

TT-3000 Go-To-Ground, Racing, Lure Coursing, Agility Timer

Controller, START and STOP Beams 4 or 6 Digit Big Display (optional) Operating Instruction Manual Version 1



(optional 6-digit display shown)

Go-To-Ground, Racing, Lure Coursing, Agility Timer

Controller, START/STOP Beams and Display

Thank you for purchasing our TT-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 (each set consisting of a Transmitter and Receiver), 1 set of tunnel brackets, START and STOP Beam cables, Beam splitter "Y", Optional Tripod Mounts, 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, 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 Beams – Each set consisting of a black box (the Receiver) and a small yellow box (the Transmitter)

START and STOP Beam Cables Custom length RJ9/RJ11 (small plug/big plug) Cable (Beams to Beam Splitter "Y" RED and GREEN ports)

Controller Cable Short length (approx. 20 ft.) RJ9/RJ11 Cable (Controller to Beam Splitter "Y" YELLOW port)

Beam Splitter "Y" Small telephone-style "Y" adaptor, with GREEN, RED and YELLOW marked ports.

Universal tunnel brackets For mounting IR Beams to any vertical or horizontal surface or to the sides of a Go-To-Ground tunnel. 2 brackets and hardware supplied, additional brackets available. Multiple mounting arrangements are possible using this bracket.

Optional Tripod Mounts Used to position IR Beams at START or STOP 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 Go-To-Ground, Racing, Lure Coursing and Agility Timer offers multiple configurations of START and STOP functions

- **START and STOP using separate 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 and/or STOP IR Beams**

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

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How to Use the Controller with START and STOP IR Beams as a Stand Alone unit. (Racing, Lure Coursing, Agility Etc.)

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

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

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

Mount the 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 and Controller. (**Note:** Distances greater than 120 Feet are possible but you must use fresh batteries in both the Controller and Transmitter)

Do the same for the other IR Beam at the FINISH line.

IR Beams may also be mounted on vertical or horizontal surfaces, or attached to agility objects using the universal tunnel brackets (2 brackets are supplied, additional brackets available).

START IR Beam at START Line:

Plug the SMALL RJ9 plug end of a Beam cable (included) into the jack on the back of the START IR Beam Receiver and the other end of the cable (BIG RJ11 plug) into the **GREEN** port on the Beam Splitter "Y".

STOP IR Beam at FINISH Line:

Plug the SMALL RJ9 plug end of a Beam cable (included) into the jack located on the back of the STOP IR Beam Receiver and the other end of the cable (BIG RJ11 plug) into the **RED** port on the Beam Splitter "Y".

Plug the short cable BIG plug end into the **YELLOW** port on the Beam Splitter "Y", and the other end into the jack on the TT-3000 Controller.

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 Controller's 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 the Receiver towards the Transmitter.

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 an invisible thin beam between the units. A second indication of a correctly aligned Beam is when the Display on the Controller turns on the word "on" above the "000" on its display. (This feature will help in alignment in bright sunlight).

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 IR Beam between the Receiver and the Transmitter at the FINISH Line will stop the clock. Record this finish time as the competitor's time.

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

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" keyboard 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.**

How to Mount the IR Beams on a Go-To-Ground Tunnel

Use a suitable wood drill or bit, for example, a paddle bit, and drill 3/4 inch diameter holes in each side of your tunnel, 18 inches back from the bars at the end of the tunnel, and about half way up on the sides. The holes should be positioned so that they line up from side to side.

Attach the tunnel brackets using the supplied hardware, to the IR Beams, Transmitter and Receiver, using the appropriate holes in the long leg of the bracket so that the "business" end of the Beam is flush with the short leg of the bracket. See the picture on front cover of this Manual.

Mount the Transmitter (yellow box) on the side of the tunnel with two screws into the short leg of the bracket so that at least one LED is lined up with the center of the hole.

Mount the Receiver (black box) the same way on the other side of the tunnel, so that the round window on the Receiver is lined up with the hole.

Use the correct length of mounting screw so they don't go through to the inside of the tunnel.

How to Configure the Exclusive "Working" Countdown Timer Function

A special countdown timer can be turned on to indicate any duration from 1 to 60 seconds *AFTER* the STOP Beam is broken. This is great to time "working" at a Go-To-Ground event. A beep can be sounded at the end of this countdown if you desire.

Setting Countdown Duration and Beep

Make sure the Controller is OFF, with a blank display. Press and hold the **MODE** button until the word "set" appears on the display. Release the **MODE** button and the current countdown duration will be displayed on the Upper Right-hand corner. Use the **UP** and **DOWN** buttons to change it to whatever value you want (for example 30 for pups, or 60 for adults). Either the word "on" or "off" will appear in the lower Left-hand corner. This is the current status of the countdown timer beep. Toggle it on or off by pressing the **START/RESET** button. When you are satisfied with your settings, press and hold the **MODE** button until the display goes blank again. These settings are retained in on-board memory and will not be lost if the battery is disconnected.

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

Unlike a standard stopwatch, the TT-3000 can receive completely separate START and STOP signals. When you use the IR Beams, these signals are routed through the Beam Splitter "Y". START signals are recognized at the **GREEN** port of the "Y" and STOP signals at the **RED** port. Manual pushbutton (**START/RESET**) will always override the IR Beam signals.

To use an IR Beam to START, and manual pushbutton to STOP, simply plug in the IR Beam to the **GREEN** port. Or just use an IR Beam in the **RED** port for STOP and manual pushbutton for START.

You can use combinations of multiple (or none) IR Beams as either START or STOP Beams. Additional parts may be required. Use standard telephone style "Y" adaptors to connect multiple beams to the START or STOP ports on the Beam Splitter "Y". This is great for multiple tunnels with a single judge.

Breaking the START Beam to start the timer will lock out all other START beams, until any STOP Beam is broken or the **START/RESET** button is pushed.

If the Countdown Timer is set for any value other than Zero, breaking the STOP beam will lock out any START Beam, until countdown reaches Zero, or the **START/RESET** button is pressed.

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 TT-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

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**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
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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.