



The Leader in Event Critical Timing Electronics

Wireless Lap Counter Owner's Manual

Model 6672CW -Rev A



RaceAmerica Corporation
P.O. Box 3469
Santa Clara, CA 95055-3469
(408) 988-6188
<http://www.raceamerica.com>
info@raceamerica.com

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LIMITED WARRANTY

To the original purchaser of this RaceAmerica product, RaceAmerica warrants it to be in good working order for a period of ninety (90) days from the date of purchase from RaceAmerica or an authorized RaceAmerica distributor. Should this product malfunction during the warranty period, RaceAmerica will, at its option, repair or replace it at no charge, provided the product has not been subjected to misuse, abuse, or alterations, modifications, and/or repairs not authorized by RaceAmerica.

Any product requiring Limited Warranty service during the warranty period should be returned to RaceAmerica with proof of purchase. If return of merchandise is by mail, the customer agrees to insure the product, prepay shipping charges, and ship the product to RaceAmerica, Inc., 280 Martin Avenue Unit 1, Santa Clara, CA 95050.

ALL EXPRESSED AND IMPLIED WARRANTIES FOR THIS PRODUCT ARE LIMITED IN DURATION TO THE ABOVE NINETY DAY PERIOD.

UNDER NO CIRCUMSTANCES WILL RACEAMERICA BE LIABLE TO THE USER FOR DAMAGES, INCLUDING ANY LOST PROFITS, LOST SAVINGS, OR OTHER INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OF, OR INABILITY TO USE, SUCH PRODUCT.

THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH MAY VARY FROM STATE TO STATE.

PRODUCT OVERVIEW

The Wireless Lap Counter Display (6672CW) is a microprocessor controlled display based upon the 7-segment format display digit using the latest technology Ultra-Bright LEDs. The Lap Counter Display receives display instructions via an internal wireless data link from a Keypad/T-Link Wireless unit as to how to change the display. The Lap Counter Display utilizes two digits (fifteen inches high) to display a lap number. The display will display one or two digits (1 to 99 plus 00 and Blank). The Keypad/T-Link wireless unit sends instructions to the display to increment up one digit, increment down one digit, clear the display, store the display number and recall a stored number.

The display is viewable at wide angles and in conditions from full sun to total darkness without adjustment. The display is easily hung or bolted to a frame for viewing up to 660 ft away.

NOTE: THIS PRODUCT USES 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

Each Lap Counter Display package includes:

- 1 - Lap Counter Display enclosure (6672CW)
w/internal wireless transceiver (4520C)
- 1 - T-Link Wireless unit (5862C)
- 1 - Keypad with 15ft cable (05-2558)
- 1 - T-Link battery charger (5890A)
- 1 - Power Patch Cord (6510B)
- 1 - Owner's Manual

AVAILABLE OPTIONS

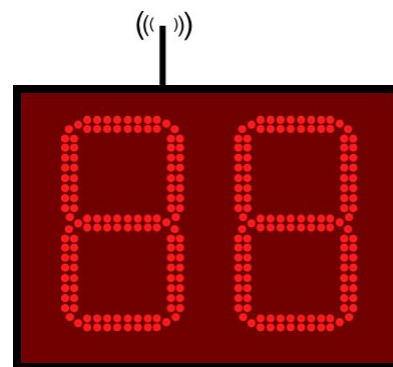
- 6502A AC Adapter
- 01-6672 Display only (2nd unit)

POWER REQUIREMENTS

The Lap Counter Display operates on any 12VDC power source. Average power consumption is approximately 0.5 ampere. Maximum voltage should never exceed 13.2VDC at the Power Input Connector. An automotive battery is ideal. Do not operate from battery chargers or an operating automobile.

SPECIFICATIONS

Model	6672CW
Display Type:	7-Segment
Digit Height (inches)	15
Number of Digits:	Two
Dimensions (inches)	29W x 22.5H x 4D + 9" antenna
Mounting	Mounting tabs on each corner
Housing	Powder Coated Steel
View Filter	Red transparent acrylic
View Range (ft)	660
Data Transmission	T-Link 900Mhz
T-Link battery life (Hrs)	24



DISPLAY SET-UP

The Lap Counter Display has mounting tabs with bolt holes on each corner. Power is connected on the back panel.

RaceAmerica has tried to make use of the display as simple as possible, however, it is strongly suggested that the system be set up and operation familiarity be gained prior to actual use. This can be done virtually anywhere.

STEP 1 -

Familiarize yourself with the components. Screw the antennas onto the connectors at the Display and T-Link. The Power Patch Cable connects to a 12VDC source for the display.

STEP 2 -

Connect the keypad cable to the T-Port connector on the T-Link. The T-Link operates best when it has line of sight to the display. The internal battery should be charged prior to use.

STEP 3 -

Power is supplied to the display through the 12VDC power input alligator clips or optional AC adapter unit. Connecting power to the display begins the power-up self-test mode.

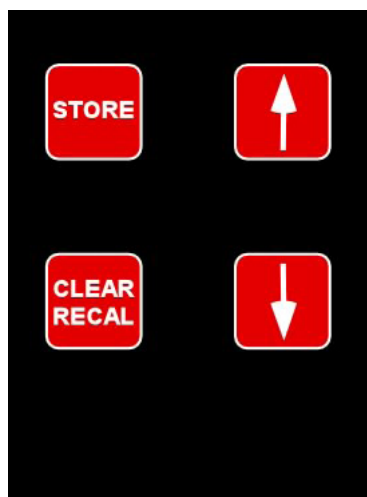


Figure 1 - Keypad

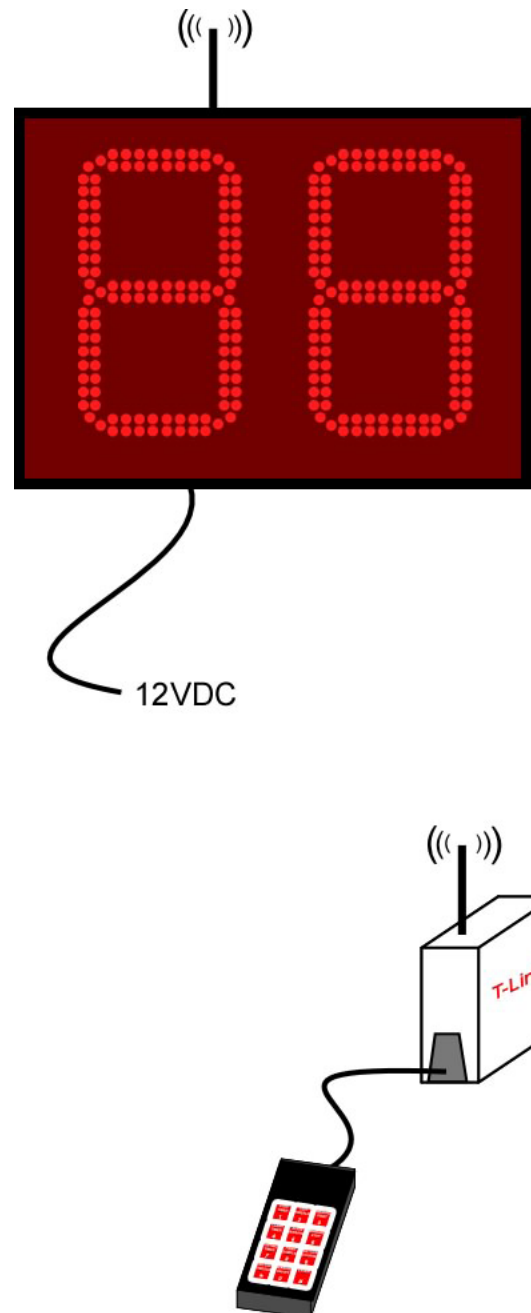


Figure 2 - Display, T-Link and Keypad setup

POWER-ON SELF-TEST

Connect power to the display; it begins an internal self-test and an external visual check of the display elements.

The self-test begins by stepping through each segment of all digits, one segment at a time and then the revision level of the code (eg [A0]) running in the microprocessor is displayed for about five seconds, then the display blanks out.

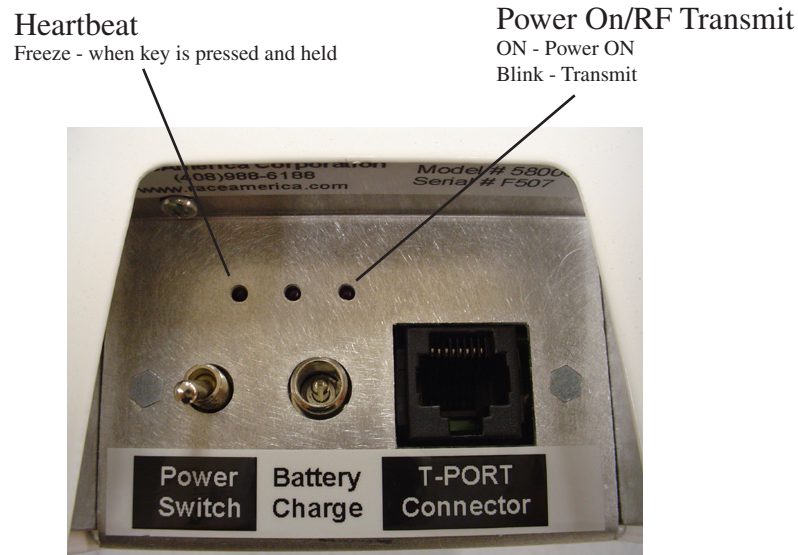


Figure 3 - T-Link power, external connections and status LEDs

Turn on the T-Link; **[bx]** is displayed indicating the battery level in the T-Link (1 thru 9 plus - (dash) where each digit represents 10% thru 100% (dash) charged, respectively); then the display blanks out. To check the battery level again, cycle power on the T-Link unit again.

The T-Link will show transmit status with the LED panel; see Figure 3 for details.

DISPLAY OPERATION

The Lap Counter is activated by pressing and releasing the buttons on the keypad. Press the **UP/DOWN ARROW** keys to change the count one lap; press and hold either button to move rapidly to the desired lap count. Press the **[CLEAR]** key to reset the count on the display to zero. When counting up, the lap counter is capable of displaying from one to one hundred laps. The display will show **[99]** then **[00]** and then **[--] CLEAR** in a circular counting loop.

The **[STORE]** key can be used to store a beginning lap count (default is 30) for **[RECAL]** before the start of another race; if a different count is desired, use the **UP/DOWN ARROW** keys to select the desired lap count to store, press **[STORE]** to save the count, the display will flash once indicating a stored value; The stored count can be recalled later by pressing **[RECAL]** once to clear the display and again to display the stored count.

MAINTENANCE

The Lap Count Display requires minimal maintenance.

To clean the red lens, use a non-abrasive cleaner on 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 wet cloth being careful not to press when wiping to avoid scratching the red lens material.

Keep the T-Link battery charged.

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.