

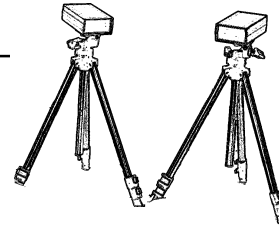
LONG RANGE ELECTRIC EYES

The Long Range Electric Eyes are used to form an invisible start/stop line for barrel racing, pole bending, and other speed events, as well as a starting line for team penning, cutting, and optionally, roping.

- The Transmitter electric eye has built-in rechargeable batteries to allow operation in the arena without A/C power. If the batteries are not charged, the Transmitter can be operated from electricity.
- The Transmitter must be switched ON to operate. If an A/C adapter is plugged into the Transmitter,

the unit runs from A/C power, otherwise, the unit runs from its internal batteries.

- When not in use, the Transmitter must be turned OFF to prevent over-discharge of the batteries.



Rechargeable Battery Care

Charging the Battery

- Use the A/C adapter to charge the battery. Plug the Transmitter into electricity for about 14 hours. Make sure the unit is OFF when charging. Do not charge for more than about 14 hours.
- After a full charge, the Transmitter will operate about 12 hours. Typically, this is enough time to use the Transmitter on several occasions before recharging is needed.
- When *not in use*, a rechargeable battery will drain from full to empty in about three months – losing roughly 1/3 of its charge per month.
- If the condition of the battery is not known, you can maximize performance of the battery by fully discharging and then fully charging the battery. This should be done a day or so before your event. To discharge the battery, leave the Transmitter on until the red light stops flashing. Then, turn the Transmitter off and give it a full 14 hour charge.

Checking Battery Condition

A lamp on the rear panel of Transmitter provides an indication of battery condition. The lamp is brightest when viewed from straight-on.

- When the Transmitter is ON, a steadily blinking lamp indicates the batteries are still operational.
- Irregular blinking occurs when the battery is on its last breath – assume the battery is dead.
- If the lamp is off, the batteries are dead and need recharging. The Transmitter will not operate unless plugged in or recharged.

When the Transmitter is first turned on after being off for a period, even a discharged battery may temporarily have enough voltage to indicate “good.” However, a discharged battery will quickly drain and indicate “dead.” Therefore, leave the Transmitter on for 30 to 60 seconds before checking battery condition.

Notes

- ***Do not store the Transmitter when it is fully discharged.*** It should be charged within a day or so, at most, after being fully discharged.
- When the Transmitter is stored for extended periods of time, it should be given a full charge every three months. ***Even if you always run the Transmitter from electricity, the batteries should be given a full charge once every three months.***

Two Timers At Once

Two timers can be used at the same time to provide back-up for each other. However, when two Transmitters are on at the same time, they may interfere with each other at the Receiver. To prevent problems, set up both complete timers, stacking the electric eyes

directly on top of each other. However, *only turn on one of the two Transmitters.* Both Receivers will “see” the beam, but since the beam is coming from only one Transmitter, there is no interference.

REFLECTOR ELECTRIC EYE

Mounting

The Reflector Electric Eye is supplied with a metal mounting bracket to ease installation and alignment of the eye. The bracket can be left permanently attached to your fence and the eye installed into the bracket just before use.

One way of attaching the reflective electric eye to the mounting bracket is shown in the adjacent figure. (Note: your bracket may not exactly match the one shown). The bracket allows two axis adjustment of the eye as required for alignment. Optionally, the eye may be mounted without the bracket using two screws through the body of the eye, also as shown in the adjacent figure.

Range

- The maximum range of the reflector electric eye is dependent on a number of factors including how bright it is outside, the amount of dust suspended in the air and how dirty the electric eye and reflector are.
- The eye should easily reach across the rider's box in most circumstances.
- Range can be extended by using additional reflectors. A second reflector will add another three to five feet in range. When using more than one reflector, it is best to place the second reflector directly above or below the original reflector. This keeps the score line or barrier line as narrow as possible.

Indicator Lamps

Small indicator lights on top of the electric eye provide status information:

- The yellow lamp indicates that power is applied to the electric eye.
- The green lamp comes on when the eye is aligned.
- The red lamp comes on when the eye is aligned *and* the signal is strong (2:1 safety margin).

