



Specifications

Independent Controller MCTRL4K

Overview

MCTRL4K is an independent master controller developed by NovaStar with an epoch-making significance. The loading capacity of a single unit is up to 3840x2160@60Hz, which is able to meet the on-site requirements of oversized LED displays. MCTRL4K makes it easier to create stunning visual effects for users.

MCTRL4K also can be used as two independent master controllers, which makes it more flexible to load LED displays.

The design of MCTRL4K is innovative. It allows to configure a display at any time without PC.

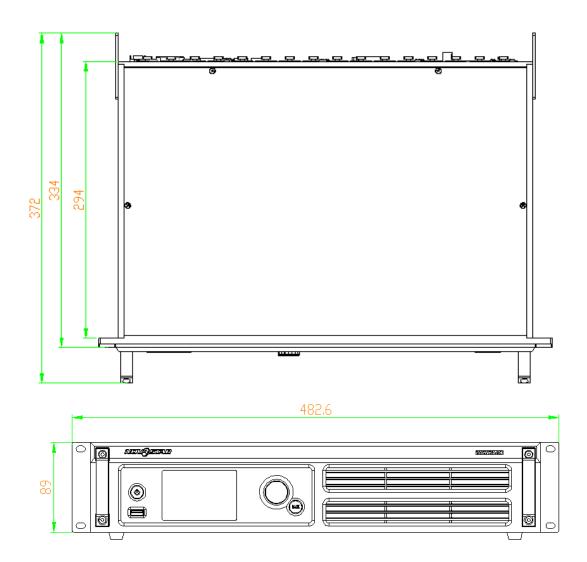
Various video inputs such as DP, HDMI, dual-link DVI etc. and outputs of 16-channel Neutrik Gigabit Ethernet ports as well as 4-channel optical fiber ports are supported.

Features -

- Complete video input interfaces: DP1.2 x 1, HDMI2.0 x 1, dual-link DVI x 2;
- Supports 16-channel Neutrik Gigabit Ethernet outputs and 4-channel optical fiber outputs and maximum loading capacity of a single unit up to 3840x2160@60Hz;
- 3) Supports two operating modes during dual-link DVI input: mosaic and multi-card;
- 4) Innovative design to enable smart configuration which has greatly shortened the time for stage preparation;

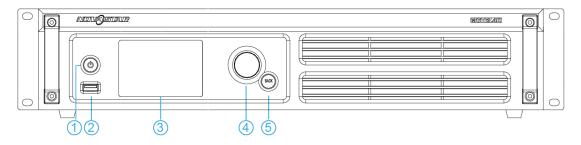
- 5) NovaStar's G4 engine to create stable and flicker-free pictures without scanning lines, and bring smooth images with a good sense of layering;
- 6) Supports NovaStar's latest pixel-by-pixel calibration technology, the process of which is fast and efficient;
- 7) Enables white balance calibration and color gamut mapping based on the different features of LEDs on the display to ensure the real restoration of color;
- 8) Screen configuration can be done at any time without PC;
- 9) Manual adjustment of screen brightness, which makes it much easier and quicker;
- 10) Multiple controllers are able to be cascaded for uniform control.

Dimensions



Dimensions of MCTRL4K (mm)

Front panel

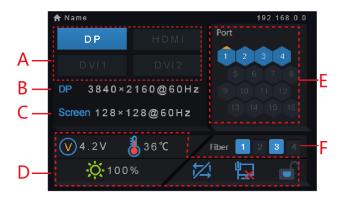


①: Power button;

Press the button for startup. After startup, press and hold the button for 4~5 seconds to power off.

②: USB interface for connecting USB drives only(unable to connect computers).

③: Operation screen



The top section of the screen displays product name (customizable) and its IP address. The meanings of other sections are described as below:

A: Input status of signal source. Blue indicates it has signal while gray indicates no signal.

B: Current input source and its resolution, frame rate. For example, the information of two DVI sources will be displayed alternately here when dual-link DVI is selected as input.

C: Width, height and frame rate of the screen under configuration;

D: Status, the meanings of each status icon are introduced as follows:

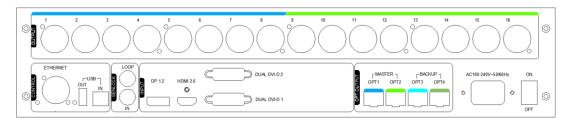
- Supply voltage of mainboard core;
- Temperature inside the controller;
- Brightness of the LED display;
- DVI1 and DVI2 sources are not synchronous(in mosaic mode),
- DVI1 and DVI2 sources are synchronous(in mosaic mode);
- Control interface is not connected;
- USB port is used as control interface;
- Ethernet port is used as control interface;
- Operation screen is not locked;
- Operation screen is locked.

E: Connection status of Ethernet ports. Blue indicates that the connection is available and the port works as master control while gray indicates the port is not connected or the connection is unavailable. Mark on the upper left corner of the icon indicates that the connection is available and the port is in redundancy state.

F: Connection status of optical fiber ports. Blue indicates that the connection is available and the fiber port works as master control while gray indicates the port is not connected or the connection is unavailable. Mark on the upper left corner of the icon indicates that the connection is available and the port is in redundancy state.

- ④: Knob, Pressing the knob indicates Enter or OK, rotating the knob allows us to select or adjust.
- (5): BACK: Back to the previous menu.

Rear panel



T				
Inputs				
DP 1.2	DP 1.2 interface			
HDMI 2.0	HDMI 2.0 interface			
DUAL DVI-D1/D2	Dual-link DVI interface			
Outputs				
	16-channel Neutrik Gigabit Ethernet			
1~16	outputs			
OPT1~4	4-channel optical fiber outputs			
Control				
ETHERNET	Control interface			
	IN: cascade input or connecting to PC for			
USB	communication			
	OUT: cascading next unit			
GenLock				
	Genlock type: Blackburst			
	Genlock synchronous signal, making sure			
IN	the pictures on LED display are			
	synchronous with external Genlock			
	source.			
LOOP	Genlock loop output			
Power supply				
AC 100-240V ~ 50/60HZ	AC power interface			

Specifications —

Inputs				
Port	Qty	Resolution specifications		
DP		DP 1.2 standard		
	1	Max. supported resolution:3840×2160@60Hz,		
		Max. width and height are 3840(downward		
		compatibility)		
HDMI	1	HDMI 2.0 standard		
		Max. supported resolution:3840×2160@60Hz		
		Max. width and height are 3840 (downward		
		compatibility)		
Dual link	Dual-link DVI	VESA standard, max. supported resolution:		
Dual-link DVI		3840x1080@60Hz and 3840×2160@30Hz		
		(downward compatibility)		
Outputs				
Port	QTY	Resolution specifications		
RJ45	16	Neutrik Gigabit Ethernet port		
ОРТ	4	Optical fiber port, single mode and double fiber,		
		LC port, 1310mm		
		OPT1 is used for transferring the data of port 1-8		
		OPT2 is used for transferring the data of port 9-16		
		OPT3 is the backup channel of OPT1		
		OPT4 is the backup channel of OPT2		
		Either Gigabit Ethernet port or optical fiber port		
		can be used at the same time. Two types of ports		
		cannot be used to connect devices		
		simultaneously.		

Control			
Port	Qty	Notes	
ETHERNET	1	Control interface	
USB 2	2	Control interface of upper computer and	
		cascading interface	

Overall Specifications		
Input power	AC 100-240V, 50/60Hz	
Overall power consumption	30W	
Operating temperature	-20~60°C	
Dimensions(L×W×H)	482.6×372×89 (mm)	
Weight	4.6kg	