

Your Firefly scoring apparatus is an efficient and affordable tool to aid you as you practice and train in fencing. Included in this description of Firefly are instructions for its use and a diagram with an explanation of its various parts.

Firefly features user-upgradable firmware. To check your Firefly unit's firmware version, turn on the device while holding down the Flip Coin button. The firmware version will appear on the clock display.

Instructions for use

To select your weapon:

When you turn on Firefly, the default setting will be foil. Press the Weapon button to select your desired weapon: 'F', 'E', or 'S' will appear, to signify foil, épée, or saber, respectively.

Basic operation:

Firefly will function the same way as any standard scoring apparatus. For foil it will signal valid (on-target) and invalid (off-target) touches; for saber it will signal valid touches and faults; for épée it will simply signal valid touches. When a touch is made a buzzer will sound; a yellow light will appear to signal an invalid touch in foil or a fault in saber, and a red or green light will appear to signal a valid touch in foil, épée, and saber. Firefly will automatically reset when any touch is detected, preventing any further touches from registering until the reset period is complete.

The buzzer that signals touches will not be activated until both fencers are connected and ready to fence.

To use AutoClock™ to time bouts:

The AutoClock™ (patent pending) button on Firefly has four settings: the first is for a three-minute bout, the second for a one-minute bout (sudden death), the third for a one-minute rest, and the fourth for a ten-minute rest for injury. Select the setting by pressing the AutoClock™ button until the desired time appears on the display. To activate AutoClock™ for a bout in foil or épée, simply depress the tip of your weapon; for saber, touch the bell guard to your lamé. A beep will indicate that the clock has been activated; a second, trilling beep will signal the fencers to begin fencing. The second beep is on a random time delay for the sake of fairness (as a good referee will vary the timing of his or her commands). The delay will be between one and two seconds.

Once a touch is scored, valid or invalid, the clock will stop. To re-activate it, simply follow the above instructions for activating AutoClock™. If the bout stops for any reason other than a touch (e.g., if a lateral boundary is crossed or a fencer is injured), the clock will continue to run because no touch has been registered. To stop the clock in foil or épée, depress the tip of your weapon; in saber, touch your opponent's lamé with your weapon.

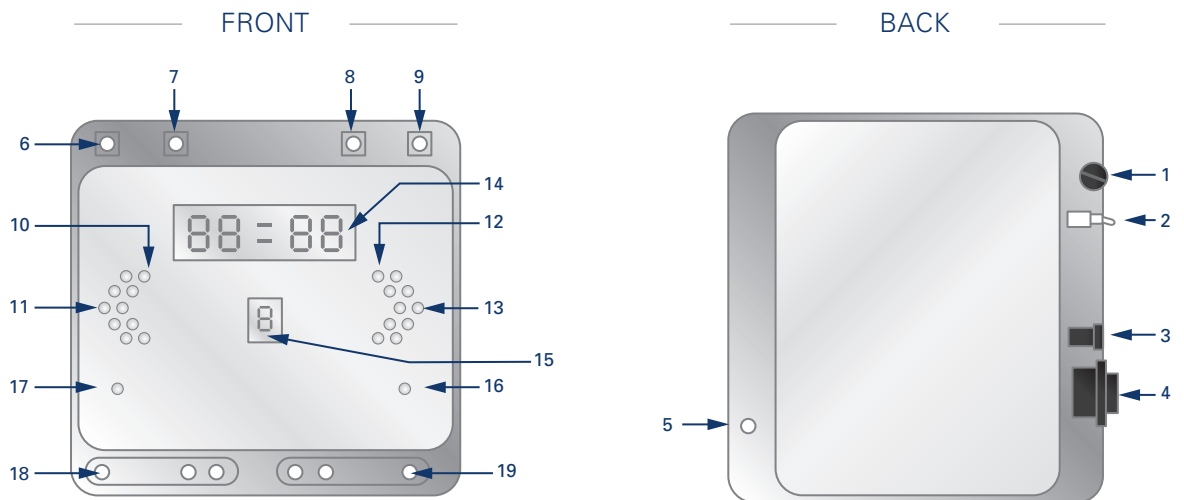
To select which fencer will have priority in a one-minute sudden death bout, press the Flip Coin button, and Firefly will randomly select a fencer.

The Firefly apparatus is capable of keeping track of two clocks at once. One clock can store a time while the other clock runs, or two clocks can be running at once (as when fencers use the ten-minute rest feature—see below). The Mem (memory) button will enable fencers to store the time remaining in a bout should they need to leave the strip and allow other fencers to use Firefly. Simply press the Mem button and your time will be saved, and the next fencers using Firefly to keep score or time their bouts will then proceed in the same manner as indicated above. When you return, press the button again and your time will be restored to the display.

To use Firefly for a one—minute or ten—minute rest:

The one-minute rest and the ten-minute rest settings are unlike the first two settings in that they will begin counting down automatically, and the clock will not stop if a touch is made. This difference is indicated by a brief flashing of the number (one or ten, respectively) before it begins the countdown.

The Mem button will allow other fencers to use AutoClock™ during a ten-minute rest for injury or between direct elimination bouts. Press the Mem button to store the countdown. When the ten minutes are up, Firefly will make a trilling sound that is distinct from the buzzer indicating touches.



1. Volume control
2. Power switch
3. Power connection
12V @ 0.5A
4. Serial connector
Remote control, firmware upgrades, future expansion
5. Strip connector
6. AutoClock
Allows you to select desired clock preset: three-minute fencing timer, one-minute fencing timer (sudden death), one-minute rest timer (between periods in a direct-elimination bout, for example), and a ten-minute timer (for injury timeouts, or rest periods between direct-elimination bouts)
7. Mem
Memory button: toggles between two independent clocks, allowing you to save the remaining time in a bout so you can finish it later, or use the clock while simultaneously timing an injury or rest timeout.
8. Weapon
Allows you to select between foil, épée, and saber.
9. Flip Coin
Randomly selects which fencer will have priority in a one-minute sudden death bout. Hold this button when starting Firefly to display firmware version.

10. Left invalid touch (foil) or saber fault (yellow).
Not used in épée.
11. Left valid touch (red)
12. Right invalid touch (foil) or saber fault (yellow).
Not used in épée.
13. Right valid touch (green)
14. Clock display
Displays the time remaining in a bout or rest period. If the Flip Coin button is held down when Firefly is started, the clock display will show the firmware version.
15. Weapon display
Displays the letter F (foil), E (épée), or S (saber), indicating the current weapon mode.
16. Right grounding light (yellow)
Signals that the right fencer has or touched their bell guard to his or her lamé. In épée, it indicates a weapon short-circuit between the B and C lines.
17. Left grounding light
Signals that the left fencer has or touched their bell guard to his or her lamé. In épée, it indicates a weapon short-circuit between the B and C lines.
18. Left fencer (floor cord)
19. Right fencer (floor cord)