RACE**A**MERICA

INNOVATION. TECHNOLOGY. RELIABILITY.

Wireless Leader Board Scoreboards

Model 64635A, 64636A
6463LT, 6466LT Lap/Time Displays

Rev A

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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 per race position. 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 64635A Leader Board is preconfigured to display vehicle positions 1 to 5. The 64636A Leader Board is preconfigured to display vehicle positions 1 to 3. The leftmost enclosure 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 a customer provided structure. Mounting Diagrams are available on the Product Information Links in this manual.

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 Position Leader Boards:

5 - Displays - Positions 1 thru 5 (64635A)
      - or -
3 - Displays - Positions 1 thru 3 (64636A)
1 - Rubber Duckie Antenna

Model 6463LT Lap/Time/Media:

1 - Display - Lap & Time
2 - Media Advertising panels
1 - Rubber Duckie Antennas

Model 6466LT Lap/Time/Media:

1 - Display - Lap & Time
1 - Media Advertising panels
1 - Rubber Duckie Antennas

Wireless Options (PC end):

4520BU Wireless Data Comm Links 900MHz
4620BU Wireless Data Comm Links 2.4GHz

LOCAL REQUIREMENTS

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

PRODUCT SPECIFICATIONS

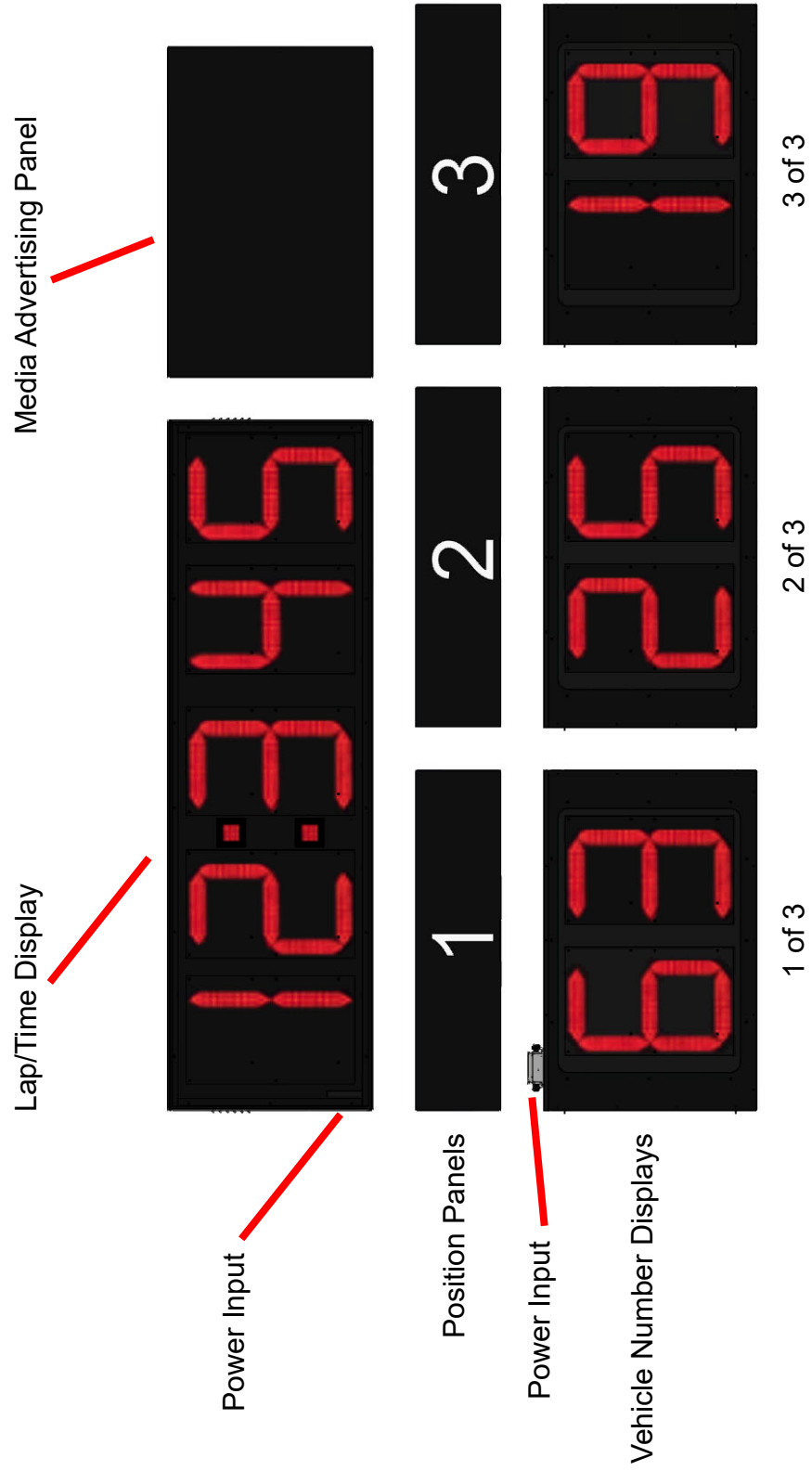|	
Display Type:	7-Segment
Digit Size:	24in/61cm
Number of digits:	2 per position
Vehicle Number:	31in x 48in x 4in
Lap/Time Dims:	97.4in x 29in x 4in
Media Panel Top5:	71.4in x 29in x 4in
Media Panel Top3:	42.6in x 29in x 4in
Position Panel:	48in x 12in x 4in
Mounting:	3/8-16 PEM nuts on back
Housing:	Powder coated aluminum
View Range:	1000' in full sun
Power Reqt:	110/230 VAC 250W
Weight (total):	20#/enclosure

Figure 1 - Top 3 Horizontal Scoreboard Components

Media Advertising Panel

Lap/Time Display

Power Input

Position Panels

Power Input

Vehicle Number Displays

1 of 3

2 of 3

3 of 3

Figure 2 - Top 5 Horizontal Scoreboard Components

Media Advertising Panels

Lap/Time Display

Power Inputs

Position Panels

Vehicle Number Displays

1 of 5

2 of 5

3 of 5

4 of 5

5 of 5

LEADER BOARD SET-UP

The 64635A/64636A Leader Board consists of 3 or 5 2-digit enclosures. Models 6463LT/6466LT consists of a 5-digit 6483LT Lap/Time display, and 1 or 2 media advertising panels which mount to a customer supplied frame structure.

Model No.	Type
64635A	5 Posiitons
64636A	3 Positions
6463LT	Lap/Time + 2 Media Panels
6466LT	Lap/Time + 1 Media Panel

Figure 3 - Screw locations to attach Position Panel to Vehicle Position Display

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

STEP 1 - Mount Position 1

Attach each Position Panel to the appropriate Vehicle Number Display enclosure referencing the tag on each enclosure using three #8 1/2" long screws included with the scoreboard as shown in Figure 3. Mount position #1 enclosure with position panel attached to the scoreboard structure using four 3/16"-16 bolts as shown in the mounting diagrams. Add the antenna to this enclosure (upper left front).

Figure 4 - Round Interconnect Cable between position displays

STEP 2 - Mount Position 2 and higher

Place the next Vehicle Position Display enclosure with Position Panel attached to the right of position #1. Locate the round interconnect cable connectors (Figure 4) and attach it to the mating connector on the side of next position (Figure 5). Locate the guide pins on the side of the position enclosure and slide them into the mating holes on the side of the next position enclosure (Figure 6), then mount the position ensclosure with the four 3/6'-16 bolts. Repeat until all position enclosures are mounted.
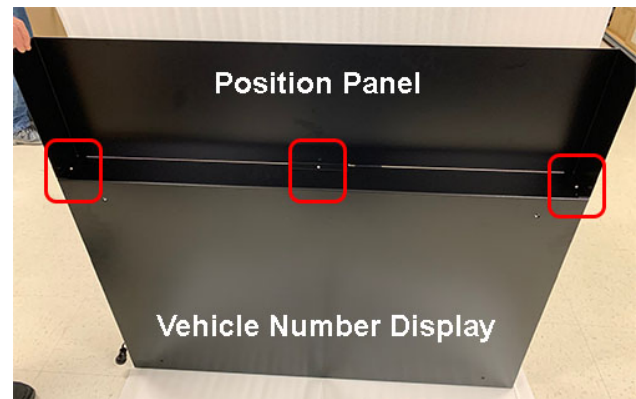

Figure 5 - Interconnect Cable connected   7

STEP 3 - Connect the power

Power is supplied to the Lap/Time Display and Vehicle Position Display through separate NEMA watertight junction boxes located as shown on Figure 2 and Figure 3. On the Lap/Time Display, 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.
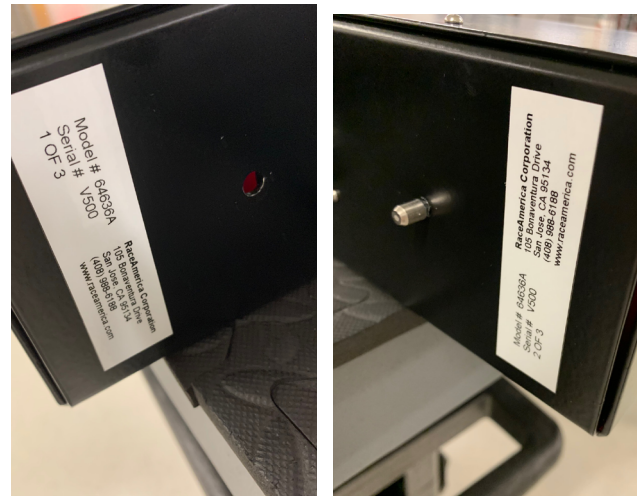
Conduit can be attached directly to the NEMA watertight power box located on the top of Vehicle Position Display #1 behind the Position Panel.

To install AC power, attach a 3/4in conduit to the NEMA watertight junction box and slide the power wire through the and connect power as follows (Figure 7):

AC power connection label:

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

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

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.

Figure 6 - Enclosure alignment pins

Figure 7 - Cover removed from NEMA watertight junction box.

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 USB 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 install 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 polycarbonate 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.