

# **Signature Gear Flyball Timing System**

## **Programming and Operations**

**V 1.0 – 12 February 2006**

**(POLARIS rev 1.4 Flyball)**

## Basics & Getting Started

This description has been updated for timing Console software version 1.4. The software version of the timing Console can be observed during power on in the lower Status Window following the Initializing... prompt.

The Console is the heart of the Signature Gear Flyball timing system. It provides the end-user interface for operating the system, allows the setting of options to change the behavior of the system and controls the overall flow of the other components.

The Console is powered by four (4) AA batteries that are concealed in the bottom compartment on the bottom of the unit. The batteries used should not be of the rechargeable variety due to the slightly lower operating voltage and characteristics of these batteries. A single set of batteries will last for well over one weekend of use and well over two weekends in most circumstances. The console is powered on using the slide switch on the back. The Console should be powered off during long periods of non-use to preserve batteries (such as overnight or between weekends).

On the back of the Console are three I/O ports. The one marked audio is used to interface to the audio amplifier and provides optional sounds for the start cadence, false starts and bad passes. The other two ports will be used to provide computer interfaces to the timing system in a future software version.

On the top of the Console are two display windows – the Top Display which will show the Race and Heat number of the current run, and the Status Window (lower display) which will show the status of both lanes as well as split times for each dog and final heat times for each lane.

The active buttons for the Console when being used for Flyball are:

Horn – To send a horn sound to the audio system to get the attention of the judge or competitors

Clear Time – To indicate to the system (and judge) that the timing table is ready for the next heat to begin. Clear Time has a toggle effect, so pressing it when the system is ready will cause the system to go not-ready.

Race/Go – Increments the race number and resets the heat number to 1.

Setup – Enters Setup mode on the console for programming various options.

Prev Choice – Used during setup to scroll through selections. When not in setup mode, it is also used to review previous times as discussed later.

Next Choice - Used during setup to scroll through selections. When not in setup mode, it is also used to review previous times as discussed later.

ENTER – Used during setup mode to make or save a selection.

Start/Stop – Can be used to start and/or stop a heat. This button performs the same function as the judge's remote control (HandSwitch) and can be used in place of the judge's remote control. The judge's remote control and the Start/Stop button can be used interchangeably during a heat without limitation.

Antenna – The short antenna that protrudes from the top of the timing console is used to communicate with all the other components of the system. This antenna should ideally have an unobstructed line of sight to the timing poles, small receivers on top of the large displays, both light trees and the judge with his/her remote switch.

## **Initial Setup**

To start using the system, power on the Console and the other components (including the 6 timing poles, two trees, judges handswitch, audio system and large displays if present). Once initialized, the Console will show 1-1 in the large Display window and “L Not Run” in the lower Status Display. Walk through each of the racing lanes start/finish line and the Status Display should change to “L Not Run S P” and “R Not Run S P”. The L and R lines both showing up indicate it has now sensed it is operating in a two-lane mode (as opposed to single lane racing, training or practice mode).

If the R line fails to appear after walking through the lanes, check the beam alignment in both lanes and the overall setup as detailed in the setup document. Ensure that all poles with green caps show a green LED at the top and all poles with black caps show a red LED at the top. If all appears to be setup correctly, refer to Advanced setup – Reprogramming eyes later in this document or contact your support person.

If either S or P is replaced by an X, this is an indication of misalignment of one of the timing poles. If the S is missing (replace by an X) the start pole in that lane is misaligned and similarly, the P relates to the passing pole (pole closer to the box). Check the alignment of the poles and then walk through them again. The best way to reset the poles is by blocking all of the beams for a given pole at the same time. This is most easily accomplished by walking through the beam (hesitate while in the center of the beams).

## ***Basic Programming***

### **Audio Settings**

To set the audio options, press the Setup button, press Prev Choice three times to show the Advanced Menu setup prompt and press ENTER. Press Next Choice and then enter to move to the Speaker Options settings and press ENTER. There are three speaker options that can be set:

Stage Beep – ON indicates a beep will be issued as each yellow light comes on during the start cadence. This is similar to the beeps you hear if you watch downhill snow skiing just before the skier starts. The current setting is shown with an asterisk to the left of the option.

Start Fault – ON indicates a buzzer will sound when a false start occurs. This is normally set ON.

Pass Fault – ON indicates a beep will be heard when an early pass is detected. This is helpful to line judges and to teams to alert them to check the tree for the lane incurring the infraction. This is normally set ON.

To change any of these options, move to the desired entry (e.g. Pass Fault ON) and press ENTER. Once one of the settings has been changed, press Previous Choice and then ENTER to go back into the speaker options area to check or change other speaker settings.

When finished, press Setup to leave setup mode. Use the horn button as an indicator to adjust the volume of the audio subsystem so that the selected sounds can be heard but will not be objectionable to the timing table, judges or racing dogs. Typically the speaker should be pointed roughly at the head judge so that the sound is directed into the area behind the start/finish line. The speaker is often positioned on the end of the timing table furthest from the boxes. There will be additional noise present once racing starts so the volume may need to be re-adjusted at that time.

## **Breakouts**

The timing system has the ability to track and indicate breakouts automatically. It is your choice to use or not use this capability. If it is used, the timing table personnel are responsible for entering the breakout time for each race prior to the start of the race. Each lane's breakout time can be set independently, but will default to be identical.

To set the breakout time, press Setup and then press ENTER. Use the numeric keys to enter the breakout time for the left lane (including the decimal point). Breakouts can be set to a maximum of two decimal points. Press ENTER to store the breakout time. The breakout for the right lane will be shown (set identically to what was just entered) – press ENTER to accept the default or key a different breakout time for the right lane and press ENTER. A breakout time of 0 indicates no breakout for that lane.

Breakout times carry over from race to race and remain in place until reset. This makes it easy when several races of the same division are grouped together. It can also have unwanted results if the timing table forgets to reset the breakout time before the start of the next race.

Setting the breakout time to 0.00 for both lanes disables the breakout functionality of the timing system.

## **Handicaps**

The timing system is capable of supporting handicapped racing. Handicapped racing can allow two teams of differing abilities to race each other head to head. It works by delaying the start of one lane in relation to the other. Large handicap differences can also

introduce concerns with false starts as one team may have released a second dog before the delayed team incurs a false start.

To set the handicap for a lane, press Setup, press Next Choice once to advance to Set Handicap and press ENTER. Key in the time that the Left lane is to be delayed vs. the other lane (0.00 if they are the slower team) and press enter. Now key in the time that the Right lane is to be delayed (again 0.00 if they are the slower team). In any given heat, one lane should have a handicap of 0.00 and the other should have a number – both lanes should not have a handicap time.

To disable the handicap function, set the handicap for both lanes to 0.00.

## **Race Number**

Use of the race number is optional and the timing system will continue to operate normally if the race and heat number are just allowed to increment without regard to their relation to actual races and heats.

The race and heat numbers are used to tag the various recorded times to whichever race and heat they apply. This is useful when scrolling back through past times to find a missed time and also when a computer interface is used to ensure that recorded times are credited to the correct races and teams.

Normally, the race number is incremented by pressing the Race/Go button before the start of the first race in each heat to set the race number. Occasionally, it may be necessary to manually set the race/heat number. This may occur when a heat is rerun, when races are run out of order or when the race number is inadvertently incremented too far.

To set the race/heat number manually, press Setup, then press Next Choice twice and then press ENTER. Enter the race/heat number in the form rrRH where rrR is the Race number and H is the heat. So to enter Race 12, Heat 3 – enter 123 and to enter Race 105 Heat 1 enter 1051. Press ENTER and the race/heat number will now be reflected correctly in the upper Display window.

## **Battery Status**

The status of the battery in the timing console can be checked by pressing Setup followed by Next Choice three times and then ENTER. *The battery status is not accurate for the first 20 minutes or so after the console is powered on.* Press Setup to exit the battery status display.

## **False Starts**

The timing system automatically tracks false starts for each lane and resets the system on the first false start in each lane. It indicates a pending false start by leaving the top red light on in that lane.

Occasionally, it may be necessary to manually set or clear a pending false start due to the restarting of a heat or to the timing table inadvertently pressing Clear Time after a false

start occurs. False starts can be set two ways: First, the judge may elect to simply sequence the lights (while asking the teams to hold their dogs) to either clear or set the desired false start status. This may require you to manually reset the race/heat number if you are using this function.

Second, the false start status can be set from the Console. Press Setup, followed by Prev Choice three times to display the Advanced Setup prompt, press ENTER to go into advanced setup and ENTER again to go into Start Faults. Select the option you need by using Next Choice/Prev Choice and press ENTER. Press Clear Time once to make the system ready to race.

### ***Normal racing operations***

Power on the system as described above under Initial Setup. Ensure the race and heat number are set correctly if you are using this feature. Set the breakout times if you are using this feature. Press Clear Time to indicate to the judge that the timing table is ready to go. The Status Window should now read L Ready SP and R Ready SP. If they do not, check alignment as discussed in Initial Setup above.

The heat can now be started by either the judge pressing the remote HandSwitch or by pressing the black Start/Stop switch at the judge's direction. The Status Display will show several prompts and the trees will sequence through the start cadence. The trees will first light all their lights going up (to test the LEDs and get the racers' attention) and then count down in the normal start sequence.

If a false start occurs, do not touch the Console. Pressing Clear Time inadvertently after a false start will clear the pending false start and require that it be reset manually (see False Starts above). The system handles the normal false start rules without intervention – and automatically resets for the restart of the heat with the false start pending in the offending lane(s).

At the completion of a heat, the judge will press his/her remote HandSwitch to freeze the times or direct you to press the Start/Stop button (black) on the Console. At this time the heat is complete and the tree will indicate the winner to the best of the system's ability (it can't see dropped balls or dogs going around jumps). Record the final times as shown in the status display window.

Recorded times can be replaced by BO if a team broke out, NF if the judge indicates that lane did not finish the heat or INF if the judge indicates that team interfered with their opponents. If a breakout or some other condition requiring the judge's attention occurs, the horn button can be used to get the judge's attention.

Once the times are recorded and you're ready for the next heat, press Clear Time to bring the system ready for the next heat. The Status Window should now read L Ready S P and R Ready S P. If they do not, check alignment as discussed in Initial Setup above. The judge knows that you are ready because two small green LEDs light at the base of each tree when the system is ready for him/her to start the next heat.

## ***Recalling missed times***

Once in a while, you may need to recall a past time from the timing system. The timing system records dog splits for the immediate previous heat and final times for up to 100 past heats.

### **Recall a past split time**

Occasionally things happen where a dog or person inadvertently crosses the start/finish line of a team that has completed its heat prior to the judge stopping the timing system. This causes the wrong final time to be displayed for that team. This kind of retrieval must be accomplished before the next heat is run since the system only stores this dog level information for the immediate preceding heat.

Pressing the Prev Choice key will step backwards through the dog crosses showing the split and total elapsed time as each dog crossed. The first number is the total number of dogs that have run up to this split in each lane. The next number is the split for that dog and finally the elapsed time at that point in the heat (you're probably looking for this final number – the elapsed time).

For example, the right lane completes their run in four dogs and the left lane has to rerun their fourth dog. The dog bobbles its ball on the rerun and ends up coming back down the other teams lane – incrementing their final time. The judge stops the timing system and awards a No Finish (NF) to the left lane but you now need an accurate time for the right lane. Press Prev Choice until you see the 4 dog total for the right lane and record the elapsed time for four dogs as their final time. Prev and Next Choice will scroll forward and backward through the times. The Console will revert to normal operation a few seconds after no keys have been pressed.

### **Recall a past heat time**

The system also allows you to recall the total time of a past heat. This must be done before the Console is powered off as all past heat times are discarded at that time.

By repeatedly pressing the Prev Choice key, you can scroll back through past times. At first, the dog splits for the immediately previous heat will be shown followed by the total time for each preceding heat. If you are using the race/heat number functions, you can identify a past time by its race/heat number. Otherwise you can find a past time if you know how many heats have occurred in the meantime or preferably, you know the time of the other lane or the times of the preceding and following heat – to bracket the time you're searching for.

Prev Choice and Next Choice will scroll forward and backward through the times. Once you've found and recorded the time you're looking for, simply leaving the console alone for a few seconds will cause it to revert to normal operation.

## **Advanced Setup**

***Setting seldom used options***

***Reprogramming Radio IDs***