"Release your warrior spirit"

Nihonzashi Samurai Fast Draw

Users Manual

Samurai Fastdraw Timer

The Nihonzashi Samurai Fastdraw timing system measures the time it takes to draw and cut with a sword. This was an essential skill for the samurai and was a mater of life or death. They would live or die by their skill and speed with a katana. Now you can find out just how fast you are! Practice by yourself or connect multiple timers together for head to head competition.

Timer Componets

The Nihonzashi Samurai Fastdraw timing system can be purchased in two different packages. An individual system is used for a single person and a competition system is used for two. Please make sure you have received all the components of the system you have ordered.

Components for individual timers
- Timer Unit (SFD-TU001) Measures time to 1/1000 second
- Start Unit (SFD-SU001) Starts timing sequence
- Target Light (SFD-TL001) Indicates start of time and includes a mounting plate
- Target Cable - 50ft (SFD-TC001) Connects Timer Unit to Target Switch
- Power Supply - 1A (SFD-PS001) Powers Timer Units
- Target Switch (SFD-TS003) or (SFD-TS004) Stops timing sequence
    - Thread Trigger (SFD-TS004)
    - Padded Target Trigger (SFD-TS003)

Components for competition timers
- Timer Unit x 2 (SFD-TU001) Measures time to 1/1000 second
- Start Unit (SFD-SU001) Starts timing sequence
- Start Cable - 1 ft (SFD-SC001) Connects Timer Units when a single Start Unit is used
- Target Light x 2 (SFD-TL001) Indicates start of time and includes a mounting plate
- Target Cable x 2 - 50ft (SFD-TC001) Connects Timer Unit to Target Switch
- Power Supply - 1A (SFD-PS001) Powers Timer Unit
- Power Supply Y Cable (SFD-PY001) Connects Power Supply to two Timer Units
- Target Switch x 2 (SFD-TS003) or (SFD-TS004) Stops timing sequence
    - Thread Trigger (SFD-TS004) or
    - Padded Target Trigger (SFD-TS003)
- Competition Cable (SFD-CC001) Connects Timer Units indicating winner

Individual Components Available
- Timer Unit (SFD-TU001) Measures time to 1/1000 second
- Start Unit (SFD-SU001) Starts timing sequence
- Start Cable - 1 ft (SFD-SC001) Connects Timer Units when a single Start Unit is used
- Start Cable - 10 ft (SFD-SC002) Connects Timer Units when a single Start Unit is used
- Target Light (SFD-TL001) Indicates start of time and includes a mounting plate
- Target Cable - 50ft (SFD-TC001) Connects Timer Unit to Target Switch
- Target Cable - 100ft (SFD-TC002) Connects Timer Unit to Target Switch
- Power Supply - 1A (SFD-PS001) Powers one or two Timer Units
- Power Supply - 2A (SFD-PS002) Powers 2 Timer Units and 2 Audience Displays

- Power Supply Y Cable (SFD-PY001) Connects Power Supply to two Timer Units
- Power Supply 4 Way Cable (SFD-PY002) Connects Power Supply to four devices
- Power Supply 4 ft Extension Cable (SFD-PE001) Extends Power Supply cable
- Power Supply 9 ft Extension Cable (SFD-PE002) Extends Power Supply cable
- Battery Pack (SFD-BP001) Rechargeable battery pack replacing Power Supply
- Target Switch Thread Trigger - Generic (SFD-TS002) Stops timing sequence
- Target Switch Padded Target Trigger - Generic (SFD-TS001) Stops timing sequence
- Target Switch Thread Trigger (SFD-TS004) Stops timing sequence
- Target Switch Padded Target Trigger (SFD-TS003) Stops timing sequence
- Target Cable - 50ft (SFD-TC001) Connects Timer Unit to Target Switch
- Target Cable - 100ft (SFD-TC002) Connects Timer Unit to Target Switch
- Cable Connector (SFD-CC001) Connects cables together
- Competition Cable (SFD-CC001) Connects Timer Units indicating winner
- Audience Display (SFD-AD001) Large display showing time
- Audience Display Cable - 100 ft (SFD-ADC001) Connects Timer Unit to Audience Display
- Cutting Stand (SFD-CS001) Standard cutting stand used to spike tatami targets for tameshigiri

Timer Unit

The Timer Unit (SFD-TU001) is a compact unit that show the time with easy to read LED digits. The time has four digits and shows the time up to 9.999 seconds in 1/1000 second intervals. The time is visible up to 15 feet away indoors. All the cable connections are on the top of the unit.   WARNING: PLUGGING THE START UNIT INTO ANY OTHER JACK THAN THE RED CODED START JACKS WILL RESULT IN DAMAGE AND WILL NOT BE COVERED BY THE WARRANTY!

Connectors / Indicators on Timer Unit

1. Time (Front) - 9/16" digits showing time up to 9.999 seconds in 1/1000 second intervals.

2. Competition Jack (Top Left) - This 1/8 plug connects two Timer Units together with a Competition Cable (SFD-CC001) showing the winner of a one on one competition by blinking the target light of the winner.

3. Power Indicator (Top) - This red LED illuminates when the Timer Unit is powered up.

4. Power Input (Top Right) - This barrel jack is connected to the Power Supply (SFD-PS001/PS001)directly or with the use of Y cables (SFD-PY001/PY002 and or power extension cables (SFD-PE001/SFD-PE002).

5. Start Jack x 2 (Top Left colored coded RED) - These two jacks are the same and their use is interchangeable. The Start Unit (SFD-SU001) is plugged into one. The second can be used to connect to additional Timer Units using a Start Cable to make the timers start at the same time.

6. Display Jack (Top Center coded BLACK) - This jack is used to connect to an Audience Display (SFD-AD001) using an Audience Display Cable (SFD-ADC001).

7. Target Jack (Top Right coded BLUE) - This jack is used to connect to the Target Switch (SFD-TS003/TS004) using the Target Cable 50/100ft (SFD-TC001/TC002) to the Timer Unit

Start Unit and Cables

The Start Unit (SFD-SU001) starts the timing sequence for one or multiple Timer Units. It plugs into one of the two red start jacks of the Timer Unit. There are two modes of operation (practice and competition) that are described below. WARNING: PLUGGING THE START UNIT INTO ANY OTHER JACK THAN THE RED CODED START JACKS WILL RESULT IN DAMAGE AND WILL NOT BE COVERED BY THE WARRANTY!

Practice Mode:

- Push both the red button and black buttons releasing the red first and the black second. This will put the Timer Unit into a continual practice loop.

- In the practice loop the Timer Unit will blink the Target Lights three times indicating the start of a timing sequence. There will be a 2 to 5 second delay until the target light illuminates and the time clock starts. The timing sequence will restart automatically.

Competition Mode:

- Push and release the red button on the Start unit to clear the Timer Unit put it into a ready mode

- Push and release the black button to initiate the timing sequence. There will be a 2 to 5 second delay until the target light illuminates and the time clock starts.

Using the Start Cable - 1ft/10 ft (SFD-SC001/2) connects Timer Units together so a single Start Unit will control all of them. It plugs into the second red start jack of the first Timer Unit and one of the two on the second unit. Several Timing Units can be serially connected in this way and the timing period will start at the same time for all units.

Target Light and Cable

The Target Light (SFD-TL001) is attached to the target stand and indicates when participants should start. The Target Light has a magnet on that back that attaches to a metal mounting plate attached to the target stand. The Target Light has two cables. One connects to the Timer Unit using the blue Target Cable - 50ft/100ft (SFD-TC001/TC002). The Target Cable must be plugged into the blue target jack on the Timing Unit. The other cable plugs into the Target Switch.

Power Supply and Cables

Power Supplies are available in 1 Amp (SFD-PS001) and 2 Amp (SFD-PS002) versions that plug into a 110V outlet. The 1 amp supply can power two Timer Units. The 2 Amp supply and power two Timer Units and two Audience Displays. A Power Supply Y Cable (SFD-PY001) is needed when powering two

Timer Units and the Power Supply 4 Way Cable (SFD-PE002) connects the Power Supply to four devices (Two Timer Units and Two Audience Displays). The Power supply barrel connector plugs into the top of the Timer Unit.

Four foot and nine foot Extension Cable (SFD-PE001/PE002) are available to extend the Power Supply cable. A rechargeable Battery Pack (SFD-BP001) is available that can be used to replace the Power Supply. This can be used in situations were a wall outlet is not available.

Target Switch Padded Target Trigger

Target Switch Padded Target Trigger (SFD-TS003) Stops timing sequence. This model mounts in a cutting stand and triggers when the target is knocked off. It can be used with bokken or un-sharpened iaito. Using a sharp blade will damage the target assembly.

1. The Target Switch is mounted onto a tameshigiri target stand using the 7/8" post. This can be used with stands that accept either 7/8" or 1" pegs.

2. The Target Switch has a single 1/8" phone jack that the Target Light is plugged into.

3. The target has a tethered target that is placed on top of the Target Switch. The paracord tether is pulled though the Target Switch. Make sure the tether is not tangled in any cables. The bottom of the target should be placed over the micro-switch lever coming through the top of the Target Switch. This will also light the Armed LED if a 9V battery is installed. The Target Switch is now ready.

Thread Trigger Target Switch

The Target Switch Thread Trigger (SFD-TS004) stops the timing sequence. This model mounts to the back of a 3.5 to 4 inch cutting stand and uses the breaking/cutting of a thread as a trigger. It can be used with bokken, iaito, or shinken.

1. The Target Switch is mounted onto the cutting stand with the activation lever oriented downward with the two screws included. It is recommended that the holes are pre-drilled in the stand with a 1/8" drill. It can also be temporarily be attached with rubber bands.

2. The Target Switch has a single 1/8" phone jack that the Target Light is plugged into.

3. The trigger thread can be connected to either an overhead clamp or looped over a tatami target. The overhead attachment is useful for all types of swords but requires a connection point to the ceiling. The clamp on the Target Switch can only be used with live blades cutting targets, but is easier to set up.

   a. Overhead: The trigger thread holder / clamp is suspended from overhead using the paracord included. The paracord is tied to the eye-bolt on the assembly. A bracket for attaching to a drop ceiling is included. The thread holder and clamp should be

suspended 4 feet above the top of the cutting stand (about 1 foot above a tatami omote target). This allows clearance below the assembly when cutting.

    b.   Looped: The trigger thread is looped over a cutting target between the fixed and activation lever arm.

4.   Any sewing thread or fishing line can be used as the trigger thread.

    a.   Overhead: A spool of thread is placed on the thread holder and looped through the eye-bolt. The target thread is pulled out and clamped to the lever arm of the Target Switch module. The lever arm has a thread clamp with a wing nut. The thread is placed between the two dome washers and the wing nut is tightened. The thread is then looped over the similar mechanism on the thread holder / clamp. The thread should pulled tight until the lever arm on the Target Switch is pulled up to contact the case of the Target Switch. This will also light the Armed LED if a 9V battery is installed. The Target Switch is now ready.

    b.   Target Stand Clamp: After spiking a cutting target on the target stand, the target thread is clamped to the lever arm of the Target Switch module. The lever arm has a thread clamp with a wing nut. The thread is placed between the two dome washers and the wing nut is tightened. The thread is then stretched up an over the top of the tatami target and looped around the similar mechanism on the fixed arm. The thread should pulled tight until the lever arm on the Target Switch is pulled up to contact the case of the Target Switch. This will also light the Armed LED if a 9V battery is installed. The Target Switch is now ready.

Competition Cable

The Competition Cable (SFD-CC001) Connects Timer Units indicating the winner in one on one competitions by blinking the Target Light of the winner.

Audience Display and Cable

An Audience Display (SFD-AD001) is available that shows the time and visible from 300 feet away. It is connected to the Timer Unit with a 100 foot Audience Display Cable (SFD-ADC001) plugged into the black port.

Timer Operation

Set-up

Target Light

 The Samurai Fastdraw Timing system is designed to use with a standard cutting stand with a square upright center post from 3.5 to 4 inches wide and a 7/8" or 1" removable peg. A standard cutting stand is 23.6 inches (60 cm) tall with 23.6 inches (60 cm) wide legs.   The Target Light is attached to the front of the Cutting Stand using a magnet on the back side of the case. A Steel Plate is first attached to the front of the stand using a mounting screw. The Blue Target Cable is plugged into a coupler and the Target Light. The 1/8" phono plug will be plugged into the back of the Target Switch. The following diagram shows how the Target Light is attached to the cutting stand.
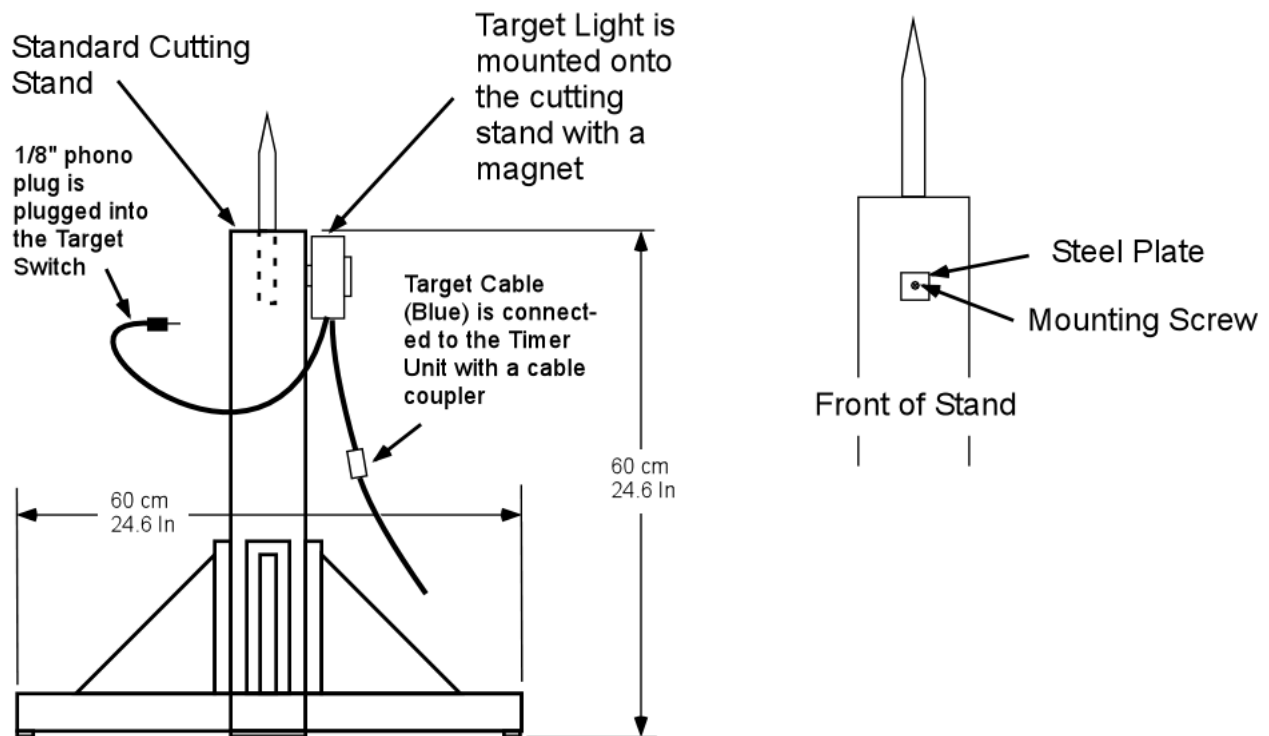
Target Switch

There are two version of the Target Switch. The first uses a padded target for bokken and iaito. The target is covered with ballistic nylon to protect it from semi-sharp iaito, but cutting swords will damage it and should not be used with this type of Target Switch. The second type of Target Switch uses a target thread that is broken or cut with a sword. It is usable with all types of swords but takes more time to set-up between uses. Both types of Target Switches can be used with the same cutting stand. The Target Switch uses a 9V battery that powers an "ARMED" indicator showing the switch is properly set up and ready to use. The following diagram shows both versions of the Target Switch and how they are attached to the target stand.
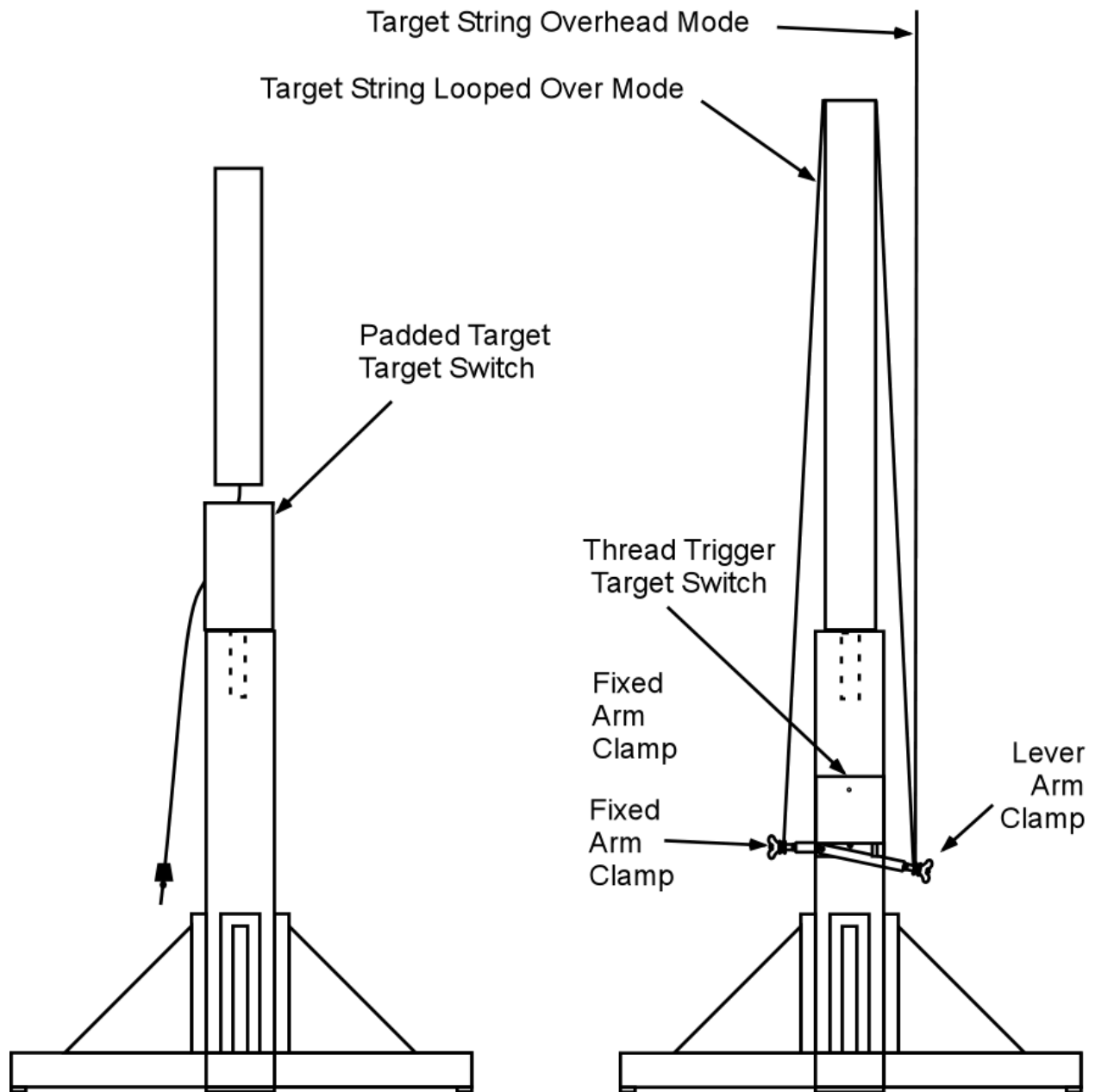
The padded target version of the Target Switch simply replaces the peg on the cutting stand and sits on top of the stand. This Target Switch has a 7/8" stainless steel post the fits in the peg hole of the cutting stand. The body of the Target Switch is the same height as a competition peg. To arm the switch the padded target is simply placed on top of the Target Switch making sure the micro-switch on the top is covered and the ARMED LED goes on.

The target string version of the Target Switch mounts on the back of the target stand low enough so a misguided cut will not hit the steel arms. The Target Switch can be attached to the target stand using the stainless steel screws supplied with the unit or temporarily with rubber bands on the top and bottom of the unit. An optional overhead clamp and string holder can be attached to the ceiling with paracord that is included. A bracket to attach to a dropped ceiling is also included. This allows the

Target Switch to be used with bokken or iaito without a target on the stand. It is recommended that the overhead clamp be at least 4 feet above the top of the cutting stand. The arm the switch a thread or fishing line is clamped to the lever arm of the Target Switch and either attached to the over-head clamp or looped over a target back to the fixed arm of the Target Switch. Make sure the lever arm is pulled up against the bottom of the Target Switch body and the ARMED LED is illuminated.

Timer and Start Unit

The Target Light connects with the blue Target Cable to the target port of the Timer Unit. The Start Unit plugs into one of the red ports on the Timer Unit. WARNING: PLUGGING THE START UNIT INTO THE DISPLAY OR TARGET PORTS ON THE TIMER UNIT WILL DAMAGE THE START UNIT. If a single Timer Unit is being used, the 110v wall outlet power supply plugs directly into the Timer Unit. If two Timer Units are used, a Y power cable can connect both Timer Units to the same power supply. When power is applied to the Timer Unit the red power indicator on the top will illuminate. To connect a second Timer Unit a Competition Cable and Start Cable link the first and second Timer Units.
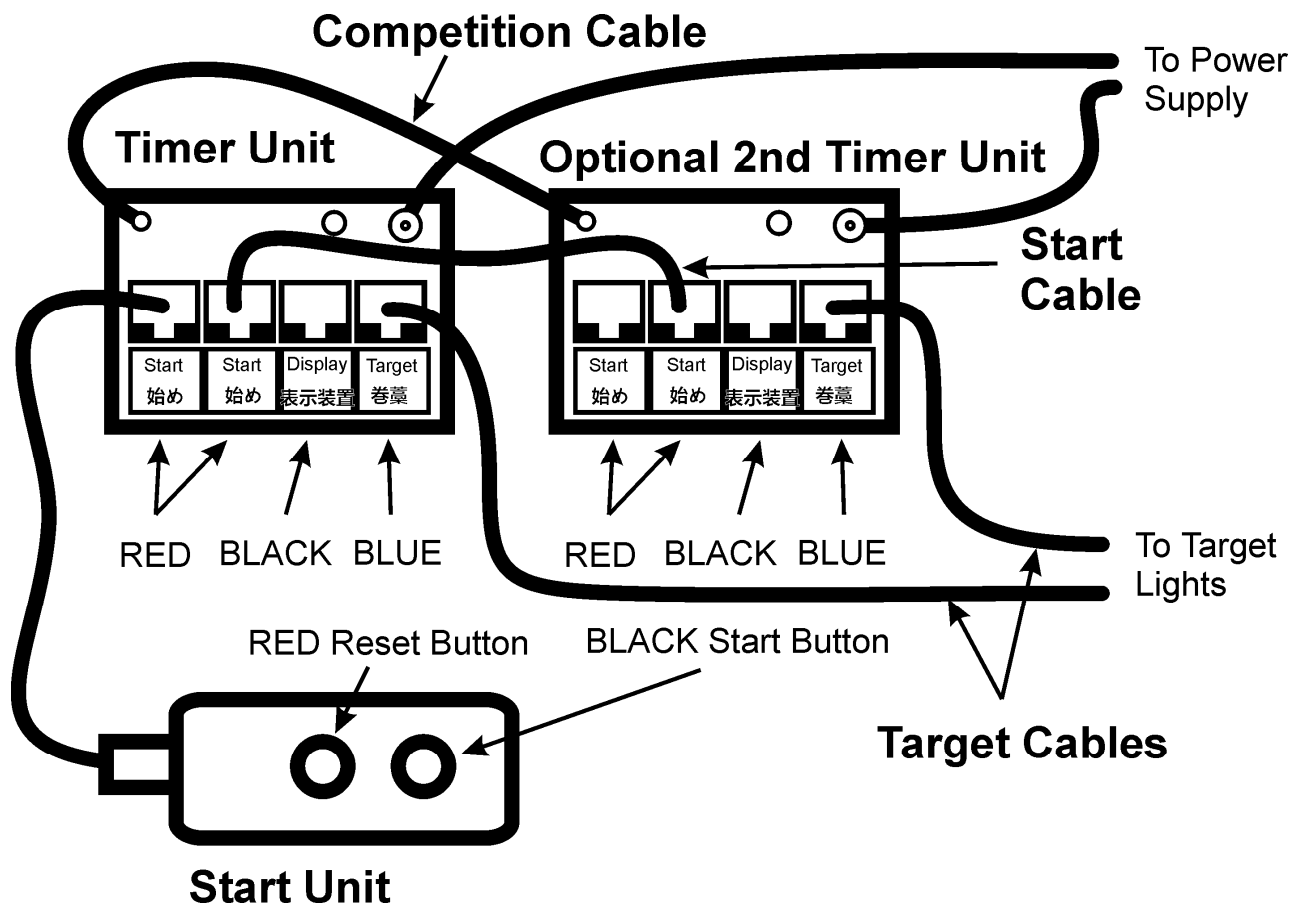
Starting the Timing Sequence

Competition Mode

Once the system is set up the buttons on the Start Unit are used to start the timing sequence. Press and release the red reset button and then press and release the black start button to start the completion timing sequence. There will be a random 2 to 5 second random delay and the Target Light will illuminate (The decimal point on the time display of the Timer Unit will also go on). The timer then measures the time from when the Target Light goes on and the target is hit. The Timer Unit will show the time in 1/1000 of a second. If and Audience Display is being used, it will show the time about 1/4 second later. Pushing the red reset button will clear the times from the Timer Unit and Audience Display.

Practice Mode

Practice Mode allows the system to be used without someone operating the Start Unit. Press and hold both the red and black buttons on the Start Unit. Release the red button first and then the black button to put the unit in practice mode. The timing sequence will start with the Target Light blinking three times. This will start the 2 to 5 second random delay until the Target Light illuminates. If the target is not hit in 10 seconds, the Target Light will go out for about 4 seconds and the timing sequence will restart. Pressing and releasing the red reset button on the Start Unit will put the system back in completion mode.

Completion Rules

Basic Rules

- The saya/scabbard must be placed in the obi/belt
- Both hands must be kept at the sides below the obi/belt until the starting light goes on
- Both feet must be even and behind the cutting line until the starting light goes on
- The cutting line is 6 feet (183 cm) from the front of the cutting stand
- The cutting stand should be 23 5/8 inches (60 cm) tall
- The competitor must step forward, draw the sword, and strike the target

Penalties

- Add .25 seconds
    - Cutting too thin of a piece of tatami omote target that breaks into pieces
- Add .5 seconds
    - Failing to cut through a tatami omote target
    - Torso bent past 30 degrees during the cut
    - Splitting the saya
    - Bending the sword so it can not be sheathed
- Score 2 seconds
    - Failing to hit the target
    - Moving ahead of the starting light
    - False Start – any time under .8 seconds must be backed up with another within .1 seconds or it will be considered a false start and scored as 2 seconds
- Disqualification
    - Any blood from self inflicted injury with sword
    - Dropping the sword
    - Losing balance and falling while cutting