

### How to install your *Fast Track* flashing light display timer model P1 with optional remote start switch

(If you have ordered the Quick Mount option, disregard this section and refer to the Quick Mount Instruction sheet for installing your timer)

Enclosed you will find the Fast Track finish line, AC adapter (and any options ordered). The Fast Track finish line contains all the electronics, sensors and displays for the Fast Track system.

To install the Fast Track finish line to your track, mark the finish line on your track with a pencil. Now mark the midpoint of each lane where it crosses the finish line. These marks should align with the location of the sensors in the bottom rail of your Fast Track timer, which was manufactured according to the track measurements provided on the order form.

Next, measure from the nearest sensor to the mounting screws. Mark this spot where it crosses the finish line. This marks the spot to put the mounting screws. The other marks are for the sensors that are mounted in the bottom rail of the Fast Track finish line. Now carefully drill these marks in the finish line of your track with a 3/16 inch drill bit. The sensor holes should be in the middle of each lane. The two other holes are for mounting and should be countersunk with a 1/4 inch bit so that the mounting screws are flush with the surface of the track.

Once these holes are drilled you are ready to mount the Fast Track finish line to your track. Remove one bolt in the bottom corner of the finish line. With this bolt removed the finish line can now hinge open. (If you take out the wrong bolt the finish line will not be able to open because of wires that are in that side of the finish line.) Remove and save the mounting screws. Now with the Fast Track finish line open, run the bottom rail under the track. Close the finish line and replace the bolt.

Check for proper alignment of all of the holes in the track. If a hole in the track does not match that of the sensors in the rail or the mounting holes in the rail doesn't line up, you will have to ream out the holes in the track that do not match. When you have good hole alignment, you can insert the two mounting screws through the top of the track and into the threaded hole in the bottom rail. Be careful that the sensors fit into the holes you drilled in the track.

### Connecting the start switch and AC adapter

Connect the start switch to your track so that the car release lever on your track closes the start switch as the cars wait at the starting line (see illustration on reverse side). When the cars are released the switch should open. Run the start switch cable under the track all the way back to the finish line. Plug the start switch connector into the small socket in the side post of the timer. Plug the AC adapter into the other round socket in the side post (or use the optional battery pack if you ordered one.) Plug the AC adapter into a wall outlet and you are ready to roll.

### How to operate the *Fast Track* timer

**Close the starting gate so that the start switch is closed. This starts the self test. In the test mode all display lights should be off. If a display light is on then something is blocking the sensor for that lane. Once all display lights are off, you will be able to start a race.**

**Put the cars in their starting position. Open the start gate and release the cars. When the first car crosses the finish line, the light over that lane will light and remain lit. As the second place car crosses the finish line, the light over that lane will flicker on and off very fast. When the third place car crosses the finish line, the light over that lane will blink slowly. (If you have the 4 lane model, the light flashes once as the fourth place car passes over the sensor and stays off.)**

**After recording results, close the start gate which presses the reset switch, to start a new race. Ties can also be displayed if two cars cross the finish line within less than 0.0002 of a second. Two or more continuous lights would indicate a first place tie. Two flickering lights would indicate a second place tie. Ties of any kind are very rare.**

If you have problems...

**1) If one or more display lights come on with the reset button depressed:** Then the infrared sensors in the bottom rail are not receiving the signal from the Infrared transmitters in the bottom of the finish line banner. Check the holes in the track. Can you see the infrared sensors through the holes in the track? Check the infrared transmitters in the bottom of the finish line banner. You can check the infrared transmitters with Radio Shack's infrared sensor Cat. No. 276-099 it should cost less than \$8.00. This sensor works only at a very close range 1 or 2 inches. (also handy for checking the TV remote control)

**2) If nothing is working:** Then Unplug the power adapter from the side post of the finish line banner. Make sure the outlet is functional. Reconnect the power adapter and plug it in. Put your hands over all the holes in the finish line. If the display lights now work then you may have a reset switch problem.

**3) If you still have a problem:** give me a call, Stuart Ferguson, at (888)693-3729 (office) or (859) 380-3882 (cell). We have a two year warranty on the Fast Track system. If it hasn't been abused, we'll fix or replace it free (including ground shipping), or refund the purchase price if we are unable to meet your satisfaction.

## Remote Start Switch Diagram

