

4K Multi-media Server Product Specifications



Model: RDBC-L201

I.Product Overview

This professional 4K Multi-media Server, specifically designed for LCD/LED small-screen displays, integrates multimedia playback control, information publishing, cluster management functions, and an application platform, delivering powerful interactive and playback capabilities.

Supports multi-platform terminal control via Windows, Mac OS, iOS, and Android, enabling arbitrary multi-screen windowing and roaming display. It also supports integration with video conferencing systems, surveillance systems, live streaming, and local media playback to meet diverse application needs. Two scene modes (Desktop Mode and Window Mode) ensure optimal display for document presentations, video playback, and remote meetings.

The product supports control via infrared remote, mouse, tablet, smartphone, or computer, making it widely applicable for commercial display scenarios across government, enterprise, hospitality design, healthcare, education, and other industries.

II. Key Features

- ◆ Supports 1 HDMI 2.0 output port, enabling native 3840 x2160@60Hz display with backward compatibility.

- ◆ Supports 1 HDMI input port (4K@30Hz) with backward compatibility.
- ◆ Features 2 USB 3.0 ports for multimedia playback and functional expansion (keyboard/mouse connectivity, USB flash drive upgrades, etc.).
- ◆ Supports 4K VP9 and 4K 10-bit H.265/H.264 video decoding at up to 60fps.
- ◆ Supports video post-processing: deinterlacing, noise reduction, edge/detail/color optimization.
- ◆ Supports TF card expansion, USB flash drive extension, and direct live streaming.
- ◆ Supports online/local playback of video, audio, images, PPT (optional), web pages, etc.
- ◆ Supports multiple communication methods including Wi-Fi, Gigabit Ethernet, and direct USB cable connection.
- ◆ Supports 1 channel 3.5mm audio output with synchronized audio-video output.
- ◆ Supports cluster management within LAN/WAN and remote information publishing.
- ◆ Supports multi-window playback with up to 6 1080P video windows for flexible windowing, roaming, overlay, and tiling display.
- ◆ Customized desktop UI system based on Linux, allowing addition of

Linux applications (optional).

- ◆ Supports personalized subtitle management including single-line text, static text, and scrolling text, plus clock and weather forecast display.
- ◆ Supports keyboard/mouse control, infrared remote control, and mobile/tablet control.
- ◆ Supports network streaming media playback, network camera decoding, and quick access to live stream links.
- ◆ Supports 32GB local storage for saving customer video content.
- ◆ Supports central control functions, enabling remote control of curtains, air conditioning, audio systems, LED power distribution boxes, and more.

III. Technical Specifications

Category	Item	Specifications
Hardware Configuration	CPU	Quad-core CPU architecture, frequency up to 2.0GHz
	GPU	Dual-core GPU, supports OpenGL ES 1.1/2.0/3.0/3.1 OpenGL, supports AFBC (Arm Frame Buffer Compression)
	VPU	High-performance VPU, 1080P 100FPS H.264/H.265 video encoding, 4K 60FPS H.265/H.264 video decoding
	RAM	4G
	Storage	32G (Expandable)
	Power	DC 12V 1.5A
Interface Parameters	HDMI-OUT	1 output, max. resolution 3860x2160@60Hz
	HDMI-IN	HDMI 1 input, supports up to 4K@90Hz
	LAN	1000M Ethernet port
	RS232	Control serial port (Supports controlling this device and external equipment)

Multi-media Server

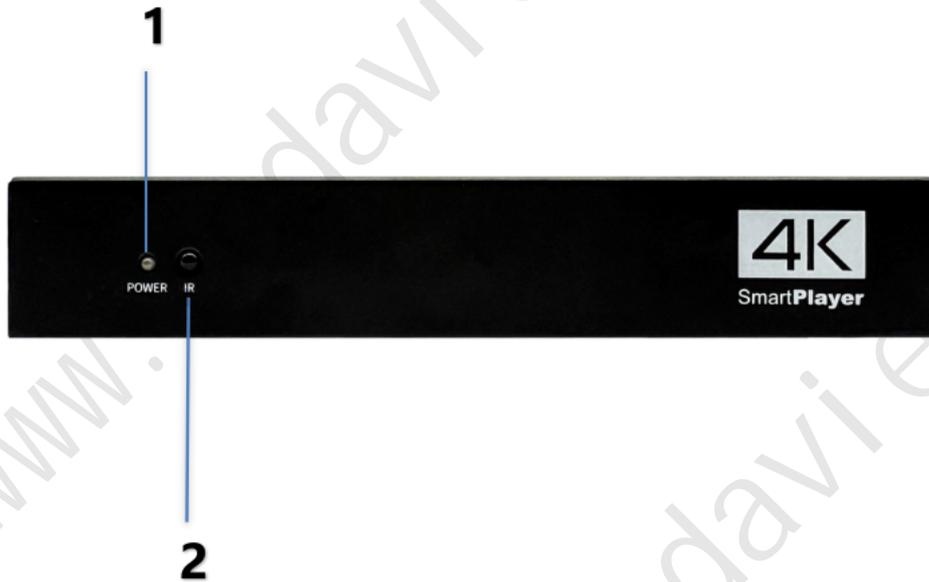
	USB 3.0	Supports connecting USB drives/keyboards
	SET	Function port selection
	AUDIO-OUT	3.5mm audio output port (1 channel)

Environmental Parameters	Operating Temperature	0°C ~ 50°C
	Operating Humidity	10% ~ 75% RH (non-condensing)
	Storage Temperature	-25°C ~ +125°C
	Net Weight	0.8kg
Physical Specifications	Gross Weight (with packaging)	1.2kg
	Chassis Dimensions	200×150×34mm
Packaging Specifications	Package Dimensions	250×261×71mm
	Package List	1 x Power Adapter, 1 x Certificate of Conformity, 1 x IR Remote Controller, 2 x Mounting Ears, 1 x Phoenix Terminal Plug, 6 x Mounting Screws

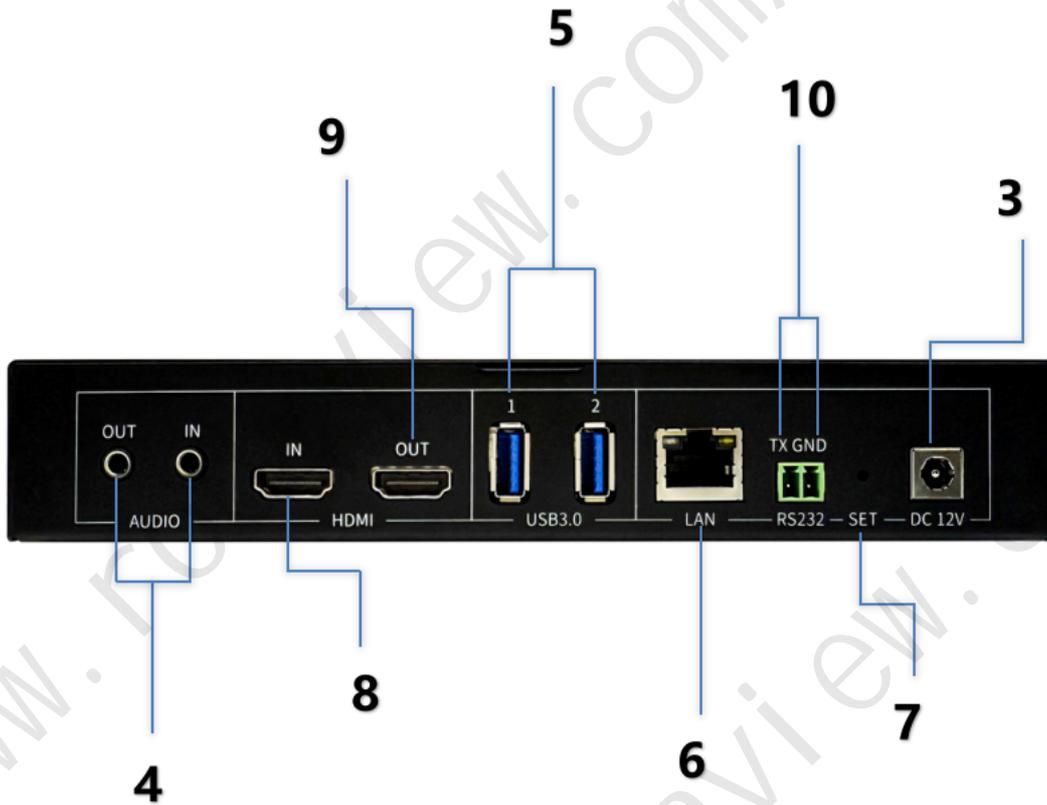
IV. Product Dimensions



V. Panel Buttons and Ports

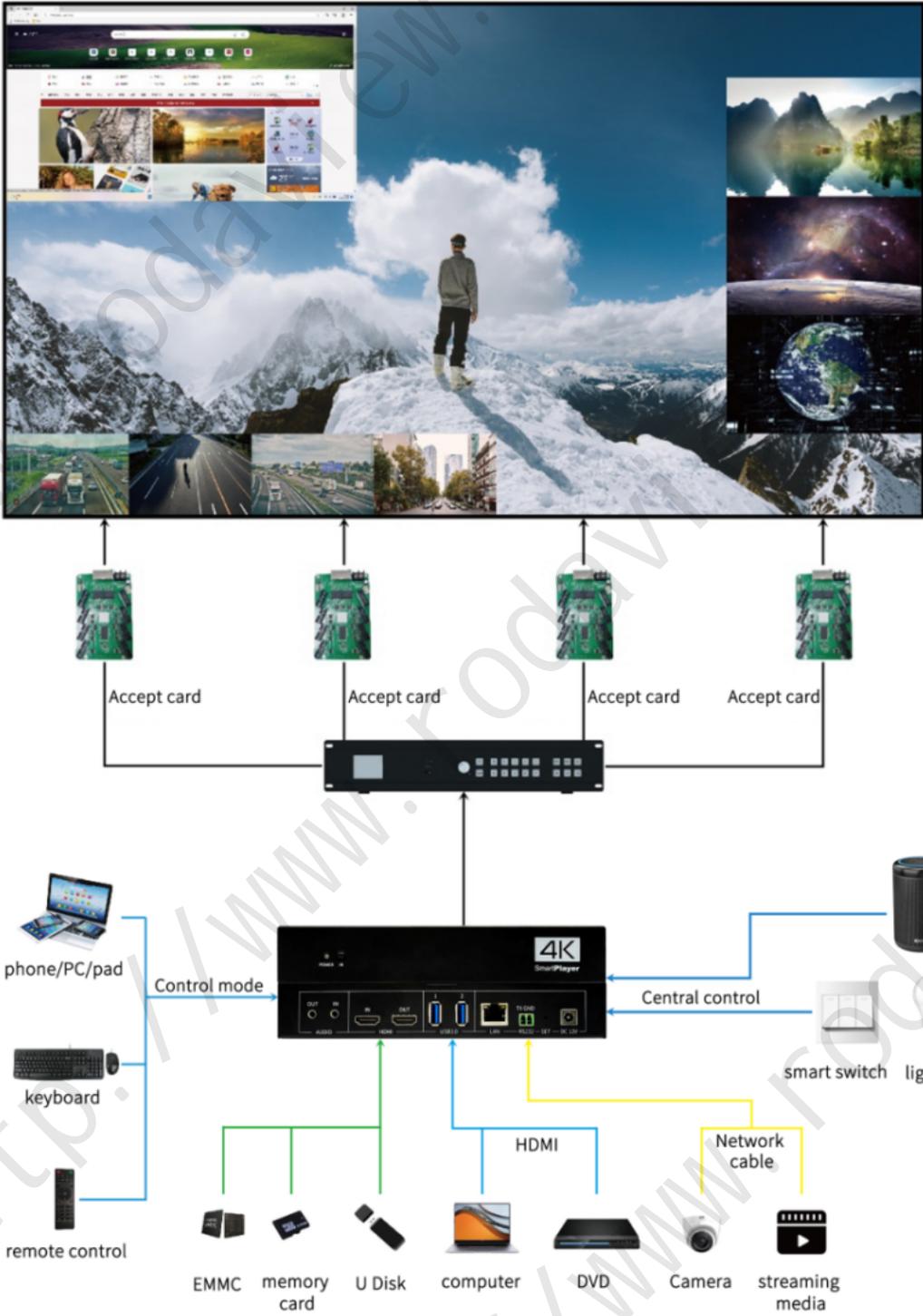


No.	Interface	Description
1	POWER	Power indicator, green light indicates normal operation
2	IR	Infrared (IR), receives infrared signals

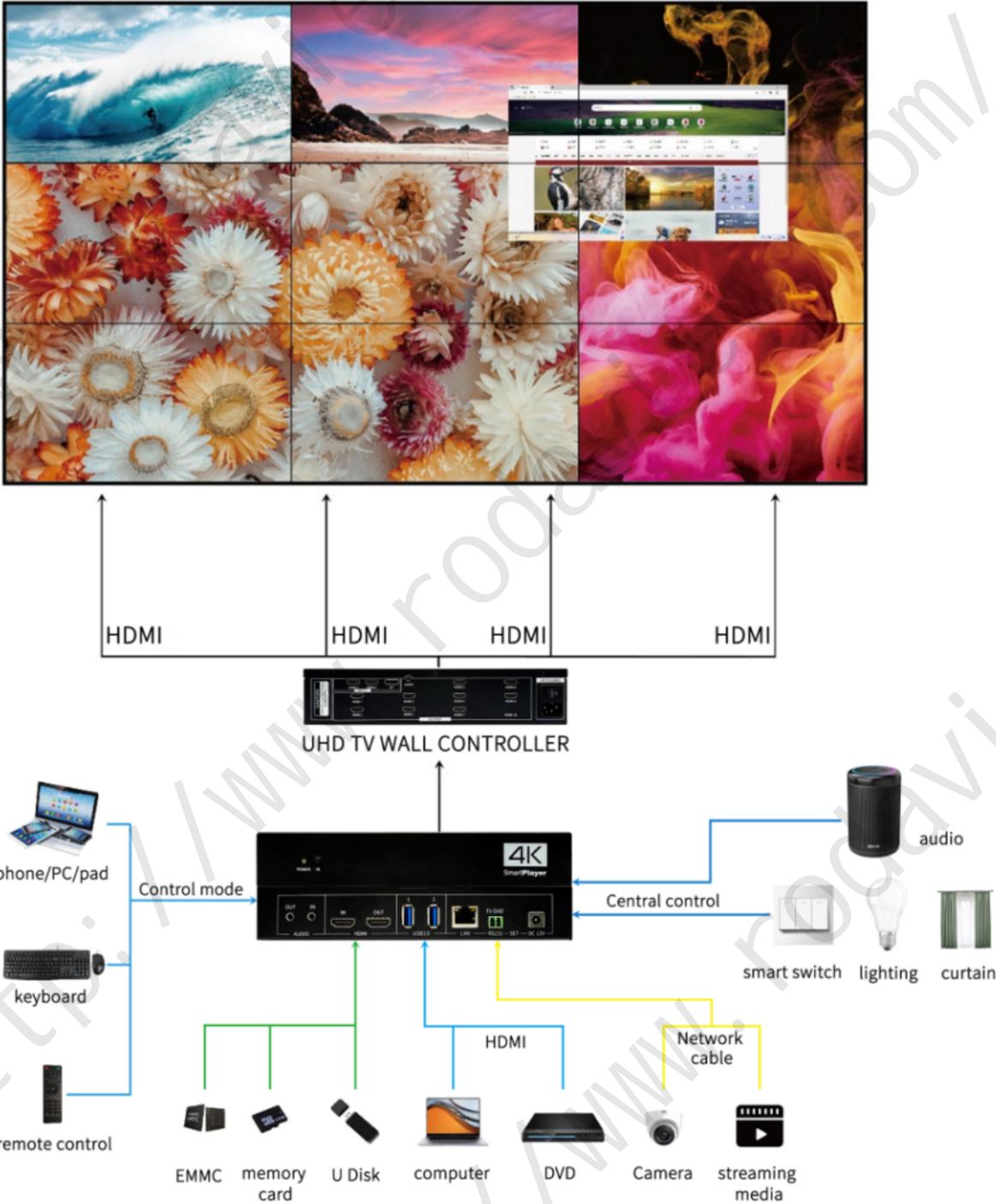


3	DC-12V	DC-12V power input
4	AUDIO-OUT	Supports one 3.5mm audio output channel
5	USB3.0	Connect USB drives, mouse, keyboard, etc.
6	LAN	1000M Ethernet port for network connection
7	SET	Function port selection
8	HDMI IN	Supports input up to 4K@30Hz
9	HDMI OUT	Supports output up to 3840×2160@60Hz
10	RS 232	Control serial port interface for controlling external devices

VI. LED System Framework



VII. LCD System Framework



VIII. Cloud Management System Framework

