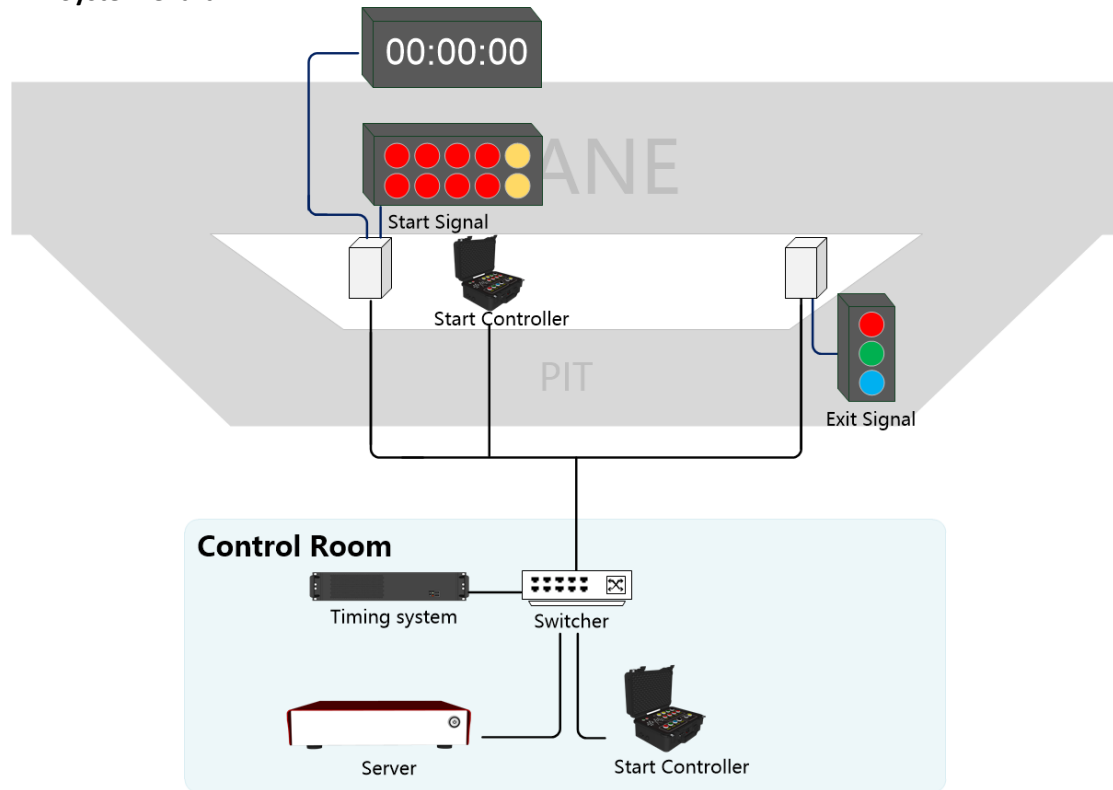# Karting Signalling System

The system is based on the realization of signal light and departure light controlling to expand the flag function. It uses high brightness LED components to achieve the maximum visual angle and high brightness display. The system uses the network architecture of TCP/IP protocol to facilitate future expansion.

1. System Chart

System structure description

All signal lights are centrally controlled by the command center, so as to avoid flag leakage and mistake by the referee in the event. The system architecture gets rid of the complex mode of PLC BUS, builds a new fiber ring installation network system, and controls the front-end signal light screen and the start bridge signal light screen through the TCP/IP protocol. The working state of the front-end equipment can be detected through the network.

2. Specification for products
2.1 Server

Product	Specification
Start Signal Control System Server	Type: KS-MRSG-SERVER Size: 170x150x35 (mm) Weight: 1.0 KG Power: 110~240V AC Port: Network Port*2, DP*1, VGA*1 Functions: ◆ Logic control of start signal light.

All info of the system is collected and controlled by the server installed in the control room.

The server adopts unattended operation mode, which can run by 7*24*365. And the system adopts passive heat dissipation mode, which can support various working conditions.

In addition to meeting the basic start signal light control, the server also supports the connection to the mainstream timing system, and can be easily extended to connect to the timing screen, exit signal light and other external devices.
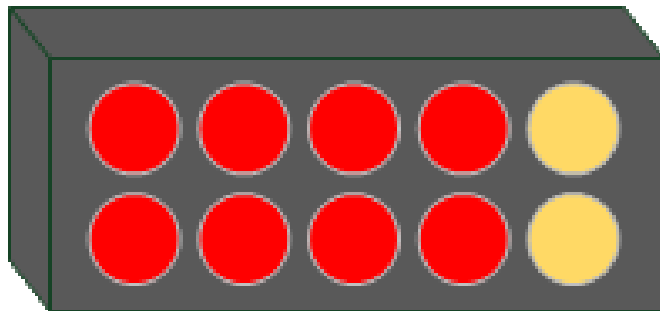
2.2 Start controller

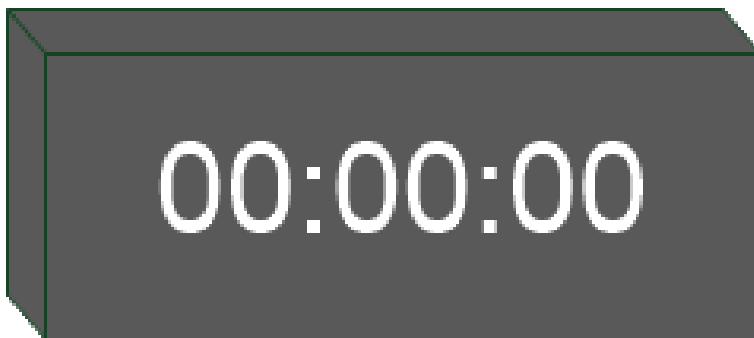| Product	Specification
Start controller	Type: KS-MRSG-PCTL Size: 410x330x180 (mm) Weight: 4.6 KG Communication: Network Functions: ◆ Signal control: One-key to switch the signal lights. ◆ Start signal control: static start, rolling start and other start operations. ◆ Terminal signal control: control to display checkered flag on the terminal screen. ◆ Buzzer: Press the corresponding button can make a horn sound at any time.

2.3 Start Signal Light

Product	Specification
Start Signal Light	Cabinet size: 1520x720x120(mm) Material: 2.0 aluminum Color: black sand Waterproof: IP65 Maintenance: Back open for maintenance Hoisting hole: 4 Communication: Network LED Module Type: P10 outdoor full-color MCD brightness: 5500~6500 Waterproof: IP65 Functions: ◆　Control: Special control software, docking with TAG Heuer system, and serial communication. ◆　Start signal control: static start, rolling start and other start operations.

2.4 Timing Screen

Product	Specification
Timing Screen	Cabinet size: 1520x720x120(mm) Material: 2.0 aluminum Color: black sand Waterproof: IP65 Maintenance: Back open for maintenance Hoisting hole: 4 Communication: Network LED Module Type: P10 outdoor full-color MCD brightness: 5500~6500 Waterproof: IP65 Functions: ◆ Control: Special control software, docking with TAG Heuer system, serial communication and can display real-time time, match time and checkered flag as required.

Kazo Vision
WEB: http://www.kazovision.com   MAIL: sales@kazovision.com

2.5 Exit Signal Light

Product	Specification
Exit Signal Light	Cabinet size: 400x880x120(mm) Display: Double-side Material: 2.0 aluminum Color: black sand LED Module Type: P10 outdoor full-color MCD brightness: 5500~6500 Waterproof: IP65 Functions: ◆ Control: Special control software, docking with TAG Heuer system, and serial communication.