



Z6 PRO

Controller

Specification V1.2

Overview

Z6 PRO is a professional LED display controller with splicing, sending and processing functions. Z6 PRO has 4K video source input capability, UHD and HDR image processing and transmission. Z6 PRO has four 10G fiber output ports, which can be applied to high-end rental display and high-resolution LED displays.

Features

Input

- Supports 4×4K input board, up to 4096×2160@60Hz resolution per board
- Supports 3 types of optional 4K input boards, including HDMI/DP, 4×DVI, 4×SDI

Output

- Four 10G fiber outputs (two main outputs, two backup outputs)
- Loading capacity: up to 8847360 pixels, maximum width: 8192 pixels, maximum height: 4096 pixels

Video Process

- Supports HDR10/HLG
- Supports low latency
- Supports 16 PIP layers. The location and size can be adjusted freely
- Supports video source switching, splicing, cropping and scaling
- Supports 3D video and display(optional)
- Improved gray-scale at low brightness
- Hue, saturation, contrast adjustment

Control

- USB port for control or cascading
- RS232 protocol control
- Fast Ethernet port for IP control
- Art-net protocol control

Hardware

The Front Panel



No.	Items	Functions
1	LCD	Displays operational menu and system information
2	Knob	Turn or press to select or adjust
3	Selection keys	OK: Enter ESC: Escape current operation or selection Bright: Brightness option Black: Blank screen Lock: Lock key 1, 2, 3, 4, 5: Switch preset modes Mode: Switch to the preset mode selection interface F1: Switch to the main interface F2: Switch to the signal list F3: Switch to the signal selection interface

The Back Panel



Input Interface		
1	Input board	4 pcs, resolution up to 4096×2160@60Hz per board
2	Input board options	1) HDMI/DP 2) 4×DVI 3) 4×SDI
Output Interface		
1	10G Fiber	4×10G fiber output ports, compatible with Neutrik optical CON DUO fiber port and LC-LC fiber port
Controlling Interface		
1	LAN	100M-Ethernet control port, and can be used as Art-net control port
2	USB IN	USB input, which connect with PC to set device
3	USB OUT	USB output, cascading with next controller
4	RS232	DB9 port, for external device control
5	GENLOCK	Genlock signal input
6	GENLOCK LOOP	Genlock signal loop output
7	3D sync	Connect to 3D emitter (optional)

Specifications

Optional 4K input board

1) HDMI/DP input board

Input signal	1×HDMI2.0+LOOP, 1×DP1.2 Only one of them will be working at the same time	
Standard	HDMI: EIA/CEA-861 standard, HDMI-2.0 compliant, HDCP2.2 compliant DP: DP-1.2 standard and HDCP1.3 compliant	
Input resolution	3840×2160@60Hz	8bit: Supports RGB444, YCbCr444, YCbCr422, YCbCr420 10bit: supports YCbCr422, YCbCr420
	1920×1080@60Hz	8/10bit: Supports RGB444, YCbCr444, YCbCr422, YCbCr420
	4096×2160@60Hz	8bit: Supports RGB444, YCbCr444, YCbCr422, YCbCr420

2) 4×DVI input board

Input signal	4×DVI inputs
Standard	VESA standard, supports HDCP1.4
Input resolution	1920×1080@60Hz 8bit: supports RGB444, YCbCr444, YCbCr422, YCbCr420

3) 4×SDI input board

Input signal	4×3G-SDI inputs
Video source format	Compatible with 3G-SDI, HD-SDI, SD-SDI
Input resolution	1080p, 1080i, 720p
Transmission distance	1080p≤100 meters

Output interface

Output signal	4×10G fiber outputs		
Interface	Compatible with Neutrik optical CON DUO fiber port and LC-LC fiber port		
Resolution		2D mode	3D mode
	8bit	8847360 pixels total, maximum	4423680 pixels total, maximum

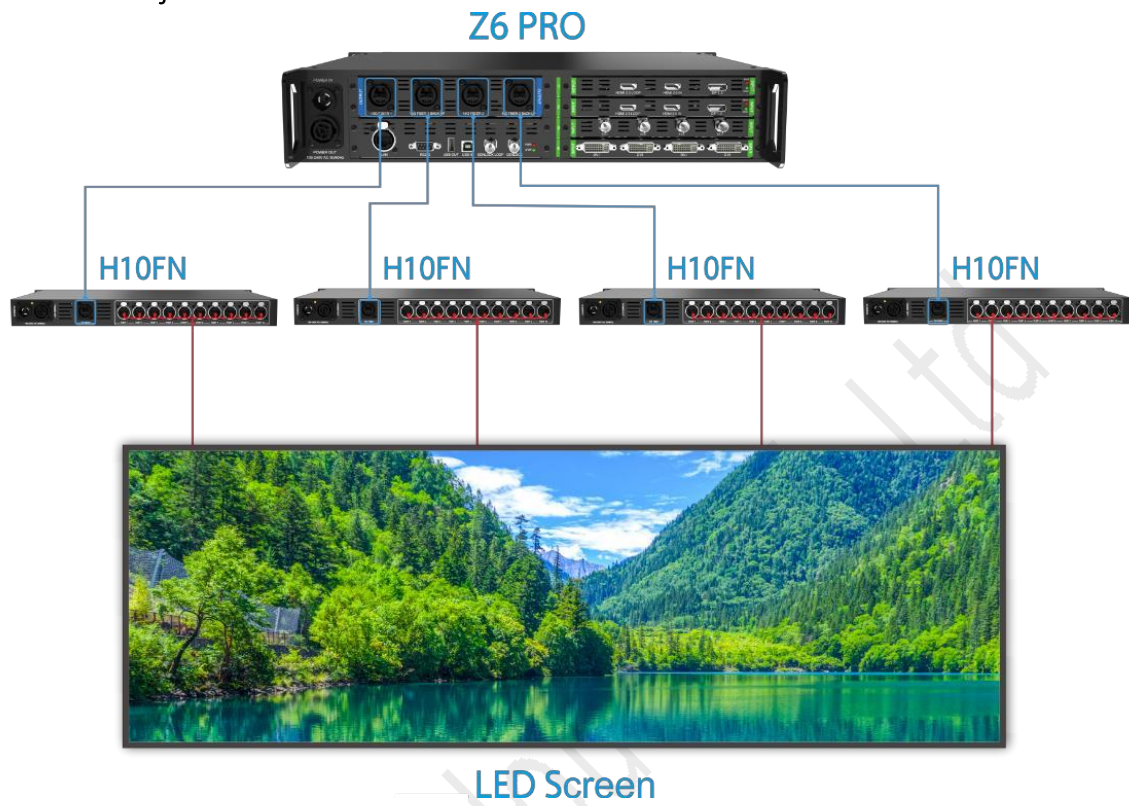
		width: 8192 pixels, maximum height: 4096 pixels	width: 8192 pixels, maximum height: 4096 pixels
	10bit	8294400 pixels total, maximum width: 8192 pixels, maximum height: 4096 pixels	4147200 pixels total, maximum width: 8192 pixels, maximum height: 4096 pixels
Transmission distance	2 km		

Other Specification

Device specification	
Size	482.6mm (19") × 87.0mm (3.5") × 430.0mm (16.3")
Weight	9.64kg (21.25lbs)
Electrical	
Input voltage	AC100-240V, 50/60Hz
Rated Power Consumption	150W
Work environment	
Temperature	0°C~55°C (-4°F~158°F)
Humidity	10%RH~80%RH, non-condensing
Storage environment	
Temperature	-30°C~80°C (-22°F~176°F)
Humidity	10%RH~90%RH, non-condensing

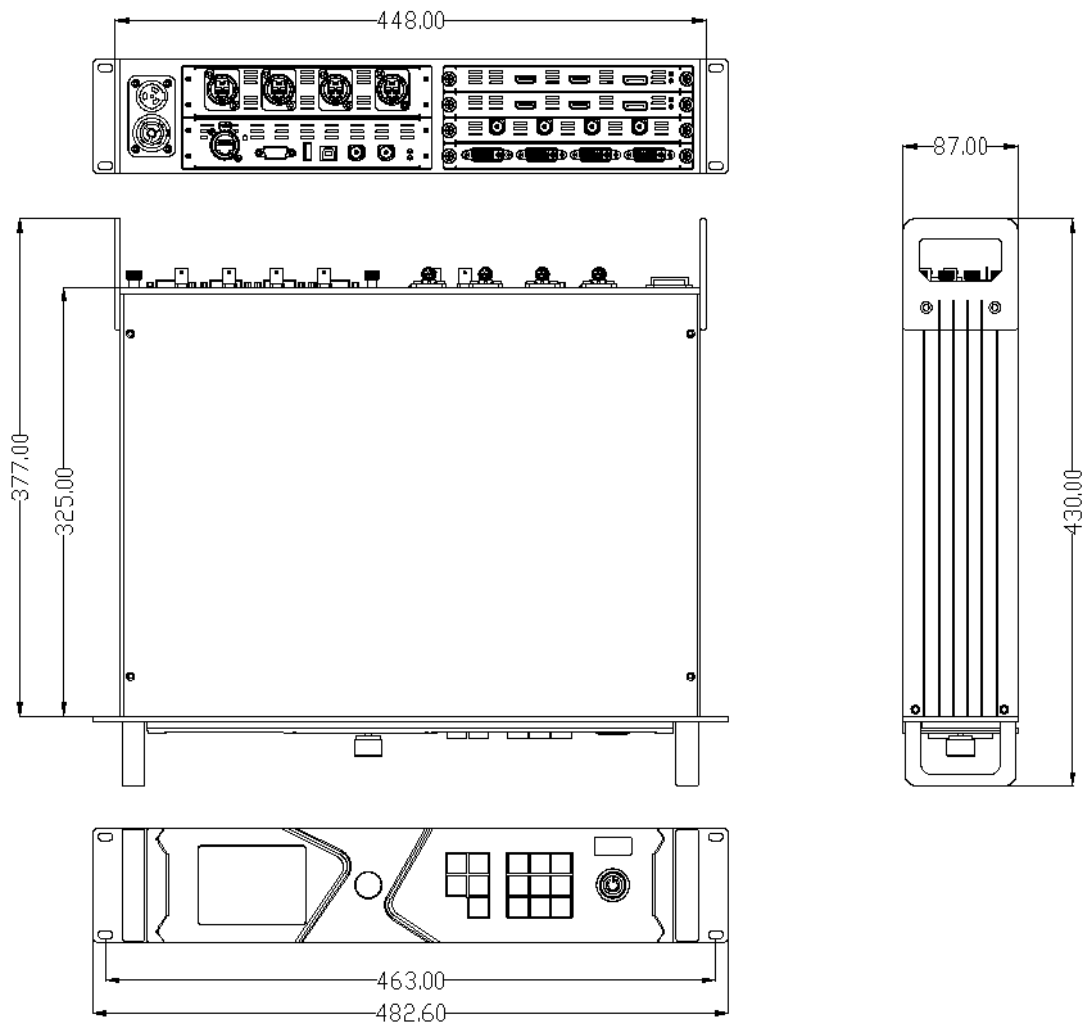
Connection Diagram

Used in conjunction with H10FN



Dimensions

Unit: mm



Statement

Thank you for purchasing the product of Colorlight Cloud Tech Ltd. If you encounter any problems during use or have any suggestions, please contact us through official channels. We will do our best to provide support and listen to your valuable suggestions. We will constantly make improvements on technical specifications but