

SportTIMER-3000 Racing Timer For ALL events with a single START/FINISH line

**Controller, wireless IR Beam
4 or 6 Digit wireless Big Display
(optional)
Operating Instruction Manual
Version 2**



(optional 6-digit display shown)

Distributed By:
THUNDERPAWS Racing Equipment
P.O. Box 3033
Leslie, MO 63056
573-484-0030
support@raceqp.com
www.raceqp.com

Racing Timer Controller, wireless START/STOP Beam and optional Display

Thank you for purchasing our SportTIMER-3000 Controller, 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:

Controller, 1 set of IR Beams, consisting of a Transmitter and Receiver, Optional Big LCD Display with 9/110 Volt AC Power Supply.

A Brief Description of the Components:

Controller

A yellow in color, small box, which has a small LCD Display and a four button keyboard. Turn the Controller ON by pressing and holding the **START/RESET** button for 3 seconds. Turn the Controller OFF by pressing and holding the **MODE** button for 3 seconds.

IR Beam – Consisting of a black box (the Receiver) and a small yellow box (the Transmitter) IR=InfraRed (invisible) light.

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.

Please note: The controller, the IR Beam Receiver and the optional Big Display include an RJ9 telephone style jack which is not used on these models. NEVER plug anything into these jacks – permanent damage or loss of function could result.

Operating Instructions - which you are now reading.

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

The Racing Timer offers multiple configurations of START and STOP functions

- **START and STOP single IR Beam**
- **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**

Some functions may require additional parts (not included)

If you ever get confused with a strange screen on the Controller display, or you think you pressed the wrong button, just take the battery out for a second and put it back in and turn the Controller back on.

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

How to Use the Controller and IR Beam at your START/ FINISH line. (Autocross, SOLO II Events)

Install a 9 Volt **Alkaline Battery** in the Battery compartment of the Controller, the IR Beam Transmitter.(yellow box), and the IR Beam Receiver Box (black box). Also install a battery in the optional Big Display if you have one. Turn on the Transmitter and Receiver using the small switch on the side of each box.

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

Mount the IR Beam Transmitter (yellow box) on a suitable tripod (not included) or other mount, and position it between 3 and 120 Feet away on the other side of the Timing Line. Aim the Transmitter in the direction of the Receiver.

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

IR Beams may also be mounted on vertical or horizontal surfaces, or attached to objects using the universal tunnel brackets, agility clamps or any other method using the ¼"x20 socket in the bottom of each Beam.

IR Beam alignment at START/FINISH Line: Please note that the red (LED) light on the back of the IR Beam Receiver is now on solid or blinking, telling the user it is looking for the Transmitter. Now aim the Receiver towards the Transmitter.

Observe the Red light (LED) on the back of the Receiver. Move the Receiver on its mount, 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.

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 ensures that the Beam is centered and aligned between the Receiver and Transmitter.

Using the Controller, Display, IR Beam (Receiver and Transmitter) when they are aligned. Turn on the Controller by pushing and holding the **START/RESET** button in for three seconds and then releasing.

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 IR Beam again will stop the clock. Record this finish time as the competitors time.

Note: Timer START or STOP can always override the IR Beams by manually pressing and releasing the **START/RESET** button.

Important Hints.

Once you believe you have established alignment, we suggest starting the Clock running and allowing it to run for several minutes, if the Clock does not stop you have successfully aligned the Beam correctly, and you can proceed with your event.

If you are using two sets of Beams, a START line Gate and a FINISH line Gate, the first Beam will start the clock running and the second Beam will stop the clock. Care must be taken that no object goes through the START gate before the second gate is tripped and the FINISH time is recorded the clock will stop on the first detection that is transmitted to the Controller from either gate.

Turning "OFF" your Controller and IR Beam 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**" keyboard for three seconds or until the Controller LCD goes blank. Turn the IR Beam Receiver and Transmitter "OFF" when not in use.

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. When the Display is first turned on it will display its ID until your Controller with a matching ID is turned on.

*******The Time on the Controller is always the Official Time** *****

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 unique ID is displayed on the 4 or 6 Digit Display when it is turned on (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 numbers. Push and release the Mode Key after the fourth number to store the new ID. Removing the batteries will not affect this configuration in memory

Manual operation of the Sport-Timer 3000 Controller. The **Sport-Timer 3000 Controller** can be manually operated if necessary by simply pushing and holding the **START/RESET** key in and releasing it when you want to start the event. Once the event starts you can push and hold the **START/RESET** key in and release it to stop the time. This releasing of the key is the most accurate way to time when done manually. If a **4 or 6 Digit Display** in being used and is set at the same ID as the **Controller** the time will be displayed on the **4 or 6 Digit Display** as well as the **Controller**.

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

The Sport Timer 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 Controller will instantly zero and start as soon as a Beam is broken.

Hints:

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 fresh 9 Volt Alkaline Batteries Only. Never use Re-chargeable or used batteries for important events.

Battery Saver on the Controller will shut it down after 10 minutes of non use, not running or recording or displaying time, this does not mean the battery is low, it is normal operation to conserve batteries. Turn it back on by pressing and holding the **START/RESET** button for 3 seconds.

Low Battery Warning on the Receiver. If the Red LED Light on the back of the IR Beam Receiver is flashing rapidly the Battery has dropped below 8 Volts and should be changed soon as it may effect reliability. It will keep running until the Battery is exhausted and the LED goes off.

Low Battery Warning on the Display. If the Display scrolls "**battery lo**" across the screen, it is an indication that the Display is going into

conserve battery mode and the screen will blank. The Display but will still function to Display your running time for a short time. Simply restart an event using the Controller. Do not rely on the Display to show the Finish Time for very long after the Controller is stopped as it will shut down again shortly to conserve the battery. Read the Official Time from the Controller if necessary. Replace that battery!

Do not store the units for 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 Time, should the Receiver not stay in contact with the Transmitter by blinding sunlight.

Gate width in excess of 100 Feet is possible but not recommended and may cause intermittent starting and stopping of the clock if contact between the Receiver and Transmitter is lost. Beam alignment is critical.

Sport-Timer 3000 Controller has 5 additional Options

Strt. (start) **StoP**, (stop) **clOc** (clock) ,**Sond.**(sound) and **tESt** (test)

Note: (changing of the first four options remains in memory even if the batteries are removed)

tESt option is used by one of our Technicians to diagnose a problem over the phone.

Enter these 5 Configuration modes by pushing and holding the **MODE** key in until you see **SEt** appear on the screen and then release the **MODE** Key. Push and release an **up or down arrow** to cycle through the five modes as above. Make your choice to set these configurations:

Beam Dead Time adjustments for special events. This feature is not necessary under normal use, but is provided for non-standard events.

When setting **Dead Time** you are turning off a Beam for a specific time. Once it has been broken, it will not respond to something going through the Beam again for the set time. For example if you set the start beam to the maximum 20, once you go through the Beam it is turned off for approximately 40 seconds and will not allow the clock to be stopped if something goes through that Beam. An indication that the time has been set is after object has gone through the Beam, the Red LED on the back of the Receiver will flash the number of times that you chose below and during this time the Beam does not respond. Be aware that if you are using only one Beam the Controller will consider the single Beam both a START and FINISH Beam and apply Dead Time per your settings. Before using this feature test it and make sure you understand its operation. **a setting of 1 equals 2 seconds of dead time**

1) To set **Dead Time** on a **Start** Beam, with the Controller screen blank, put it into **Strt** Configuration mode. Push the **START/RESET** Key once to display a counter. Using the up and down arrows, set the desired count from 1 to 20. (**a setting of 1=2 seconds of dead time**). Push and release the **MODE** key twice to back out of the program and save your setting.

2) To set **Dead Time** on a **Finish** Beam, with the Controller screen blank, put it into **StoP** Configuration mode. Push the **START/RESET** Key once to a display a counter. Using the up and down arrows, set the desired count from 1 to 20. Push and release the **MODE** key twice to back out of the program and save your setting.

To use as a Count Down Clock. When set, the **Controller** will count down from a preset time, for example 60 seconds.

To set a count down time, with the Controller screen blank, put it into **clOc** Configuration mode. Push the **START/RESET** Key one time to display the clock. Using the up and down arrows, set the desired time from 1 second to 10 hours in full seconds. (Holding in the arrows will cause the timer to cycle quickly up or down. Push and release the **MODE** key twice to back out of the program and save your setting.

To set Start and Stop signals. With the **Controller** screen blank, put it into **Sond** Configuration mode. Push the **START/RESET** Key one time to display the **oFF**. Using the up and down arrows, set the signals to **on** or **oFF**. Push and release the **MODE** key twice to back out of the program and save your setting

Note Very Important ! When the signals are set to on, each time the clock is started or stopped manually or passing through a Beam the signals will sound. (**Not recommended around any animals as the signals can be very loud.**)

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.