

Timing & Scoring setup

Pre-event

The on-line registrations must be downloaded onto a thumb drive to import into the program. The proper download format is available in the reports section of the event on MotorsportsReg.com. It is titled *Entry Download Report*. Only site administrators are able to access the reports section.

Event Set-up

At the event, it's helpful if the course designer sets up the start and finish first so the timing lights and cables can be run. The items that need to be setup are the start and finish lights, the time slip printer, the large display, and the launch light. With the exception of the large display, all the other devices run off standard network cabling. All the cables are interchangeable. The large display has a combination data power cable that is always connected to the timer.

The cable runs for the timing lights can be combined with the connectors available in the timing storage box. The lights have been tested to over 600' so distance should not be a problem. It's best to use the shorter cable runs for the time slip printer.

The timing lights consist of an emitter and receiver. The receiver has a cable connection that runs back to the trailer. The emitter is a battery-operated device that stands alone. The emitter and receiver should be placed as close together as is practical. On the start that is usually just outside the start pylons. On the finish, the lights need to be further apart to minimize damage from errant vehicles. The course design usually dictates which side needs to be further back. They work quite well at 30' to 40' but can be stretched out to 60' or more. Something to watch out for on some courses is pavement irregularity. Since the lights only sit a few inches above the pavement, a significant crown can affect the look angle.

The emitters have a power switch and some have a power LED. Turn on the switch and verify that power is on. A trick to verify that the emitter is working is to aim a cell phone camera at the lens opening. The IR LEDs will show up on the cell phone but are invisible to your eyes. Weak batteries can cause problems and is usually one of the first troubleshooting tasks. The 4 AA cells will usually last 5 or 6 events.

Under the left hand side of the trailer table is a light switch that controls the DC power for all the timing equipment and the PA. When the timer gets power it goes through a self-test procedure and then goes into alignment mode. In alignment

mode it displays 2 numbers, the left one for the start and the right one for the finish. The numbers themselves don't mean anything. They show how many trips the lights are seeing. A continuous count indicates a problem – a bad cable, bad connection, or dead batteries. An occasional tick in the counts is usually someone walking through the lights.

The large display cable is two cable bundled together – a power cable and a data cable. Plug the RJ-45 data cable into the receptacle on the back of the display and the power connection into the molex connector. When it gets power the display will go through a self-test sequence and then go to a blank display. The display is very sensitive to power problems. If it starts acting up, it usually indicates a problem with the 12v battery bank or the converter/charger. The other equipment will continue to work for a while but problems will occur later.

The time slip printer requires AC power and a short cable run to the trailer. It plugs into a small white RJ-45 connection on the right side of the table. The main issues with the time slip printer are running out of paper or paper jams. On rare occasions the USB/serial connection gets messed up and requires a computer restart.

The launch light is a single cable connection from the light to the mushroom switch on the right side of the table. The light should be set as close to driver eye level as possible. Due to voltage drop issues; try to use a short cable run for the light.

Running the event

Most of the information for running the event is covered in the Timing & Scoring program manual. Some additional information is listed below.

Assigning work groups can be difficult. The printout of drivers by class is used to split up the groups. Two things throw off the number counts – the drivers that already worked tech or other setup duties, and the no-shows that pre-registered. The registrar can usually give an idea of how many no-shows and what classes they're in. The one thing to avoid is putting all the novices into one group. That would put almost all novice workers on the course during a heat – not a good thing.

Electricity – most sites except for Verona require running the generator. A full tank of gas will last almost the entire day. The computer's battery is old and will only run a short time without AC. The printer and announcer display requires AC to run. The generator will need to be started about the time the PC is turned on to enter on-site registrations. Check the fuel level and refill about midway through the event. Connecting the AC to the trailer requires the use of a double male-ended cable. Be careful connecting them so that live power isn't active on the exposed male end.

At most events the trailer is positioned between the start and finish so than cable runs don't get driven over. In the event that isn't possible due to site restrictions or

the course design, there are cable covers that can be used to cover the wires. These should only be driven over at low speed. They cannot be used on course.

Rain usually has no effect on the cables or connectors. If heavy rains are expected, try to keep the cable ends out of the water. Corrosion on the connectors can cause some problems. If the rain gets so heavy that the lights won't work, it's probably too rainy to run the event.

Event Wrap-up

Once the results have been verified and any issues corrected, the various reports are printed. To get an electronic copy of the results requires two steps. In the timing program, click on the button – Write Results to Disk. That writes the various reports to the thumb drive (make sure it's inserted or you will crash the program). The reports also include the HTML file for posting to the web. The second step is to write a copy of the database file used for the event. This can't be copied until the program is finished. There's a shortcut on the desktop – Copy database to thumb drive – that will copy the file. Double click it and respond to the prompts. Safely remove the thumb drive and following the post event procedures for uploading the results.

Shut down the computer and turn off the printer before killing the AC power.

Verify that the emitter power switches are turned off before storing the timing lights. If not, they will be dead at the next event.

Post-event

In the files written to the thumb drive three are most often used: byclass.htm, allruns.txt, and points.csv. The byclass.htm file contains the standard html layout used for the web page. It needs to be renamed and FTPed to the web server. The allruns.txt file contains every run a driver made. Some people like to have that history so it gets uploaded to the web server also. The files are normally renamed to yyyyymmdd.htm or .txt where yyyy is the year, mm is the month, and dd is the day of the event. These files are kept in the Results folder of the web site.

The points.csv file is used by the points keeper to calculate season standings. Points keeping is discussed in a separate document.

The ax2007.accdb is the Access database file used for the event. It can be used to run the program on another computer to revise the results if needed.