

# Automatic Display Timer Autocross, SOLO II Auto Racing Timer Single Channel

## START/FINISH Beam 4 or 6 Digit Big Display Operating Instruction Manual Version 1

### Includes 1 set of IR Beams:



### And a Big LCD Display



(optional mini-tripods and 6-digit display shown)

#### Distributed By:

**THUNDERPAWS Racing Equipment**  
P.O. Box 3033  
Leslie, MO 63056  
573-484-0030  
[support@raceqp.com](mailto:support@raceqp.com)  
[www.raceqp.com](http://www.raceqp.com)

December 7., 2009  
Version 1.0

## Autocross, SOLO II Auto Racing Automatic Display Timer START/FINISH Beam and Display

Thank you for purchasing our Automatic Display Timer with IR Beam and Display. A portable, flexible and economic answer to your timing and scoring needs. Please check the shipping box to make sure all components on your order were received undamaged:

1 set of IR Beams (consisting of a Transmitter and Receiver), Beam cable, Big LCD Display (either 4 or 6 digit) with 9/110 Volt AC Power Supply.

#### A Brief Description of the Components:

IR Beam – Consisting of a black box (the Receiver) and a small yellow box (the Transmitter)

Beam Cable Custom length RJ9/RJ9 Cable, from Beam Receiver to Display

Optional Tripod Mounts Used to position IR Beam at START/ FINISH line. Also used to hold the optional Big Display upright on a flat surface. Your system may come with different mounts depending on your application.

Big LCD Display - Either a 6.75" x 14.5" (4 Digit Display) or 6.75 x 21" (6 Digit Display) yellow case with a clear plastic display window on one side. It can be used with either the enclosed AC Adapter, or a 9VDC Alkaline Battery. It is turned on with the small black switch on left side of Display - Up for 'On' and Down for 'Off'. AC Power Adapter that can be used if 110 Volt Power is available, is included with a Big Display.

(Components may not all be exactly as shown due to manufacturing revisions)

### The Automatic Display Autocross, SOLO II Auto Racing Timer uses a SINGLE IR Beam for both START and STOP functions

- START/FINISH using IR Beam
- Multiple START/STOP IR Beams – Any Beam STARTS or STOPS Timer

### Some functions may require additional parts or cables (not included)

### How to Use the Controller with START/FINISH IR Beam (Autocross, SOLO II, Auto Racing Events)

Install a 9 Volt **Alkaline Battery** in the Battery compartment of the 4 or 6 digit BIG Display.

Install an 9 Volt **Alkaline Battery** in the Battery Compartment of the IR Beam Transmitter.(yellow box)

Mount the IR Beam Receiver Box (black box) onto a suitable tripod (not included) or other mount as your conditions dictate, at the desired height at one side of the START/FINISH Line.

Mount the IR Beam Transmitter (yellow box) on a suitable mount and position it between 3 and 120 Feet away on the other side of the START/ FINISH Line. Turn on the Transmitter using the small switch on the side of the Transmitter and aim it in the direction of the Receiver and Controller. (**Note:** Distances greater than 120 Feet are possible but you must use fresh batteries in both the Controller and Transmitter)

IR Beams may also be mounted on vertical or horizontal surfaces, or attached to other objects, fences, etc., using our universal tunnel brackets or agility pole brackets (not included) or any other means of mounting, using the standard tripod socket on the beams (1/4" – 20 UNC thread).

December 7, 2009  
Version 1.0

### **IR Beam at START/FINISH Line:**

Plug one end of a Beam cable (included) into the jack on the back of the IR Beam Receiver (black box) and the other end of the cable into the jack on the bottom of the BIG Display.

Turn on the Display with the black switch on the left side of the Display. Please note that the red (LED) light on the back of the IR Beam Receiver (black box) is now on solid or blinking, telling the user it is looking for the Transmitter. Now aim the Receiver toward the Transmitter.

Observe the Red light (LED) on the back of the Receiver. Move the Receiver on its stand, pointing it in the direction of the Transmitter. When the units are aligned the Red (LED) will be on solid, indicating alignment of the two units and creating a invisible thin beam between the units. Observe the Display and if it is running, break the Beam to STOP it. You are now ready for your first competitor.

### **How to set up special configurations of START/FINISH functions**

You can use multiple IR Beams as START/FINISH Line Beams. Additional parts are required. Contact us and we can supply exactly what you need.

Using multiple IR beams, ANY Beam will START/STOP the timer

Once the timer stops, always record the displayed time promptly. If the timer is stopped and any Beam is broken, the timer will reset to ZERO and start again (after the built-in 3 second delay). No need to manually reset for each competitor. Under normal conditions this means totally hands-free operation!

#### **Hints:**

You may start the next competitor any time after the clock has been stopped and the built-in 3-second delay elapses. Make sure the previous time is recorded.

The number one cause of problems with our systems is the failure to change the batteries. The batteries in our units can last an exceptionally long time, but it is wise to have spares available should they need to be changed. For best results always use **9 Volt Alkaline Batteries Only**.

Do not store the units for long periods of time (2 months or longer) with the batteries installed. Batteries can discharge and leak, damaging the units.

Avoid, if possible having the Receiver (Black Box) pointing directly or on the same plane as bright sunlight. This will cause premature stopping of the Display Time, should the receiver not stay in contact with the transmitter by blinding sunlight.

#### **Important Hint.**

When aligning the Transmitter and Receiver if you are using an adjustable tripod, tilt the Receiver (Black Box) up until the light on the back of the Receiver flashes then down until it starts to flash then adjust the vertical height in the middle of these two settings and the light is on solid. Adjust the horizontal the same way moving the Receiver left and right until the light on the back of the Receiver flashes then adjust the tripod to achieve the centering of the beam with the Transmitter and the light is on solid. This procedure assure that Beam is centered between the Receiver and Transmitter.

**Note:** A Gate width in excess of 120 Feet is possible but care must be taken that the batteries in both the Display and Transmitter are fairly fresh. Use Alkaline Batteries Only, and check the expiry dates!

**DON'T RISK YOUR EVENT. ALWAYS USE FRESH BATTERIES!!!**

## **RECORD OF PURCHASE**

The Controller, Display and Beams (Transmitter and Receiver) are fully warranted to the original purchaser against any defects or workmanship for one year from the date of purchase from an approved Dealer. This warranty does not cover physical damage & will be voided if any attempt has been made to remove the sealed covers on the Display or Beams (Transmitter and Receiver). It is not necessary to register your warranty, your receipt from the reseller will be considered the start date of your warranty.

Display Serial Number \_\_\_\_\_

Purchase Date \_\_\_\_\_

Purchased from:

Dealer \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State/Prov. \_\_\_\_\_ Zip/PC \_\_\_\_\_

Should our products require service and to assure prompt repair, please call our Toll Free Support Line for instructions and if instructed, package the unit in a secure container with proof of purchase.

Outside of Canada mark the container **"CANADIAN GOODS RETURNING FOR REPAIR"** in plain view, and return the defective unit postage paid to:

**R. U. READY Electronics Ltd.**  
P.O. Box 10  
Inverary, Ontario,  
Canada, K0H 1X0  
  
Phone 613-353-1911  
Fax 613-353-2003

**Your Dealer is NOT equipped to support our Products**

**For Technical Support or Repairs  
Please Call Toll Free  
1- 877- 84 SPEED (77333)**

**Or contact your Distributor:**

**THUNDERPAWS Racing Equipment**  
P.O. Box 3033  
Leslie, MO 63056  
573-484-0030  
[support@raceqp.com](mailto:support@raceqp.com)  
[www.raceqp.com](http://www.raceqp.com)

Except as provided herein, we make no express warranties and any implied warranty of merchantability or fitness for a particular purpose is limited in its duration to the duration of the written warranty set forth herein.

Except as provided herein, we shall have no liability or responsibility to the purchaser or any other person or entity with respect to any liability, loss or damages caused or alleged to be directly or indirectly by use of this product, including, but not limited to, any incidental or consequential damages.

Some states or countries do not allow the limitation or exclusion of incidental or consequential damages or limitations on the length of implied warranties; therefore, the aforesaid limitations or exclusions may not apply to you. This warranty gives you specific legal rights and you may also have other rights, which vary from state to state.