DC-150-20X8 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 where to install the scoreboard and install the mounting poles/beams
    a. **NOTE: ALL HARDWARE REQUIRED TO MOUNT THE SCOREBOARD TO POLES OR I BEAMS IS SUPPLIED BY THE CUSTOMER**.
3. Arrange scoreboard panels for the assembly process.
4. Install sponsor panels if applicable.
5. Install the control cable for cable-controlled systems. No additional installation is necessary for Wireless Remote Control systems.
6. Install electrical system.
7. Install any other options; such as protective nets or horns, according to the installation instructions included with each option package.
8. Test the installed system.

PRODUCT SPECIFICATIONS

Overall Dimensions:

8’-0” tall x 20’-0” long x 8” deep; shipped in five (5) sections

Weight:

Hanging weight = approximately 995 lbs. - Shipping weight = approximately 1,250 lbs.

Mounting Recommendations:

(2) 8” steel I-beams (W8 x 31) or (2) 8” OD galvanized steel poles (schedule 40); Total length determined by local codes, mounting height, and scoreboard options.

Power Requirements:

Scoreboard

(1) 120-volt, 20-amp, 60 Hz grounded AC circuit connected to a power disconnect switch or circuit breaker (refer to the wiring diagram on page 8 for instructions on determining the scoreboard’s power requirements – specific power requirement information is also marked on the scoreboard’s serial number label, located on the scoreboard)

Keyboard Controller

(1) 120-volt, 15-amp, 60 Hz grounded AC circuit in a standard duplex outlet (optional if an internal battery pack was purchased with the controller or using a handheld controller)

Cable Recommendations (for cable-controlled systems only):

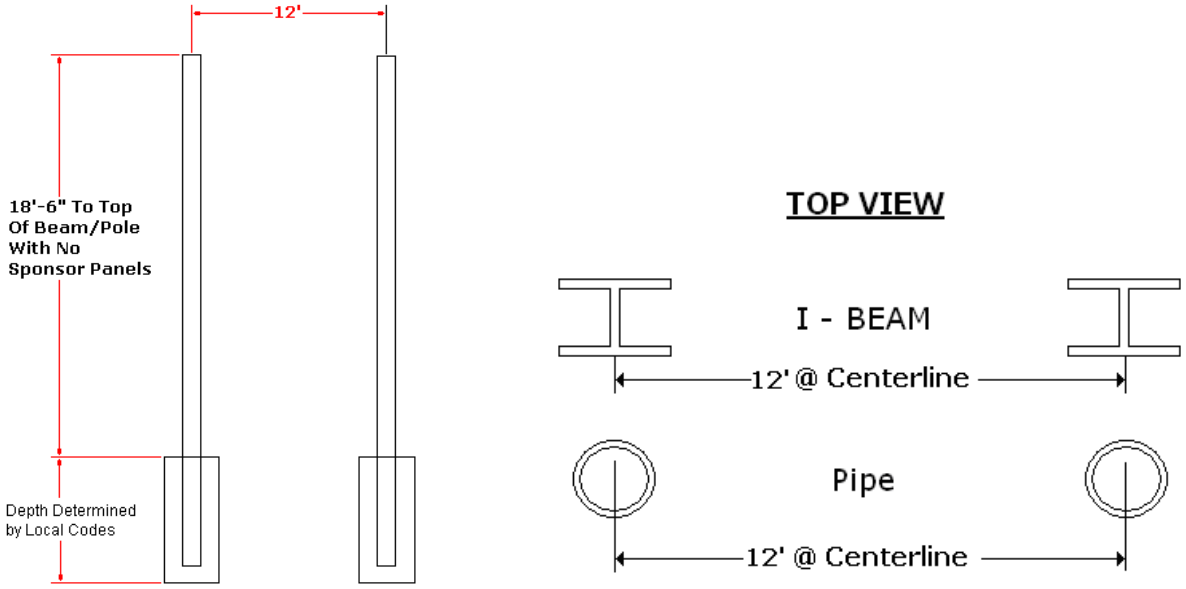
Four conductor cable – 28 gauge, twisted pair (two pairs), shielded data cable

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.

Helpful Installation Tips:

1. When removing the scoreboard from its packaging, do not pry against or cut into the scoreboard. Cut the packing straps and remove the box.
2. Inspect the unit for shipping damage according to the instructions on page 1.
3. Each piece of the provided 20’ X 3.5” angle iron has two holes provided for a lifting shackle or clevis. Choose one of the 20’ angle iron as the top mounting angle iron. Ensure that the pin for your clevis will pass through those holes. If not, it is easier to make changes before going further, whether a smaller clevis or a larger hole is required.
4. When installing the poles/I-beams that support the scoreboard, it is important to keep the spacing accurate and the faces straight. If you are using beams, a good way to keep the faces straight is to clamp a length of the 20’ X 3.5” angle to the first and middle beams and the middle and third beams as they are placed, and if necessary, provide bracing until the concrete has cured. The poles/beams should be allowed to stand overnight for the concrete to cure enough to support the scoreboard.
5. Arrange 6 each 2” X 4” X 8’ boards into two rows, three in each row, roughly seven feet apart on the ground in front of where you are to install the scoreboard. This will serve as a “table” for assembly and helps to keep the face of the scoreboard off of the ground. If the scoreboard uses wireless communication, remove the antenna from the panel it is mounted on until the scoreboard is mounted.



NOTE: The length of Beam/Pole above ground should be calculated by including the height of top and/or bottom sponsor panels if they are part of the installation.

INSTALLING THE MOUNTING POLES/BEAMS

1. The following information for installing the mounting poles/beams is for suggestions only. Local codes, field placement, scoreboard options, customer preference, and other special considerations will determine the above ground height and total length of the poles/beams. The center to center pole/beam spacing should not be changed.
2. Install the two (2) mounting poles/beams (supplied by the customer) on the field 12’-0” (twelve feet, zero inches) center to center with 18’-6”(*) of pole/beam above ground (refer to the installation diagram below). If a sponsor panel is to be mounted above the scoreboard, leave 21’-0” (*) of pole/beam above ground (an additional 30”).
3. The poles/beams must be set into concrete footers.
4. When installing the poles/I-beams that support the scoreboard, it is important to keep the spacing accurate and the faces straight.
5. The poles/beams should be allowed to stand overnight for the concrete to cure enough to support the scoreboard.
6. Make sure the poles are level and plumb. If the face of a pole/beam (either at the top or bottom of the mounting points of the scoreboard) is not straight, shims will be needed to continue the installation.
7. The required dimensions for the footers vary from city to city and state to state depending on the soil conditions, scoreboard size, and the building and sign codes for your area. 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.

NOTE: CONSULT WITH LOCAL BUILDING CODE OFFICIALS REGARDING THE REQUIRED DIMENSIONS AND CONSTRUCTION OF THE FOOTERS, POLE/BEAM SIZES, AND OTHER REQUIREMENTS AND RESTRICTIONS REGARDING THE INSTALLATION OF THE SCOREBOARD.

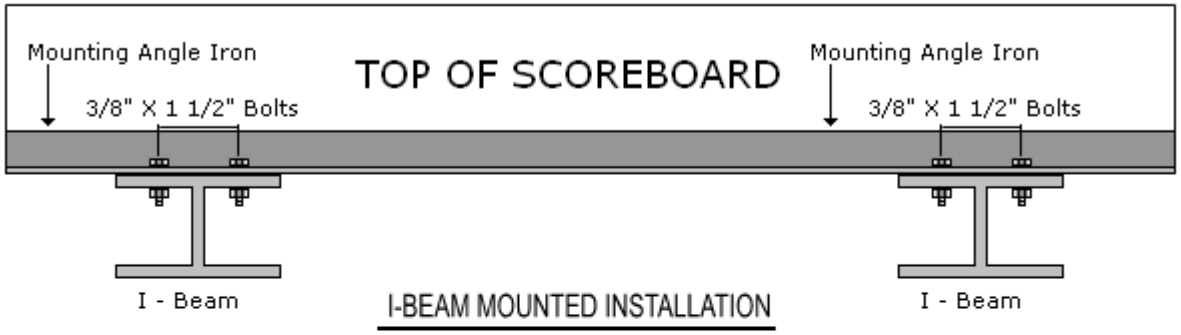
DETERMINING INSTALLATION

IMPORTANT NOTE: The main consideration when choosing installing is whether the lifting device you will use is capable of supporting the weight of the entire assembly. Your lift should be capable of lifting 1500 pounds in order to use Install this scoreboard. We do not recommend using this lifting device if it is border line of supporting the total weight or if the lift will not be stable during the lifting process.

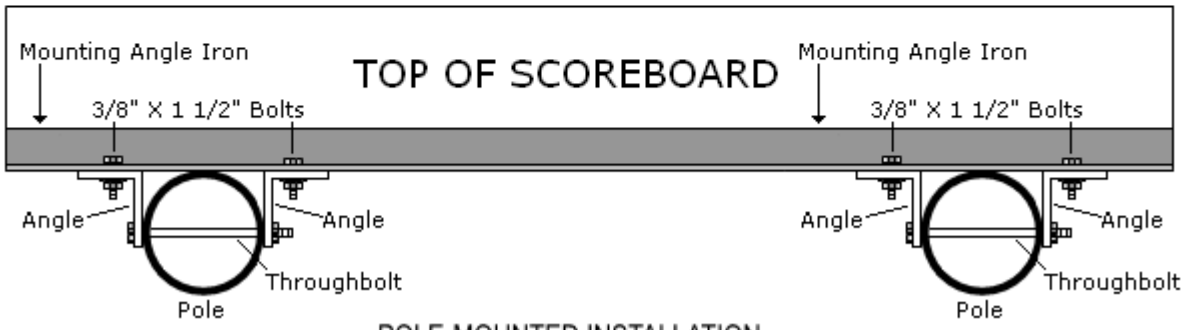
NOTE: Determining the installation method is the responsibility of the installer.

ASSEMBLING AND MOUNTING THE SCOREBOARD

IMPORTANT: <u>DO NOT</u> MOUNT FLAT TO A WALL. A MINIMUM OF 18" CLEARANCE MUST BE LEFT FOR ACCESS TO THE REAR OF THE UNIT, AS THE ELECTRONIC MODULE ACCESS AND ALL POWER AND SIGNAL CABLE ACCESS DOORS ARE LOCATED ON THE BACK OF THE SCOREBOARD. 24" CLEARANCE IS RECOMMENDED. ALL HARDWARE REQUIRED TO MOUNT THE SCOREBOARD TO POLES OR I BEAMS IS SUPPLIED BY THE CUSTOMER.

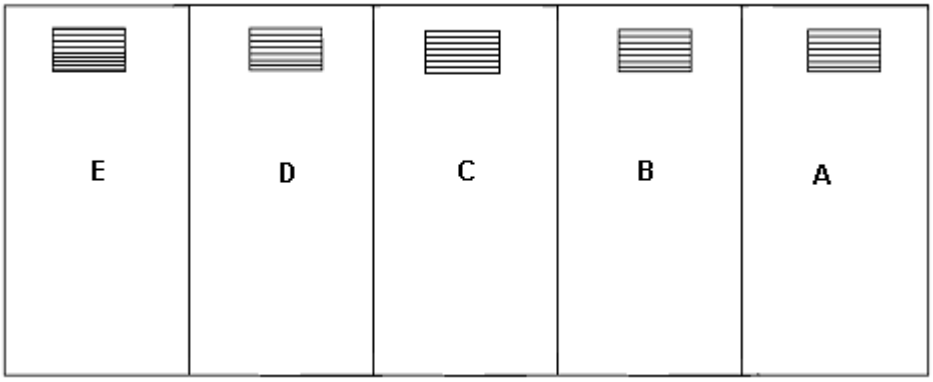


I-BEAM MOUNTED INSTALLATION

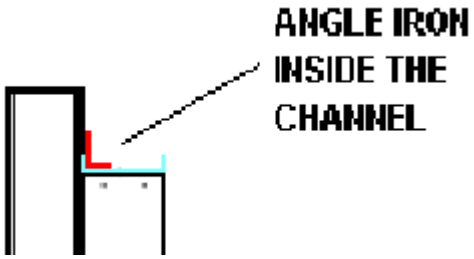


POLE-MOUNTED INSTALLATION

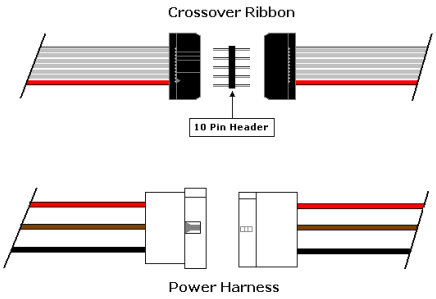
Installation:



1. After unpacking the scoreboard, arrange the panels in order A – E from right to left, face down (use the packaging material to prevent damage to the scoreboard face), with the top away from the mounting poles or I beams. Keep the panels aligned at the top and against each other, making sure not to pinch cables that may be hanging outside of each cabinet.
2. Join the cabinets using the 3.5" X 20' mounting angle and the 3/8" bolt hardware provided in the installation kit, making one assembly.



3. Install crossover nipples between cabinets. **Failure to install crossover nipples will void the warranty**. Connect wiring in each of these sections.

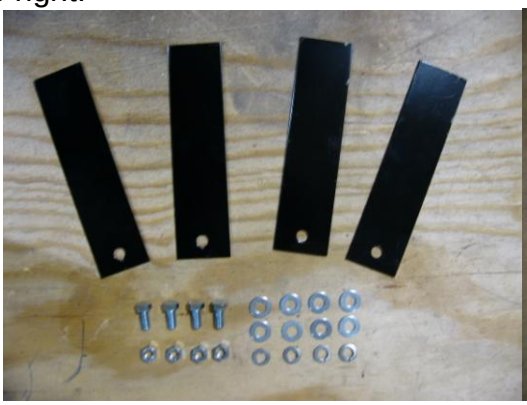


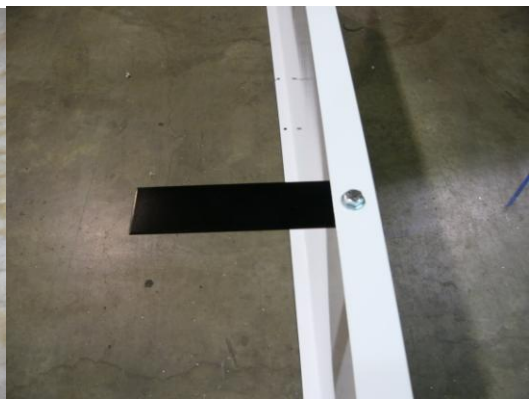
4. Connect ALL crossover cables between cabinets as in the image on the right above, making sure the red stripe on the edge of the ribbon cables are aligned when connected.
5. Raise the scoreboard to the mounting poles or I Beams and at the proper height, use a clamp at one pole or I beam to hold that corner in place.
6. Using a level in the top channel of the scoreboard, slowly raise the scoreboard to level it and clamp to the other end mounting pole or I Beam.

7. Weld or bolt the mounting angle to the poles or I Beams you are clamped to and follow the same procedure at the bottom of the scoreboard, clamp and weld or bolt.

INSTALLING OPTIONAL SPONSOR PANELS

1. If you do not have sponsor panels skip this portion.
2. Reference the list of materials that are included with the sponsor panel(s).
3. Lift the assembly from the top angle iron to a vertical position, still resting on the ground and install the top sponsor panel if included in the installation.
4. Install the 2” X 8” flat steel brackets with the bolts provided in the pre-drilled holes along the top of the sponsor panel, with the bracket being perpendicular to the scoreboard, as shown below in the figure on the right.





5. Lay one piece of the 1.5” X 1.5” X 20’ angle in the top channel of the scoreboard. These will be installed after the scoreboard is mounted.
6. Pick the scoreboard up high enough to install the bottom sponsor panel if included in the installation. Repeat the bracket assembly process from Step 4
7. At the top sponsor panel, clamp the 1.5” X 1.5” X 20’ angle to the I beams or poles level with the top of the sponsor panel and weld or bolt them to the poles or I Beams.
8. Weld or bolt the sponsor panel brackets that were fastened to the sponsor panels in Step 5 to the 1.5” angle, making sure to check for straightness along of the top edge of the sponsor panels before welding.
9. Install any options such as horns or protective screens.