



The Leader in Event Critical Timing Electronics

***Model 4101/4102
Standalone
Stage Light Maxi-Dots***

Rev A

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

Copyright 2006 RaceAmerica, Inc.

Table of Contents

LIMITED WARRANTY 3

PRODUCT OVERVIEW 4

PACKAGE COMPONENTS 4101..... 4

PACKAGE COMPONENTS 4102..... 4

LOCAL REQUIREMENTS 4

PRODUCT SPECIFICATIONS 4101..... 4

PRODUCT SPECIFICATIONS 4102..... 4

POWER REQUIREMENTS 4

PRODUCT SET-UP 4101..... 5

PRODUXT SET-UP 4102..... 5

POWER-ON..... 5

STANDALINE STAGING LIGHT SYSTEM DIAGRAMS 6

MAINTENANCE 7

SUPPORT AGREEMENTS 7

RACEAMERICA

T i m i n g S y s t e m s

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

Model 4101/4102 Stage Light LED Maxi-Dots are a switch controlled system based upon the RaceAmerica infra-red beam technology using the latest technology Ultra-Bright LEDs.

The LED Maxi-Dot lights are switched on/off based on the interruption of an infra-red beam(s) in the dual beam units; either one or both beams can be blocked illuminating their respective LED Maxi-Dots.

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 A CAMERA FLASH.

PACKAGE COMPONENTS 4101

- 1 - 3221W Stage LED Maxi-Dot
- 1 - 5158D Track Sensor
- 1 - 5058B Beam Emitter Unit
- 1 - 05-4101 Interconnect cable with power cord
- 1 - Power Patch Cord
- 1 - Owner's Manual

PACKAGE COMPONENTS 4102

- 2 - 3221W Stage LED Maxi-Dots
- 1 - 5163R Dual Beam Track Sensor
- 1 - 5063R Dual Beam Emitter Unit
- 1 - 05-4102 Interconnect cable with power cord
- 1 - Power Patch Cord
- 1 - Owner's Manual

Model 4102 Available Options:

- Custom cable lengths
- 6501A AC Power Adapter
- 6070B Blow Mold Storage Case
- 5050/5060 Extended range emitters
(75 ft/2250 ft respectively)

LOCAL REQUIREMENTS

Additional items required to operate the 4102 Stage lights and options:

- 1 - 12VDC automotive battery for each unit
- 4 - 'C' batteries for 5063R Dual Beam Emitter
- 4 - 'AA' batteries for 5058S

Other options:

AC power source for AC adapters

PRODUCT SPECIFICATIONS 4101

Display Type:	LED Maxi-Dot
Maxi-Dot size:	Four inch diameter
Number of beams:	Two
Beam spacing	Fifty feet
Housing:	Powder coated aluminum
Maxi-Dot Filter:	Red Transparent acrylic
Maxi-Dot View Range:	1000 ft in full sun

PRODUCT SPECIFICATIONS 4102

Display Type:	LED Maxi-Dots
Maxi-Dot size:	Four inch diameter
Number of beams:	Two
Beam spacing	Fifty feet
Housing:	Powder coated aluminum
Maxi-Dot Filter:	Red Transparent acrylic
Maxi-Dot View Range:	1000 ft in full sun

POWER REQUIREMENTS

Each Stage light unit can be powered by a 12VDC automotive battery or any 12VDC power source capable of 0.85 ampere current load maximum. Average power consumption is approximately 0.4 ampere. Maximum voltage should never exceed 13.2VDC at the Power Input Connector.

PRODUCT SET-UP 4101

The Stage Light unit is designed to be flexible in application. The LED Maxi-Dot are 10 feet of cable from the power connector so they can be mounted using the 1/4-20 PEM nut as desired; the track sensor is on the other end of a fifty foot cable so it can be placed as appropriate.

In operation, when the beam is blocked, the Maxi-Dot will illuminate.

STEP 1 - Mount the Dots

Mount the dots per the installation diagram and the specific application. A camera tripod or pole may work satisfactorily.

STEP 2 - Position the Beam

Position the Emitter/Sensor Beams on the track surface up to fifty feet apart and facing each other. Connect the cable between the dots and beams.

STEP 3 - Connect the Power

Power is supplied to the system at the power connector. The system is ready to confirm alignment and then use as intended.

PRODUCT SET-UP 4102

The Stage Light units are designed to be flexible in application. The LED Maxi-Dots are separated by 20 feet of cable so they can be mounted using the 1/4-20 PEM nut as required; the track beams are on the other end of a fifty foot cable so they can be placed as appropriate.

In operation, when a beam is blocked, a light will illuminate. Each Maxi-Dot corresponds to one beam; either one or both can be blocked and the respective Maxi-Dots will illuminate.

STEP 1 - Mount the Dots

Mount the dots per the installation diagram and the specific application.

STEP 2 - Position the Dual Beams

Position the Dual Beams on the track surface up to fifty feet apart and facing each other. Connect the cable between the dots and dual beams showing the direction of flow. Since the beams operate independently, the direction of flow can be reversed to move the cable to the opposite side of the track.

STEP 3 - Connect the Power

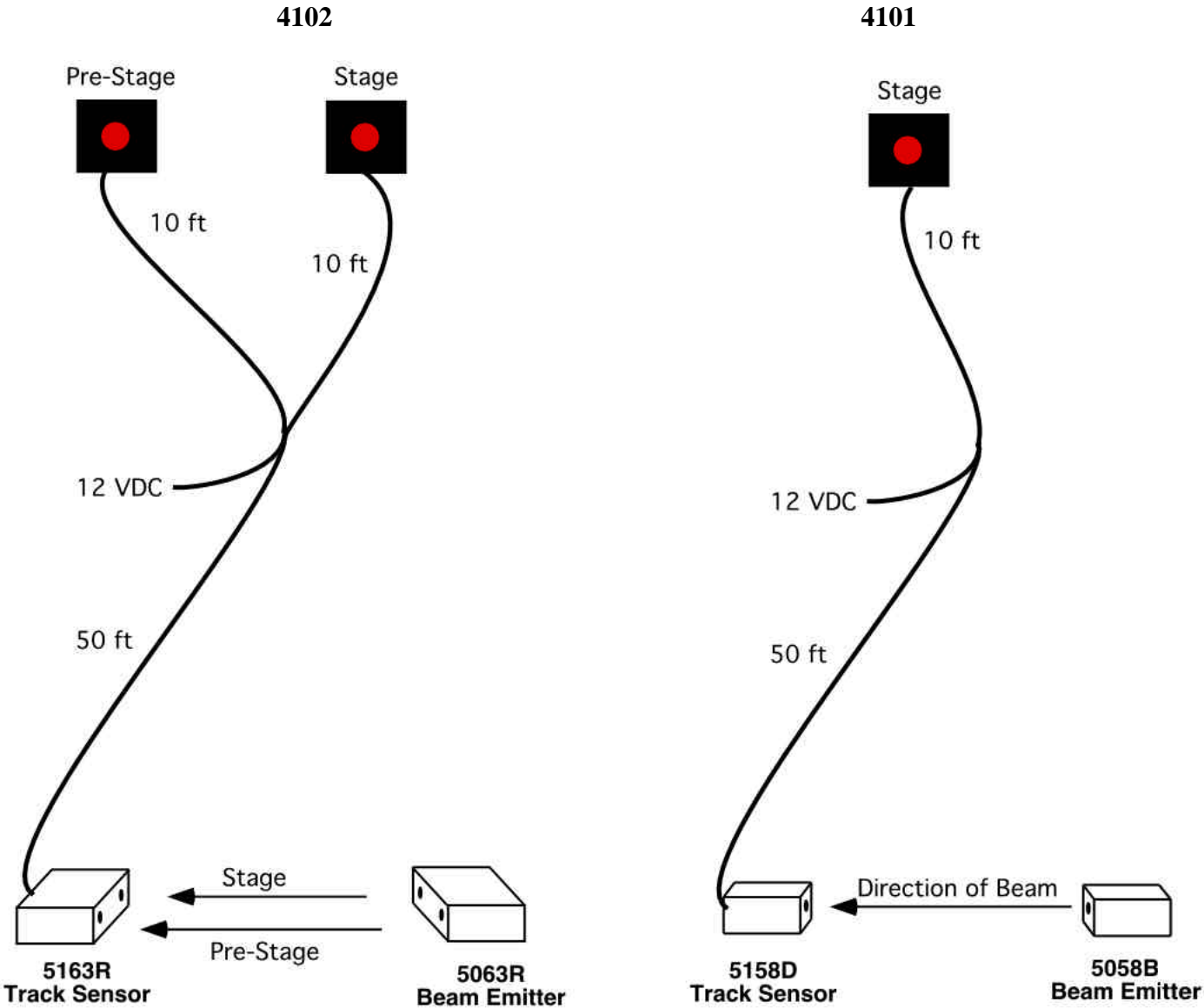
Power is supplied to the system at the power connector. The system is ready to confirm alignment and then use as intended.

POWER-ON

When the power source is connected, the system becomes immediately active and available.

The lights should be off when the dual beams are aligned and the beams unblocked. Each LED Maxi-Dot should illuminate when their respective beam is blocked. Each beam operates independently.

STANDALONE STAGING LIGHT SYSTEMS



The system operates fully unattended; when a beam is blocked, a LED Maxi-Dot illuminates.

MAINTENANCE

The Standalone Staging Lights do not require any maintenance to maintain proper operation. If the system is to be used in rainy or wet conditions, it is suggested to dry it out well after use.

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 dots. If the red lens is soiled with mud or dirt, gently remove the grit using a soft cloth being careful not to press when wiping to avoid scratching the red lens material.

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.