Signature Gear Flyball Electronic Judging System – updated 2012

Contents

Section 1: Unpacking and Assembly Instructions

Required components:

- □ Qty 2 Black cases with one handle and two twist latches. These cases hold the large displays plus minor extras such as console stand and wet weather plastic covers.

- □ Qty 2 Black case with tandem handles and three twist latches. These cases hold the poles, spare poles, console, Judge's remote, wireless receivers for the large displays, light tree assembly and charger, battery clips and minor extras such as nuts & bolts and green plastic clips.

□ Qty 2 Nylon tripod cases. These two cases hold a total of three tripods – one for each large display and one for the trees.

□ Qty 1 Nylon upright base bag. This bag holds the metal bases for the uprights that will be placed at the start finish line.

□ Qty 1 Nylon audio bag. This case holds the amplifier/speaker and cable for the audio function of the EJS.

□ Other cases will hold the mains surge diverter, safety switch power board, assorted power boards and extension leads.

You will also need:

□ 40 AA batteries for a weekend and one 9-volt battery. Do not use rechargeable batteries as they will not reliably operate the EJS components due to slight voltage differences.

□ Three extension cords – one for each large display and one for the audio system at the timer table.

□ Plastic covers for both display consoles & the light tree eg heavy duty clear garbage bin liner

Step 1 – Inventory what you have received

Remove a copy of the EJS evaluation form from one of the longer black cases. If none are present, one can be printed from the web by going to http://www.flyball.org/ejseval.htm. Check that you have received all the cases listed here and that the set designations on the cases all match (all the cases you have belong to the same set). Open each case and verify that the components in each case also match the set designation. Note any discrepancies on the form and also email info@flyball.org.au with any discrepancies and/or missing or damaged items.

Step 2 – Assemble large displays

Remove the three tripods from the tripod cases. Extend the legs on each to form a sturdy tripod and gently tighten the thumbscrew to secure the legs. Do not extend the tripods above their collapsed heights until assembly is complete and they have been moved to their final location for your event.

Loosen the top thumbscrew on each tripod enough to slide the crossbar assembly into the opening. **Gently** tighten the thumbscrew to snug the crossbar assembly onto the tripod. Two of the cross bar assemblies will have silver standoffs on the end and the other will have two upright studs. Set the tripod with the upright studs aside to be used as part of the tree assembly.

Open a large display case (one handle – two twist lock latches). Before removing the large display, open the silver links hanging from each end of the tripod crossbar by twisting the fitting to create an opening in each link. Remove the large display and hang it from the two links. Ensure that the Plexiglas side of the display is facing away from the tripod. Close the two links by twisting

the fittings. Turn the large display until it is hanging directly above one of the tripod legs (for improved stability). The power cord should be hanging freely from the display.

Repeat the above procedure for the second display. Set the displays aside as one more component will be added to each display in the next step.

Step 3 – Assemble uprights and tree

Open the upright base bag and remove the four metal bases. Separate the bases into two sets with each set containing one single pole base and one double pole base.

Open an upright case (tandem handles – three twist lock latches). Remove two white poles with green caps (labelled LS [Left Start] & LP [Left Pass], or RS [Right Start] and RP [Right Pass]) and one white pole with a black cap. Leave the one pole marked "spare" (may have a green or black cap) in the case. Remove a battery holder from the case and install 6 AA batteries into the holder as shown on the holder. The negative end of each cell (with no button) always goes toward the spring in the connector. Repeat until three holders have been loaded with batteries. NOTE: it's advisable to 'spin' the batteries when they are in the holders to make sure they are reliably contacting the connectors.

Unscrew the dark grey cap from the bottom end of each white pole and insert a battery holder into each pole. To orient the battery holder, find the green dot on the pole and align it with the green dot on the battery holder. The battery holder goes into the pole green dot end first. Screw the grey cap back onto the pole but **do not overtighten**. Ensure proper operation by rotating the black ring on the pole to the on position. Observe that the LED at the top of the pole lights and then return the switch to the off position. Repeat for the two other poles.

Place the pole with the black cap into the single upright base (you may need to loosen the wing nut in the base to allow the pole to slide completely in). Ensure that the alignment stud has seated into the slot in the base and that the pole is fully inserted in the base. Insert the green capped poles into the double base. For the left lane (poles marked LP and LS), LS should be to the left of LP when facing the lenses on the front of the poles. For the right lane (poles marked RP and RS), RS should be to the right of RP when facing the lenses.

Gently snug the wingnut to secure each pole. **Do not overtighten the wingnuts** as damage to the poles can occur. Once both poles have been placed in the double base, remove a green alignment connector from the case and snap it into the slot near the top of each green pole. The alignment connector should be on the opposite side of the pole from the lenses and should hold the poles parallel to one another. The poles can be gently twisted once the alignment connector is in place to ensure they are parallel.

Remove the light tree assembly from the case by grasping the U-shaped portion of the black shroud. Do not handle the tree by the thin shroud and do not stand the light tree on end. The light tree should be laid down at any time it is not in the case or mounted on the tripod.

Place the U-shaped portion of the shroud over the stud in the crossbar of the tree tripod and secure with a wingnut. Ensure that the labels on both trees face the same direction. Ensure that when facing the trees such that the labels are visible, the middle switch on the bottom of the tree is set correctly (left tree is left lane and right tree is right lane). The tree can be tested by depressing the power switch. The tree should cycle through each of its lights and then go dark. Depress the

power switch again to turn the tree off. Remove the charger from the case. The charger should be used each evening to recharge the internal batteries in each tree. The charger plugs into the jack on the bottom face of the tree. Each tree can be charged for up to 15 hours – **do not overcharge by leaving plugged in for extended times**. The trees will also operate with the chargers plugged in in case the batteries were not recharged. Place the chargers back in the cases when not being used to avoid their being misplaced.

Remove the large display receiver from the case. Attach it to the crossbar of one of the large display tripods using the thumbscrew on the crossbar - **do not overtighten**. Attach the connector at the end of the wire to the db-9 connector located at the end of the large display. Note the lane designation on the receiver as this will determine which large display will support each lane. You may wish to move the large display to the appropriate lane at this time to avoid later confusion.

Remove the timing console from the case (only present in one of the two upright cases); install four AA batteries as shown in compartment (battery cover slides off bottom). Ensure proper operation by switching it on, watch for the startup message on the display and then turn off again. Place the timing console on the timers table.

Remove the judges handswitch from the case (only present in one of the two upright cases) and install one 9v battery as sown in compartment (battery cover slides off – may be partially obstructed by the belt clip). Ensure proper operation by pressing the power switch and watching for the red LED next to the switch. Press the power switch again to turn it off. Hang the judge's switch by its lanyard from a thumbscrew on the tripod for the tree.

Repeat entire procedure for the other lane with the remaining black case.

Step 4 – Audio setup

Remove the speaker/amplifier and place it on the timing table. Connect the speaker/amplifier to the timing console using the supplied cable. The cable should go in "Line 1" on the speaker/amplifier and "audio" on the timing console. Plug in the speaker/amplifier and turn on with the rocker switch located on the back panel. The volume can be adjusted by turning on the timing console, waiting for the startup to complete and then pressing the "horn" button. The sound should be audible to the judge but not loud enough to startle a dog. You may wish to point the speaker/amplifier at the approximate position where the judge stands during a heat in progress.

Step 5 – Place the system in the ring

Place the base with the two left poles to the left of the left lane. The poles should be approximately 3 feet from the center of the lane. Place the base with the two right poles to the right of the right lane – again the poles should be approximately 3 feet from the center of the lane. The lenses in the LS pole should align with the start/finish line and the LP pole should be on the box side of the start finish line (you may need to swap the LS and LP poles in the base if they were assembled incorrectly). The lenses in the RS pole should also align with the start/finish line and the RP pole should be on the box side of the start/finish line (you may need to swap the RS and RP poles in the base if they were assembled incorrectly). The LS and RS poles should face each other on the left and right sides of the start/finish line respectively.

Place the two single pole bases between the two lanes, facing out toward the green tipped poles. Ensure that the legs with arrows are pointing directly at the start pole (LS or RS) in the opposing double upright stand. The arrow should align with the start/finish line. Ensure that all four bases rest firmly on one surface (e.g. not spanning matting and floor). The bases can be adjusted for uneven surfaces using the three screw-in feet on each base.

Power on all six poles by rotating the black power ring at the base of each pole. The LED at the top of the black capped poles should glow red and the LED at the top of the green capped poles should glow green (after briefly flashing red during power on). Constant red LEDs on the green capped poles indicate lack of alignment – power off the poles, repeat alignment in that lane and then power on again. Aligning the poles with the power already on may result in a weaker and less reliable alignment. Assure that all six poles are powered on and aligned before leaving this step.

Power on the timing console, audio speaker/amplifier and judge's switch.

Power on both trees by depressing the power switch on the bottom of the tree.

Plug in the two large displays (they will show a dash (-) when first powered up).

Step 6 – Testing the system

Walk through the start/finish line in both the right and left lane. The large displays should now show numbers and you may see a red light on the tree for the corresponding lane. Go to the timing console – the bottom window should show S P and Not Run or Not Ready for each lane. If you see an X rather than an S or a P, check the alignment in that lane and then walk through the start finish line for that lane again.

- Press the clear time button to make the system ready for a heat. The display should indicate ready for both lanes and a green LED should illuminate at the base of each tree.

- Depress the judge's handswitch or the large black button on the timing console to start a heat. The tree will sequence rapidly up to test its lights and then begin the start cadence. The speaker may also beep if that option is enabled.

- Break the left lane beams before the green light comes on and the system will indicate a false start in the left lane and reset. A negative time will be shown on the left large display and the top red light on the left tree will come on and stay on.

- Depress the judge's handswitch or the large black button again to restart the heat. The tree will sequence again.

- Break the right lane beams before the green light comes on and the system will indicate a false start in the right lane and reset. A negative time will be shown on the right large display and both top red lights on the trees will come on and stay on.

- Depress the judge's handswitch or the large black button one more time to restart the heat. The tree will sequence again.

- Simulate several dogs running and observe the split times and bad pass indications. Depress the judge's handswitch or the black button to signal the end of the heat. The final time will display on the large displays and console and a winner may be indicated by a blinking light on the tree if four "good dogs" ran in either lane. Press clear time to ready the system for another heat.

Once you are satisfied that the system is operating correctly, power off all six poles, the judges handswitch, the timing console and both trees to conserve batteries. The large displays should be unplugged when not in use for extended periods (overnight) and the audio speaker/amplifier should be switched off. Both trees should be plugged in to charge if leaving the system overnight. The whole tripod with the trees can be moved to a convenient location where AC power is available – often near the timing table or large displays works well. After a brief delay, the green lights on the front of the trees will flash while charging.

Step 7 – After the competition

Disassemble and repack the equipment in the same containers that they came out of. For special note:

- Make sure all battery packs are removed from the poles. This is important because some switches do not turn off properly, and a battery pack left 'on' for days or weeks is likely to leak and damage the pole.

- Also take batteries out of the console and judge's handswitch.

- Make sure all poles are placed in the appropriate cases – don't mix left and right.

- Ensure the trees are turned off.

- If pack up happens during rain or damp, make sure the equipment is taken out and aired at the first opportunity, definitely within 24 hours.

Section 2: Operating and Programming Instructions

Part 1: Major changes and additions with the 2012 software upgrade:

Countdown timer

A new feature has been introduced that counts down the pre-race warm up period and displays the remaining time on the console and on the rear displays.

To set the countdown time period, press *Setup* then *Enter*. Key in the desired time period in M:SS (Minutes: Seconds) format then *Enter*. So to key in 1 minute 30 seconds, press
Setup Enter 1 3 0 *Enter.*

To start the countdown, press the Countdown button.

Notes:

- The countdown time appears on the console immediately but it can take up to 15 seconds until it appears on the rear displays.
- The displays are about ½ second out of time with each other. This is normal.
- Warm-up times are displayed on the rear displays as dogs or people break the beams. This allows teams to see what their dogs are running during the warm up. Each display returns to showing the remaining countdown time 2 or 3 seconds after the beam was broken.
- When the countdown hits zero, the horn will sound.

Start faults On / Off

A one-key-press system has been introduced to turn the Start Fault detect system on and off for both lanes, for Veterans and Handicap racing.

Press *Eyes On* and *Eyes Off* to toggle (switch) between “Start Fault detect ON” and “Start Fault detect OFF” modes.

The way to tell which state the system is in is to look at the red lights on the light tree. When the Start Fault system is OFF (that is, a dog that false starts does not have the usual allowance for a restart), both red lights on the light tree will be on when the system is reset for a start.

The Start Faults system stays where it was last set until told to change. It does not self-reset.

Note, this mode is NOT suitable for a forfeiting team situation because it affects both lanes simultaneously. For this situation, either do a deliberate false start for the affected lane or use the program option.

Setting the Breakout Time

Setting the countdown timer has taken the first position in the Setup menu, the position which used to be for setting Breakouts. All other menu options are in the same order, just pushed down by one position. The menu order is: *Setup* Countdown timer *Next Choice* Set Breakouts *Next Choice* Set Handicap . . . etc.

Otherwise, the Breakout programming is unchanged.

Handicap Time

The process of loading the new software "hides" the Handicap option from the Setup menu. It has to be restored by going into the Protected menu.

This should only have to be done the first time the Handicap is used after the software upgrade. Once Handicap has been restored, it remains in the Setup menu it its old position just after Breakouts.

Part 2: Original programming not affected by the 2012 software upgrade:

NOTE: Minor changes resulting from the 2012 software update are highlighted in **Bold** print.

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 behaviour 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. Do not use rechargeable batteries due to the slightly lower operating voltage and characteristics of these batteries. A single set of Duracell style 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 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, also see separate Advanced Menu instruction) 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 or an obstruction being present. 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, **then Next Choice** and then 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 same time or key a different breakout time for the right lane and press ENTER. A breakout time of 0 indicates no breakout for that lane, ie Division 1.

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 **twice** to advance to Set Handicap and press ENTER. Key in the Handicap time for the Left lane and press Enter. Now key in the Handicap time for the Right lane and press Enter.

In any given heat, one lane (the *faster* lane) will have a handicap of 0.00 and the other (the *slower* lane) will have a number – both lanes should not have a handicap time. The slower lane having a handicap time may seem strange, but picture it as being the slow lane's advantage over the fast lane.

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 **three** times 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 **four** 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.

Circle (as appropriates) BO if a team broke out, DNF if the judge indicates that lane did not finish the heat or INT or CR if the judge indicates that team interfered with their opponents or crossed the centreline. 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 – for more detail refer to Timekeepers Manual.

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 Did Not Finish (DNF) 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 – see other instruction sheet

Setting seldom used options

Reprogramming Radio IDs

Section 3: Troubleshooting Guide

Problem	Suggested Action	Suggested fix
Beeping every time a dog crosses the Start line but not a bad cross OR System does not respond when START pressed	Check that poles are in their correct positions. Check pole indicator lights on all poles (see Note [1] below) Timekeepers can also check by looking for 'X' in the console display	If both Green tipped pole indicators are GREEN, walk through or sweep a hand across the Start line between the poles.
		If one Green tip pole indicator is RED: • Make sure the space between the poles is clear of any obstruction. • Wipe down the lenses with a clean dry cloth. • Re-align the poles
		If both Green tip pole indicators are RED: • Check the Black tipped pole.
		If any pole has no indicator showing: • Check on/off switch • Remove & check battery pack for proper insertion, flat cells, cells not sitting properly against contacts or batteries inserted the wrong way
False starts or beeping indicated when nothing crossed the Start line	Check for sun shining directly and from a low angle into the Green tipped pole lenses for one lane.	Swap the black and green poles around. Make sure you also swap the Pass and Start poles on their base. If you still get occasional bad crosses but they are less frequent, place a visual barrier on the Start line between the Left and Right lanes. It only has to be big enough to prevent the Green poles of one lane "seeing" the Black pole of the other lane.
Occasional false crosses indicated when did not happen	This happens at some venues and no cause can be found. Suspected to be local radio interference.	
Indicator lights on pole flashing	Battery problem	Exhausted or faulty batteries – check / replace. Incorrectly inserted batteries - remove the battery pack and check for flat cells or cells inserted the wrong way.
Indicator stays ON when pole switch turned to OFF.	Internal On/Off switch stuck ON	• Remove battery pack when not in use to prevent going flat. • **GENTLY** tap the base of the pole near

		the on/off switch until the indicator goes out.
Can't find Handicap option in the Setup menu.	Option has been disabled or System software has been reloaded	Refer to Protected Menu instructions

NOTES:

[1] Each pole has an indicator lamp at the top.
For the Black tipped poles, colour is always Red
For the Green tipped poles, colour may be Red or Green.