



# KPB04 Specificatin

Pandora Series

Version: v1.1

Release Date: May 2025

## Revision History

Version	Summary of the revisions	Revision Date	Revised by
V1.0	Initial release	2024.05.16	Liao Yajian
V1.1	Add authentication and modify document format	2025/05/26	Liao Yajian

## Product Overview

KPB04, the all-in-one broadcast and control card from KYSTAR, is a new generation LED multimedia player card that integrates a transmitter card, a receiver card, and a player terminal. Compared to traditional synchronous playback solutions, it can reduce the need for a computer player terminal, allowing for convenient control at any time. It also comes with an onboard receiver card for direct connection to the screen. It supports 60Hz frame rate output for smooth playback and remote power control.

It is widely used in advertising display fields such as lamp pole screens, storefront displays, and vehicle-mounted LED screens.



## Product Certification

FCC, CQC, CE, RoHS

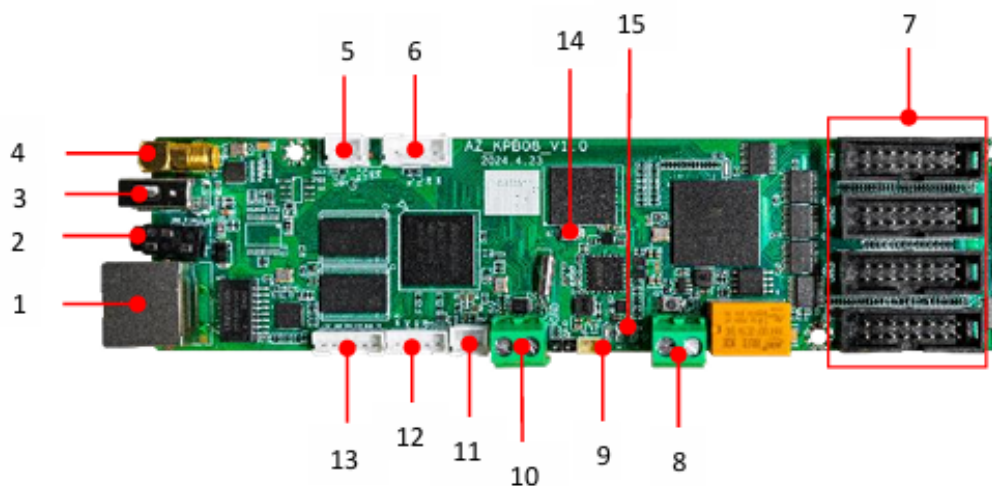
**If the product has no relevant certification in any country or region, please contact us immediately for confirmation or processing. Otherwise, if any legal risks are caused, the customer shall bear them by himself or our company shall have the right to seek compensation.**

## Features

- Integrated 4 HUB-75E interfaces, single card can load 80,000 pixels;
- Supports discounted playback, with a maximum width of 16384 and a maximum height of 8192 pixels;
- WIFI, Ethernet port, U disk, 4G and other communication methods;
- Built-in 8GB ( 4GB available to users ) storage, supports USB flash drive expansion, plug and play;
- 3.5mm audio output, audio and video synchronous output;
- Supports high-definition video hardware decoding, 60Hz frame rate output and smooth text;
- Standard configuration: 1 set of relay controller to remotely control the power supply;
- Optional 4G module, supports Kares cloud publishing system cluster control;
- Onboard brightness sensor interface, automatically adjusts screen brightness according to ambient brightness;
- Supports secondary development and can meet the needs of various scenarios;
- Supports Kares cloud platform, cluster hierarchical management and multi-role program release;
- The simple APP allows you to fully control program editing and management, allowing you to enjoy the big screen at your fingertips.
- The new Web PE adopts B/S architecture LAN control software, which is feature-rich and easy to learn and use;

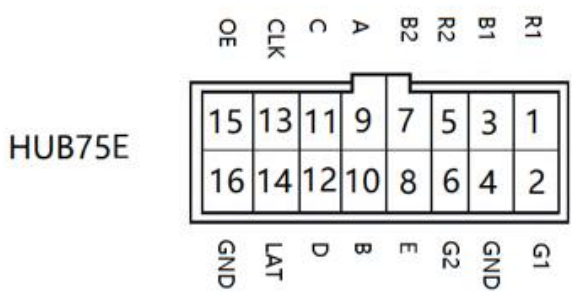
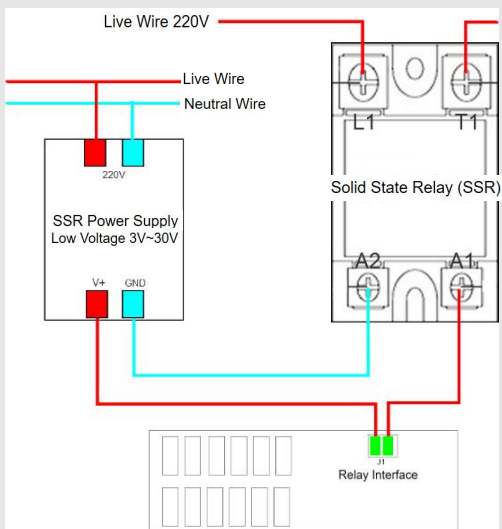
## Parameter

### Interface Description



### Interface Information

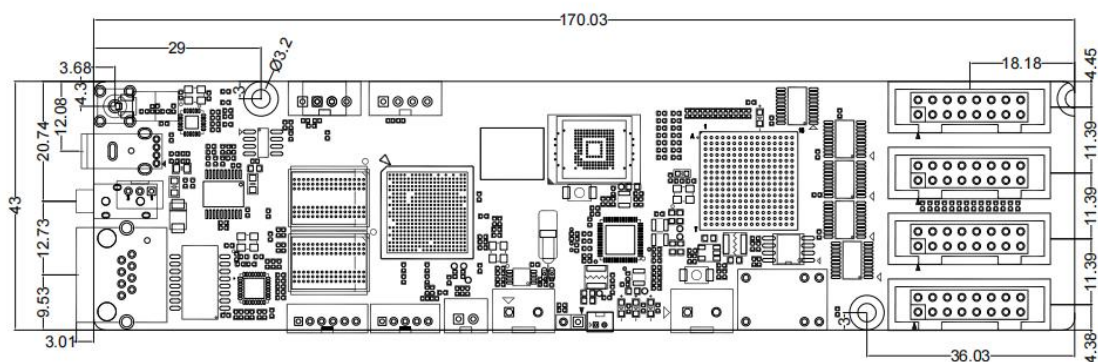
No.	Type	QTY	Specification
1	Input network port	1	Connect to the debugging computer for debugging or publishing programs; LAN/Internet connection port
2	Audio output interface	1	3.5mm audio output port
3	USB interface	1	USB2.0 *1, update programs via USB disk and expand storage space
4	WIFI	1	Wi-Fi antenna interface
5	LIGHT	1	AD brightness sensor interface
6	TTL	1	TTL interface, can be connected to external GPS module
7	HUB75E interface	4	Connect to the module via cable HUB port definition

			
8	Relay control interface	1	<p>Relay power interface, can control external power switch</p> <p>DC: Maximum voltage 30V, maximum current 3A</p> <p>AC: Maximum voltage 250V, maximum current 3A</p> <p><b>Note:</b> It is recommended to use direct current. It is not recommended to directly control alternating current with a relay. If you need to control alternating current, it is recommended to use <b>the wiring method shown below.</b></p> 
9	External battery interface	1	Used to keep the clock normal after power failure
10	Power interface	1	5V DC power input
11	TEMP	1	AD temperature sensor interface
12	4G interface	1	Can be connected to an external 4G module to provide control card networking (4G module optional device)

13	Relay expansion interface	1	Can be connected to an external relay module to expand three relays (relay module optional device)
14	RESET	1	Restore factory settings, long press for 5 seconds to take effect
15	Indicator Lights	3	<p>PWR power status indicator</p> <ul style="list-style-type: none"> <li>- The power supply is normal, and PWR is always on.</li> <li>- Power supply abnormality, PWR flashes</li> </ul> <p>SYS operation status indicator</p> <ul style="list-style-type: none"> <li>- The system and APP start normally, and sys is always on;</li> <li>- The player APP is abnormal, sys flashes once per second</li> <li>- During the system upgrade process, sys flashes quickly, 4 times per second</li> </ul> <p>NET connection status indicator</p> <ul style="list-style-type: none"> <li>- The NET light is on when the client is connected, otherwise it is off;</li> <li>- When connected to the cloud platform, NET flashes once per second;</li> <li>- Upload program, NET flashes quickly, 4 times per second</li> </ul>

\* Due to hardware upgrades, interface differences will not be notified separately. The actual product will prevail.

## Size



Unit: mm

## Specification

External interface type	
Audio output port *1	1/8" (3.5mm) TRS plug output
USB2.0*1	Storage expansion possible (U disk or SD card, maximum 128G)
100M input network port *1	Access to LAN , cluster control
WIFI	WiFi AP + STA dual WiFi mode , can be used as a hotspot for mobile phones and computers to connect
LIGHT	External brightness sensor to control screen brightness according to ambient brightness (L600 module needs to be purchased separately)
TEMP	External temperature sensor to obtain ambient temperature and humidity (W600 module needs to be purchased separately)
Relay	Can be used to control an external power switch (J3 00 module needs to be purchased separately)
4G/5G	Access to WAN (L610 module needs to be purchased separately)
GPS	Precise positioning, precise timing, and multi-screen synchronization (PM650 module needs to be purchased separately)
Performance parameters	
Hardware performance	1.6GHz, quad-core CPU, 3D GPU
	1GB@600MHz DDR3 high-speed memory
	Support 1080p@60fps hard decoding playback
	Support 1080p@30fps hardware encoding
Storage Space	Built-in 8GB storage (4G available to users)



Load size	Comes with 4 HUB75E interfaces, the whole machine has a load capacity of 8 W points, the widest is 3840, the highest is 2000
Wi-Fi connection distance	20 meters (unobstructed)

### Support multimedia formats

Video Format	AVI, WMV, MPG, RM/RMVB, VOB, MP4, FLV and other common video formats;  Supports multiple videos playing simultaneously
Audio Format	MPEG-1 Layer III, AAC, etc.
Image Format	Support bmp, jpg, png, etc.
Text form	Single-line text, static text, multi-line scrolling text, office, etc.
Clock	Real-time clock, multi-region clock display and management
OSD	Supports 32-bit true color OSD, can be displayed at any position, supports video/graphics mixing, and can overlay graphics on video.

### Machine Specifications

Dimensions	170x43 mm (W×H)
Net weight	61g
Gross weight	104g
Input adapter power	DC 5V/2A power supply
Rated Power	8 W
Operating temperature	-40 °C ~ 80 °C
Operating humidity (%)	5% ~ 95%
Protection level	IP20  Please pay attention to waterproofing, do not immerse the product in water , do not drip water into the product, etc.

**Note:**

- 1) To ensure the time storage of the control card during normal operation, please make sure that the battery on the control card is normal and not loose.
- 2) To ensure long-term stable operation of the system, please try to use a standard 5V voltage (2A and above current) power supply.
- 3) The board is long and slender. Do not bend or fold it, as this may cause components to fall off and affect the normal use of the device.

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