
PRODUCT SPECIFICATION



Product Type: LED Display Controller

Product Model: CRN PCON 600

File Version: V1.0

1. Preface

1.1 Product Introduction

CRN PCON 600 is an LED display controller that supports large loading. It integrates various functions such as LED display control, Android system and video processing. Its full channel supports 4K resolution input and output, and the maximum input resolution of a single unit is 3840*2160@60Hz. And the controller also support 3 HDMI video source input, 1 DP video source input, 2 HDMI video source output, 1 DP video source output, 18 RJ45 Gigabit Ethernet port output, satisfying high-resolution display and super resolution needs, and can be widely used in applications including broadcasting, security monitoring, corporate service, exhibition, Smart City, command and dispatch and etc.



1.2 Product Features

- Support maximum input resolution 3840*2160@60Hz, multi-channel loop out support 4K@60Hz;
- 18-way Gigabit Ethernet port design to meet ultra-high resolution needs;
- Full-channel 4K signal input and output;
- The maximum loading area of a single device is 8.3 million pixels;
- Support various signal input sources, compatible with different devices;
- Support video processing function, and full screen and multi-windows display modes (2 windows, 3 windows, 4 windows display) with adjustable image size;
- Support Wireless Screen Sharing function (mobile phone, MAC system or Windows system);
- Android 9.0 system, built-in Android applications;
- Support mobile terminal control function, enabling simple operation on mobile phone;
- Support one-button standby, input source switching by remote control;
- Enable standard resolution image scaling within 3840*2160
- Support LED display OSD;

2. Product Functions & Characteristics

2.1 ARM Processor Performance

- CPU: 2 x Cortex-A72 + 4 x Cortex-A53, 2.0GHz
- 4G RAM, 32G flash memory
- Mainstream video formats: MPEG1, MPEG2, MPEG4, H.264, WMV, MKV, TS, flv and etc.; Audio formats: MP3 and etc.; Image formats: JPG, JPEG, BMP, PNG, GIF and etc.
- System: Android 9.0

2.2 Major Functions

- (1) Support 3840*2160@60Hz video source input, all channels support 4K input and output;
- (2) Support HDMI 2.0 IN*3,DP1.2 IN*1,HDMI 2.0 OUT*2,DP1.2 OUT*1;
- (3) The maximum load is 8.3 million pixels, the widest range can up to 7680, and the highest can up to 4320;
- (4) Supports video processing multi-window display function, up to 4-windows display, and the displaying window size can be adjusted;
- (5) Support small-screen-control-large-screen function, which enables mobile terminals to realize touchpad operation and remote control;
- (6) Support screen settings including screen brightness, contrast, color temperature and current gain;
- (7) Support screen parameter setting and storage;
- (8) Support multi-screen cascade output, realizing splicing display of ultra-wide screen;
- (9) Support audio output;
- (10) Support access to the central control system that meets the RS232 protocol.

3. Product Appearance Size & Ports



Diagram 1 Front Button Panel

No.	Name	Function
1	USB 3.0	Connect USB flash drive, support multimedia file reading and displaying
2	Power button	<p>Power-off state: short press to turn on</p> <p>Standby state: short press to wake up the screen</p> <p>Power-on state: short press to start standby mode (rest screen)</p> <p>Power-on state: long press for 3-5 seconds to shut down</p>



Diagram 2 Rear Panel

Input port		
Type	Quantity	Description
DP 1.2	1	DP1.2 input, support resolution input 3840*2160@60Hz, load capacity: 8.3 million pixel dots
HDMI 2.0	3	HDMI 2.0 support resolution input 3840*2160@60Hz, load capacity: 8.3 million pixel dots
Output Port		
Type	Quantity	Description
HDMI 2.0	2	Support any input image (HDMI-IN and DP-IN) and large screen image loop out;
DP 1.2	1	Support any input picture (HDMI-IN and DP-IN) and large screen picture loop out;
Network port	18	18-way Gigabit Ethernet port output, using standard RJ45 interface Single network port loading area: 650,000 pixel dots Support backup between network ports
Control Port		
Type	Quantity	Description
GEN IN	1	Sync phase lock signal input (to be developed)
GEN OUT	1	Sync phase lock signal output (to be developed)

OPTICAL	1	Use standard OPTICAL port to realize audio optical fiber signal transmission of more than 100 meters
IR	1	Use standard 3.5mm headphone jack to realize long-distance IR signal transmission through audio male-to-female extension cable
AUDIO	1	3.5mm audio output port
LAN	1	LAN port, can be connected to the host computer
WAN	1	WAN port, can be connected to the host computer
RS232 IN	1	Can be connected to the central control system that meets the RS232 protocol
R232 OUT	1	Can output commands that meet the RS232 protocol
3D SYN	1	Support 3D synchronization function (to be developed)
USB 2.0	2	Connect USB flash drive for multimedia file reading and displaying
Power Input Port		
AC100-240V-50/60Hz	1	AC power connector

4. Product Specification

Electrical Parameter	
Input Power	AC100-240V~50/60Hz
Rated Power	40W
Environmental Parameter	
Operating Temperature	-10°C~60°C
Operating Humidity	10%~90% no condensation
Storage Temperature	-20°C~70°C
Storage Humidity	10%~90% no condensation
Product Parameter	
Dimensions	482.6*281.4*97.0mm
Net Weight	4.3kg
Gross Weight	5.5kg