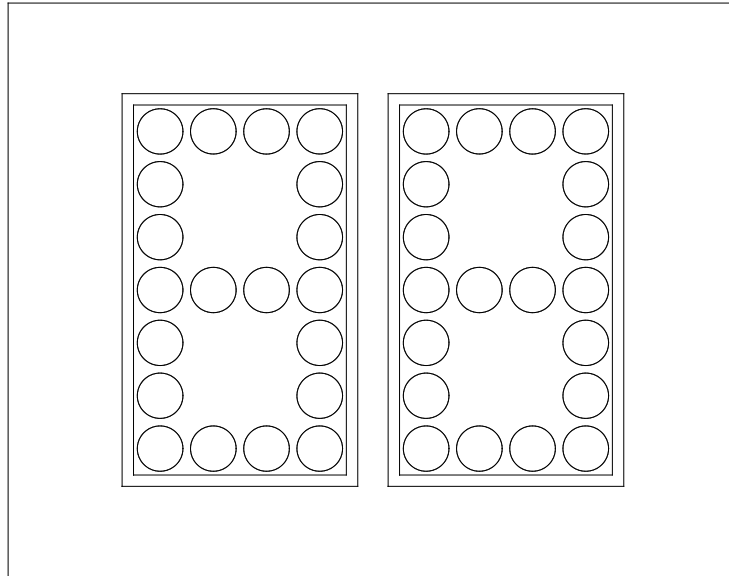

ELECTRO-MECH SCOREBOARD CO.



MP-920 LED SHOT TIMER SCOREBOARD

OWNER'S HANDBOOK

Thank you for choosing an Electro-Mech Scoreboard for your athletic complex. We are confident that your new scoreboard will give many years of reliable service.

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MP-920 LED DELAY OF GAME TIMER SPECIFICATIONS

GENERAL: The MP-920 LED DELAY OF GAME TIMER scoreboard is a two digit counter which can be set from 1 to 99 seconds. This ETL listed scoreboard is remotely programmed by a control console via a dedicated control cable. It is operated by a hand held unit which interfaces with the control console.

DIMENSIONS: 21.25" L x 18.25" H x 6"

WEIGHT: 50 lbs

SCOREBOARD CONSTRUCTION: The scoreboard is constructed of aluminum. The outer frame is made from extruded aluminum, while the face is finished with enamel paint. Black is the standard color. Mounting hardware is included.

POWER REQUIREMENTS: Scoreboard - 120 VAC, 5 A, 60 Hz, 600 watts maximum, (8 A service recommended). **Control Console** - 120 VAC, 0.5 A, 60 Hz

SCOREBOARD ELECTRONICS: 100% solid state fully enclosed within a plug in module.

CONTROL CONSOLE: The microprocessor control console is constructed of a rugged plastic housing with a metal back plate. It features a lithium cell battery backup to retain game information, a 37 key sealed membrane keypad, and a LCD display of game information.

CONTROL CABLE: The cable has two 22 AWG stranded copper conductors with semi-rigid PVC insulation. It also has a braided shield and a foil shield. The polyethylene jacket is rated at 300 volts. The cable is direct burial rated and measures approximately 1/4" in diameter. One length is required to run from the scoreboard to the point of operation.

JUNCTION BOX: A 4 1/4" x 2 1/4" x 2" junction box with a stereo jack mounted on the face plate is provided.

WARRANTY: Five year limited warranty.

SCOREBOARD INSTALLATION

Installation of the MP-920 LED Scoreboard consists of mounting the scoreboard cabinet and making the proper electrical connections.

These scoreboards can be mounted on the wall or the basketball goal. For wall mounting, two hanger brackets are attached to the cabinet. Since the construction of goals varies, it is not possible to provide the customer with hardware which will be suitable for each installation. There are two tapped holes located on each side of the cabinet which accept threaded rods. Application specific hardware can use the threaded rods to attach the scoreboard to the goal (Not provided by Electro-Mech Scoreboard Company).

While Electro-Mech Scoreboard Company does not perform installations, we will make every effort to answer your installation questions. Installation should be performed by qualified personnel. Consult national and local codes before installation.

MOUNTING THE SCOREBOARD

The scoreboard can be attached to a wall using lab bolts or other suitable hardware. The customer must provide the necessary hardware to attach the scoreboard to a goal.

ELECTRICAL CONNECTIONS

We recommend a qualified electrician perform the needed electrical connections to ensure proper operation of your scoreboard. These connections include connecting the scoreboard to a power source, installing the control cable, and connecting the control console.

Connecting The Scoreboard To Your Power Source

The scoreboard requires 120 VAC 5 amp service. The scoreboard has a 9 foot attached power cord which can be plugged into a NEMA 5-15R receptacle.

Installing The Control Cable

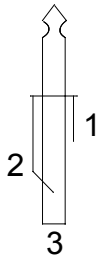
The model MP-920 LED shot clock scoreboard is compatible with Electro-Mech Scoreboard Company models MP-259, MP-269, MP-259/220, MP-269/220, MP-259/220-4S, MP-269/220-4S, 2350, 2650, 2655, 2350-4, 2650-4, and 2655-4. If the customer has one of these model scoreboards, the MP-920 LED shot clock scoreboard can be operated with the same control console. If the customer does not have one of these models, the MP-920 LED shot clock scoreboard must be operated with its own control console.

If the customer has one of the models listed above, he can install the control cable from the stereo jack mounted on the top of the scoreboard to either the shot timer output jack located on the side of one of the scoreboards (serial data output jack located on the top of models 2350-4, 2650-4, and 2655-4) listed above or to the control console.

When connecting between the shot timer output jack of the of the listed scoreboards to the MP-920 LED scoreboard, each end of the control cable has a male stereo plug attached. When connecting between the control console and the MP-920 LED shot clock scoreboard, the cable end which attaches to the scoreboard has a male stereo plug attached and the other end has a small metal junction box with a stereo jack mounted on the face plate. The junction box is mounted within 10 feet of the control console point of operation. A 10 foot cable with stereo plugs attached to each end (called the extension cable) is provided to make the connection from the junction box the control console.

Most customers order the control cable with the proper connectors attached to each end when ordering the scoreboard. Some customers prefer to attach the connectors after the cable is installed. The instructions below describe how to attach these connectors. All connections should be soldered. Splicing the cable is not recommended.

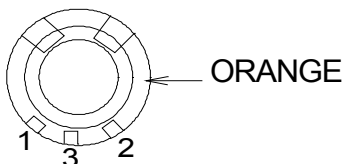
Refer to Figure 1 to attach the stereo plug. Refer to Figure 2 to attach the stereo jack mounted on the face plate of the junction box. This drawing shows the rear view of two stereo jacks. Match the stereo jack mounted on the face plate to one of the stereo jacks in figure 2 to make the proper connections.



PIN 1 - BLACK WIRE
 PIN 2 - RED WIRE
 PIN 3 - SHIELD WIRE

Figure 1 STEREO PLUG WIRING DIAGRAM

STEREN
 1/4" STEREO JACK



PIN 1 - BLACK WIRE
 PIN 2 - RED WIRE
 PIN 3 - SHIELD, GREEN WIRE

SWITCHCRAFT
 1/4" STEREO JACK

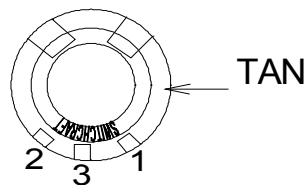


Figure 2 STEREO JACK WIRING DIAGRAM

Connecting The Control Console

The control console is normally connected to the junction box via the 10 ft. extension cable. This extra length of cable allows the scoreboard operator some mobility and the ability to store the control console after the game. The extension cable has two molded stereo plugs attached to it. One end of the extension cable is plugged into the junction box stereo jack and the other end is plugged into the stereo jack mounted on the control console back plate. The control console power cord is plugged into a grounded NEMA 5-15R 120 VAC receptacle.

This product is equipped with a 3-wire grounding type plug, a plug having a third (grounding) pin. This plug will only fit into a grounding-type power outlet. This is a safety feature. If you

are unable to insert the plug into the outlet, contact a qualified electrician to replace your obsolete outlet. Do not defeat the purpose of the grounding-type plug.

SCOREBOARD OPERATION

The MP-920 LED Scoreboard is programmed by the control console and is operated by a hand held unit which interfaces with the control console. **No scoreboard functions will operate without connecting the control console.** Figure 3 shows the keypad layout on your control console. The keypad functions are described in the text below the figure.

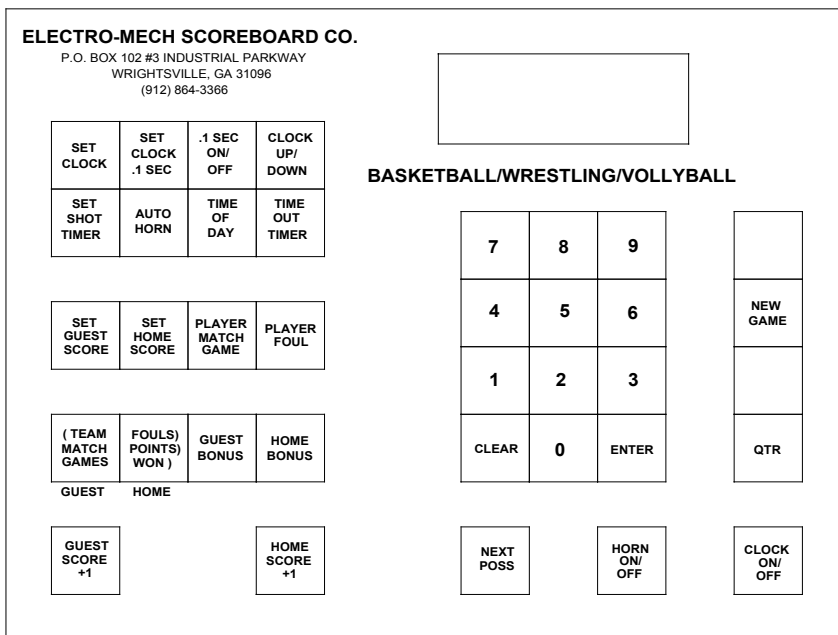


Figure 3 Keypad Layout

Control Console Key Functions

- **SET SHOT TIMER** – The shot timer default time is 30 seconds. To change this time, press [SET SHOT TIME]. The console LCD display will read:

ST RESET	<30>
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Press the keypad numbers for the time, [ENTER]. The LCD display will then read:

ST-OB RESET	<05>
-------------	------

This will allow you to change the out of bounds time. To change this time, press the keypad numbers for the time, [ENTER].

- **NEW GAME** – This key is used to reset all the scoreboard functions to their default settings. To reset the scoreboard, press [NEW GAME]. The console LCD display will read:

RESET	YES	<1>
SCOREBOARD	NO	<0>

Press [1], [ENTER] on the control console. The scoreboard will reset its functions.

- **CLOCK ON/OFF** – This key is used to start and stop the clock. The clock must be on in order for the MP-920 LED to count down.

The other keys are not used with the MP-920 LED scoreboard, but may be used for a compatible basketball scoreboard.

You should reset the scoreboard each time that it is turned on. Test out all the functions to ensure that the scoreboard is operating properly. **Electro-Mech Scoreboard Company strongly advises that you unplug the control console and disconnect the extension cable at the control console when the scoreboard is not in use.**

SHOT TIMER HAND HELD UNIT OPERATION

The delay of game hand held unit has an attached cable which is plugged into a jack on the control console back plate labeled **DBT/SC Hand held**. As seen in figure 4, the hand held unit has three buttons. The operation of the buttons is described in the text below the figure.

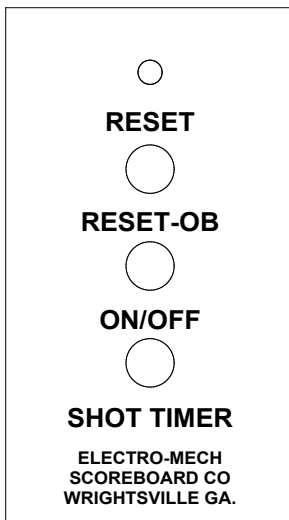


Figure 4 DELAY OF GAME TIMER HAND HELD UNIT

Control Console Key Functions

- **RESET** – This button is used to reset the MP-920 LED to the time programmed in the console as DELAY TIME1. The default time is 30 seconds.
- **RESET-OB** – This button is used to reset the MP-920 LED to the time programmed in the console as DELAY TIME2. The default time is 5 seconds. Press and hold this button to blank the scoreboard.
- **ON/OFF** – Press and hold this button to pause the count.

SERVICING THE SCOREBOARD

While your scoreboard was designed for years of trouble-free operation, some problems may occasionally occur. Our trained personnel at Electro-Mech Scoreboard Company are ready to answer your questions from Monday to Friday during the hours of 8 AM to 5 PM Eastern Standard Time. Be sure to know your scoreboard model number when calling. Scoreboard replacement parts are always available. Electro-Mech Scoreboard Company can repair the control console and plug in module at a significant savings when compared to the price of new units. Our convenient toll free number is listed at the bottom of every page in this manual.

The plug in module MST-02 is located behind the rear access panel. The fuses are located on the top of the cabinet.

PLUG IN MODULE REPLACEMENT

The plug in module MST-02 performs all of the scoreboard functions. The module has two plugs which mate with sockets in the scoreboard. A screw located at the bottom of the module holds it against the scoreboard cabinet. Simply remove the screw and pull the module down to unseat the module. **To avoid damage to the plug in module, always turn off the power to the scoreboard when removing or replacing it.**

FUSES

FUSE	RATING	FUNCTION
F1	1/2 A 250 V	CONTROL LINE
F2	5A 250 V	DIGITS

ELECTRO-MECH SCOREBOARD CO. FIVE YEAR LIMITED WARRANTY

THE ELECTRICAL COMPONENTS OF ALL ELECTRO-MECH SCOREBOARDS ARE GUARANTEED FOR A PERIOD OF FIVE (5) YEARS FROM THE DATE OF INVOICE AGAINST DEFECTS IN WORKMANSHIP OR MATERIAL AND WILL BE REPLACED OR REPAIRED WITHOUT COST TO THE OWNER PROVIDED THE EQUIPMENT OR PARTS ARE RETURNED POSTAGE-PAID TO THE FACTORY IN WRIGHTSVILLE, GA. SHIPPING BACK TO THE OWNER WILL BE VIA UPS GROUND SERVICE EXCEPT WHEN AIR OR SPECIAL METHOD OF RETURN IS SPECIFIED BY THE OWNER, IN WHICH CASE SHIPPING WILL BE FREIGHT COLLECT.

EXCLUDED FROM THIS WARRANTY ARE FUSES.

THIS WARRANTY DOES NOT INCLUDE LABOR CHARGES INCURRED IN THE REMOVAL OF COMPONENT PARTS, SERVICE CALLS, OR DAMAGES RESULTING FROM IMPROPER INSTALLATION, IMPROPER OPERATION, OR PROBLEMS CAUSED BY ANY REPAIR, ALTERATION OR MODIFICATION OF THE SCOREBOARD NOT PERFORMED BY ELECTRO-MECH.

EQUIPMENT WHICH IS SUBJECTED TO ACCIDENT, NEGLIGENCE, ABUSE, MISUSE OR OTHER NATURAL DISASTERS, INCLUDING BUT NOT LIMITED TO FIRE, WIND, LIGHTNING, OR FLOOD, IS NOT COVERED BY THIS GUARANTEE.