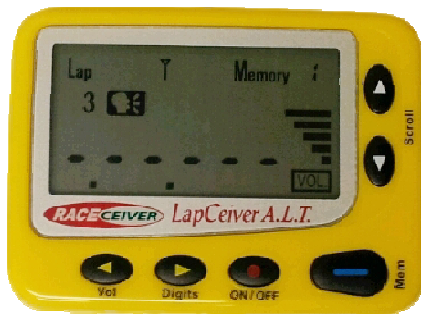




*LapCeiver A.L.T.*



Drivers! -

Your Electronic Spotter!

Get your lap times as they happen, Anyway you want them!

The LapCeiver A.L.T (Audible Lap Timer) is a device that allows you to get your lap times in the palm of your hand. You can see the lap times on the large LCD display and hear it audibly using a separate earpiece (sold separately). You can even choose to have the LapCeiver A.L.T tell you if the current lap is faster than the previous laps.

## The LapCeiver A.L.T has 2 Modes of Operation.

1. Transponder Mode – This mode works with a Timing & Scoring System and the transponder that you have on your car. The transponder sends a signal to the Timing & Scoring System that your track is using and a LapCeiver transmitter connected to that system sends the same signal to the LapCeiver A.L.T. You can input the serial number of up to 5 transponders into the LapCeiver A.L.T., one in each of the 5 memory banks. Each memory bank will hold up to 500 laps.
2. Infra-Red (IR) Mode – This mode works with an IR transmitter that is set up across the track. When your car passes through the beam, the Infra-Red Detector, mounted on your car and connected to the LapCeiver A.L.T, detects the beam. It then sends it to the LapCeiver A.L.T., triggering the timing, which shows up on the display. In this mode you use one memory bank at a time.

The display shows your lap times as you race much more accurately than hand held stopwatches. You see your times on the track and you can try different driving styles or different lines to get the quickest times. Times are stored and can be recalled once you are back in the pits.

The LapCeiver A.L.T. in Transponder mode works with the RACEceiver, Westhold & MyLaps Timing & Scoring Systems. If your track doesn't have a LapCeiver Transmitter, we will provide one for them.

The LapCeiver A.L.T in the Infra-Red Mode is compatible with the RACEceiver, AIM and InterComp Infra-Red Transmitters & Detectors.

Use a Reverse Splitter to connect your RACEceiver or 2-way radio and only use one headset.

The LapCeiver A.L.T Features:

- 5 Memory Banks, each with 500 Lap Memory
- The ability to save up to 5 Transponder ID's
- 3 or 5 Digit Announcement (for example 10.235 or .235 seconds)
- Digital Volume Indicator
- Accurate readings to 1/100th of a second
- Lap count and times shown on display
- Lap times by crossing the scoring Loop or breaking the IR beam.
- Standard (IR) transmitter range 100-120 feet
- Large, easy to read display that runs on AA battery

The LapCeiver A.L.T. uses an AA battery. A good battery with a full charge should last approximately 18 hours of continual use. To extend the life of your battery and prevent battery corrosion, remove the battery when not in use.

The Battery cover is located on the back of the LapCeiver A.L.T.

To install the AA battery,

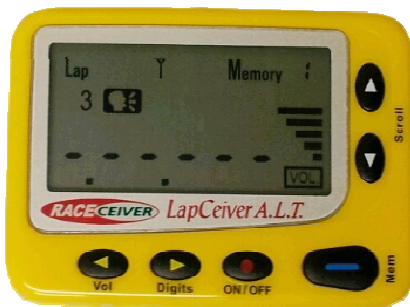
1. Slide the locking tab up to release the battery cover
2. Slide the battery cover to the right and remove it from the back of the LapCeiver A.L.T.
3. Install the battery, matching the polarity and shown in the battery compartment.
4. Reinstall the battery cover by sliding the cover along the rail to the left.
5. Lock the cover in place by pushing the locking tab down.

Information stored in memory locations is not lost when the battery is removed or dead.

**The LapCeiver A.L.T has 6 multi-function buttons.** They must be used in the correct combination to work properly according to the mode of operation. We refer to them by color for ease of use.

### Common operation


These functions work the same in both the Infra-Red or Transponder modes.



1. **Power on/off** - Press and hold **red** (on/off) button for 3 seconds.
2. **Volume up/down** - Press ▷ (right yellow) button for volume up and ◁ (left yellow) button for volume down.
3. **Audio test** - Plug the earpiece into the “Ear” jack Press and hold ▽ (down white) button.  
The data displayed on the LCD will be audible.


4. **Volume test** – Plug the earpiece into the “Ear” jack  
Press and hold  $\triangle$  (up white) button.  
You can test the volume. (It announces zero.)
5. **Data scroll** – Press  $\triangle$  (up white) or  $\nabla$  (down white) button. Use this to scroll through the data for each lap in each memory bank.
6. **Announcement Functions** - These functions allow you to select what you want to hear, Fast/Fastest voice, Lap times or both.

Function 1 - (default) The Fast/Fastest voice and Lap times are both audible.

The 3 or 5 digit announcement icon and the  icon will appear on the display.

Function 2 – Lap Times only are audible.


Press the red button to select this function.

The  icon will turn off and the 3 or 5 digit announcement icon is on the display.

You will hear the Lap times only.


Function 3 – The Fast/Fastest voices only are audible.

Press the red button to select this function.

The 3 or 5 digit announcement icon will turn off, and  icon appears.

You will only hear Fast / Fastest voice.

7. **Fastest voicing** - This function will allow you to hear an audible indication comparing the current lap to previous laps.

Press **red** button to use this function. The " " icon on the LCD appears.

If the lap time is faster than the former lap time, a man's voice says "**fast**".

If the lap time is the fastest, "**Fastest**" appears on the LCD and a women's voice says "**fastest**".

8. **Selecting 3 digit or 5 digit audible announcement**

Press ◀ and ▶ (left and right yellow) buttons at the same time for 5 digit announcement.

Press ◀ and ▶ (left and right (yellow) buttons at the same time again for 3 digit announcement. The "**3**" or "**5**" Icon is shown on the display to indicate announcement selected.

The default is 3 digit announcement (for example 10.2 seconds).

9. **Changing memory banks** - Press **blue** button to change memory banks. You will advance one memory bank at a time.

- 10. Data save/Memory Lock** – This function allows you to Save your laptimes so you can compare them at a later time.

You save the data in one memory bank at a time

Change to the Memory Bank where the data you want saved is located, then Press the **blue** and ◀ (left yellow) buttons at the same time.

On the LCD display "**Memory**" is blinking and the data in the memory bank is stored.

Press **blue** and ▶ (right yellow) buttons at the same time to lock the data in and return to the common operation.

Note: When a memory bank is locked you cannot receive data in that memory bank. You must move to another unlocked memory bank in order to record new lap times. If all 5 memory banks are locked you will not receive any laptimes. See #7 – Changing memory banks.

- 11. Memory delete** - Press and hold △ (up white), ◀ (left yellow) button at the same time to delete the data in the current memory bank. You delete the data from one memory bank at a time.

The default is overwriting the data. When a memory bank is full and reaches Lap 500, the data in Lap 500 is overwritten over and over until the data in that memory bank is deleted.



## **The Connection Jacks are on left side of the LapCeiver A.L.T.**

**Ear** – This is the audio jack, plug your earpiece in here.

**USB** – This is the jack for the IR Sensor, plug the IR Detector in here.

**Ear & USB** –A USB cord is included in your package that will enable you to upload your laptimes to your computer. One end has a standard USB connector, which will plug into your computer, the other end has 2 connectors that will be plugged into the USB & Ear jacks. Software is available soon for you to download when you complete your warranty registration.



**Note:** You must use the correct jack for the LapCeiver A.L.T. to work correctly.

## Infra Red Mode –

**There must be an Infra Red Transmitter operating and an Infra-Red Detector mounted on your car and plugged into the LapCeiver A.L.T to work in this mode.**

The Infra-Red Mode allows a driver or crew to get the Lap times without the track having a Timing & Scoring System. This will enable the driver or crew to determine if changes to the car setup or driving line have the desired effect.

Plug the IR Detector into the USB jack located on the right side of the LapCeiver A.L.T., the antenna icon on the LCD will disappear.

Mount the IR Detector on the car. Make sure the detector faces in the direction of the IR Transmitter.

- 1. Sensitivity** – Track or weather conditions can affect how well the IR Detector picks up the IR beam. You may need to adjust the sensitivity level to compensate for these conditions.

1 = accurate but low sensitivity.

2 = default.

3 = not accurate but high sensitivity.



Press **red** and **blue** buttons at the same time. "SEn" and the number on the display will be blinking.

Adjust the sensitivity by using  $\nabla$  or  $\triangle$  (up or down white) buttons.

Press **red** and **blue** button at the same time again to lock.

- 2. Minimum lap time** – This function is used to prevent readings from other Infra-Red transmitters and giving short lap times.

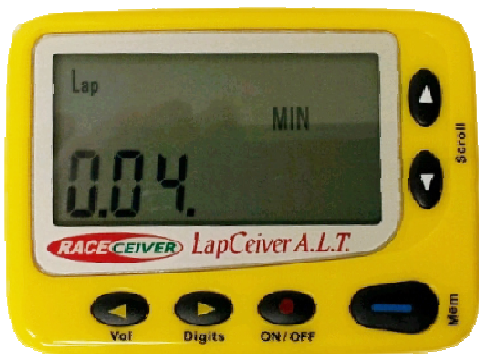
The default is 0 minute 02 seconds.  
The maximum is 9 minutes 59 seconds.

Press and hold **blue** button for 3 seconds.

**"Lap"** and **"MIN"** & **8(m)** **88(ss)** appear on the **LCD** and **"88"** second (or last set time) is blinking.

Adjust seconds by using  $\triangle$  and  $\nabla$  (up or down white) buttons then press and release the **blue** button to save.

Then, **"8"** minute is blinking.



Adjust minute by using  $\triangle$  or  $\nabla$  (up or down white) buttons, and press and hold **blue** button for 3 seconds for saving.

If you press and hold the **blue** button for too long (3 seconds after the seconds are saved and LapCeiver A.L.T goes back to Infra-Red operation without displaying the minutes. You must unlock this function again by holding the **blue** button for 3 seconds. This will take you back to the set seconds location, press and release to go to the set minute location.

The LapCeiver A.L.T. goes back to Infra Red operation.

## **Infrared Lap Timer Beacon Transmitter**

(Applies if package includes the IR Transmitter)

The IR Transmitter operates using a 9volt battery (not included) or the optional power supply. It may be mounted on the track wall directly or mounted using a mini tripod.

Ensure that the Beacon side of the IR Transmitter is pointed towards the track.

Power the IR Transmitter on.

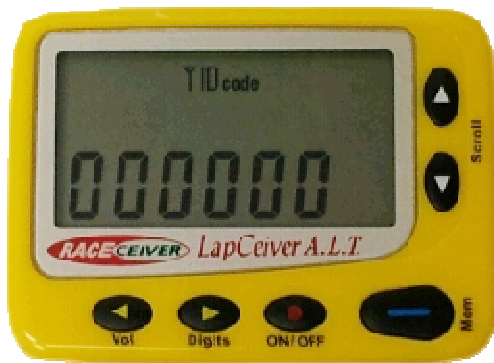


## Transponder Mode –

The Transponder on the car sends information to the Timing & Scoring System being used at your track. The Lap Transmitter resends this information for use by the LapCeiver A.L.T.

**This requires the track to have a Timing & Scoring System with Lap Transmitter in use and there must be a Transponder mounted on the vehicle to be monitored (yours or someone else's).**

When the IR receiver is disconnected, the antenna icon is displayed.



## Add/Change Transponder ID code

LapCeiver A.L.T. has 5 memory banks and each memory bank can have its own Transponder ID code respectively. The Transponder ID Code is the Serial Number of the Transponder. You will only need to put the last 6 digits of the Serial Number (drop the first numbers if there are more)

Move to the memory bank you want to use by pressing **blue** button.

Press  $\triangle$ ,  $\nabla$  (up and down white) buttons at the same time. **"ID code"** and **numbers portion** of the display will appear.

Select each digit of ID code (Transponder ID) by pressing  $\triangle$  (up white) button.

Change the number of each digit (0 ~ 9) by pressing  $\nabla$  (down white) button.

After setting all the ID codes (Transponder IDs) in each of the memory banks, press  $\triangle$ ,  $\nabla$  (up and down white) buttons at the same time.

There must put a Transponder ID in each of the memory banks for that memory bank to store laptimes (it can be the same Transponder ID or different Transponder ID's). If you choose to put the same Transponder ID in each memory bank, you must lock each memory bank that you are not currently adding laptimes to.

You are back in Transponder mode.

Your LapCeiver A.L.T may be used with a RACEceiver or 2-way radio. Connect one male end of a Reverse Splitter to the “EAR” jack on the side of the LapCeiver A.L.T and the other male end to the audio jack of the RACEceiver. Plug an earpiece into the female side of the Reverse Splitter. You will be able to use only one headset to hear your LapTimes and the Officials.

## Battery Care

Battery life is between 13-27 hours on a new alkaline battery depending on the brand battery.

1. Remove the battery from the LapCeiver A.L.T. when storing. Corrosion may take place if the battery is left in the LapCeiver A.L.T for long periods of time.
2. Keep battery contact surfaces and compartment clean.
3. Store batteries in a dry place at normal temperature.
4. Never attempt to recharge a battery unless it is specifically marked “Rechargeable”
5. Dispose of batteries properly.



## Troubleshooting And Frequently Asked Questions.

1. I've completed a lap but it doesn't show up on the LapCeiver A.L.T.

Check the Sensitivity

Adjust the IR detector to ensure that it is seeing the IR transmitter beacon.

Check that the lens of the IR Detector is clean.

Check the IR Detector is plugged into the "USB" port on the side of the LapCeiver A.L.T.

You must complete 2 full laps for the laptime to display.

2. Check Transponder ID in Transponder Mode

Ensure that you have entered the last 6 digits of the Transponder ID

Confirm that the track has a functional LapTransmitter that is powered on and connected to the Timing & Scoring System

3. The display on my LapCeiver A.L.T is fading and flickering.

The LapCeiver A.L.T has a Battery Save Mode which can cause these symptoms

Check the battery life indicator and Replace Battery If needed.

4. The LapCeiver A.L.T is telling me that my lap time is 1 minute and I know that my lap times should be over 2 minutes.

Check your Minimum Lap Time – it appears that there is more than one IR Transmitter active on your track and your IR Detector is seeing both of them. Set the minimum lap time to 1 min 30 secs.

5. I can't hear anything.

Make sure that the earpiece is plugged into the connection marked “Ear” and that the plug is completely pushed in.  
Check the volume level.