



## Scoring & Timing Solution for Swimming



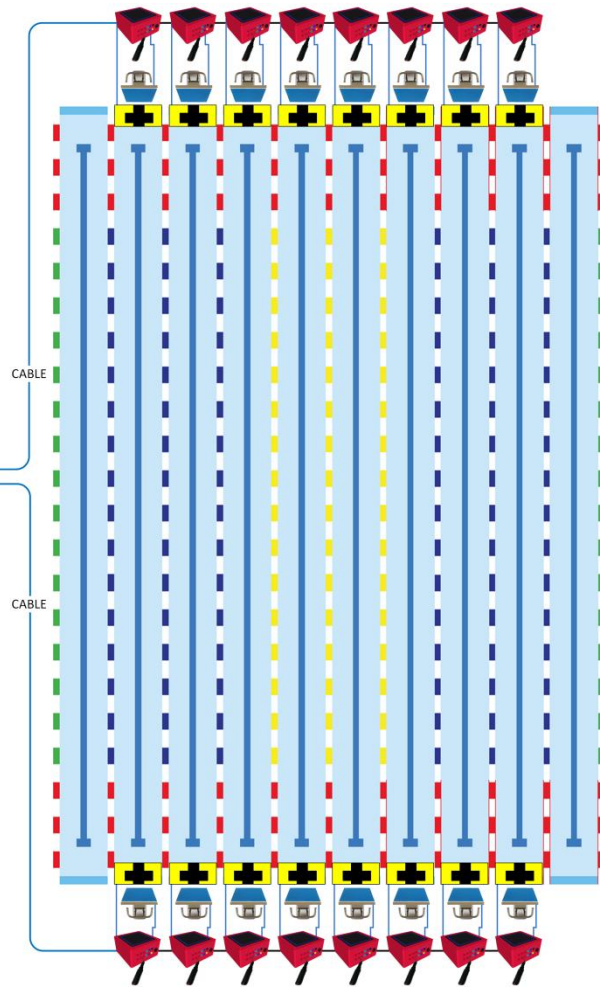
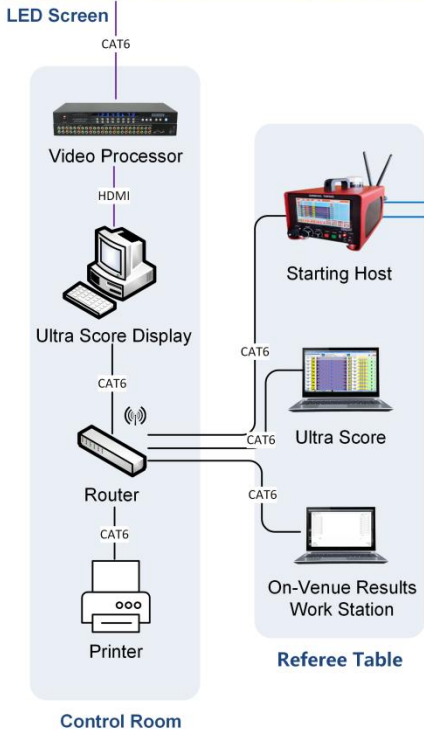
This scheme is a standard scheme for LED display screen of indoor stadiums and gymnasiums, which is applicable to international standard swimming competitions, supports the use of 8-lane regular swimming pool, and can be expanded to 10 and 12 lanes. It can complete many functions such as game timing, score display, temporary notice and advertisement broadcast, player information display, live broadcast, score superposition and so on. It is an ideal choice for most of small and medium-sized stadiums.

The swimming timing competition system of this scheme is a set of new, low-cost, high-efficiency, standardized interface and convenient stadium timing and scoring system. The equipment configuration can meet the technical standard requirements of swimming competition for the whole set of swimming timing equipment and score processing. In the process of design and R & D, the product refers to the international and domestic requirements for swimming automatic timing system, and fully meets the following specifications:

- FINA SWIMMING RULES 2021
- SWIMMING COMPETITION RULES 2019-2022 (CHINA SWIMMING ASSOCIATION)
- ISO9001 CERTIFICATION

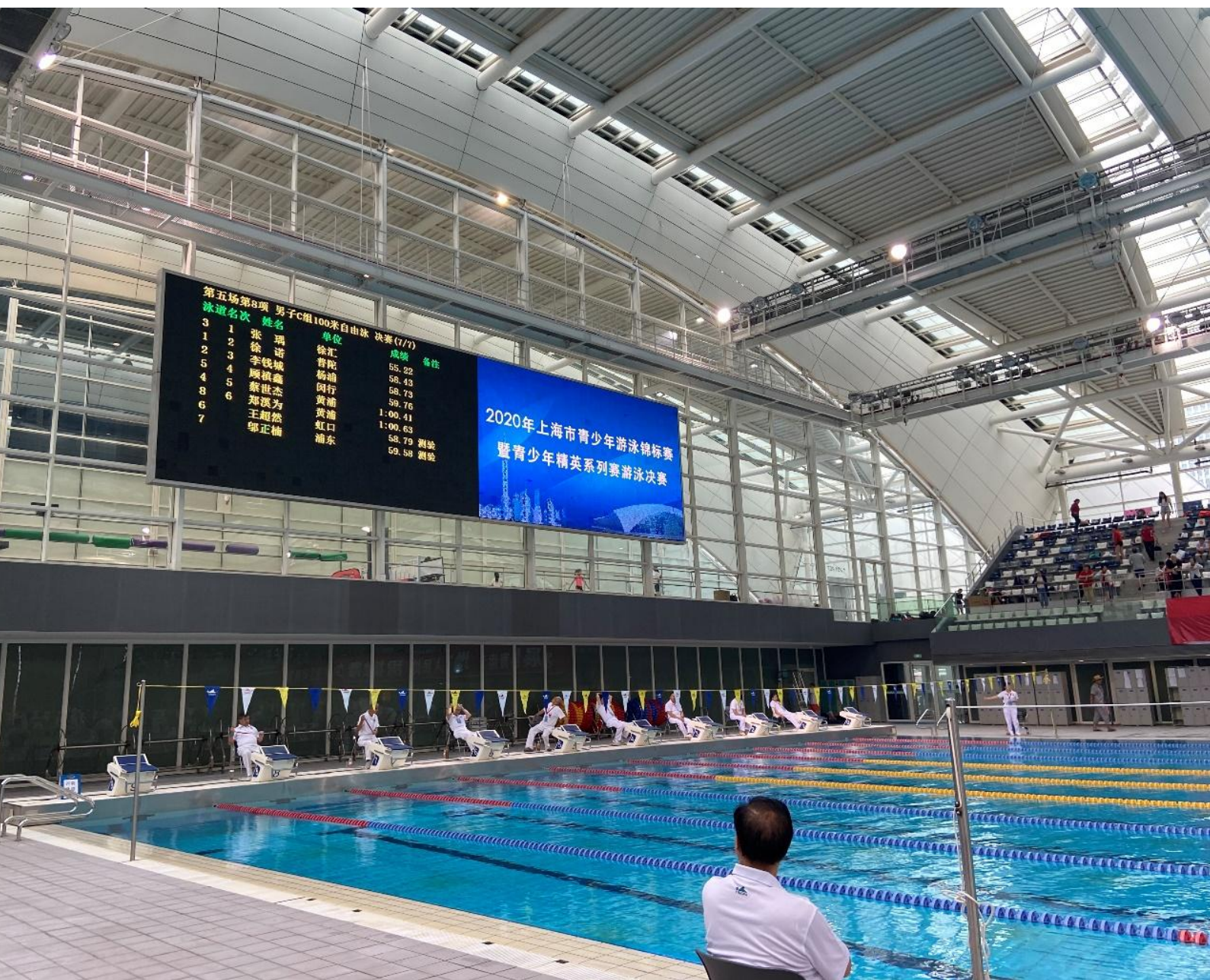
# 1. System Wiring Diagram

400 M MEDELEY - MEN HEAT 2 OF 4						
		WR 4:03.84	CR 4:09.59	ER 4:06.16		
0	Nikola DIMITROV	BUL	34.30	1:36.71	7	
1	Alexander KUDASHEV	RUS	25.30	1:32.14	1	
2	Alphan ORNEK	TUR	34.96	1:35.85	6	
3	Jeremy Marc DESPLANCHES	SUI	33.10	1:33.37	3	
4	Christoph MEIER	LIE	35.73	1:33.41	4	
5	Diogo Filipe CARVALHO	POR		DNS		
6	Pavel JANECEK	CZE	34.36	1:32.92	2	
7	Bogdan KNEZEVIC	SRB	35.43	1:34.83	5	
8	Uladzimir ZHYHARAU	BLR	36.79	1:37.37	9	
9	Anton GONCHAROV	UKR	36.32	1:37.24	8	



### 1.1 System Description

- 1) The stadium shall be equipped with 1-2 synchronous LED display screens, and the screen shall be connected with the control computer through LED data.
- 2) In addition, two computers are equipped with Swimming Timing & Scoring software and swimming score processing workstation respectively, which are used for competition arrangement, competition timing and scoring, contestant score ranking and contestant information on-screen display.
- 3) A LAN is set up in the stadium, and all three computers are connected to the network.
- 4) The timing host is connected with the game timing and scoring computer through USB cable. The timing information during the game will be transmitted back to the timing and scoring computer in real time and displayed on the screen.
- 5) The timing control panel can monitor the competition data in real time, issue orders, and publish the real-time competition results through the network.
- 6) Both sides of each lane are equipped with a lane module and a blind watch for manual timing.



## 1.2 Main Functions and Features

- 1) High precision timing and scoring: it can record the competition results and judge the ranking.
- 2) Real time timing and scoring: the competition timing and scoring information and athletes' score can be transmitted to the LED display screen in real time.
- 3) Simple referee operation interface: the referee can not only use the keyboard and mouse to control the competition, but also connect other external devices to operate.
- 4) Professional scoreboard display: Scoring and timing operation, layout of scoreboard can meet international game rules.
- 5) Synchronously print the competition results and competition ranking.
- 6) Remote referee table and timing table: the referee operation computer and timing computer can be placed anywhere near the court.
- 7) The swimming timing competition control system is applicable to the swimming pool with a length of 50 meters or 25 meters and a lane width of 2.5 meters. Be able to complete the timing of single event or relay competition in 50m, 100m, 200m, 400m, 800m and 1500m events.
- 8) The equipment supports multi-point simultaneous click operation such as starting host, starting tablet and computer control host, and can automatically record results and judge ranking. The timing resolution reaches one thousandth of a second, and the double-click error does not exceed one thousandth of a second. During the competition, after each athlete touches the board, the printer can synchronously print the results and the ranking of the athlete this time. If necessary, the segment and final results can be reprinted after the competition.
- 9) It has the function of correcting and dealing with fouls.
- 10) During the competition, the competition clock and the results of swimmers in each lane can be transmitted to the display screen in real time, and the effective results can be displayed to one hundredth of a second.
- 11) It has the jump detection function and detect the athlete's departure reaction time.
- 12) The control terminal can release the real-time results of each team member to each handheld monitoring terminal through WiFi.

### 1.3 Product Configuration

Product	Type	Qt.
<b>Timing and Scoring System for 8-lane Swimming Competition</b>		
Ultra Score	KS-FL16-V2.0	1
Starting Host	KS-FL16	1
Decoding Module	KS-FL16-L	16
Start Push Button	KS-YM202	32
Starting Block	KS-CF01	8
Touchpad	KS-CM01	16
Starting Block Storage Bracket	KS-CF01-1	1
Touchpad Storage Bracket	KS-CMC-1	2
Meet Management Server	KS-MMS-MINI	1
PC	/	2
LED Display	/	1
Video Processor	/	1
Printer	/	1
Switcher	/	1

## 2. Specification for Products

### 2.1 Ultra Score Software

Products	Details
Ultra Score	Support: swimming English version Functions: <ul style="list-style-type: none"><li>◆ The referee operates on a computer.</li><li>◆ High precision timing and scoring: it can record the competition results and judge the ranking</li><li>◆ Timing and scoring comply with FINA rules.</li></ul>

男子自由泳100米					1/4
Lane	Rank	Name	Team	Time	Remarks
3		姚海翔	梦翔体育	1:20.34	
4		俞凌飞	CSI	1:34.34	
5		Leon Fan	RSC		

## 2.2 Starting Host

Products	Details
Starting Host	<p>Type: KS-FL16 Starter size: 320 x 220 x 170mm (w / O connection plug) Microphone size: 118 x 25 x 80mm Microphone cable length: 4m Weight: 6.4kg (excluding charger &amp; microphone) Connection: microphone, starting host, flashing light, speaker Functions:</p> <ul style="list-style-type: none"><li>◆ Swimming starting host, which is connected with the system, battery and horn.</li><li>◆ Control software through wireless and wired network connection.</li></ul>





### 2.3 Decoding Module

Products	Details
Decoding Module	<p>Type: KS-FL16-L</p> <p>Power supply: Starting Host</p> <ul style="list-style-type: none"><li>◆ Interface: compatible with international brand (omega / Colorado) departure platform, touchpad and start push button.</li><li>◆ Connection mode: connect in series regardless of number (1-10)</li><li>◆ The 8-lane data line is connected to the decoding module.</li><li>◆ Functions:</li><li>◆ It is used to connect departure platform, touchpad, start push button, start speaker, underwater trip alarm, terminal controller and other equipment to realize the control and data reading functions of communication controller for each equipment.</li></ul>



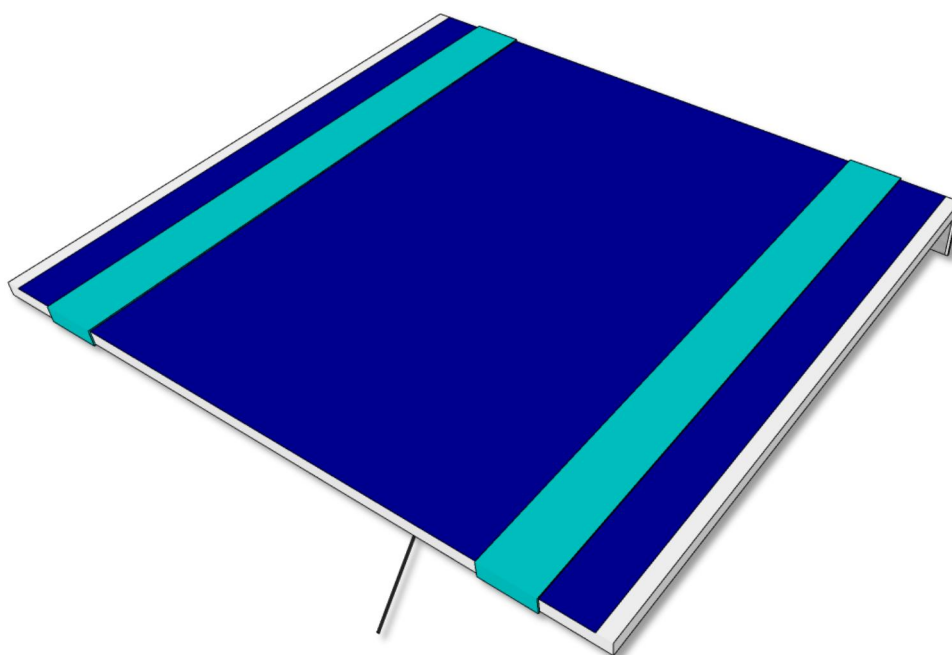
## 2.4 Start Push Button

Products	Details
Start Push Button	<p>Type: KS-YM202</p> <p>4 sets of start push button per lane.</p> <p>Functions:</p> <ul style="list-style-type: none"><li>◆ The single lane referee timed the time manually.</li><li>◆ Take remedial measures to prevent the failure of the touchpad during the competition.</li></ul>



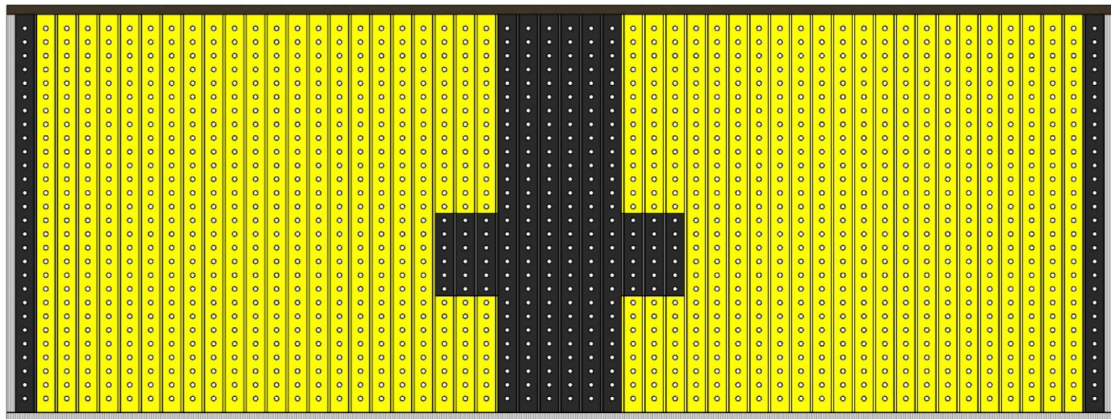
## 2.5 Starting Block

Products	Details
Starting Block	<p>Type: KS-CF01</p> <p>Functions:</p> <ul style="list-style-type: none"><li>◆ Relay departure judge with built-in LED speed light (50cm) × 50cm), 6 lanes are configured at the proximal end and 50m at the distal end, and 2 pieces are provided for standby.</li><li>◆ The front end of the equipment is equipped with LED green flashing speed light synchronized with the starting system, which can facilitate swimmers with hearing disabilities to take off quickly.</li><li>◆ Provide athletes' departure response and baton handover time in relay competition, accurate to 0.01 seconds.</li><li>◆ The relay departure judge has 2 adjustable nylon fastening straps, which can be used with domestic departure platforms of various specifications.</li></ul>



## 2.6 Touchpad

Products	Details
Touchpad	<p>Type: KS-CM01            Size: FINA standard touchpad (240cm) × 90cm)            Material: plastic (PVC) anti-skid shell</p> <p>Built in: relay departure judge with LED speed light (50cm) × 50cm)</p> <p>6 Lane proximal and 50m distal configuration, and 2 pieces of competition standby are provided.</p> <p>Functions:</p> <ul style="list-style-type: none"> <li>◆ There is no contact blind spot on the surface of the whole contact plate.</li> <li>◆ The touchpad is embedded with a pressure electronic sensor, equipped with full face switch system, with a sensitivity of 2 ~ 3kg and equal stress.</li> </ul>



## 2.7 Starting Block Storage Bracket

Products	Details
Starting Block Storage Bracket	Type: KS-CF01-1 Material: Aluminum Stainless Steel Functions: <ul style="list-style-type: none"><li>◆ The special carriage can support 10 starting blocks, equipped with movable pulley.</li></ul>



## 2.8 Touchpad Storage Bracket

Products	Details
Touchpad Storage Bracket	Type: KS-CMC-1 Material: Aluminum Stainless Steel Function: ◆ The special bracket car can support 10 touchpads.



## 2.9 Meet Management Server

Products	Details
Meet Management Server	<p>Size: 170*150*35(mm)            Weight: 1KG            Input Voltage: 12V DC            RAM: 4GB            Hard Disk: 64G            Communication: LAN*1Port: VGA*1, DP*1, USB*2            Support: Swimming</p> <p>Features:</p> <ul style="list-style-type: none"> <li>◆ Easy to create a match, and import the match entry information.</li> <li>◆ Arrangement the match with variants of game systems. Including elimination, round-robin, etc.</li> <li>◆ Provide the match information to the scoring software on each venue/court.</li> <li>◆ Gather the real time score and statistics information from the scoring software. Monitor the progress of the match.</li> <li>◆ Generate standard reports for the match, including start-list, results, combined results, ranking, etc.</li> <li>◆ Print certifications with adjustable print templates.</li> <li>◆ Print the team score report.</li> <li>◆ Open interface with ODF compatible data feed.</li> </ul>

