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USER'S GUIDE - LapTimer 5003A/5503A

Congratulations on your new LapTimer 5003A/5503A

Please read before use to gain maximum benefit from your new LapTimer.

CONTENTS PAGE

1. Installation

RECEIVERThe receiver is to be mounted at the side of the car/MC that faces the transmitter

Mounting height:
For standard- & formula cars as well as MCs it is recommended to mount the receiver at a height of approx. 800-900 mm above ground level

Specially regarding standard & formula cars

IMPORTANT! The receiver must be mounted so that it points **horizontally** out of the window

Specially regarding MCs

IMPORTANT! The receiver must be mounted **horizontally** on the rear seat cover tale so that it is positioned at right angles to the MC. Be careful that no wires are jammed between the seat and the tank.

TRANSMITTERThe transmitter is to be placed at the same height as the receiver or preferably 100-200 mm higher and as close to the finishing line as possible

The range of the system is 3-50 metres

WARNING!!If other types of infrared transmitters are placed on the track at the same time as a UNIPRO RACING LAPTIMER, the individual distance between the transmitters should be 3 times the distance between the transmitter and the vehicles with the LapTimers

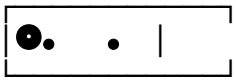
DISPLAY UNIT To be placed in the most suitable place for the driver

2.Operating the LapTimer before driving

Switch on the LapTimer by pressing the POWER key [5].

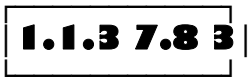
When the POWER key is released the display will show..... 8.8.8.8.8.8

Shortly after the display will show..... and the LapTimer is ready to receive signals from the transmitter.

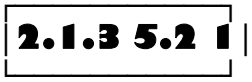


The first time you pass the transmitter the display will show.... The stop watch is now activated and the display will now show lap number **0** and time **0.00**.

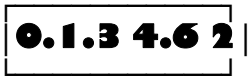
The next time you pass the transmitter, the display show e.g. .. which means that you completed lap number 1 in 1 minute 37 seconds and 83/100 of a second.



After another lap the display may show..... Which means that you completed lap number 2 in 1 minute 35 seconds and 21/100 of a second.



After lap 10 the display may show.....

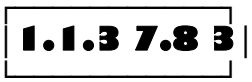


From lap 1 to lap 999 only the last figure of the lap number will be displayed. If you exceed 999 laps without deleting data in the memory, the lap number will be replaced by - in the display. This means that data from these laps will not be stored in the memory, but the lap times shown in the display are still correct.

3.Operating the LapTimer after driving

After the race/test session you can go through your lap times once again by pressing the MODE key [2]. *The LapTimer is now in PIT-MODE.*

The display will show lap 1 and the lap time, e.g. .....



With the two arrow keys [3][4] you can flip through the stored lap times. (When you release the arrow buttons firstly the lap number and secondly the corresponding lap time will be shown in the display). It is possible to "spool" fast by constantly pressing one of the arrow keys. When the display shows lap 1, you can jump direct to the last lap, e.g. lap 57, by pressing the arrow ⩛ key [4].

When you have finished going through your lap times, you switch off the LapTimer by pressing the POWER key [5].

Next time you want to start your LapTimer, you switch on the LapTimer by pressing the POWER key [5]. The LapTimer will automatically switch to the last lap stored and now the LapTimer is ready to receive further signals from the transmitter.

If you want to delete data in the memory, please follow instructions in section 4

4. The memory of the LapTimer

The LapTimer will automatically store the lap times in the memory.

It is possible to print all the data stored in the memory via a DATALOGGER 5000 and a printer (additional equipment). Please see an example of printed data on page 7.

In order to delete data in the memory, the LapTimer must be switched off. Press then the arrow ➘ [4] and hold it depressed while you press the POWER key [5]. When you release both keys (first the POWER key then the ARROW key) all stored data are deleted.

5.Setting the trig-time

The trig-time is the time that as a minimum must be between two signals sent to the LapTimer. Setting the trig-time is primarily important on tracks where more than one transmitter are placed or on tracks where the transmitter and the receiver can "see" each other more than once during a lap. In order to avoid incorrect signals, it can be advantageous to set the trig-time at approx. 2 seconds below the approx. time that a lap takes. Example: If the approx. time for a lap is 1 minute and 40 seconds (i.e. 100 seconds as the trig-time is set in seconds), set the trig-time at 98 seconds. (*The LapTimer is delivered with the trig-time set to twenty seconds)*.

The LapTimer must be switched off to set the trig-time. Press the MODE key [2] and keep this key depressed while pressing as well the POWER key [5]. Release first the POWER key and then the MODE key. You can now set the trig-time by pressing the arrow ➙ key [3]. The trig-time will remain stored until you choose to set a new trig-time.

6.Inserting/changing battery

A 9V battery type 6LF22 or the like should be used. It is recommended to use alcaline batteries which have a working time of 20-25 hours or re-chargeable batteries.

Take off the back plate of the display box [1]. Connect the battery to the battery clip. It may be necessary to bend the ends slightly in order to ensure perfect contact. Insert the battery and re-assemble the box. Take care that no cables are jammed. To avoid oxidation it is recommended to add a drop of acid-free oil to each of the four screws.

When the LapTimer is in PIT-MODE and the figures in the display begin flashing, this indicates that the battery power is low. The battery must be changed in order to ensure that the LapTimer functions correctly.

It is recommended to remove the battery if the LapTimer is not to be used for some time as the battery might leak and cause damage.

7.Maintenance

The LapTimer can be used in all weathers. However, if you have been driving in rainy weather, the LapTimer should be dismantled after driving. Remove the back plate of the display box [1] and the receiver [6] and place all parts in a warm place for 24 hours. Then all parts can be re-assembled and re-installed. If the joint surfaces are oxidized they should be cleaned with a piece of emery cloth or the like, but make sure that these surfaces *are absolutely free from oil.*

8.Fault-finding

If the LapTimer is switched on but receives no signals, check the following:

A.Is the transmitter switched on?
B.Is the receiver [6] placed horizontally and at the correct height - see section 1.
C.Is the distance between the transmitter and the receiver too short - should minimum be 2-3 metres.
D.Is the battery power sufficient - see section 6.
E.The connection between the battery and the battery clip - see section 6.
F.Is there moisture inside the receiver [6] and the display box [1] - see section 7.
G.**For MCs only -** Receiver [6] and transmitter lenses - dirt on the lenses may cause problems
H.Does the sun shine direct into the receiver [6]. If so the receiver will automatically turn down the receipt power which could mean that signals are not registered.
I.The LapTimer receives a singal only every second time you pass the transmitter. Check if the trig-time has been set too high - see section 5.

If the LapTimer receives more signals during one lap, check the following:

A.Is there more than one transmitter on the track.
B.Are other types of infra-red transmitters being used.
C.Do the transmitter and the receiver [6] "see" each other more than once during a lap.

The solution to above 3 problems is to set the trig-time - see section 6.

9.Example of printed data

In only 4 seconds all stored data can be transferred (wireless) to the DATALOGGER 5000 and afterwards printed out on a printer. We recommend a Seiko DPU-201-GS as this printer is of absolutely high quality, battery-driven and easily connected to the DATALOGGER. On the print the fastest lap time is marked with a *.

Please contact your UNIPRO LapTimer dealer for further details.

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  UNIPRO RACING LAPTIMER
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DATE      ..............................
TIME      ..............................
DRIVER    ..............................
CAR       ..............................
TRACK     ..............................
WEATHER           .............-
...................
TYRES     ..............................
.............................................................
.............................................................
.............................................................
Lap 001   1.04.62
Lap 002   1.04.11
Lap 003   1.03.84
Lap 004   1.03.88
Lap 005   1.03.84
Lap 006   1.03.38
Lap 007   1.04.20
Lap 008   1.03.22
Lap 009   1.03.51
Lap 010   1.04.72
Lap 011   1.03.29
Lap 012   1.03.02
Lap 013   1.03.38
Lap 014   1.02.75
Lap 015   1.03.53
Lap 016   1.05.56
Lap 017   1.02.98
Lap 018   1.05.74
Lap 019   1.04.43
Lap 020   1.03.14
Lap 021   1.02.35*
Lap 022   1.03.75
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