



Quick Draw Electronics

## Shooting Sports Timer User Manual

Model TS1000



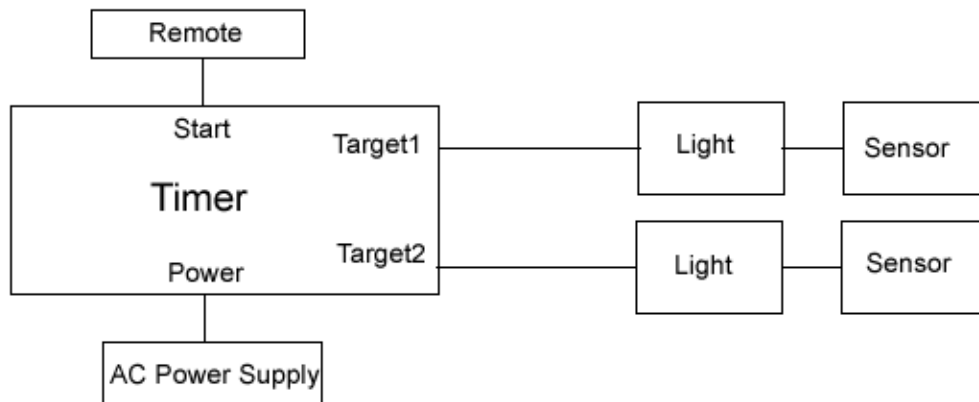
WELCOME TO THE **QUICKDRAW ELECTRONICS SHOOTING SPORT TIMER.**

THE BASIC SYSTEM (TS1000-0001-1001) CONSISTS OF;

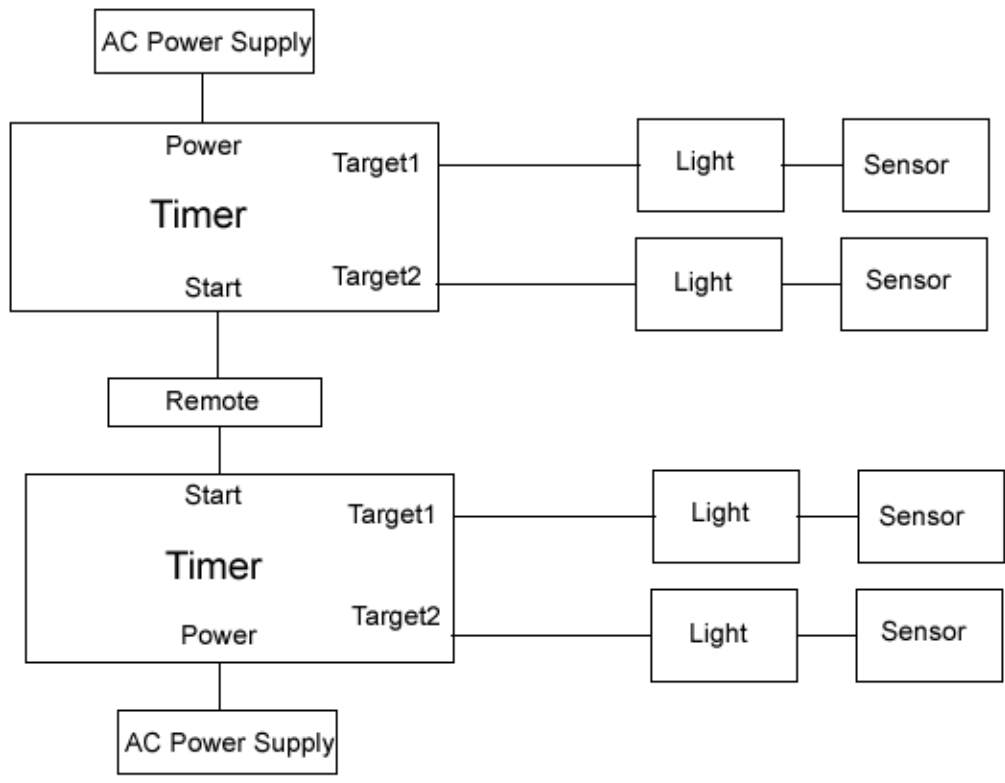
- 2 IMPACT SENSORS
- 2 LIGHT ASSEMBLIES
- 1 TIMER BOX
- 2 TIMER TO LIGHT CABLES
- 2 SENSOR TO LIGHT CABLES
- 1 PUSHBUTTON
- 1 POWER CORD

THE TS1000-0001-1002 SYSTEM INCLUDES 2 TARGET ASSEMBLIES ALONG WITH THE COMPLETE TS1000-0001-1001 SYSTEM.

## SETUP



Single Timer Setup



## Dual Timer Setup

SET UP IS QUICK AND EASY.

START BY ATTACHING AN IMPACT SENSOR AND A LIGHT ASSEMBLY TO THE BACK OF EACH TARGET. THE LIGHTS AND SENSORS ARE HELD ONTO THE TARGET BY STRONG RARE EARTH MAGNETS. THE LIGHT ENCLOSURE HAS THE MAGNETS MOUNTED ON THE REAR. IT IS RECOMMENDED THAT AN "L" BRACKET BE ATTACHED TO THE REAR OF THE TARGET BEHIND THE LIGHT HOLE. THE SENSOR PROTRUDES FROM THE FRONT OF THE SENSOR ENCLOSURE BUT IS SPRING LOADED SO THAT IT RETRACTS INTO THE SENSOR ENCLOSURE AS NECESSARY TO MAKE FIRM CONTACT WITH THE REAR OF THE TARGET. MAKE SURE THE LIGHTS ARE CLEARLY CENTERED ON THE TARGET WINDOW. PLUG IN THE SENSOR TO LIGHT CABLE TO EACH UNIT. PLUG ONE END OF THE LIGHT TO TIMER CABLE INTO THE LIGHT BOX – PLUG IN THE OTHER END TO THE BACK OF THE TIMER BOX. PLUG IN THE PUSHBUTTON JACK TO THE BACK OF THE TIMER BOX. PLUG IN THE POWER CORD TO THE POWER JACK ON THE BACK OF THE TIMER BOX – PLUG INTO POWER SOURCE. YOU ARE READY TO START!

## **MODES**

### **NORMAL MODE**

WHEN THE UNIT IS PLUGGED IN, IT WILL GO THROUGH A SELF TEST PROCESS. THE DIGITAL DISPLAY WILL RUN UNTIL IT REACHES 9.999. DURING THIS CYCLE TIME THE LIGHT BOXES WILL BE CONSTANTLY LIT. WHEN THE CYCLE IS COMPLETE THE LIGHTS WILL FLASH BRIEFLY AND THEN GO OUT. AT THIS POINT THE SYSTEM IS READY. TO START THE TIMER RANDOM DELAY, PRESS THE PUSHBUTTON AND RELEASE (THE DISPLAY WILL READ '0.000'). WHEN THE LIGHT ILLUMINATES THE TIMER STARTS. A HIT ON THE TARGET WILL STOP THE TIMER. IF YOU ARE SHOOTING WITH A SINGLE TARGET A HIT WILL CAUSE YOUR LIGHT TO GO OUT, IF YOU ARE SHOOTING WITH TWO TARGETS THE WINNING TARGET LIGHT WILL FLASH. TO RESTART SYSTEM – PRESS PUSHBUTTON.

### **PRACTICE MODE**

TO TOGGLE TO THE PRACTICE MODE – HOLD THE PUSHBUTTON DOWN FOR 12 SECONDS – THE DISPLAY WILL READ 'PPPP'. A DELAY BEGINS – THE SYSTEM WILL THEN SOUND A 'BEEP' (THIS WOULD BE THE SHOOTER SET SIGNAL) – AFTER A RANDOM DELAY, THE LIGHT WILL ILLUMINATE AND THE TIMER WILL BEGIN. A HIT ON THE TARGET WILL STOP THE TIMER – OTHERWISE THE TIMER WILL RUN TO 9.999 AND START THE CYCLE OVER AGAIN. THE RECYCLE DELAY DEPENDS ON THE NUMBER OF LIGHTS PLUGGED INTO THE TIMER. IF BOTH LIGHTS ARE PLUGGED IN, THE TIMER WAITS 16 SECONDS AND THEN RESTARTS THE CYCLE. IF ONE LIGHT IS PLUGGED IN THEN THE TIMER WAITS 4 SECONDS BEFORE STARTING THE CYCLE.

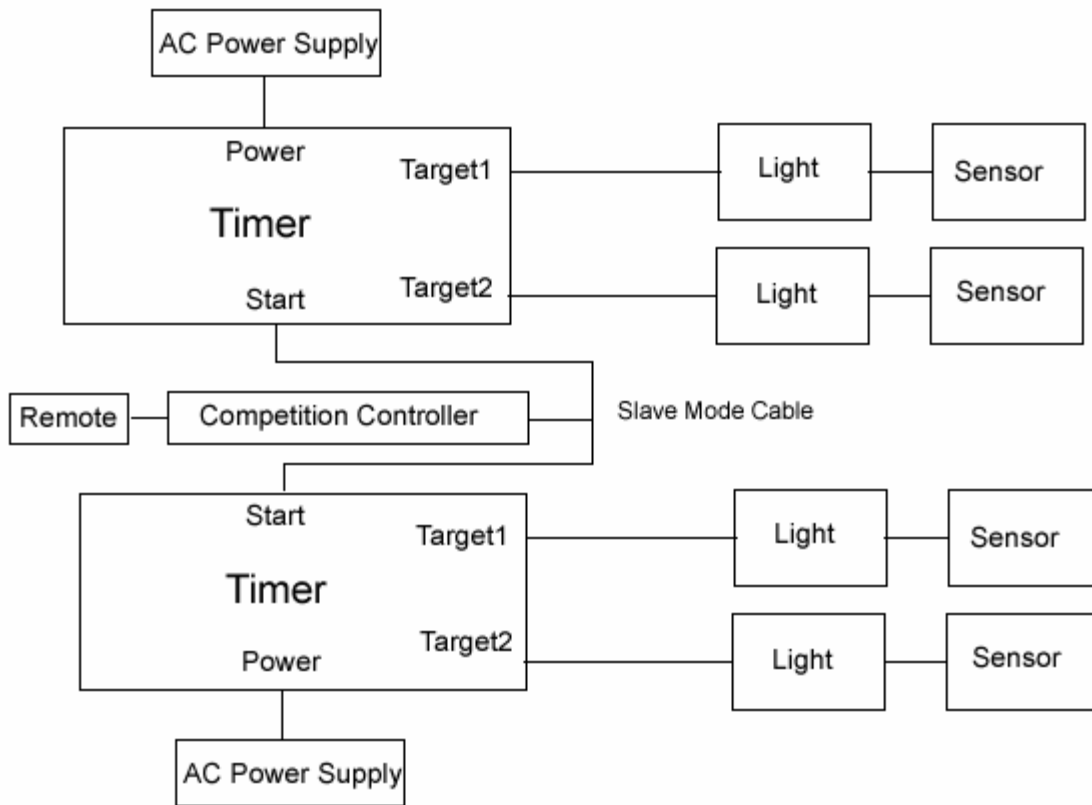
TO EXIT PRACTICE MODE AND GO TO SLAVE MODE, PRESS THE PUSHBUTTON FOR 12 SECONDS (UNTIL DISPLAY READS SSSS).

### **COMPETITION MODE**

TO TOGGLE TO THE COMPETITION MODE, HOLD THE PUSHBUTTON DOWN FOR 12 SECONDS WHEN IN THE PRACTICE MODE. THE DISPLAY WILL READ SSSS. WHEN IN THE COMPETITION MODE, THE TIMER WILL TURN ON THE LIGHTS AND START THE TIMER EXACTLY 2 SECONDS AFTER THE RELEASE OF THE REMOTE SWITCH. THE USER DETERMINES THE RANDOM DELAY TIME BY WAITING TO RELEASE THE REMOTE BUTTON. THE USER CAN CONCEAL THE REMOTE SWITCH FROM THE SHOOTERS SO THAT THEY CAN NOT ANTICIPATE THE 'LIGHT ON' EVENT. A HIT ON THE TARGET WILL STOP THE TIMER. IF YOU ARE SHOOTING WITH A SINGLE TARGET, A HIT WILL CAUSE YOUR LIGHT TO GO OUT. IF YOU ARE SHOOTING WITH TWO TARGETS, THE WINNING TARGET LIGHT WILL FLASH.

THIS MODE IS INTENDED TO ALLOW MULTIPLE TIMERS TO BE SLAVED TOGETHER. AN OPTIONAL COMPETITION CONTROLLER IS AVAILABLE TO AUTOMATE THE RANDOM PUSH BUTTON.

TO EXIT COMPETITION MODE AND RETURN TO NORMAL MODE, PRESS THE PUSHBUTTON FOR 12 SECONDS (UNTIL DISPLAY READS 0.000).



## Dual Timer Setup with Competition Controller

### **BALLOON SWITCH OPERATION**

WHEN THE TIMER IS USED WITH A BALLOON SWITCH, THE USER INSTALLS A BALLOON IN THE BALLOON TARGET AND THEN PRESSES THE START BUTTON. IF TWO BALLOON TARGETS ARE USED, THE WINNERS LIGHT WILL FLASH. A NEW BALLOON MUST BE INSTALLED IN THE BALLOON TARGET AFTER EACH SHOT. IF A BALLOON IS NOT PRESENT, THE TIMER ASSUMES THAT THE TARGET IS NOT PRESENT AND WILL NOT FLASH THE LIGHTS DECLARING A WINNER. THE BURSTING OF THE BALLOON SIGNALS THE TIMER TO STOP THE TIME.

THE TIMER FOR BALLOON OPERATION IS THE SAME AS FOR IMPACT SENSOR OPERATION. THE BALLOON SYSTEM CAN BE USED WITH THE NORMAL IMPACT LIGHTS AND SENSORS SIMPLY BY PURCHASING THE ADDITIONAL PARTS.

### **OPTIONAL EQUIPMENT**

THE OPTIONAL FOOT SWITCH MAY BE PLUGGED INTO THE TIMER BOX IN LIEU OF THE PUSHBUTTON.

THE OPTIONAL DC POWER CABLE MAY BE USED WITH AN AUXILLARY POWER UNIT/ OR BATTERY. ONE EXAMPLE OF A PORTABLE BATTERY CAN BE FOUND AT:  
[HTTP://WWW.HARBORFREIGHT.COM/CPI/CTAF/DISPLAYITEM.TAF?ITEMNUMBER=38391](http://www.harborfreight.com/CPI/CTAF/DISPLAYITEM.TAF?ITEMNUMBER=38391)

## **WARRANTY**

THE TIMER IS WARRANTEED AGAINST DEFECTS IN MATERIALS AND WORKMANSHIP TO THE ORIGINAL PURCHASER FOR ONE YEAR FROM DATE OF PURCHASE WHEN OPERATED UNDER NORMAL CONDITIONS. THIS WARRANTY IS LIMITED TO THE REPAIR OR REPLACEMENT OF ALL OR PART OF THE TIMER SYSTEM.

THE PURCHASE IS AUTOMATICALLY REGISTERED WITH QUICK DRAW ELECTRONICS UPON PURCHASE. NO ADDITIONAL WARRANTY REGISTRATION IS REQUIRED.

**NOTES:** THE IMPACT SENSORS HAVE BEEN DESIGNED, CALIBRATED, AND TESTED TO WORK WITH THE QUICK DRAW ELECTRONICS TARGETS. SINCE WE DO NOT HAVE CONTROL OF THE DESIGN OF USER PROVIDED TARGETS, WE CAN NOT GUARANTY THE RELIABILITY OF THE IMPACT SENSORS ON USER PROVIDED TARGETS. OUR WARRANTY ON THE IMPACT SENSOR IS VALID ONLY WHEN USED WITH THE QUICK DRAW ELECTRONICS TARGETS.

SOME USERS HAVE EXPERIENCED PROBLEMS WITH IMPACT SENSOR RELIABILITY WITH THIN STEEL TARGET MATERIAL. WE RECOMMEND A MINIMUM THICKNESS OF 10 GAUGE (0.134) STEEL MATERIAL BE USED IN THE CONSTRUCTION OF TARGETS.

THE COVERING OVER THE LCD DISPLAY IS FLEXABLE AND CAN BE DEFORMED BY FINGER PRESSURE. THE MATERIAL WILL RECOVER FROM A SLIGHT DEFORMATION BY ITSELF.

IF EXCESSIVE PRESSURE IS APPLIED TO THE COVERING, IT CAN ADHERE ITSELF TO THE DISPLAY. THIS WILL NOT AFFECT THE OPERATION OF THE TIMER SINCE THE COVERING IS ONLY FOR DUST PROTECTION. **CAUTION IS URGED WHEN HANDLING THE TIMER.**