# E C L I P S E ™ User's Guide

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Congratulations on your purchase of the Eigertek Eclipse<sup>™</sup> 3-weapon fencing scoring machine! We designed it with you in mind, reducing unnecessary costs while increasing quality where it counts—in performance and reliability. We hope you will be delighted.

## Installation

The Eclipse can be operated on a table or mounted on a wall.

## To mount the Eclipse on a wall using the plastic strip fasteners

1. Make sure that an electrical wall outlet, extension cord, or power strip is close enough to where you plan to mount the Eclipse.

2. Locate the two included strips.

3. Remove the paper backing on one of the strips and attach it horizontally to the back of the Eclipse case, near the top rather than in the middle.

3. Attach the other strip to a sheet of plastic or finished wood as illustrated. Attach the sheet to the studs in the wall.

5. Line up the two strips and press them together to secure the case to the wall.

## To mount the Eclipse on a table stand using the plastic strip fasteners

1. Locate the two included strips.

2. Remove the paper backing on one of the strips and attach it to the bottom of the Eclipse case, near the front rather than in the middle.

3. Attach the other strip to a sheet of plastic or finished wood as illustrated.

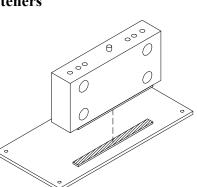
5. Line up the two strips and press them together to secure the case to the table stand.

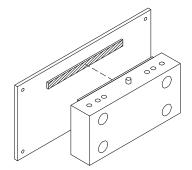
## To connect all plugs

Plug the left floor cord into the left side of the Eclipse; the right floor cord into the right side.
If you have a metallic fencing strip, plug the grounding wire of the metallic fencing strip into the jack labeled Mat.

3. If you have Eclipse-compatible extension lights, plug the extension light connector into the jack labeled Lights.

4. Plug the power pack cord into the jack labeled Power and plug the power pack into an electrical wall outlet, extension cord, or power strip (standard 60 Hz, 120 volts AC). Alternatively, you can use the included battery connector and a 9-volt battery.





## Operation

After you plug in the Eclipse, press the button marked On/Off. Select the weapon by pressing the Weapon button until the desired blue weapon light is on. For saber, both blue lights will be on. When turned on, the Eclipse automatically runs through a set of self-test diagnostics. To reduce unnecessary and annoying buzzer noise at your club, the Eclipse buzzer shuts off automatically after the second uninterrupted off-target cycle.

**Important:** To avoid damage from static, do not use the Eclipse or any other electrical device during thunder or lightning conditions. Do not fence on carpet or high-static plastic tile.

## **Changing Pitch and Timing Settings**

There are two white, circular dials on the circuit board inside the Eclipse that control pitch and timing settings. You can adjust the buzzer pitch to differentiate between the sounds of several Eclipse scoring machines. You can also choose between

- Practice mode in which the duration of the buzzer and lights is very short
- Official FIE T2005 "Doha" timings, the factory setting
- USFA 2003 club timings.

#### To change the buzzer pitch

- 1. Turn off and unplug the Eclipse.
- 1. Remove the back cover and locate the upper dial, marked R9 on the circuit board.
- 2. GENTLY rotate the dial with a small screwdriver.
- 3, Turn the Eclipse on and then press the Weapon button to hear the difference.
- 4. Turn off the Eclipse and replace the back cover.

#### To change the timings to the FIE 2003 club settings

1. Turn off and unplug the Eclipse.

- 2. Remove the back cover and locate the lower dial, marked R10 on the circuit board.
- 3. GENTLY rotate the dial with a small screwdriver clockwise until it stops turning.
- 4. Replace the back cover and turn the Eclipse on.

#### To change the timings to the official FIE T2005 "Doha" settings

- 1. Turn off and unplug the Eclipse.
- 2. Remove the back cover and locate the lower dial, marked R10 on the circuit board.
- 3. GENTLY rotate the dial with a small screwdriver until the slot in the R10 dial is horizontal.
- 4. Replace the back cover and turn the Eclipse on. When set to Foil, the blue light will pulse.

#### To change the duration of the buzzer and lights to practice mode

- 1. Turn off and unplug the Eclipse.
- 2. Remove the back cover and locate the lower dial, marked R10 on the circuit board.
- 2. GENTLY rotate the dial with a small screwdriver counterclockwise until it stops turning.
- 4. Replace the back cover and turn the Eclipse on.

## **Care and Cleaning**

If the case or label needs to be cleaned, gently wipe it off with a soft damp cloth. Do not immerse in any liquid or use solvents. Because the Eclipse uses high intensity LEDs rather than light bulbs, they should never have to be replaced.

## **Specifications**

Here is additional technical detail and specifications for your information.

- The Eigertek Eclipse meets all standard FIE requirements. The latest foil and saber timing requirements specified by the FIE (T2005) have been incorporated.
- The Eclipse uses a 120-volt AC power pack that delivers approximately 12 volts DC. The Eclipse is designed to accept 9-25 volts DC. It uses very little electrical power and you can operate many Eclipses without burdening the electrical wiring in your club. For comparison, seven Eclipses use about the same power as one 40-watt light bulb. Using the adapter, you can run an Eclipse with a single 9-volt battery for a typical all-day tournament.
- Weapon timings have been calibrated and are accurate to within 1/1000 of a second.
- The Eclipse measures the total resistance of the fencing circuit including weapons, body cords, reels, etc. 1000 times a second and automatically adjusts to any changes in resistance.
- The Eclipse provides static protection that is adequate for most environments. For reference, running around on a carpet on a cold, dry winter day and causing a spark produces about 1.5 to 35 kilovolts static, depending on the humidity. Static charges at the upper end will damage all but the most robust electronic devices. Do not fence on carpet or high-static plastic tile.
- The operation of the Eclipse is controlled by a microprocessor. For any future changes in the timings or rules by the FIE, the microprocessor firmware can be updated by Eigertek.
- The Eclipse case is high-impact ABS plastic, chosen for being rugged, lightweight, and low cost. The case is about 8-1/2 inches wide, 4 inches high, and 1-3/4 inches thick.

## Safety

Observe the same safety precautions that are appropriate to any electrical appliance or device. Unlike older scoring machines, the Eclipse uses very little electricity and is far safer as a result.

## Troubleshooting

Make sure the machine is plugged in, turned on, and set to the correct weapon. When troubleshooting, start from the weapon tip and work backwards: point, blade, body cord socket, body cord, lame', reel cord, reel, floor cord, and scoring machine.

### **Questions and Answers**

Q: If my Eclipse ever fails, how would I know?

A: A flashing red light would indicate that the Eclipse failed the internal self test.

Q: If the Eclipse is running off of a 9-volt battery, how would I know when the battery runs low?

A: If the power runs low, the Eclipse will rapidly flash all its lights.

**Q:** My Eclipse does not register touches or registers a continuous off-target light. What do I do?

A: Check the floor cords and reels. Floor cords develop problems just like body cords, and reels sometimes have intermittent contact problems. Also check the plugs at the ends of the floor cords. Sometimes the wing springs on the prongs become flattened and fail to make contact.

Q: When I turn on my Eclipse, nothing happens. What could be the problem?

A: Check the power connections. Make sure that you are using the power pack that came with the Eclipse. The Eclipse may not work if you use other types of power packs. Sometimes AC power outlets don't work, so check them with a night-light or lamp.

For any other questions, contact us by email at schlae@sonic.net or visit us on the web at http://www.eigertek.com. The Eigertek Eclipse is designed and manufactured in the USA.

#### LIMITED WARRANTY

Eigertek warrants this Product, the Eigertek Eclipse scoring machine, (including any accessories) against defects in material or workmanship as follows:

LABOR: For a period of one (1) year from the date of purchase, if this Product is determined to be defective, Eigertek will repair or replace the Product, at its option, at no charge, or pay the labor charges to any Eigertek authorized service facility. After the Warranty Period, you must pay for all labor charges.

PARTS: In addition, Eigertek will supply, at no charge, new or rebuilt replacements in exchange for defective parts for a period of one (1) year. After the warranty period, you must pay for all parts costs.

To obtain warranty service, you must take the Product, or deliver the Product freight prepaid, in either its original packaging or packaging affording an equal degree of protection, to Eigertek or an authorized Eigertek service facility. Proof of purchase in the form of a bill of sale or receipted invoice which is evidence that the unit is within the Warranty period must be presented to obtain warranty service.

This warranty does not cover cosmetic damage or damage due to acts of God, accident, misuse, abuse, negligence, or modification of, or to any part of the Product. This warranty does not cover damage due to improper operation or maintenance, connection to improper voltage supply, or attempted repair by anyone other than a facility authorized by Eigertek to service the Product. This warranty is invalid if the factory-applied serial number has been altered or removed from the Product.

REPAIR OR REPLACEMENT AS PROVIDED UNDER THIS WARRANTY IS THE EXCLUSIVE REMEDY OF THE CONSUMER. EIGERTEK SHALL NOT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR BREACH OF ANY EXPRESS OR IMPLIED WAR-RANTY ON THIS PRODUCT. EXCEPT TO THE EXTENT PROHIBITED BY APPLICABLE LAW, ANY IMPLIED WARRANTY OF MERCHANT-ABILITY OR FITNESS FOR A PARTICULAR PURPOSE ON THIS PRODUCT IS LIMITED IN DURATION TO THE DURATION OF THIS WARRANTY.

Some states do not allow the exclusion or limitation of incidental or consequential damages, or allow limitations on how long an implied warranty lasts, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights, and you may have other rights which vary from state to state.

To locate the servicer or dealer nearest you, or for service assistance or resolution of a service problem, or for product information or operation, contact:

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