## **THUNDERPAWS** Racing Equipment

P.O. Box 3033 - Leslie, MO 63056

573-484-0030

www.raceqp.com thunderpaws@raceqp.com

Mobile Recording Lap System, for <u>multiple</u> vehicles on course together AUTOCROSS, MOTOCROSS, BMX, DUNE BUGGY

## **Components and operation:**

Each vehicle is equipped with a Sport Timer 3000 Recording Lap Timer and a special IR Beam Receiver, connected by a 24" cable. The Lap Timer is mounted in a location that is visible to the driver. The IR Beam Receiver is mounted to the frame of the vehicle approx. 24" off the ground, with the "window" looking to the side.





The IR Beam Transponder is located on the side of the track that the IR Beam Receivers on the vehicles will see when they pass. The Big Display is located where the driver can see his ET for the lap just completed – just like the old-style chalkboards!



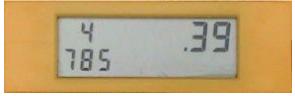


Each time any vehicle passes the IR Beam Transponder, the onboard Timer records the current lap time, instantly resets to zero and begins timing the next lap. The current lap ET is displayed on the trackside Big Display. Here are some examples:

The trackside Big Display and the Sport Timer 3000 both show an elapsed time for lap 4

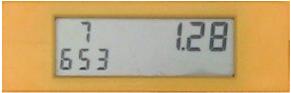
of 39.785 seconds. (photos not to scale)



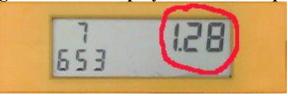


Here is a display of lap 7 with an ET of 1 minute, 28.653 seconds.





Each time the driver crosses the timing line, the Timer will start to time the new lap and display the running elapsed time – for up to 25 laps. The big digits (circled below) on the Timer show minutes and seconds only. This makes it very convenient for the driver to glance at the display and see their progress while running the current lap.



The Timer can be set for 1 to 25 laps and sounds a loud BEEP, easily heard even through a helmet, at the <u>end</u> of the last lap.

Once a run is completed, the driver can scroll through the times for each lap that are in memory on the Timer, with the lap number displayed as shown above for each lap. Each time will also show on the Big Display so your timekeeper can record it if desired. When another run is started, as soon as the driver passes the timing line the first time, the Timer will reset to lap 1 and begin to record each lap again.

The IR Beam Receiver is made of Schedule 40 PVC pipe, and is extremely durable. It measures 4.5" long and 2" in diameter and weighs approx. 6 oz. It includes a 24" connecting cable that plugs into the Timer. Mount to the vehicle's frame using a screw clamp or a big snap tie around each end. No connections are required to the vehicle's electrical system, the Timer runs on a standard 9V Alkaline battery and the IR Beam Receiver obtains it's power from the Timer. Timer weight is approx. 6 oz., including battery.