RACE AMERICA

INNOVATION. TECHNOLOGY. RELIABILITY.

4525 Network Antenna

4525IPA1W/Z and /4525IPA2W/Z
4525IPA3W/Z and /4525IPA4W/Z

Rev A.1

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PRODUCT OVERVIEW

RaceAmerica wireless electronic flagging systems have a design limit of 16 lights on track while RaceAmerica IP network based electronic flagging extends to 32 lights on track. Implementing the model 4525 Network Antenna product combines extending the wireless electronic flagging to 32 lights on track. The 4525 handles the management of two sets of wireless optimizer codes, each with up to 16 lights each, connected to the PC through the track's IP network.

HOW IT WORKS

Combining two 4525 Network Antenna units to the existing lights provides up to 32 wireless lights on track. Each 4525 connects to the track's IP network and wireless communications to the existing lights using the existing wireless Optimizer Code. The second 4525 also connects to the track's IP network and a new set of up to 16 lights on a new wireless Optimizer Code. The two 4525 units handle separate connection between the lights with the matching assigned Optimizer Code and the PC software.

ModelS 4525IPA1x and 4525IPA3x communicates as the LOWER 16 lights while models 4525IPA2x and 4525IPA4x communicates with the UPPER 16 lights. The 4525 design avoids the two wireless Optimizer Codes from interfering with each other and manages network communication to avoid packet collisions.

PACKAGE COMPONENTS

Each 4525 package includes:

1 - 4525 Network Antenna (TSL A.x, C.x)
4525IPA1W 'Lower 16' use -or-
4525IPA2W 'Upper 16' use
1 - 4525 Network Antenna (TSL B.x, DSF)
4525IPA3W 'Lower 16' use -or-
4525IPA4W 'Upper 16' use

PRODUCT SPECIFICATIONS

Model 4525IPA1xW

Frequency	900MHz band
Power	9-12VDC
Antenna Connection	RPSMA
Max Operating Range	-20ºF to 120ºF

Model 4525IPAxZ

Frequency	2.4GHz band
Power	9-12VDC
Antenna Connection	RPSMA
Max Operating Range	-20ºF to 120ºF

AVAILABLE OPTIONS

Power (AC)	6512C/6512D
Power (DC)	6510D
High Gain Antenna	4591B (900MHz)
	4592B (2.4GHz)

PC SOFTWARE CHANGES

TrackSafetyEX and TrackSafetyDigitalEX Electronic Flagging System PC software can be used with the 4525 product line. TrackSafety EFS software does not have a network communications option and therefore is not compatible with the 4525 product line.

Figure 1 - 4525 Units

On the SYSTEMS SETTINGS screen, NETWORK DATACOMM is selected in place of WIRELESS NETWORK. The software communicates through the track's IP network to the 4525 units.

Onscreen, LOWER 16 lights appear as IDs 1Green through 4Yellow while UPPER 16 lights appear as 5Green through 8Yellow, same as usual when 32 lights are on track. On the CONFIG IDS screen, LOWER 16 lights appear as normal while UPPER 16 lights appear as IDs 1Green through 4Yellow and flashing to differentiate the two sets of lights. On track, LOWER 16 lights display their ID as 1Green through 4Yellow solid on. Since the UPPER 16 lights are essentially a second set of 16 lights, they display their ID as 1Green through 4Yellow also.

NOTE: During track setup and light placement, it is suggested to enable onlu one 4525 at a time until all lights are placed on track and the software is configured to match.

The Spare IDs are disabled and not used with the 4525 units. Any attempt to change an ID to a spare ID is ignored by the 4525's. As a substitute to handle spares, one of the valid IDs in the LOWER 16 and one of the valid ID's in the UPPER 16 can be used as spare ID's then disabled from use on the CONFIG ID screen.

IDs can be changed within the same LOWER 16 and UPPER 16 ID's. Attempts to change an ID from the LOWER 16 to the UPPER 16 or visa versa are ignored by the 4525's.

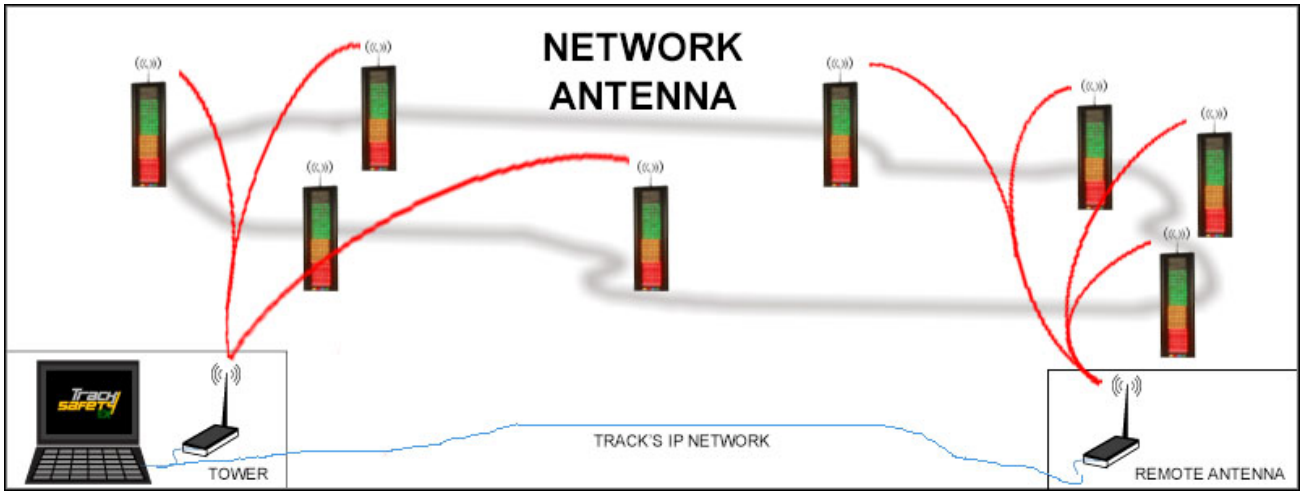

Figure 2 - Typical Track Setup