

Preparation For Use

SHOW JUMPING (1)

- 1) Attach each electric eye to a tripod. Place Transmitter/Receiver pairs facing each other to form start/stop lines between the eyes. *Extend tripod legs fully* to ensure the eyes are high enough to be broken by the horse's body (not its legs).
- 2) Turn the electric eyes ON. The power indicator lamp on each unit should glow steadily. If the indicator is blinking, the battery is low and should be replaced.
- 3) Align the electric eyes. The opposing electric eye should be directly in-line when sighting down either line on top of the electric eye (left to right alignment), and when sighting down the crack on the side of the eye (up and down alignment).
- 4) Turn on the timer in the announcer's booth by plugging the A/C adapter into a wall outlet and into the POWER jack on the timer. (The optional A/C Eliminator battery pack can be used instead of an A/C adapter).
- 5) Walk through each electric eye beam to force the eyes to send a message to the timer console. This makes the timer console update its electric eye alignment indicator (see the next page).

Setting Course Times, Electric Eye Usage

The Polaris timer is easily switched between "First Round" and "Jump-Off Round" (see the *Timer Operation* Section). This capability allows the following:

- Separate course times are maintained for First and Jump-Off rounds. The timer automatically stops and then sounds the horn at twice the course time.
- Computation of time faults can be different for First Round versus Jump-Off Round.
- The way the electric eyes are used to start and stop the timer can be set differently for the First Round and Jump-Off Round. When the timer is switched between rounds, the eye configuration is automatically changed.

The example below shows sample course times and eye usage for First and Jump-Off Rounds:

	First Round	Jump-Off Round
Course Time	72 sec.	68 sec.
Eye Usage	Eye #1 starts Eye #2 stops	Eye #1 starts and stops

- You can press SETUP at any time to exit Setup and return to timing mode.
- These parameters can be updated individually and in any order desired.
- All changes are automatically stored in the timer until changed again in the future.

To Set Course Times and Electric Eye Usage:

- 1) Press SETUP to access timer setup features.
 - 2) Press NEXT CHOICE until the 1st Round Time option is displayed and then press ENTER.
 - 3) To accept the course time shown, press ENTER, or, key in a new time followed by the ENTER key. (To fix a mistake, press *and hold down* the CLEAR TIME key until the time is cleared).
 - 4) After entering the First Round time, the option for entering the Jump-Off Time is displayed. Press ENTER to input the Jump-Off time.
 - 5) After entering the Jump-Off time, the option for selecting which eyes are used for the First Round is shown (1st Round Eyes). Press ENTER, then use the NEXT CHOICE key to scroll through the possible eye combinations ("*" is displayed next to the current setting). Press ENTER when the desired eye combination is shown.
 - 6) Repeat Step 5 for Jump-Off Round electric eyes.
 - 7) Press the SETUP button to exit Setup.
- To disable the display and printing of time faults for a class, enter a course time of zero.
 - See the *Show Jumping Advanced* page for more setup options.

Checking Eye Alignment

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The bottom right corner of the Status Display shows the alignment status of each electric eye. When an electric eye is aligned, its eye number is displayed. If not aligned, an “x” is displayed.

Alignment	Display Shows
Eyes aligned	Eye #1 Ξ
Eye #2 not aligned (or beam broken)	Eye #1 \times

Important! When setting up the electric eyes, always take time to align the eyes as outlined above – *even if the timer indicates the eyes are aligned*. This ensures a strong alignment instead of a possibly marginal alignment.

Timer Operation

- 1) Verify the proper round is shown on the display (FIRST ROUND or JUMP-OFF ROUND).
To change rounds: Press the SETUP key, then press ENTER to accept the new round type.
- 2) Sound the horn and start the rider-start count down by pressing the COUNT DOWN (Cattle Num) button. If a count down start timer is not needed, sound the horn by pressing the HORN button. (The duration of the count down timer and action when timeout expires are options you can change. See the *Show Jumping Advanced* page.)
- 3) Make sure the electric eyes are enabled by pressing the EYES ON button before the rider is ready to cross the start line. When the rider breaks the beam, the timer begins timing from zero and the eyes are automatically turned back off.
- 4) As the rider comes to the end of the course, press the EYES ON button to re-enable the electric eyes. When the beam is crossed, the timer stops and the eyes are automatically turned back off. If the rider's time exceeds the time allowed, time faults are shown on the Status Display. At twice the course time, the timer automatically stops and sounds the horn.
- 5) If the rider is eligible for the Jump-Off, press SETUP and then ENTER to switch rounds.
- 6) Repeat steps 2 through 4 for the Jump-Off Round.

Useful Features

Manual Start/Stop

The timer can be manually started and stopped by pressing the START/STOP button.

Dislodged Jump

If a rider dislodges a jump, sound the horn by pressing the HORN button and stop the clock by pressing the START/STOP button. Press RESTART (**not the START/STOP key**) to resume timing. A wireless handswitch is available as an option to automatically sound the horn and stop the timer, or sound the horn and resume timing.

Adding a Time Penalty (not jumping faults)

After the run, press the SCORE/PENALTY button, then key in a penalty followed by the ENTER button. The time penalty is added to the rider's time.

Accidental Beam Break

If an electric eye accidentally stops the timer, the rider can still be accurately timed. Pressing the RESTART button resumes timing as if the timer had never been stopped. (**Note:** If the timer is manually stopped using the START/STOP button, RESTART resumes timing from the time shown on the display)

Previous Time Recall

Use the PREV and NEXT keys to scan back and forth through previous times, time faults and the associated round (First Round or Jump-Off). If a course time is changed, then the saved time faults are updated to reflect the new course time.

Rule Options

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Several timer options can be changed to support rule variations that may affect your event:

- Time allowed for a rider to start the run.
Default: 45 seconds
- Display format of the starting countdown timer (fractional seconds, whole seconds, etc.),
- What happens when the starting timer expires (sound a horn or start timing).
Default: Start timing
- Faults per second (or other unit of time) for First Round and Jump-Off.
1st Round US: 1 fault/second
1st Round FEI: 1 fault/4 seconds
Jump Off: 1 fault/second

Easy Set-Up

To set all options for U.S. or FEI rules at one time as shown to the left, follow these steps:

- 1) Press SETUP to access timer setup features.
- 2) Press NEXT CHOICE until Rule Options is displayed, then press ENTER.
- 3) U.S. Rules is displayed first. Press ENTER to select U.S. rules, or press NEXT CHOICE to display FEI Rules and press ENTER.
- 4) After ENTER is pressed, the timer momentarily displays Done!, then the chosen rule set is shown again. Press SETUP to exit.

Changing Individual Rule Options

Time Allowed for the Rider to Start

To set the time allowed for the rider to start:

- 1) Press SETUP to access timer setup features.
- 2) Press NEXT CHOICE until Rule Options is displayed, then press ENTER.
- 3) Press NEXT CHOICE until Start Timeout is displayed, then press ENTER.
- 4) The current starting timeout is displayed. To keep the same timeout, just press ENTER, or, key-in a new starting timeout followed by ENTER.
- 5) After ENTER is pressed, the timer momentarily displays Done!, then the Start Timeout menu option is shown again. Press NEXT CHOICE to change other rule options, or press SETUP to exit.

Timer Action upon Starting Timer Expiration

When the rider's starting time expires, the timer can either sound the horn to signal the rider off course, or the timer can start running:

- 1) Press SETUP to access timer setup features.
- 2) Press NEXT CHOICE until Rule Options is displayed, then press ENTER.
- 3) Press NEXT CHOICE until Horn w/Timeout or Start w/Timeout is displayed (your choice), then press ENTER.

- 4) After ENTER is pressed, the timer momentarily displays Done!, then the menu option you selected is shown again. Press NEXT CHOICE to change other rule options, or press SETUP to exit.

Display Format of the Starting Timer

The starting countdown timer can be displayed in any of several time formats. Changing the countdown time format does not affect the time format of normal timing functions. To change the countdown time format, follow these steps:

- 1) Press SETUP to access timer setup features.
- 2) Press NEXT CHOICE until Rule Options is displayed, then press ENTER.
- 3) Press NEXT CHOICE until Timeout Format is displayed, then press ENTER.
- 4) Press NEXT CHOICE to scroll through the different time formats available. When the desired time format is displayed, press ENTER.
- 5) After ENTER is pressed, the timer momentarily displays Done!, then the Timeout Format menu option is shown again. Press NEXT CHOICE to change other rule options, or press SETUP to exit.

Individual Rule Options (cont'd)

Changing Faults per Second (or other unit of time)

You can enter the faults per unit of time for First Round and for the Jump-Off Round. To change faults per unit of time, follow these steps:

- 1) Press SETUP to access timer setup features.
- 2) Press NEXT CHOICE until Rule Options is displayed, then press ENTER.
- 3) Press NEXT CHOICE until Round 1 Faults or Jump Off Faults is displayed (your choice), then press ENTER.
- 4) The current value of the “faults” portion of faults per unit of time is displayed. To keep the same value, press ENTER, or key-in a new value for

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faults followed by ENTER. For example, press “1” then ENTER for whole faults. Key in “.25” then ENTER for ¼ faults.

- 5) After ENTER is pressed, the timer momentarily displays Done!, then Sec(s) is displayed to prompt for the unit of time. For example, key in “1” for faults per second, or key in “4” for faults per four seconds, then press ENTER.
- 6) After ENTER is pressed, the timer momentarily displays Done!, then the menu option you selected is shown again. Press NEXT CHOICE to change other rule options, or press SETUP to exit.

Miscellaneous Features

Using Three Sets of Electric Eyes

A third set of electric eyes provides the course designer with more flexibility in course layout. If three electric eyes are shown on the bottom right of the Status Display, the timer is ready for three eye operation. Otherwise, program Eye #3 into the timer as detailed in the “Learning a New ID Code” section of the “Wireless Electric Eyes” pages of this manual.

If you are no longer using the third set of eyes and do not want the status of the unused set of eyes showing on the status display, it can be removed from the timer by following the procedure for “Learning a New ID Code,” to the point where “Break Beam Now...” is displayed. However, instead of breaking the beam, press any key on the timer to abort the programming process. Eye #3 will be removed.

Power & Speed Classes

The Polaris timer includes a separate event specifically designed for Power & Speed classes. Follow these steps to select the Power & Speed event:

- 1) Press SETUP to access Setup options.
- 2) Press ENTER to pick a new event.
- 3) Press NEXT CHOICE until Power & Speed is displayed.
- 4) Press ENTER to select the Power & Speed event.

Fault & Out Classes

For Fault & Out and similar classes, a warning horn can be set to sound at a specified time. The timer continues to run after the horn is sounded. Manually sounding the horn while the timer runs “takes the place” of the warning horn for the current rider (i.e., the warning horn does not automatically sound).

To set a warning horn for Fault & Out classes, follow these steps:

- 1) Press SETUP to access setup functions.
- 2) Press NEXT CHOICE until Set Warn Horn 1 is displayed, then press ENTER.
- 3) To keep the time shown, press ENTER, or key in a new time followed by ENTER. To correct a mistake while entering a time, *press and hold down* the CLEAR TIME key until the time is cleared to zero.

Start Timeout

If the timer automatically starts because the rider fails to cross the start line before the 45 second count down timer expires, the rider’s time is flagged with a “(T)” on the optional printer to identify this condition.