

SportTIMER-3000

Auto Racing Timer

Dual Channel

Controller, Independent START/FINISH IR Beams

4 or 6 Digit Big Display (optional)

Operating Instruction Manual

Version 1

Includes 2 Sets of IR Beams (one set shown)



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

Distributed By:

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Auto Racing Timer Controller, START and FINISH Beams and Display

Thank you for purchasing our SportTIMER-3000 Controller, Beams 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:

Controller, 2 sets of IR Beams (consisting of a Transmitter and Receiver), Beam cables, Optional Tripod Mounts, Optional Big LCD Display with 9/110 Volt AC Power Supply, optional Special Wiring Harness.

A Brief Description of the Components:

Controller

A yellow in color, small box, which has a small LCD Display, a four button keyboard and a RJ9 (telephone style jack on the side) Turn the Controller ON by pressing and holding the **START/RESET** button for 3 seconds. If the Countdown Timer beep is turned ON, it will beep when it comes on. Turn the Controller OFF by pressing and holding the **MODE** button for 3 seconds.

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

Beam Cables - Custom length RJ11/RJ11 Cable (From Beam to Controller). Optional Special Wiring Harness

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.

Big LCD Display (If Purchased) - 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 button on left side of Display - Up for 'On' and Down for 'Off'.

Power Supply 9/110 Volt AC Power Adapter that can be used if 110 Volt Power is available, included with a Big Display.

Operating Instructions - which you are now reading.

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

The Auto Racing Timer offers multiple configurations of START and STOP functions

- **Independent START & FINISH lines using IR Beams**
- **Manual pushbutton START, IR Beam STOP**
- **IR Beam START, manual pushbutton STOP**
- **Manual pushbutton START and STOP (stopwatch mode) with or without IR Beams attached**
- **Multiple START/STOP IR Beams – Any START Beam STARTS, any STOP Beam STOPS Timer (Requires Special Wiring Harness and other parts)**

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

How to Use the Controller with START & FINISH IR Beams as a Stand Alone unit. (Racing Events)

Install a fresh 9 Volt **Alkaline Battery** in the Battery compartment of the SportTIMER-3000 Controller.

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

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

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

Mount a set of IR Beams in similar fashion at the FINISH Line.

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

Connect IR Beams at START and FINISH Lines:

Plug the small end of a Beam cable (included) into the jack on the back of the IR Beam Receiver (black box) at the START Line, and the large end of the cable into a Beam Splitter Y "GREEN" port. Plug the small end of a Beam cable (included) into the jack on the back of the IR Beam Receiver (black box) at the FINISH Line, and the large end of the cable into a Beam Splitter Y "RED" port.

With a third cable(included), plug the small end into the Controller and the large end into the Beam Splitter Y "YELLOW" port.

Turn on the Controller by pushing and holding the **START/RESET** button in for three seconds and then releasing. A "0" will appear in the upper right corner (seconds) and "000" will appear in the bottom left corner (thousands of a second) of the Controllers screen. Please note that the red (LED) light on the back of each IR Beam Receiver is now on solid or blinking, telling the user it is looking for the Transmitter. Now aim each Receiver towards the Transmitter as follows:

Observe a 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.

Using the Controller, Display, Beam (Receiver and Transmitter) when they are aligned.

Moving through the invisible beam between the Receiver and the Transmitter at the START Line will ZERO the timer and start the clock running on the Controller, moving through the FINISH Line IR Beam will stop the clock. Record this finish time as the competitors time. No need to reset or push any buttons, the Timer is ready for the next run.

Note: Timer START or STOP can always override the IR Beams by manually pressing the **START/RESET** button on the SportTIMER-3000 Timer.

Turning "OFF" your Controller and IR Beam Receiver (*Important*)

The Controller must be stopped for this operation, if it is running, simply push and release the **START/RESET** button to stop the clock, if the Controller has any data on its screen, push and hold the **MODE** key for three seconds or until the Controller LCD goes blank. **To turn the IR Beam Receiver(s) "OFF" always unplug it from the Controller when not in use.**

Setting up with optional Special Wiring Harness

General Information

Complete instructions for your Special Wiring Harness will be supplied with your order. Several common features will assist you in getting everything set up. Harness cables with "YELLOW" stripes are always used to connect to Controllers. Harness Cables with "GREEN" stripes are always connected to IR Beams at the START Line. Harness Cables with "RED" stripes are always connected to IR Beams at the FINISH Line.

Just remember the color code is the same as a Traffic Light, GREEN for START, RED for STOP, and the Yellow Controller gets a YELLOW cable..

Setting up the Controller's Delay (May not be required)

The Controller must be stopped for this operation, if it is running, simply push and release the start/reset button to stop the clock, if the Controller has any data on its screen, push and hold the start/reset keyboard for three seconds or until the Controller LCD goes blank.

Delay Setup

Dual channel Timers will typically not need this feature and you can leave it set at the factory setting of "0".

Delay setup is used to adjust the time that the beams are inactive at the start and finish of the event. This allows large object to clear the start line and finish line before the beam is activated again looking for another object in its path. This time is factory set at "0", but can be adjusted by the user as required. After the Timer is started, either manually or by breaking the START Beam, both START and STOP Beams are inactivated during this delay period.

To adjust, starting with a blank screen as above, simply push and hold the **MODE** Key in for 3 second or until the word "set" appears and then release. Adjust the number up or down by using the up and down arrows, then push, hold and release the **MODE** key until the screen goes blank to store your time. This time remains stored until it is changed again, removing the batteries will not effect this storage.

Note: When the Controller is running a count down will appear in place of the word "on" on the Controller screen, indicating the length of time before the beam will be activated to stop the clock. This time would equal the set delay time.

How to Use the Optional BIG Display

4 or 6 Digit Display (If Purchased)

Install an 9 Volt **Alkaline Battery** in the Battery Compartment of the 4 or 6 Digit Display or using the 110 Volt adapter plug the Display into a suitable 110 volt outlet. Turn on the Display using the on and off switch on the left side of the Display. Your Time will be Displayed on the Display as the Controller runs.

Large Display Setup (May not be required)

The Controller is factory set before it leaves the factory to the 4 or 6 Digit Display's ID. This ID is displayed on the 4 or 6 Digit Display when it is turned on and is unique to each Display. (Example ID 1234)

You can change this ID if necessary or if you are using a Display other than the one that you purchased. With the Controller screen blank, push and hold the **MODE** button until the letters "id" appear on the Controller's screen, and release, you will then see four numbers, with the first one flashing, using the up arrow to change the first number to match the ID you would like to enter, push the Mode Key to move to the next number and so on to change the four number. Push and release the Mode Key on the fourth number to store the new ID. Removing the batteries will not affect this configuration in memory.

How to set up special configurations of START and STOP functions

You can use multiple IR Beams as START/FINISH Line Beams. Additional parts are required. Use standard telephone style "Y" adaptors to connect multiple beams to the "Y". Contact us and we can supply exactly what you need.

Breaking the START/FINISH Beam to start the timer will lock out all other beams for as long as the DELAY time (default is 3 seconds), or until the **START/RESET** button is pushed.

Once the timer stops, always record the displayed time promptly. When the countdown timer reaches Zero (if it's set), if a START Beam is broken, the timer will reset to Zero and start. No need to manually reset for each competitor.

Hints:

The SportTIMER-3000 is a high accuracy (1/1000ths. second) timer. When using the manual **START/RESET** pushbutton to operate the timer, the timer starts upon **RELEASE** of the button. You can either press and quickly release the button, or for greater accuracy, press and hold it in, and then release at the correct moment. Similar to a two-stage trigger on a sharpshooter's rifle.

You may start the next event any time after the clock has been stopped and the 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 setting 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: 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
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.