MC-C2KX

Multimedia Server

Specification V4.0

CONTENT

1 Update history

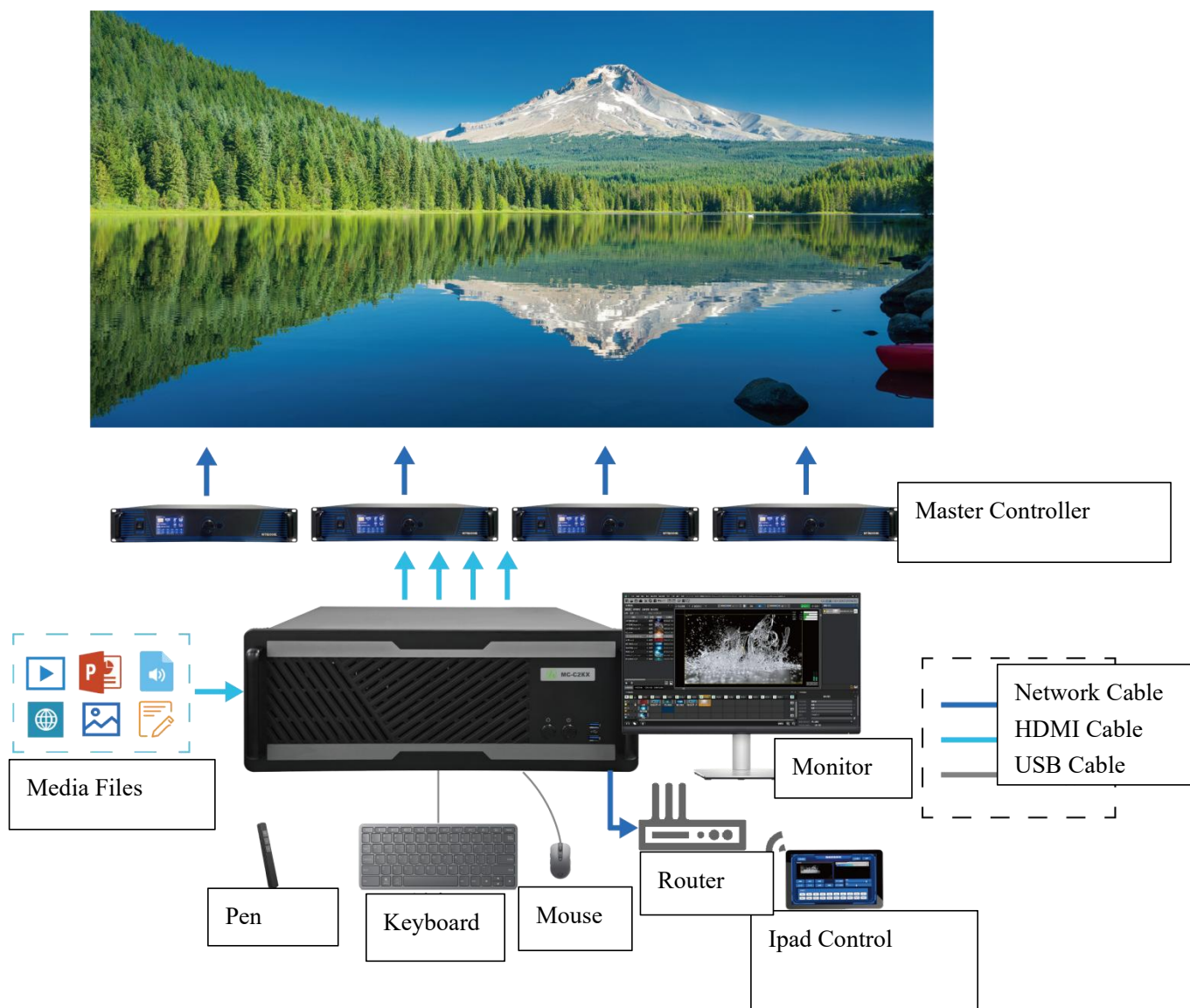| Document version	Release time	Update history
V4.0	July 16, 2025	first release

2 Product Introduction

MC-C2KX is the latest multimedia playback and control server developed by Mooncell. It utilizes a high-performance processor paired with a professional and stable industrial motherboard. It can support 4* 4K@60Hz video signal outputs. Combined with the MC-C2 multimedia "playback and control" software, it offers features such as creative splicing of the led display, decoding of ultra-high resolution video, and device status monitoring. It can achieve pixel-to-pixel display for large screens and support various splicing of irregular screens, greatly meeting the playback and control requirements of various projects.

3 Product Features

● It supports 4 DP 1.4 video output interfaces, with each interface capable of outputting 4K at 60Hz.

● Allows arbitrary rotation of images and splicing of displays at different shapes and angles

● Powerful decoder   supporting high-performance hardware decoding formats: H.265, HVC, HAP, etc., with built-in optimized decoding.

● Supports control protocols: Art-Net, OSC, MIDI, TCP/UDP, HTTP, IOT, etc.

● Tablet control (optional), supports mobile control APP, enabling centralized management and quick operation of exhibition devices.

● Supports media masking with customizable mask templates.

● Supports R, G, B chroma keying with customizable keying areas.

● Supports fade-in/fade-out transition effects for program switching.

● Supports adjustment of multiple playback effect attributes including playback speed, transparency, volume, saturation, hue, contrast, brightness, feathering, and color smoothing

- Window mode playback with unlimited number of window layers.

- Playback supports loop playback, last frame hold, and program jump.

- Supports setting power-on/power-off scripts for automatic playback control via the control terminal.

- Supports scheduled tasks for timed playback

- Supports NDI, Spout, and capture card signal input, with optional HDMI and SDI capture cards

- Supports PPT playback, with support for PPT control via presentation clicker

- Supports Wake-on-LAN and auto power-on

- Supports abnormal status detection, providing key information prompts for device and content playback exceptions

- Supports device status monitoring, including server CPU and memory usage, rendering frame rate, and screen status

- Supports screen lock function, allowing instant locking of the software interface to prevent accidental operation

4   Application Scenarios

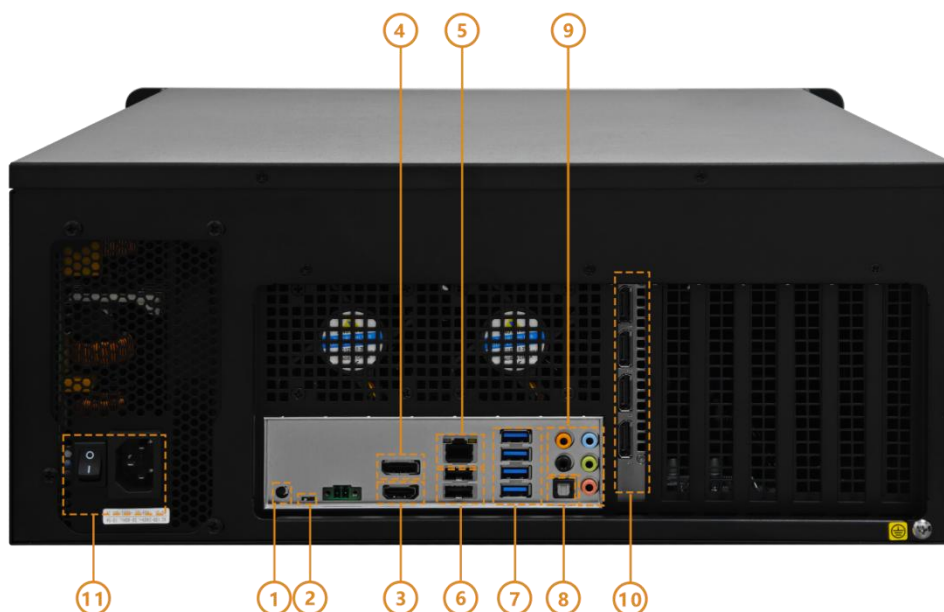# 5   Product Appearance

Front Panel

*Product images are for reference only. The actual product shall prevail upon purchase.

5.1 Interface Illustration

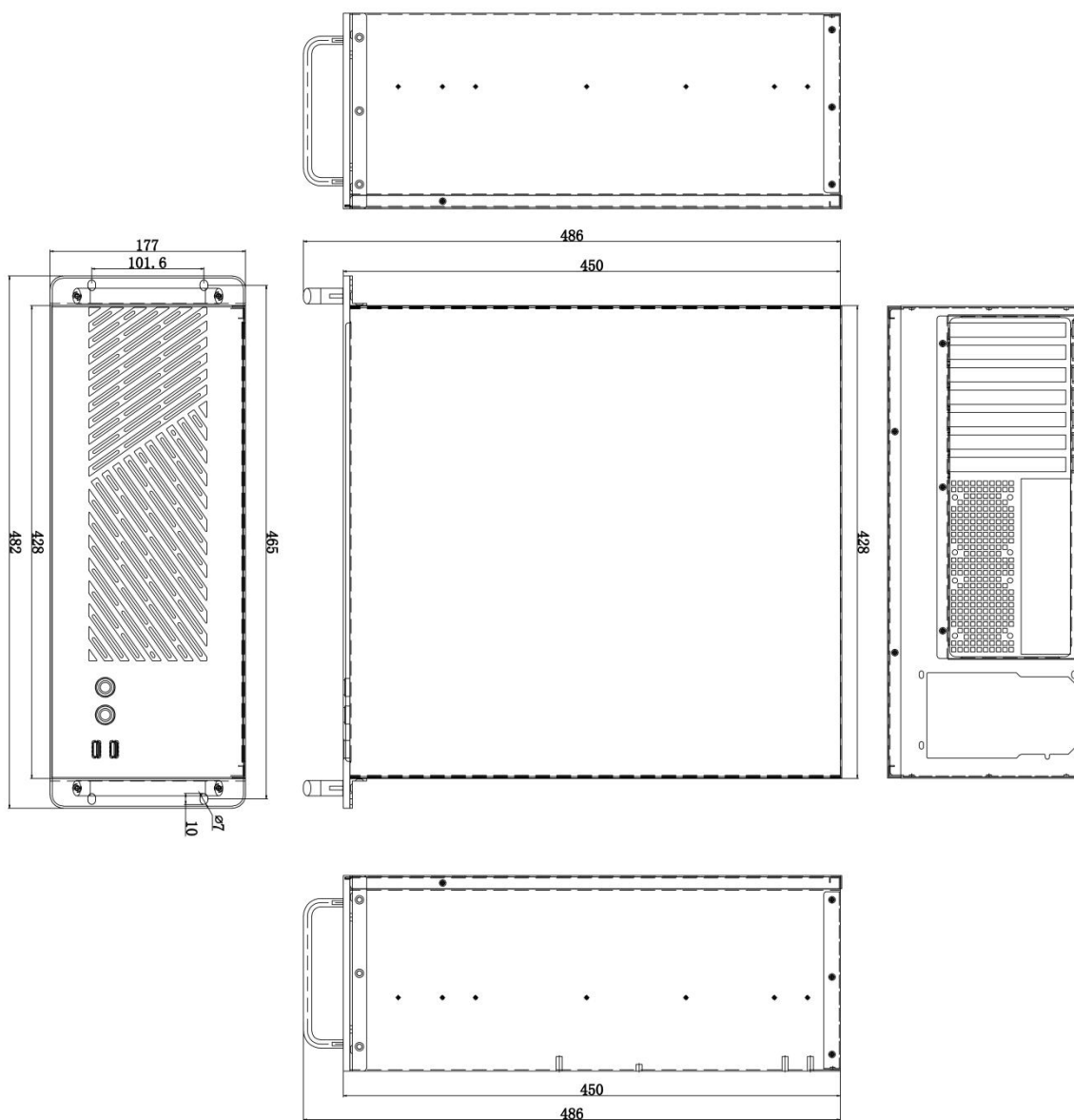| #	Name	Illustration
1	Power Restart	Restart the server device
2	Power switch	Switch server device
3	USB	2 × USB 3.0 interface

Rear Panel

Product images are for reference only. The actual product shall prevail upon purchase.

#	Name	Illustration
1	Restore BIOS	One-click restore BIOS
2	Power-on self-starting lever	Power on the self-starting lever, dial left to close, dial right to open
3	HDMI	1 × HDMI2.0 output interface, support 3840 * 2160@60Hz resolution
4	DP	1 × DP1.2 output interface, support 3840 * 2160@60Hz resolution
5	LAN	1 × LAN interface, support network wake-up
6	USB	2 × USB 2.0 interface, maximum transmission bandwidth 480Mbps
7	USB	4 × USB 3.2 Gen 1 interface, maximum transmission bandwidth 5Gbps
8	SPDIF	1 x SPDIF_OUT interface, support SPDIF fiber digital output
9	Audio Interface	Line In (Blue), Audio Out (Green), Microphone In (Red), Digital Out or Mid/Bass Out (Orange), Post Audio Out (Black)
10	DP	4×DP1.4 Output
11	Power Supply	AC 100-240V power input interface

5.2 Product Dimension

Tolerance：±0.3 mm

6　Product Parameters

6.1 Basic Parameters

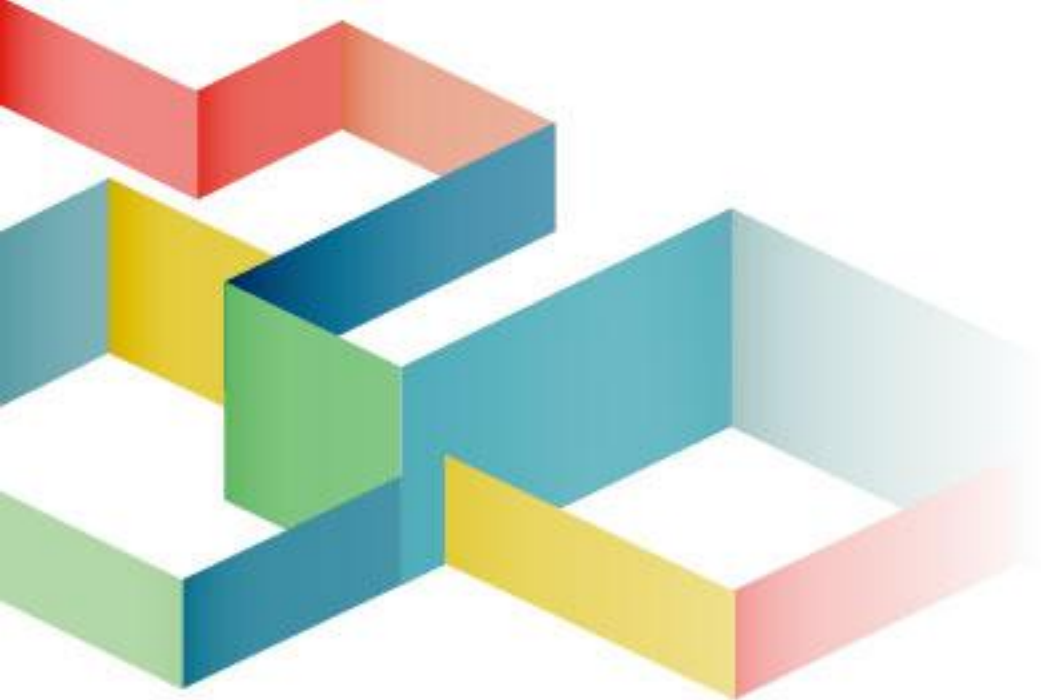|	
Product name	Multimedia server (integrated control and display)
Product model	MC-C2KX
Hardware output	DP1.4 × 4
Graphics card	NVIDIA professional graphics card
Capture card (optional)	HDMI/SDI interface
CPU	Intel 8 core 16 thread
Memory	16G DDR4
Hard disk capacity	1TB M.2 High Speed Solid State Drive
Power supply	650W
Chassis	4U industrial control server chassis
Broadcast control software	MC-C2 broadcast control software

6.2 Specifications

Electrical parameters	Input voltage	AC-100-240V-50/60HZ
	Rated power	650W
Working environment	Operating temperature	0℃～+40℃
	Working humidity	0% RH~ 80% RH non-condensing
Storage environment	Storage temperature	-10 ℃~ + 60 ℃
	Storage humidity	0% RH~ 95% RH, non-condensing
Chassis size	482mm×486mm×177mm	
Net weight	11.65Kg	
Packaging information	Outer box size	615mm×565mm×275mm
	Accessories	1 × power cord, 1 × broadcast control software encryption lock, 1 × certificate

Current and power consumption may vary depending on factors such as product usage, environment, and settings.

7 Precautions

● High voltage hazard: This product operates at AC 100V~240V.

● Do not allow liquids or metal fragments and other conductive materials to enter the device, to prevent safety accidents.

● Please use the device in a dry and clean environment.

National after-sales services hotline: 400-881-3531

Official website: www.mooncell.com.cn

Address: Mooncell Building, Third Industrial Zone, Baoshi South Road, Shiyan

Street, Baoan District, Shenzhen