

# Karting Australia Starting Light Owner's Manual

Model 6790K - Rev B1



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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

The Race Track Starting Light is a microprocessor controlled FIA-style overhead starting light system using the latest technology Ultra-Bright LEDs. The display is viewable at wide angles and in conditions from full sun to total darkness without adjustment.

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 FLASHBULBS ON CAMERAS.

#### PACKAGE COMPONENTS

Each Race Track Starting Light package includes:

- 1 Start Light Display (2 row by 5 lamp)
- 1 6729 Hand Controller
- 1 Owner's Manual

# **POWER REQUIREMENTS**

The Race Track Starting Light powered by a 110VAC/230VAC AC Power Adapter. See POWER CONNECTIONS in this manual for wiring connections.

# THEORY OF OPERATION

The Race Track Starting Light is a standalone STarting Lights system offering pre-programmed FIA-style starting sequences controlled by the tower via the race track's network or from a handheld pushbutton from the gantry. The Race Track Starting Light also offers manual control of solid red, green or yellow lamps as well as flashing red, green, or yellow lamps.

The handheld pushbutton can initiate a

sequence selected by the tower. The pushbutton can also abort the current running sequence and reset the starting light and clock..

## START LIGHT SET-UP

The Race Track Starting Light is designed to mount using six 3/8in dia. mounting PEMs located on the backside of the start light. Mounting drawing is provided in this manual.

Cabling is provided to control the start light and interconnect the track's IP network to the start light. Wiring is illustrated with and without the 6632SCRT Race Track Clock.

## STEP 1 -

Familiarize yourself with the components pictured in this manual and how they interconnect. Note the larger 16-conductor connector on the bottom side of the start light to connect the hardwired hand controller after power is installed and prior to powering on the start light.

#### STEP 2 -

Power is connected to the Start Light through an integrated waterproof junction box. Power installation is covered later in this manual.

## **POWER-ON SELF-TEST**

When power is applied to the start light, the power on selftest begins testing the internal control circuitry and providing a visual display for inspection. The selftest begins by illuminating each LED color lamp one at a time then advancing to the next lamp. The selftest continues by illuminating each LED lamp adding one additional lamp until all lamps are illuminated. The selftest goes blank and is ready for use.

## HAND CONTROL FUNCTIONS

The Hand Controller has six pre-programmed function buttons to control the start light as follows:

Standing Start - Each RED lamp will illuminate from left to right until all five columns of RED lights are illuminated.

Warmup Lap - All YELLOW lights will flash off and on.

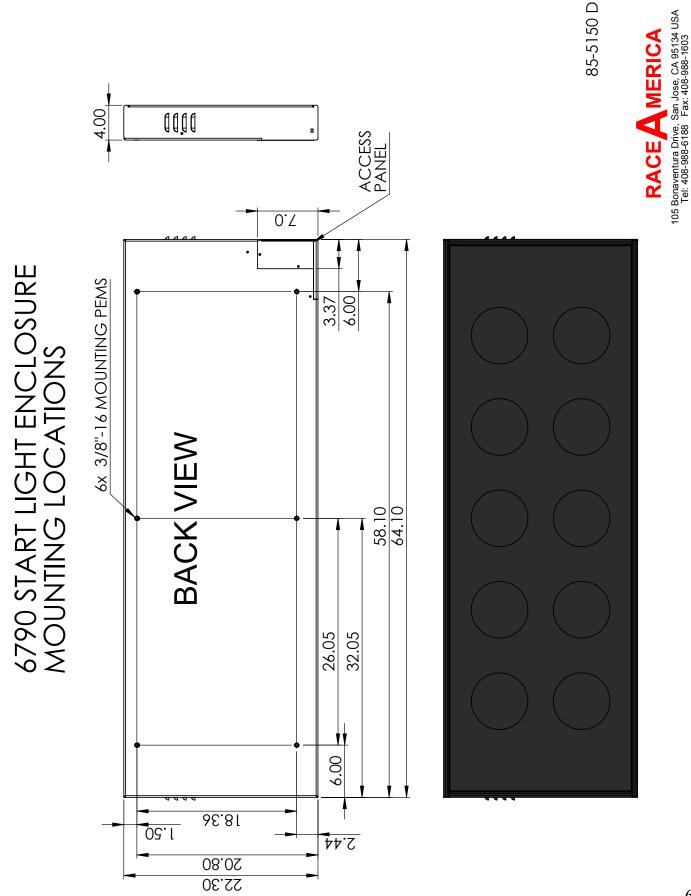
Rolling Start - All RED lights will illuminate at the same time.

Abort Start - All RED lights currently illuminated will freeze on and the YELLOW lights will illuminate.

Clear - All lights will turn off leaving the start light blank.

Yellow- Displays all yellow flashing.





#### POWER CONNECTIONS



Figure 1
Power Box Cover on rear lower right corner of enclosure



Figure 2
Exposed Power
Box with rear panel removed.

Power is supplied through the POWER INPUT box located on the backside bottom left rear corner. Models are available powered by either 110VAC/230VAC autoswitching.

Remove the Power Box access panel located at the lower right corner, rear of the enclosure to expose the Power Box (Figure 1). Loosen the four corner screws to expose the terminal strip connections (Figure 2).

AC power can be connected with an AC power cord using the watertight compression gland shown in Figure 3 using a standard 3-conductor power cord.

L = live or hot side of AC power

N = neutral side of AC power

G = ground lead of AC power

Power can also be conduit connected by installing a 1/2in (Figure 4) or 3/4 (Figure 5) by removing the compression gland. The 3/4" conduit fixture is connected to the matching hole in the cabinet metal. The compression gland can remain in place to provide a watertight connection.



Figure 3 AC power gland



Figure 4 AC power 1/2in



Figure 5 AC power 3/4in

#### **MAINTENANCE**

The Start Light requires minimal maintenance To clean the front lens, use a non-abrasive cleaner on a soft cloth. This will keep the protective lens clean and maximize visibility and clarity of the lights. If the front 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 polycarbonite material.

#### **SPARE PARTS**

RaceAmerica recommends a spare handheld pushbutton. 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.