: please set a time lower than your best lap time. In this example, best lap time is 1'25": you can for example set 1'20".



Example 2) The track is equipped with one lap transmitter and two split transmitters but you do not wish to capture split times

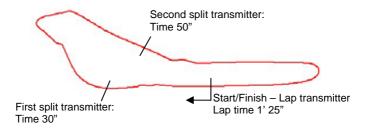


Figure 9 - The track has one lap and two split transmitters

As the track is equipped with both lap transmitter and split transmitters, but you do not wish to capture split times, please set the following value:

 Obscuring time: set a time lower than your best lap time and greater than the time elapsed at the last intermediate before the finish line. In this example, you should set a value included between 50" and 1'25".



Example 3) The track is equipped with one lap transmitter and two split transmitters and you wish to capture split times

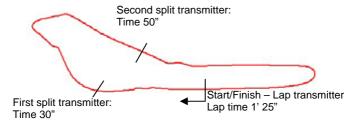


Figure 10 - The track has one lap and two split transmitters

As the track is equipped with one lap transmitter and two split transmitters and you wish to capture split times, please set the following value:

 Obscuring time: must be lower than minimum split time. In this example: first split time is 30", second one is 20", third one is 35": minimum split time is the second one (20"), please set obscuring time to a value lower than 20".



Track

Track names option allows you to select a track name or to insert a new one To enter track function, please:

- select track function in the first list and press "OK";
- these two options are showed:
 - Select
 - Enter names

You can select an existing track or insert a new one.

Select

With "UP" and "DOWN" buttons you scroll among available tracks, "OK" button selects the desired one and "QUIT" button exits and saves.

Enter names

You can enter up to 50 track names.

Select the track number you want to

enter. "<<" and ">>" buttons scroll among the characters, "OK" button enters a character, the arrow at the end of the row erases a character. When all characters have been entered, please press "END" and then "YES" to confirm.



Configure

This function is to set visual options of **MyChron Light TG.** Select configure in the first list and this **second list** appears:

- Set Time / Date
- Split
- Driver
- Display Setup
- System information

Set Time/Date

Is to set the build in clock and calendar.

First option is set hour. First time format is 12h and shows AM/PM on the right; increasing digit values more than 12 time format goes to 24h and AM/PM disappears.

When you have set hour the systems switches to set minute, year, month, set week day.





Split

You can see split time in three ways:

- previous: compared to same split of previous lap.
- best: compared to same split of best lap.
- 3. direct: current split time.

Driver

With driver function you enter the name of the driver in the memory of your lap timer; it works like enter track name.

Please note: you can store one name only.

Display setup

Display setup function changes the display setup. To do so, please:

- select display setup in the second list and press "OK" button.
- The following list appears:
 - Reverse
 - Set contrast
 - Rolling number
 - Screensaver



Reverse

Reverse option inverts characters and background colour.

Set contrast

Sets display contrast. Accepted values are between -5 and +5.

Rolling Number

Changing numbers can be rolling or not. "OK" button enables / disables rolling numbers, "QUIT" exits and saves.

<u>Screensaver</u>

MyChron light TG has a screensaver that makes the lap timer run in **Demo**Mode after one minute of inactivity and disables auto power of function.

System information

It shows:

AIM Mychron TG instrument name

V 00.00 firmware version

S.N. 0000000123 serial number.



Utility Functions

Once your lap timer has been configured, you are ready to manage the data it acquires.

Your **MyChron Light TG** displays: track name, lap and split times, best lap time, date, time, week day and battery voltage. It records lap times and split times. These data can be recalled on a later stage for analysis.

MyChron Light TG calls a test "run"; each run includes all the laps recorded between 2 switching off / downloads. To begin recording a test, please switch your instrument on.

Let's now start using your **MyChron Light TG**. With reference to the following display, we are now examining all functions of your keyboard buttons and all information the display can show.

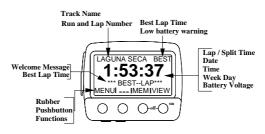


Figure 11 - Description of MyChron Light TG display



View data while driving

Your **MyChron Light TG** displays current run and lap number when the IR receiver passes a lap transmitter. If set to capture split times, once recorded time for each split, the final split is displayed as a lap.

Depending on how you set split option, the system indicates: gap time between current split time and same split time of the previous/ best lap or current split time. When best lap time is recorded, the text

*** BEST-LAP***

Memory Management appears on the third row of the display.

Your **MyChron Light TG** can record up to 2000 laps. It has a round memory.

Please note: this means that if you run 2001 laps without clearing the memory, when lap 2001 is recorded, the first one is overwritten.

When a test is completed, the system displays last lap number and last lap time. With "MEM" button you retrieve data stored by your lap timer. Here is explained how to do it.



View data per best lap time

MyChron Light TG displays data per best lap time. To see these data, please press "MEM" button to view the best lap time of the last run.

"<<"/">">>>" buttons show best lap times of each run, "VIEW" button shows run and lap number and all infos about the test (track name, date and time) and the graph of the run (if it has at least five laps); "<<<" / ">>>" buttons scroll between the laps of one run; "QUIT" button exits.

View other completed lap data

Your **MyChron light TG** displays data for completed lap. To see them, please press "MEM" button to view best lap time of the last run, then press "VIEW" button to see the graph of the run (assumed that your run has at least 5 laps).

Press twice "VIEW" button to see run and lap number, track name, date and time and use "<<<" / ">>>" buttons to see all lap times of different runs.



Maintenance

Your **MyChron Light TG** does not need any special maintenance.

Provided that adequate care is taken of display unit and components, the only suggested maintenance is systematic check and periodical change of the two 3 Volts round batteries on internally powered versions and periodical firmware/software (if you bought USB data download cable and related Light Analyzer software) upgrading.

To upgrade both software and firmware, please check periodically our website www.aim-sportline.com, where last available releases are published.