RACE AMERICA

INNOVATION. TECHNOLOGY. RELIABILITY.

Wireless Leader Board Scoreboards

Model 64835A/B, 64830A/B

Rev B

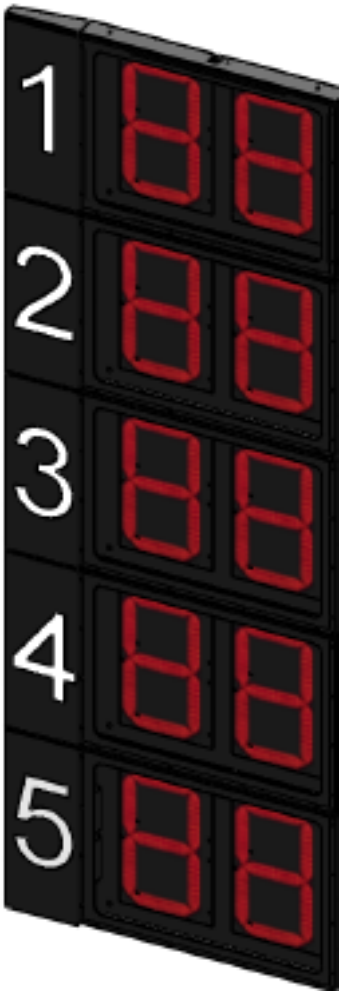

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Table of Contents

Figures

RACE AMERICA

INNOVATION. TECHNOLOGY. RELIABILITY.

PRODUCT INFORMATION LINKS

RaceAmerica Website	www.raceamerica.com
RaceAmerica Online Store	store.raceamerica.com
Raceamerica Online Forum	www.raceamerica.com/forum
Product Warranty	www.raceamerica.com/legal.html
Service & Repairs	www.raceamerica.com/service.html
Technical Assistance	www.raceamerica.com/techcall.html
Owner's Manuals	www.raceamerica.com/prodpdf.html
Mounting Diagrams	www.raceamerica.com/mountpdf.html
Product Catalog	www.raceamerica.com/catalog.html

PRODUCT OVERVIEW

RaceAmerica Leader Boards are microprocessor controlled systems based upon the 7-segment format digit using the latest technology Ultra-Bright LEDs. The scoreboard system integrates a wireless serial link to receive data to be displayed.

The Leader Boards can be controlled using RaceAmerica's Board Control software when a timing system is not available or can be controlled from a PC running the MyLaps Orbits Race Management Software and RaceAmerica's 3130A Racetrack Scoreboard Utility software.

Each Leader Board contains two 24in/61cm LED digits. Data communication to all models is accomplished via internal wireless units and requires a single PC side wireless transmitter Multiple Leader Boards can operate from a single wireless module connected to the PC. Leader Boards are viewable up to 1000 ft away.

The 64835A Leader Board is preconfigured to display vehicle positions 1 to 5. The 64835B Leader Board is preconfigured to display vehicle positions 6 to 10. Models 64830A & 64830B are preconfigured to display vehicke positions 1 to 5 and 6 to 10. The top nclosure position contains a microprocessor to analyze the data string received and correctly display the positions live as the race progresses. Each Leader Board position displays are mounted to an upright customer provided structure designed to mount position boards per the mounting locations shown in Figures 1a and 1b.

NOTE: THESE PRODUCTS USE ULTRA-BRIGHT LED TECHNOLOGY. DUE TO THE BRIGHTNESS LEVEL OF THIS DISPLAY, CARE SHOULD BE TAKEN, AS WITH ANY BRIGHT LIGHTING SOURCE,TO AVOID PROLONGED VIEWING AT CLOSE RANGE AND SHORT DISTANCES. AS WITH ANY BRIGHT LIGHTING SOURCE, VISION MAY BE AFFECTED SHORT TERM SIMILAR TO CAMERA FLASHES.

PACKAGE COMPONENTS

Model 64835A/B Leader Boards:

5 - Displays - Positions 1 thru 5 (64835A)
with left side position numbers
- or -
5 - Displays - Positions 6 thru 10 (64835B)
with right side position numbers
1 - Rubber Duckie Antenna
1 - Owner's Manual

Model 64830A/B Leader Boards:

5 - Displays - Positions 1 thru 5
with left side position numbers
5 - Displays - Positions 6 thru 10
with right side position numbers
2 - Rubber Duckie Antennas
1 - Owner's Manual

Wireless Options (PC end):

4520U Wireless Data Comm Links 900MHz
4620U Wireless Data Comm Links 2.4GHz
4620UZ Wireless Data Comm Links 2.4GHz

Available Options:

A' suffix
-- - Internal Wireless Data Link 900MHz
'AX' and AZ suffix
--- Internal Wireless Data Link 2.4GHz

LOCAL REQUIREMENTS

110/230 VAC Power Source
1 - USB Wireless Unit
1 - PC running control software
4 - 3/8-16 mounting bolts (qty per position)

PRODUCT SPECIFICATIONS

Display Type:	7-Segment
Digit Size:	24in/61cm
Number of digits:	2 per position
Dimensions (Unit):	54"W x 31"H x 4"D

Total Dims:	54”W x 151” H x 4”D
Mounting:	3/8-16 PEM nuts on back
Housing:	Powder coated aluminum
View Filter:	Red Transparent acrylic
View Range:	1000’ in full sun
Power Reqt:	110/230 VAC 250W
Weight (total):	40#/enclosure x 5 ~200#

LEADER BOARD SET-UP

The display consists of five two digit enclosures which mount to a customer supplied frame structure. Locate the appropriate mounting diagram based on model number and left/right scoreboard as follows:

Scoreboard Model No.	***No. of Positions***	***Mounting 1to5***	***6to10***
64835A	5	Fig 1	n/a
64835B	5	n/a	Fig 2
64830A	10	Fig 1	Fig 1
64830B	10	Fig 1	Fig 2

The enclosures utilize guide pins to assemble the enclosures together. The bottom enclosure is attached to the structure first. Follow the steps below for cable connections and mounting for each Position Display.

STEP 1 - Mounting Position 5 and 10

Attach the bottom unit (highest number) to the vertical frame structure with four 3/8-16 hex head machine screws. 110VAC or 230VAC AC power is connected to this unit via the NEMA watertight enclosure located behind the position number (see step 6).

STEP 2 - Mounting Position 4 and 9

Locate the round wire circular interconnect cable connectors (Figure 2) and attach it to the mating connector on the top of Position 5/10 (Figure 3). Locate the guide pins on the top of Position 5/10 and slide them into the mating holes on the bottom of Position 4/9 (Figure 4). Place one 8-32x.375 screw in the bottom left corner of Position 4/9. Secure Position 4 to the vertical frame structure with four 3/8-16 hex head screws (Figures 5a and 5b).

STEP 3 - Mounting Position 3 and 8

Locate the round wire circular interconnect cable connectors (Figure 2) and attach it to the mating connector on the top of Position 4/9 (Figure 3). Locate the guide pins on the top of Position 4/9 and slide them into the mating holes on the bottom of Position 3/8 (Figure 4). Place one 8-32x.375 screw in the bottom left corner of Position 3/8. Secure Position 3/8 to the vertical frame structure with four 3/8-16 hex head screws (Figures 5a and 5b).

STEP 4 - Mounting Position 2 and 7

Locate the round wire circular interconnect cable connectors (Figure 2) and attach it to the mating connector on the top of Position 3/8 (Figure 3). Locate the guide pins on the top of Position 3/8and slide them into the mating holes on the bottom of Position 2/7 (Figure 4). Place one 8-32x.375 screw in the bottom left corner of Position 2/7. Secure Position 2/7 to the vertical frame structure with four 3/8-16 hex head screws.

STEP 5 - Mounting Position 1 and 6

Locate the round wire circular interconnect cable connectors (Figure 2) and attach it to the mating connector on the top of Position 1/6 (Figure 3). Locate the guide pins on the top of Position 1/6 and slide them into the mating holes on the bottom of Position 1/6 (Figure 4). Place one 8-32x.375 screw in the top left corner of panel position 2/7(Figures 5a and 5b). Secure Position 1 to the vertical frame structure with four 3/8-16 hex head screws. Install the antenna to the antenna connector located on the front upper left side. Antennas are mounted and positioned upright.

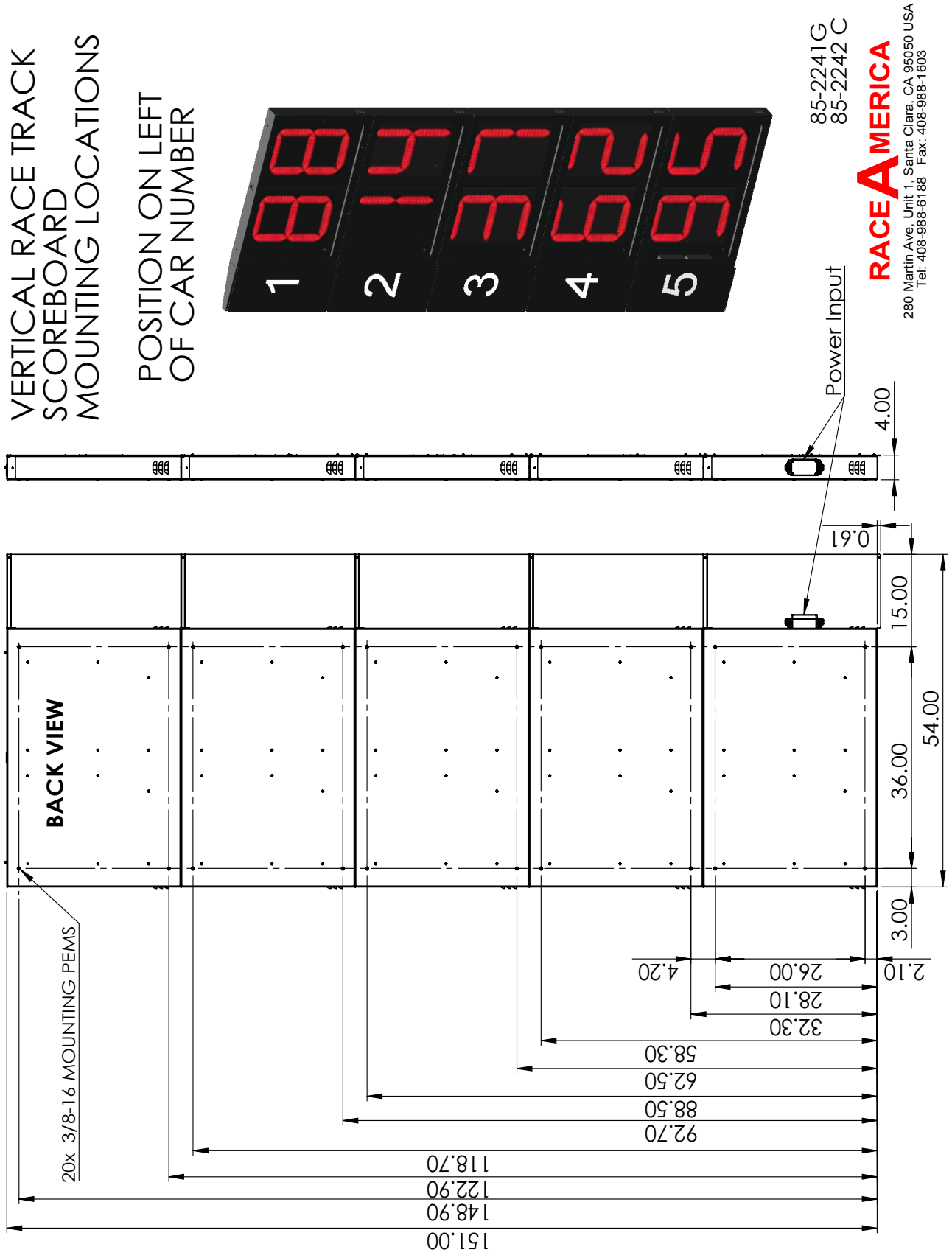
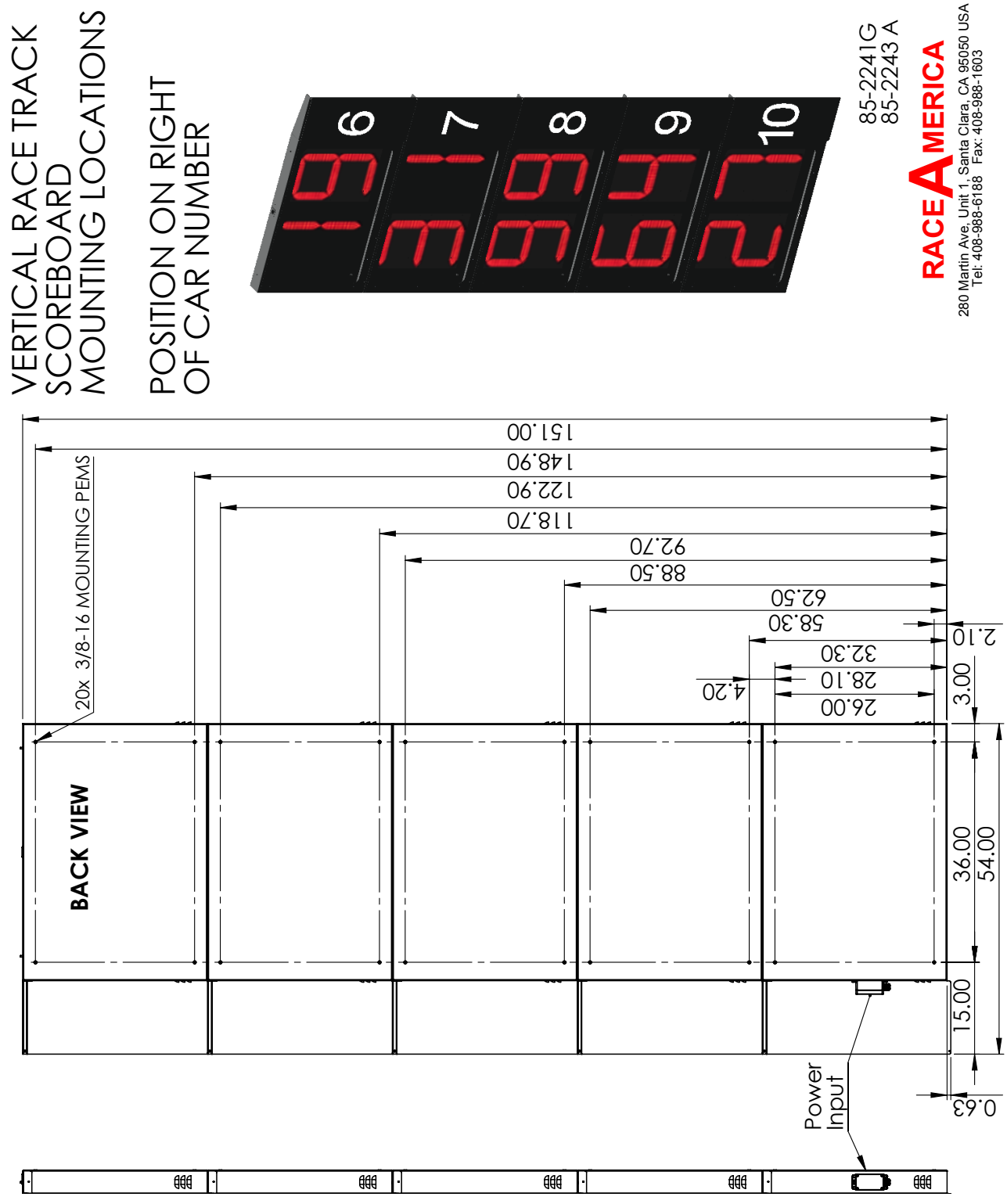

VERTICAL RACE TRACK
SCOREBOARD
MOUNTING LOCATIONS
POSITION ON LEFT
OF CAR NUMBER
1
2
3
4
5
85-2241G
85-2242 C
RACE AMERICA
280 Martin Ave, Unit 1, Santa Clara, CA 95050 USA
Tel: 408-988-6188 Fax: 408-988-1603
Power Input
4.00
0.61
15.00
36.00
54.00
3.00
BACK VIEW
20x 3/8-16 MOUNTING PEMS
4.20
26.00
2.10
28.10
32.30
58.30
62.50
88.50
92.70
118.70
122.90
148.90
151.00

Figure 1a


VERTICAL RACE TRACK
SCOREBOARD
MOUNTING LOCATIONS
POSITION ON RIGHT
OF CAR NUMBER
6
7
8
9
10
85-2241G
85-2243 A
RACE AMERICA
280 Martin Ave, Unit 1, Santa Clara, CA 95050 USA
Tel: 408-988-6188 Fax: 408-988-1603
151.00
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62.50
58.30
32.30
28.10
26.00
4.20
2.10
3.00
20x 3/8-16 MOUNTING PEMS
BACK VIEW
36.00
54.00
15.00
0.63
Power
Input

Figure 1b

Figure 2 - Locate the Circular Interconnect Cable between position displays

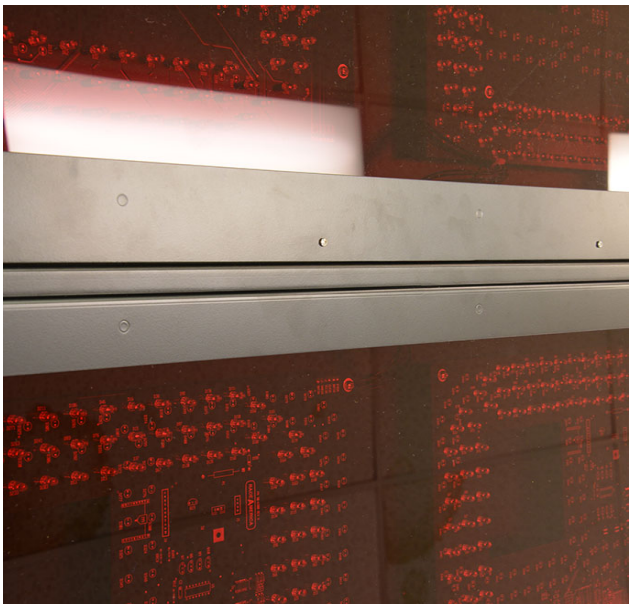

Figure 4 - Position Displays together ready for mounting.

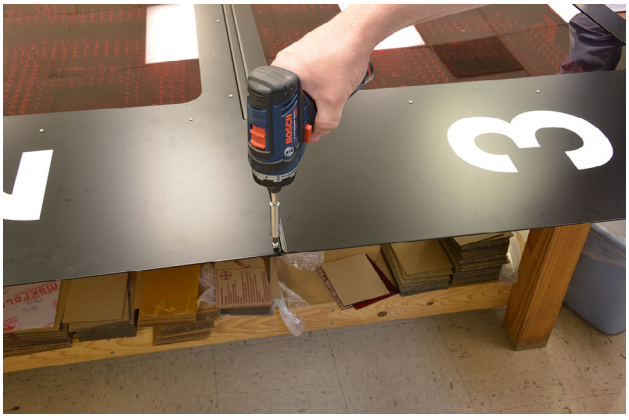

Figure 5a - Install connecting screw between positions.

Figure 3 - Connect the cable, twist until locked

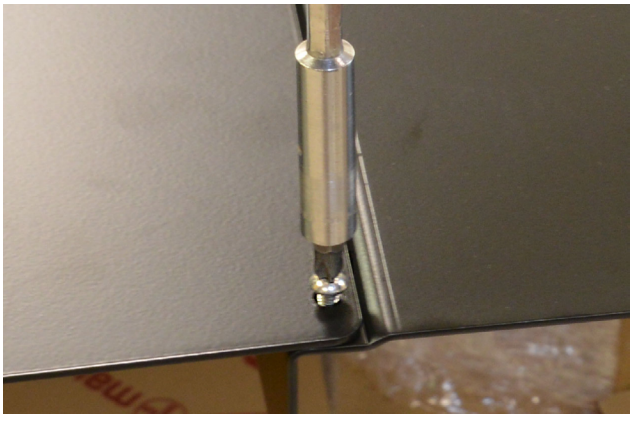

Figure 5b - Close up of screw installation

STEP 6 - Connect the power

Power is supplied to the scoreboard unit through the NEMA watertight junction box located on the Position 5/10 enclosure behind the Position 5/10 digit panel. Remove the screws holding the Rear Power Access Panel (lower right corner on rear of enclosure). Remove the four corner screws to reveal the terminal strip (Figure 6). AC power can be installed to power the scoreboard using a 3/4in conduit attached directly to the bottom of the watertight enclosure.

To install an AC power cord, attach a 3/4in conduit to the NEMA watertight junction box and slide the powerwire through the and connect power as follows (Figure 6):
AC power connection label:

L = live or hot side of AC power
N = neutral side of AC power
G = ground lead of AC power

Figure 6 - Cover removed from NEMA watertight junction box.

Re-install the cover to the NEMA watertight junction box to seal the electrical connection.

SOFTWARE SETUP

STEP 1 - Download Software

Go to the RaceAmerica website at http://www.raceamerica.com and download the model 3130A Racetrack Scoreboard Utility PC Software from the Licensed Sofwtare download page using the Software License issued at time of purchase. The ZIP file contains an install file for FTDI Drivers and an install file for the RaceAmerica software.

STEP 2 - Install the Software

Open the ZIP file and drag the two EXE files to the desktop. Double click the FTDI Drivers Install.exe file to install the drivers. Follow the onscreen instructions and wait for completion.

Double click the second EXE file to install the RaceAmerica software. Follow the onscreen instructions and wait for completion.

STEP 3 - USB Wireless Unit

Attach the antenna to the 4520/4620 Wireless Unit. Connect the USB cable to the PC and to the Wireless Unit. The Windows operating system will recognized the new device and begin installation of the drivers. This process can take several minutes so be patient. Once the drivers are installed, Windows will display a message of a successful installation. Do not unplug the USB cable. Windows will recognize the device and

begin a second driver installation creating a PC COM port for use by the software. This process can take several minutes to recognize the newly installed device so be patient. Once the ionstall is complete, Windows will display a message with the PC COM port number (i.e. COM3, COM7, etc). The PC software will prompt for which PC COM poirt to use so note the COM number displayed by Windows.

Run the RaceAmerica software and select the PC COM port to connect to the USB WIreless Unit. The scoreboard and software are ready to use.

LEADER BOARD MAINTENANCE

The Leader Boards do not require any maintenance to maintain proper operation. To clean the red lens, use a non-abrasive cleaner with a soft cloth. This will keep the protective lens clean and maximize visibility and clarity of the digits. If the red lens is soiled with mud or dirt, gently remove the grit using a soft cloth/water being careful not to press when wiping to avoid scratching the red lens acrylic material.

SPARE PARTS

Further to minimize race program interruptions, RaceAmerica recommends some spare parts. While the Leader Board may not shut down the racing action, a spare USB Wireless Unit and antennas should be considered. Contact RaceAmerica for availability and pricing of spares items.

SUPPORT AGREEMENTS

Support agreements are available from RaceAmerica providing Telephone Assistance on technical issues and operational questions, repair and/or replacement of hardware failures, Software and Firmware updates and bug reporting. Contact RaceAmerica for more information and pricing of Support Agreements.

REVISION HISTORY

05/04/2015 - Rev A Initial release