DC-Digital™ by **IES** Ltd.

VETERAN OWNED
1-800-977-6872
1-937-746-9750

INSTALLATION INSTRUCTIONS FOR

8 ft

5 ft

4:35

HOME   GUEST

28   6   21

DC-Digital
1-800-977-6872

TO GO

DOWN   QTR

Model: DC-150-FTBL-8x5

HTTPS://DC-Digital.com

Table of Contents

DESCRIPTION
MODEL: DC-150-FTBL-8x5
OUTDOOR SCOREBOARD

NOTE TO INSTALLERS: PLEASE RETURN THIS MANUAL TO THE INDIVIDUAL IN CHARGE OF THE SCOREBOARD UPON COMPLETION OF INSTALLATION.

The scoreboard and all accompanying accessories have been carefully inspected and tested before leaving the factory. However, it is possible for damage to have occurred during shipping. Therefore, we ask that you inspect all shipping containers upon arrival for damage and ensure that you have all of the parts listed below. If you find that damage has occurred during shipping: **DO NOT refuse the shipment, follow the instructions for filing a freight damage claim found below, and notify the manufacturer immediately.**

THE SCOREBOARD SYSTEM SHOULD INCLUDE THE FOLLOWING PARTS:

> **ITEMS IN LARGE PACKAGE**
> > (1) 8' x 6' scoreboard; shipped in one (1) section
>
> **ITEMS IN ACCESSORY BAG**
> > (1) Keyboard controller with keypad inserts
> > (1) 12-volt DC wall transformer
> > (1) CD ROM (including installation, operation, maintenance, warranty, and support information)
>
> **C**able-controlled systems (standard)**:**
> > (1) Junction box cover with built-in 5-pin din socket
> > (1) 20-ft. din cable with male 5-pin plugs
> > (1) 150' roll of control cable or longer if customer specified
>
> **For wireless systems (Optional):**
> > (1) Wireless transmitter with interface cable
> > (1) Keyboard mounting bracket for transmitter
>
> **Optional parts:**
> > (1.2) 21"x8' sponsor panel(s) shipped in one (1) section
> > (1) Internal Battery Pack for LCD Keyboard Controller

NOTE: INSTALLATION HARDWARE NOT SUPPLIED. CHECK LOCAL CODE FOR REQUIREMENTS. ANCHORS, BOLTS, CHAINS, CABLES AND RELATED HARDWARE MUST MEET MINIMUM WEIGHT REQUIREMENTS.

INSTRUCTIONS FOR REPORTING SHIPPING DAMAGE

Shipping damage must be noted at the time of delivery. Consignee must note on the "Delivery Receipt" form DAMAGED. Please make notations of the type of damage to the freight and to the packaging. Ask the delivery driver to call the local terminal and report immediately. The shipper is not responsible for the shipments that are not signed for as damaged upon arrival. Please contact the manufacturer immediately to report. The shipper is responsible for filing the claim, unless shipped 3rd party.

If damage is discovered after delivery, call the delivery company to report the concealed damage and please call the manufacturer immediately to report. Concealed damage must be reported within 5 days after the delivery date. If the damages are found after this time, the manufacturer will not be responsible.

INSTALLATION OVERVIEW

This manual will walk you through the installation of the scoreboard. While care has been taken to consider the many scenarios for installation, some general information applies to all. Use this guide as closely as possible to ensure proper installation, as follows:

1. Review the product specifications below to determine your specific installation hardware.
2. Determine the scoreboard's location and orientation.
3. Install the mounting poles/I Beams (supplied by the customer).
4. Mount the scoreboard to the poles/I Beams.
5. Install the control cable for cable-controlled systems (**not necessary for Wireless Remote Control systems).**
6. Install the electrical service for the scoreboard and the controller.
7. Install any options, such as sponsor panels or protective nets, according to the installation instructions included with each option package.
8. Test the installed system.

PRODUCT SPECIFICATIONS

Overall Dimensions:

8' x 6' x 8" - shipped in one (1) section

Weight:

Hanging weight approx. 275 lbs.
Shipping weight approx. 365 lbs.

Mounting Requirements:

(2) 8" steel I-beams (W8 X 31), or (2) 8" OD galvanized steel poles (schedule 40)

Power Requirements:

Scoreboard:
    1. 1 - 120-volt, 20-amp, 60 Hz grounded AC circuit. Ideally, this will be a dedicated circuit.

2. Access must be provided to turn off the power to the scoreboard after each use. Failure to turn off the power to the scoreboard could affect the functionality of the scoreboard; such as from a power surge or lightning strike.
3. **It is important to utilize the equipment ground inside the scoreboard cabinet at the utility box provided for the AC power connection.**

Keyboard controller:
- 1 - 120-volt, 15-amp, 60 Hz grounded AC circuit - standard wall receptacle.

Communication Cable Requirements (for cable-controlled systems only):
Four conductor cable – 28 gauge, twisted pair (two pairs), shielded data cable.
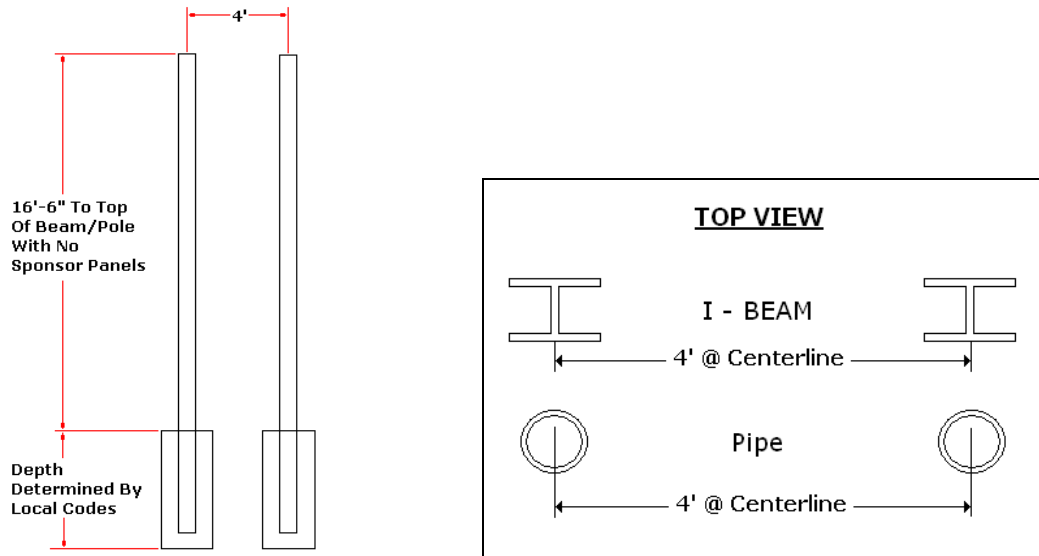
DETERMINING LOCATION AND ORIENTATION

The scoreboard should be positioned so that the greatest number of spectators can easily view it. Also, consider the best orientation of the scoreboard should the system be used to score a daytime or afternoon game. The scoreboard should be positioned so that sunlight does not glare off of its face. In the U.S., placement on the South or West side of the field is recommended. Consult with the local building or zoning department before final determination and installing the scoreboard.

INSTALLING MOUNTING POLES OR I-BEAMS

NOTE: The following information for installing the mounting poles/beams are suggestions only. Local codes, field placement, scoreboard options, customer preference, and other special considerations will determine the specifics of your installation, including footer specifications, above ground height, and total length of the poles/I-beams.

NOTE: If Sponsor Panels are to be mounted with the scoreboard, refer to the Sponsor Panel installation manual for accurate pole placement

1. Install the two (2) mounting poles/I-beams (supplied by the customer) on the field with a 4' center spacing and with 16'-6" of pole/I-beam above ground (refer to the figures below).

16'-6" To Top Of Beam/Pole With No Sponsor Panels

4'

Depth Determined By Local Codes

TOP VIEW

I - BEAM

4' @ Centerline

Pipe

4' @ Centerline

2. The poles/I-beams must be set into concrete footers. Make sure the poles are level and plumb and spaced on 4' centers. The mounting faces of I-beams must be straight with each other. If the face of an I- beam is turned, shims will be needed to mount the scoreboard. The required dimensions for the footers vary depending on local building codes, soil & weather conditions, and scoreboard size. Consult with local building officials for the required pole sizes and footer construction regarding this installation. A local architect, structural engineer, or sign installer may also be a source of assistance.

IMPORTANT: <u>DO NOT</u> MOUNT THE SCOREBOARD TO A WALL. A MINIMUM OF 18" – 24" CLEARANCE MUST BE MAINTAINED FOR ACCESS TO THE BACK OF THE SCOREBOARD CABINET. CONTROL MODULE, POWER, AND SIGNAL CABLE CONNECTIONS ARE ACCESSED ON THE BACK OF THE SCOREBOARD.
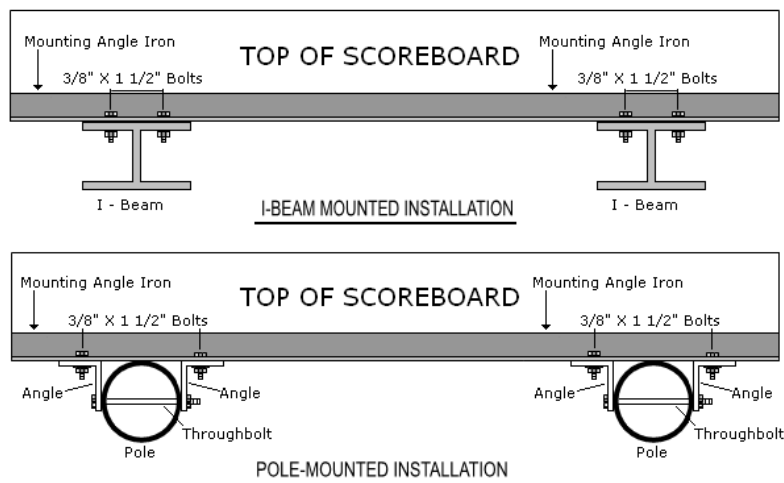
MOUNTING THE SCOREBOARD

NOTE: IF THE POLES/I-BEAMS ARE NOT IN ALIGNMENT --- SHIMS MAY BE NEEDED TO MOUNT THE SCOREBOARD PROPERLY. MOUNTING THE SCOREBOARD WITH THE POLES/I-BEAMS OUT OF ALIGNMENT MAY DAMAGE THE SCOREBOARD AND VOID THE WARRANTY.

1. Using the lift holes provided, connect a lift device to the scoreboard, as in the image below.
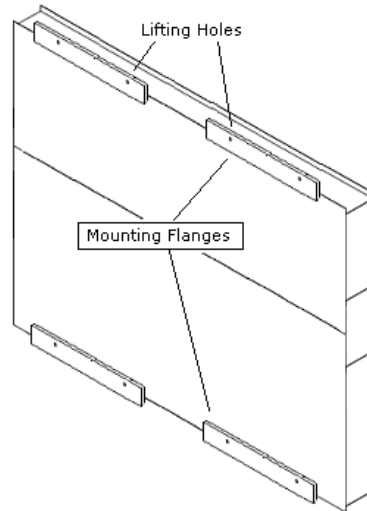
2. Lift the scoreboard into place to the desired height, ensuring that the scoreboard is level.

3. Secure the scoreboard to the poles/beams using the mounting flanges attached to the scoreboard. The unit <u>must</u> be attached to each pole/beam on top **and** bottom.

4. If using steel I-beams, either weld the mounting flanges to the supports, or drill the mounting flanges and supports to use bolts, washers, and nuts to secure the scoreboard to the I-beams.

5. If galvanized steel poles are being used, weld or bolt steel angles to the mounting flanges, which can then be welded to or bolted *through* the pole. Refer to the figure below for detailed illustrations of these suggested mounting methods.

RUNNING & CONNECTING THE CONTROL CABLE

(For scoreboards with Wireless Remote Control, skip this step.)

The control cable must be run in a separate conduit than is used for the electrical service. The control cable should run from the scoreboard to a location that is within 10 feet of the scorekeeper's location and into a 2"X4" wall box.

NOTE: IF THE WIRES IN YOUR CABLE DO NOT COLOR MATCH WHAT IS SHOWN, CONNECT TO THE TERMINALS WITH THE BLACK, GREEN, AND WHITE CONDUCTORS. DO NOT CONNECT A WIRE TO THE RED TERMINAL. MATCH THE SAME COLORS IN YOUR CABLE TO THE BLACK, GREEN, AND WHITE WIRES ON THE BACK OF THE WALL PLATE AT THE SCORING LOCATION.

At the scorekeeper's location:

1. With the communication cable installed between the scoreboard and the 2"X4" wall box, locate the wall plate provided with your installation hardware.


Front   Back
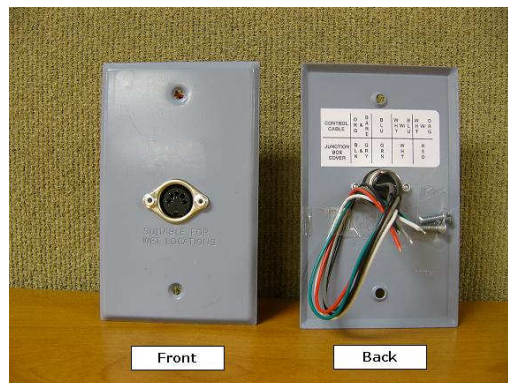
2. The back of the wall plate has a label indicating how the connections are to be made. Likely, the insulation will not be the same color on the wires in the cable as that on the wires on the back of the wall plate. Follow the chart if possible, but more importantly; whatever the match-up is at the wall plate should also be the match-up at the scoreboard.
3. Secure the junction box cover to the installed junction box.

At the scoreboard:

4. Remove the signal/power access door located on the back of panel A.

5. From the ground, run the control cable through a sealed, water-tight conduit then through a water-tight conduit fitting into the left side of the signal cable/power access door and into the scoreboard. A hole is provided for a conduit connector.

6. Inside the scoreboard, connect the control cable leads to the appropriate terminals on the terminal block, according to the label above the terminal block.
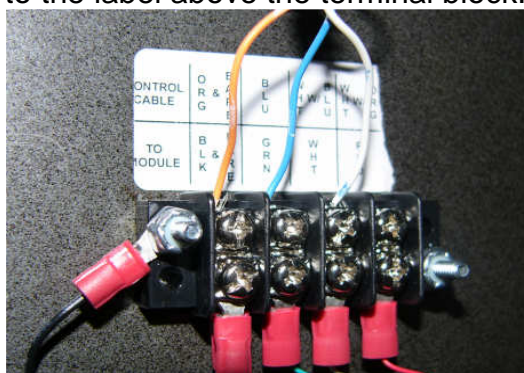

NOTE: Refer to the connections that were made at the scorekeeper's location. Make the connections at the scoreboard match the connections at the scorekeeper's location.

7. Re-secure the signal/power access door to the scoreboard.

RUNNING & CONNECTING THE ELECTRIC SERVICE

NOTE: IT IS RECOMMEDNED TO HAVE A LICENSED ELECTRICIAN FOR THIS PORTION. IDEALLY, THE SCOREBOARD WILL BE POWERED FROM A DEDICATED 120-VOLT / 20 AMP CIRCUIT. ADDITIONALLY, SINCE THE SCOREBOARD'S POWER SHOULD BE TURNED OFF AFTER EACH USE, THERE SHOULD BE EASY ACCESS TO THE POWER SWITCH OR CIRCUIT BREAKER. IF ACCESS TO THE CIRCUIT BREAKER IS NOT AN OPTION, INSTALL A SWITCH SOMEWHERE THAT IS ACCESSIBLE, EVEN IF UNDER THE SCOREBOARD AT AN ABOVE AVERAGE HEIGHT.

1. The scoreboard has a ½" knock-out on the lower right corner for bringing in the electrical service. It can be enlarged if the conduit size is ¾". This is where the conduit from the power source needs to terminate.
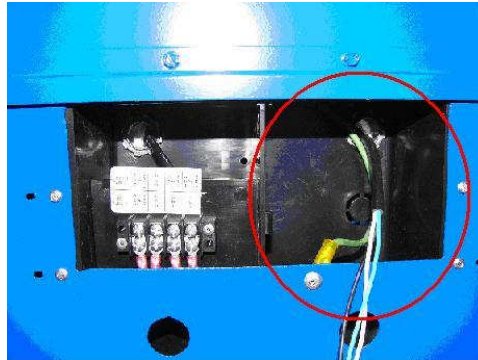
2. The connections are standard black, white, and green (ground). Replace the cover when complete.

TESTING THE INSTALLED SYSTEM

NOTE: Please refer to the OPERATION MANUAL included with the system for detailed instructions on how to connect the controller to the scoreboard and controller operation. Connecting cable-controlled systems: Connect one end of the supplied 20-ft. control cable into either of the two control cable jacks on the back of the controller and the other into the receptacle on the supplied junction box cover installed at the scorekeeper's location. **Connecting wireless systems:** Connect the wireless transmitter to the controller using the interface cable already attached to the transmitter by plugging the free end of the interface cable into either of the control cable jacks on the back of the controller. **Testing the scoreboard system:**

1. Connect the appropriate end of the 12-volt DC wall transformer to the power receptacle on the back of the controller. Plug the transformer into a live, 120-volt outlet.

2. Turn the power to the scoreboard *ON* using the power disconnect switch or circuit breaker. *HOME* and *GUEST* score should read "0", *TO GO* should read "10", and the first *DOWN* and *QTR* dot should be lit.

3. With the controller *OFF*, press and hold the **OPTION** key while turning the controller *ON*. The controller's LCD will briefly display the controller's software version. When the display changes and reads "**SELECT DIAG MODE <SEGMENT TEST>**,"" press **ENTER**. The LCD will now read "**SEGMENT TEST – ALL SEGMENTS OFF**." Pressing the **UP** arrow (located on the far right of the controller's keypad) should turn every display on the scoreboard O*N*. Pressing the **DOWN** arrow will turn every display in the scoreboard *OFF*. To exit the diagnostic mode, press the **RESET** key.

4. When turning the controller back *ON*, press either **ENTER** or **RESET** to enter the controller's scoring mode. Thoroughly test the system by adding and subtracting points from both teams, changing the period/inning, etc. To reset the scoreboard, simply press and hold the **RESET** key.

NOTE: Always turn both the controller and the scoreboard *OFF* after each use. Shortly after the controller is turned *OFF* but with the scoreboard *ON*, (or if the controller looses communication with the scoreboard) a digit on the scoreboard will begin to flash the shape of an "8". This feature is intended to remind the user to turn power to the scoreboard *OFF* after each use.

IMPORTANT!
Warranty Activation/Installation & Completion Sign Off Sheet

Your Serial Number _____

Your Model Number _____

Date Purchased   _____

Sales Agent   _____

Person Authorizing Purchase (title) _____

Date Installation Completed _____

Company or Person Responsible
For Installation (address/phone number) _____

This document confirms that the installation for the 8' x 6' Baseball Scoreboard has been completed. All structural, wiring, and power requirements have been met. This unit has been tested in scoring and diagnostic modes, ensuring the functionally of the unit.

_____
Scoring/timing equipment responsible party

_____
Installer

 So that we may better serve you, please have this information available in the event you need call technical support.