

Brower Timing System

Set-Up

Finish Line

You will have 4 cut off rapid gates with screw on plugs attached to them. The plugs occasionally fall off; just jam them back on. If you want to use an allen wrench, it is located in the foam of the red fanny pack.

- 1) Screw the four “eyes” on to the rapid gates; doesn’t matter which. Locate tape on top of eyes; set up to coincide with “red” course and “blue” course.
- 2) Attach antenna to main finish line beam; this communicates to the BIB ID Timer.
- 3) Drill holes for finish line; keep them tight so beams don’t move much. Hand screw in, light beams to the outside, main beams to the inside(main have wire plug ins on the back). Eyeball a rough alignment for the beams w/out turning on.
- 4) Plug in grey wire(wire w/o colored tape) between main finish line beam and 2nd course beam. Easiest if you keep both in the middle.
- 5) Starting with either course, turn on one of the outside beams (IR Emit). Hold the button until you hear 3 beeps; this is the “hi” setting. Proceed to the middle and turn on the Transmitter. Hold the button until you hear one beep (finish). Do the same with the other course. **IF YOU HEAR NO BEEP...SEE TROUBLESHOOTING!!**
- 6) **ALIGNMENT...**when you turn on the transmitters, they will start to “squeal” to assist in aligning the lights. Loosen the mounting clamp screw, and move the transmitter up & down, left & right to establish your “zone. The idea is to get it within the “zone” by eliminating any squeal or partial squealing. You may have to run back and forth to each side to establish this.
- 7) The finish line is now set up. When you check the “line status”, one of the finish lines beeps immediately, while the other has about a one second delay. This is fine. After about 30-40min. of no activity, the transmitters may power themselves down.

Start Set-Up

We have “built” two starting stakes that you will need at any hill except Sunburst. Wands will be attached to these. Set up the wands first.

- 1) After pounding in the stakes, attach the wand boxes to the clamps provided, then attach the wands to the stakes. Depending on which way your wires run, one of the wand boxes will attach upside down, so they will both open out and the same way. At Little Switz for instance, you will have to dig a trench for the wire under the south starting platform. Also, tape the two wands in the middle where they connect, so the ends don't fly off.
- 2) Attach corresponding wires to the correct courses; red to red, blue to blue. Don't let the tape on the bottom of the box fool you! Also, if the grey wires are not long enough to reach your Bib Entry box, in the grey bag are longer(brown) wires that can be used.(Little Switz uses these).
- 3) Set-Up bib Entry box; Sunburst/Little Switz can be inside the shack. Just pull the foam out of the red butt pack and snuggle it on top of that. Anywhere else, you will need another clamp(grey bag) and attach it to the handle of a round handled shovel.(works best). Stomp shovel into snow and secure. Attach antenna.
- 4) Entry box is now ready to turn on. Push the on/off button; push the “mode” button; push the “3” button; push the “Enter” button. You are now in “dual lane” mode. The screen should be flashing “red”.
- 5) Proceed to the wands; hold the blue course wand open for 10 seconds; do the same with the red; then go back and do the blue again. During this “exersize” the wands may beep 1 or 2 times. The course is now “active”.

Number Entry

- 1) Enter racer's # on red, HIT ENTER. The screen will now show “blu”; enter racer's # on blue, HIT ENTER. 3 diagonal lines will now be on the screen. This means the courses are ready. If you have no lines, you FORGOT TO HIT ENTER! If the time didn't register, 99% of the time, ENTER WAS NOT PUSHED!
- 2) If you have a racer ready on red, but not blue, enter his #(hit enter), then, hit ENTER again. You can now run one racer on red. Blue is similar, only you hit ENTER first, (you will then see “blu”), then you can enter the number for blue.
- 3) If there is any uncertainty, or if a course gets too far ahead of the other, just hit clear. This will give you a “red” signal, and you can re-enter the #'s.

- 4) Once both the racer's times have started, "red" will appear on the screen, and you can enter new #'s.

Bib ID Timer Set-Up

The brains of the system. Try to keep reasonably warm.

- 1) Find the "stand" in the grey bag. Attach this to the back of the timer and set-up so you can see it between the 2 people writing times.
- 2) Attach the antenna to the top of the Timer. Also helpful if you can get it high enough so it has a clear path to the finish line antenna.
- 3) Turn on unit. Push On/Off; push Mode/1; push >/3; push Block/Shift. The screen will show "dual lane". You are now ready to race!

Stopping Timer

- 1) Skier falls, clock is still running. To DNF the skier, depending on the course, you will use two buttons. If it's the top(red) course, you push 5/>; then B/6. A DNF will appear on the red course. If it's the bottom course(blue), 7/>; then B/6. A DNF will appear.

Important Reminders

-The on screen display has about a 5-6 second delay after the racer has left the starting gate until the time actually appears on screen. This is normal.

-The CLEAR button should never be hit until the entire race is over. Pushing this button will cause ALL the times to be wiped out, and the unit will self destruct. Don't do it!

Handy Buttons

-For the red course(upper); </2 and >/3 will let you scroll forwards and back to check missed times. You can even do this while the timer is running. For the blue course(lower); </8 and >/9.

-To utilize the PRINTER mode; see page 29 in the manual; RS232 Interface, see page 32. Both pieces of equipment are at the bottom of the back pack.

TROUBLESHOOTING

TROUBLESHOOTING

Most problems can be solved in the back of the book; page 34. Our most common problems over the seasons are as follows.

1) **NOT GETTING A TIME.** Make sure you are hitting ENTER after every bib number you put in. This is the most common mistake. If this is working, check the finish lines, sometimes the snow melts, shifting the beam a bit. You will be able to tell if you hear a rough, squeaking noise emanating from one of the transmitters. Just re-align until it stops.

2) **TRANSMITTERS NOT BEEPING WHEN TURNED ON.** Battery dead. Small screwdriver and extra 9v located in front of pack. Unscrew bottom, slide the unit out by carefully pushing in one direction, ease the battery out, throw it in the woods so it doesn't get mixed with the good batteries. New one in, screw in, you're ready to go.

HINT: When you first fire the units up, if it makes a long series of beeps, it's telling you to change the battery. NOW. Or it will puke about 10 racers in.

3) **STARTING WANDS NOT ACTIVATING.** Hold them both open one at a time again for about 10 seconds each. If this fails, power the Bib Entry Box down, let it sit for a minute, follow start up procedure and hold the wands open again until you hear beeps. I repeat the first wand opening just to make sure. **ALWAYS** check your wire connections, because if someone bangs the box, they can come loose. Also, check to make sure the wire is buried deep enough. If it gets knicked, the thing wacks out.

ABSOLUTE, LAST DITCH, NOTHING WORKS, I'M GOING TO SCREAM, HELP ME!!!

- 1) Power the system down, all of it for about 5 minutes. Repeat set-up process.
- 2) Still doesn't work. **CALL SCOTT!!!** **CELL 414-801-5100**
HOME 262-675-9134

I have this tendency to keep the cell with me on race day if I'm not there. I usually turn it on around 8:30ish. Make me proud, run an efficient race!!