PIXELHUE

P80
Presentation Switcher

Specifications

Change History

Document Version	Release Date	Description
V1.3.0	2026-06-25	• Added the Q8_ST2110 (100G)+HDMI2.1+DP1.4 Input Card. • Added the U5 MINI event controller to the control options.
V1.2.1	2026-05-26	Added PSE certification.
V1.2.0	2026-03-31	• Added support for the Q8_8xHDMI2.0+12G-SDI Input Card. • Added support for dual-P80 linking via the link card. • Added the live BKG feature. • Added the KeyFrame feature.
V1.1.2	2025-12-24	Updated the dimension and weight information.
V1.1.1	2025-12-12	• Added support for Q8_HDMI2.0+DP1.2+12G-SDI Input Card. • Added the Dante audio networking feature. • Added embedded audio support for inputs and outputs. • Added multi-screen mosaic support for flex outputs. • Added a description for the upgraded Multiviewer interaction. • Updated the description for the Dante connectors.

Introduction

The P80 is PIXELHUE's new presentation switcher featuring versatile 4K connectivity including HDMI 2.0, DP 1.2, and 12G-SDI. With 12x fixed concurrent 4K inputs and a swappable input card that supports P_HDMI2.0_DP1.2_OPT Link Card, Q8_HDMI2.0+DP1.2+12G-SDI Input Card, Q8_8xHDMI2.0+12G-SDI Input Card, and Q8_ST2110 (100G)+HDMI2.1+DP1.4 Input Card, it delivers exceptional input flexibility. The P80 comes with 8x HDMI 2.0 main output connectors supporting up to 4x 4K concurrent main outputs (copy mode) or 8x dual-link (DL) concurrent main outputs (split mode). It also supports 4x 4K flex outputs, 4x 12G-SDI matrix outputs, and 2x dedicated Multiviewer outputs. Additionally, 8x 10G SFP optical ports are offered to copy the HDMI 2.0 outputs, enabling long-distance 4K signal transmission without fiber converters. The P80 supports up to 8x 4K mixing main layers and 4x 4K mixing PIP layers. Up to 256 presets and 256 layer presets can be saved for easy recall. This powerful multi-screen and multi-layer presentation switcher is ideal for medium to large-scale live events such as summit meetings, annual meetings, launch events, concerts, music festivals and exhibitions, and permanent video wall installations in hotels, shopping malls, airports, etc.

The P80 is exceptionally easy to control via any of the following options: 7-inch graphical touchscreen on the front panel, event controller U5/U5 Pro/U5 MINI, event management software PixelFlow, or third-party control system Stream Deck. In addition, multiple P80 units can be controlled simultaneously from a single event controller PC with PixelFlow installed.

The P80 ensures maximum reliability through multiple backup solutions: input source hot-backup, output copying, device backup, and dual power supply redundancy. These features enable seamless failover from primary to backup connector or device, guaranteeing uninterrupted operation during live events.

Certifications

FCC, IC, CE, RoHS, CB, KC, PSE

If the product does not have the relevant certifications required by the countries or regions where it is to be sold, please contact PIXELHUE to confirm or address the problem. Otherwise, the customer shall be responsible for the legal risks caused or PIXELHUE has the right to claim compensation.

Features

Input and Output

- 12x fixed concurrent 4K inputs
  - 4x HDMI 2.0
  - 4x HDMI 2.0/DP 1.2 (Only one type of connector can be selected as the input source at the same time.)
  - 4x 12G-SDI
- A swappable input card with support for the following cards:

  P_HDMI2.0_DP1.2_OPT Link Card:
  - 2x HDMI 2.0
  - 2x HDMI 2.0/DP 1.2 (Only one type of connector can be selected as the input source at the same time.)
  - 2x 100G OPT: Link to another P80 device to share input sources, expanding the number of input sources and facilitating device management.
    - Each device can share 8 input sources. Two devices can share a total of 16 input sources.
    - To establish link connection, the two devices must be in the same project, have the same link card version, and their link cards must be available.
    - Link can be established between devices in a simulation project.
    - Dual-P80 linking supports hot swapping.

  Q8_HDMI2.0+DP1.2+12G-SDI Input Card:
  - 4x HDMI 2.0
  - 4x DP 1.2

  Q8_8xHDMI2.0+12G-SDI Input Card:
  - 8x HDMI 2.0

  Q8_ST2110 (100G)+HDMI2.1+DP1.4 Input Card
  - 2x 100G OPT
  - 2x HDMI 2.1/DP 1.4 (Only one type of connector can be selected as the input source at the same time.)
- 8x HDMI 2.0 main output connectors

These connectors are divided into four groups and up to 4x 4K (copy mode) or 8x DL (split mode) concurrent main outputs are supported.

- In copy mode, one of the connectors within a group copies the other's output content and the output resolution is up to 4K.
- In split mode, both connectors within a group collaborate to output content and the output resolution of each connector is half of the content resolution. The output resolution per connector is up to DL.

- 8x OPT output ports

  8x 10G SFP optical ports are offered to copy the HDMI 2.0 outputs. 4x 4K outputs are supported.

- 4x 4K flex outputs

  4x HDMI 2.0 flex outputs configurable as up to 4 independent screens or edge-blended widescreens

- 4x SDI matrix outputs
  - 4x 12G-SDI for matrix outputs
  - Allows any content from the input sources, Multiviewer, PGM and flex outputs to be mapped to the output.
- 2x Multiviewer outputs
  - 2x HDMI 2.0 for connecting to Multiviewer screens to monitor all the input sources, PVW and PGM.
  - Allows users to select independent or copy mode and select a standard resolution and frame rate for the connectors.
    - In independent mode, 2x concurrent DL outputs are supported.
    - In copy mode, 1x 4K output and 1x copying output are supported.
  - A variety of Multiviewer layout templates are provided and custom Multiviewer layout templates are supported.
  - The Multiviewer windows can be resized and repositioned, and the width, height and color of the border can be adjusted.
  - Intuitive and upgraded Multiviewer interaction, including maintaining source aspect ratio, snapping between canvas and Multiviewer window, adjusting background color, showing or hiding UMD information, customizing UMD color, and canvas zoom
- Genlock signal input and output (with support for loop-through), tri-level sync

Functionality

- Multi-screen configuration
  - Both main output connectors and flex output connectors can be freely configured as independent screens or edge-blended widescreens.
  - Up to 4x 4K main screens and up to 4x 4K flex screens are supported.
  - Multi-screen mosaic

    Users can arrange the mosaic layout manually or select a layout template. If a connector used for mosaic fails, it can be replaced with another normal connector in the software.
  - Edge blending

Blend the overlapping edges of the images projected by multiple projectors to ensure uniform brightness across the entire display.

- LCD bezel compensation

  Eliminate the visual disruption caused by seams in spliced LCD displays, resulting in a more unified and seamless display.

- Virtual pixel configuration is supported, simplifying calculations between on-site screen size and P80-loaded screen pixels.
- AOI (Area of Interest) feature to customize active areas of outputs
- Custom test patterns

  Select a test pattern for screen test and troubleshooting.

- Multi-layer management
  - Up to 8x 4K mixing main layers available for the main screens and up to 4x 4K mixing PIP layers available for the flex screens.
  - Any of the inputs, Multiviewer, PGM, or local images can be selected as the source of a layer.
  - Layers can be repositioned and resized.
  - The Z-order of layers can be adjusted.
  - Layer names are displayed and can be modified.
  - Layer resource usage is displayed in real time.
  - Layer effects such as flip, crop, mask, KeyFrame (fade), border, and shadow are supported. (PIP layers do not support border and shadow.)
  - DSK: Smart key, luma key, and chroma key are supported. (PIP layers do not support this feature.)
  - Cut & Fill (Flex layers do not support this feature.)

    Use the original layer as a Fill layer and overlap it with the Cut layer to display the visible image of the Cut layer, allowing users to define output shapes and effects more flexibly.
  - Layer color adjustment: Brightness, contrast, saturation, hue, opacity, etc. (PIP layers do not support opacity adjustment.)
  - Layer presets: All (or a portion) of the current layer's properties (such as input source, position, size, effects, etc.) can be saved as a layer preset in PixelFlow for easy recall. Up to 256 layer presets can be saved.
- Preset recall
  - Up to 256 presets can be saved for easy recall.
  - Relative and complete presets are supported to satisfy more application requirements.
  - Allows users to select preferred parameters such as transition duration and input source to save to a preset.
  - Presets can be loaded to PVW or PGM.
- BKG settings
  - Supports still and live BKG. Only one of them can take effect at the same time.
  - BKG can be turned on or off.
  - BKG can be changed and deleted.
  - The BKG image automatically scales to fit the screen while maintaining aspect ratio and is positioned at the bottom layer by default.

Still BKG:

- Images imported from the control computer or event controller can be used as BKG.
- Images captured from input sources and PGM can be used as BKG.
- One dedicated still BKG available on each PGM output.
- The BKG storage capacity is up to 1 GB and PNG/BMP/JPG/JPEG files are supported.

Live BKG:

- Various sources can be used as live BKG, such as local input sources, PGM sources, and still images.
- Live BKG can be created in connector or screen mode. In connector mode, one source can be added for each connector of the screen and the sources of multiple connectors combine to form a live BKG. In screen mode, one source can be added for the entire screen as a live BKG.
- Live BKG can be created for each screen. Up to 16 live BKG presets can be saved for a screen.
- A maximum of 4 live BKG can be used simultaneously for a P80 device.
- Flex screens do not support live BKG.

- Transition & Effects
  - Seamless transition from PVW to PGM via Take, Cut or T-bar
  - Two options for transition between PVW and PGM: Copy and Swap
  - Customizable transition duration (0.1s to 10s)
  - Fade in and out supported
  - Screen freeze and FTB (Fade to Black) supported
- Dante audio networking
  - Dual redundancy Gigabit Ethernet ports (AES67 compliant)
  - Audio de-embedding/embedding on every input & output (raw audio)
  - De-embedded audio channels can be routed directly to the Dante network
  - Audio channels from external Dante audio processor can be re-embedded for sending to display, streaming or recording device
  - 64×64 Dante channels @48 kHz
- Support for 12bit/10bit/8bit video sources
- Dynamic range conversion

  Convert the dynamic range format of the input source to SDR, HDR10, or HLG.
- Automatic HDCP decryption for inputs and HDCP encryption for outputs
- Visualized live monitoring of input and output connector statuses for easy troubleshooting
- EDID management on every input and output (SDI does not support this feature.)
  - Standard EDID with support for multiple standard timings such as DMT, CEA, SMPTE and VESA
  - Custom EDID with support for reduced blanking and HBlank settings
  - Advanced EDID with support for video timing parameter settings
- Compatible with Mac EDID and supports Mac mosaic
- Input and output color adjustment

Independent adjustment of brightness and contrast for each RGB channel, plus saturation, hue, and gamma control

- 3D

  Recognize and output 3D video content accurately, convert between 2D and 3D formats, and blend 3D and 2D videos for display to provide an immersive visual experience.

Multiple Control Options

The P80 can be easily controlled via any of the following options:

- Front panel touchscreen
- Event controller U5/U5 Pro/U5 MINI
- Event management software PixelFlow
- Third-party control system Stream Deck (Companion integrated into the P80)

Multiple P80 units can be controlled simultaneously from a single event controller/PC with PixelFlow.

Reliability and Stability

- Input source backup

  Users can configure hot backup for input sources. If the primary source loses its signal, the system automatically switches to the backup. You can also manually switch to the backup whenever necessary.

- Output copying

  In copy mode, one of the output connectors within a group copies the other's output content.

- Device backup

  With device backup enabled, when a layer's input source is missing or has no signal, all output connectors for the screen immediately stop signal output, triggering a failover to the backup device.

- Dual power supply redundancy

  The P80 is designed with dual power connectors, one for the primary power supply and the other as backup.

- Electrostatic protection

  Set the protection duration according to the actual static electricity, ensuring the display remains normal to keep events smooth and successful.

- Rugged 4RU chassis with a cleanable dust filter
- The system has passed 24/7 stability tests and is proven to be stable and reliable.

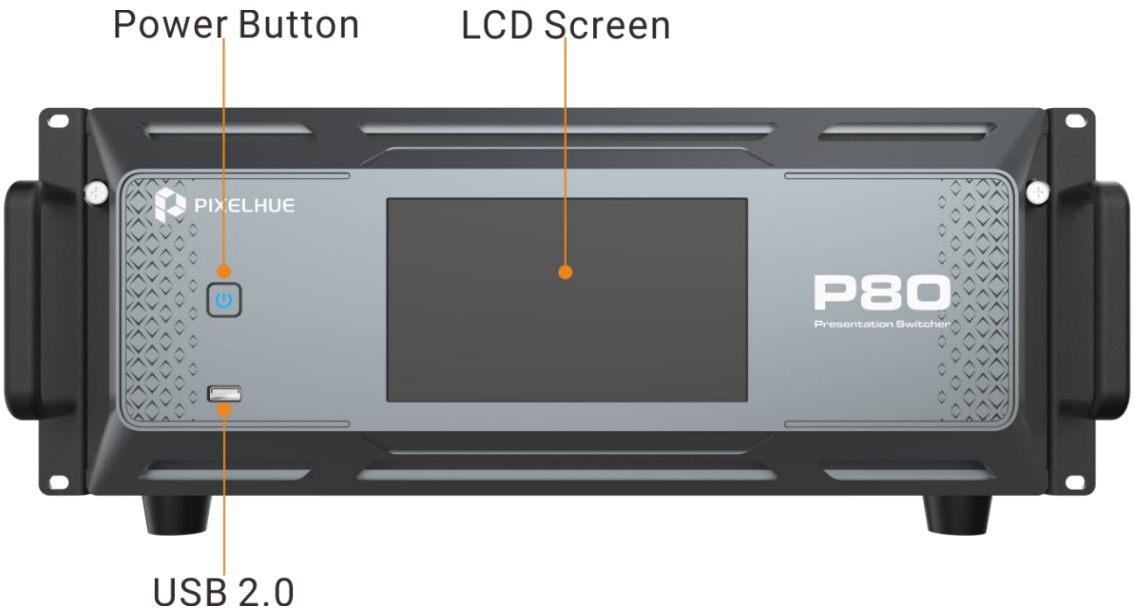
Video Source

Input	Bit Depth	Sampling Format	Supported Resolutions	Connector Bandwidth
DP 1.2	8bit	RGB 4:4:4	8192×1080@60Hz 4096×2160@30Hz	21.6 Gbps
		YCbCr 4:4:4		

Input	Bit Depth	Sampling Format	Supported Resolutions	Connector Bandwidth
		YCbCr 4:2:2	3840×2160@60Hz	
	10bit	RGB 4:4:4	8192×1080@60Hz 4096×2160@60Hz 3840×2160@60Hz	
		YCbCr 4:4:4		
		YCbCr 4:2:2		
	12bit	RGB 4:4:4	4096×2160@30Hz	
		YCbCr 4:4:4		
		YCbCr 4:2:2	8192×1080@60Hz 3840×2160@60Hz	
HDMI 2.0	8bit	RGB 4:4:4	4096×2160@60Hz 8192×1080@60Hz	18 Gbps
		YCbCr 4:4:4		
		YCbCr 4:2:2		
	10bit	RGB 4:4:4	4096×2160@30Hz 4096×1080@60Hz	
		YCbCr 4:4:4		
		YCbCr 4:2:2	4096×2160@60Hz	
	12bit	RGB 4:4:4	4096×2160@30Hz 4096×1080@60Hz	
		YCbCr 4:4:4		
		YCbCr 4:2:2	4096×2160@60Hz	
12G-SDI	10bit	YCbCr 4:2:2	4096×2160@60Hz	11.88 Gbps

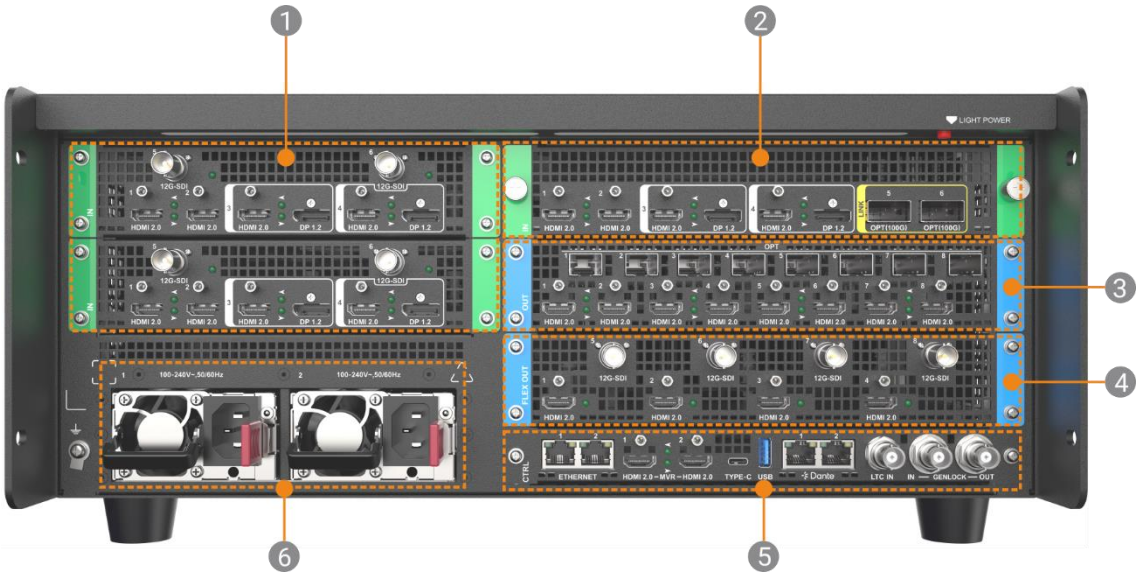
Appearance

Front Panel



Name	Description
Power Button	Press the button to power on/off the device. To power off the device, press the button and select **OK** from the confirmation dialog box displayed on the LCD screen. Button LED status: • Breathing: The power supply is connected. • Solid on: The device is powered on.
USB 2.0	A USB 2.0 (Type A) port used to update firmware, import and export files such as logs, projects and images, connect to Stream Deck, etc.
LCD Screen	• A 7-inch graphical touchscreen for displaying all the menus, submenus and messages • The device is configurable from the touchscreen.

Rear Panel



No.	Name	Qty	Description	
1	**Fixed input connectors** For an input that contains an HDMI 2.0 and a DP 1.2, only one type of connector can be selected as the input source at the same time.			
	HDMI 2.0	8	Max resolution	4096×2160@60Hz 8bit 4:4:4
			Max width/height	• Max width: 8192 pixels (8192×1080@60Hz) • Max height: 7680 pixels (1080×7680@60Hz)
			Dynamic range	HDR10/HLG/SDR
			Quantization range	Full/Limited
			EDID management	• Support for standard resolutions up to 8192×1080@60Hz • Support for custom resolutions
			HDCP	HDCP 2.2 and HDCP 1.4 compliant
			Interlaced signal	Not supported

No.	Name	Qty	Description	
			Embedded audio	Support for 8-channel embedded audio (24bit/48kHz)
	DP 1.2	4	Max resolution	4096×2160@60Hz 10bit 4:4:4
			Max width/height	• Max width: 8192 pixels (8192×1080@60Hz) • Max height: 7680 pixels (1080×7680@60Hz)
			Quantization range	Full/Limited
			EDID management	• Support for standard resolutions up to 8192×1080@60Hz • Support for custom resolutions
			HDCP	HDCP 2.2 and HDCP 1.3 compliant
			Interlaced signal	Not supported
			Embedded audio	Support for 8-channel embedded audio (24bit/48kHz)
	12G-SDI	4	Standard	• Support for ST-2082 (12G), ST-2081 (6G), ST-424 (3G), ST-292 (HD), and ST-259 (SD) video inputs • Compatible with SD-SDI, HD-SDI, 3G-SDI and 6G-SDI
			Max resolution	4096×2160@60Hz 10bit 4:2:2
			EDID management	Not supported
			Interlaced signal	Supported
			Embedded audio	Support for 8-channel embedded audio (24bit/48kHz)
2	**Swappable input card:** Currently, P_HDMI2.0_DP1.2_OPT Link Card, Q8_HDMI2.0+DP1.2+12G-SDI Input Card, Q8_8xHDMI2.0+12G-SDI Input Card, and Q8_ST2110 (100G)+HDMI2.1+DP1.4 Input Card are supported.			
	P_HDMI2.0_DP1.2_OPT Link Card For an input that contains an HDMI 2.0 and a DP 1.2, only one type of connector can be selected as the input source at the same time.			
	HDMI 2.0	4	Max resolution	4096×2160@60Hz 8bit 4:4:4
			Max width/height	• Max width: 8192 pixels (8192×1080@60Hz) • Max height: 7680 pixels (1080×7680@60Hz)
			Dynamic range	HDR10/HLG/SDR
			Quantization range	Full/Limited
			EDID management	• Support for standard resolutions up to 8192×1080@60Hz • Support for custom resolutions
			HDCP	HDCP 2.2 and HDCP 1.4 compliant
			Interlaced signal	Not supported
			Embedded audio	Support for 8-channel embedded audio (24bit/48kHz)
	DP 1.2	2	Max resolution	4096×2160@60Hz 10bit 4:4:4
			Max width/height	• Max width: 8192 pixels (8192×1080@60Hz) • Max height: 7680 pixels (1080×7680@60Hz)

No.	Name	Qty	Description	
			Quantization range	Full/Limited
			EDID management	• Support for standard resolutions up to 8192×1080@60Hz • Support for custom resolutions
			HDCP	HDCP 2.2 and HDCP 1.3 compliant
			Interlaced signal	Not supported
			Embedded audio	Support for 8-channel embedded audio (24bit/48kHz)
	OPT (100G)	2	Link to another P80 device to share input sources.	
	Q8_HDMI2.0+DP1.2+12G-SDI Input Card The 12G-SDI connectors are not available.			
	HDMI 2.0	4	Max resolution	4096×2160@60Hz 8bit 4:4:4
			Max width/height	• Max width: 8192 pixels (8192×1080@60Hz) • Max height: 7680 pixels (1080×7680@60Hz)
			Dynamic range	HDR10/HLG/SDR
			Quantization range	Full/Limited
			EDID management	• Support for standard resolutions up to 8192×1080@60Hz • Support for custom resolutions
			HDCP	HDCP 2.2 and HDCP 1.4 compliant
			Interlaced signal	Supported
			Embedded audio	Support for 8-channel embedded audio (24bit/48kHz)
	DP 1.2	4	Max resolution	4096×2160@60Hz 10bit 4:4:4
			Max width/height	• Max width: 8192 pixels (8192×1080@60Hz) • Max height: 7680 pixels (1080×7680@60Hz)
			Quantization range	Full/Limited
			EDID management	• Support for standard resolutions up to 8192×1080@60Hz • Support for custom resolutions
			HDCP	HDCP 2.2 and HDCP 1.3 compliant
			Interlaced signal	Not supported
			Embedded audio	Support for 8-channel embedded audio (24bit/48kHz)
	Q8_8xHDMI2.0+12G-SDI Input Card The 12G-SDI connectors are not available.			
	HDMI 2.0	8	Max resolution	4096×2160@60Hz 8bit 4:4:4
			Max width/height	• Max width: 8192 pixels (8192×1080@60Hz) • Max height: 7680 pixels (1080×7680@60Hz)
			Dynamic range	HDR10/HLG/SDR

No.	Name	Qty	Description	
			Quantization range	Full/Limited
			EDID management	• Support for standard resolutions up to 8192×1080@60Hz • Support for custom resolutions
			HDCP	HDCP 2.2 and HDCP 1.4 compliant
			Interlaced signal	Supported
			Embedded audio	Support for 8-channel embedded audio (24bit/48kHz)
	Q8_ST2110 (100G)+HDMI2.1+DP1.4 Input Card • 100G OPT for video source transmission, control, and synchronous clock input. • The video interface and control interface are combined into one. • Simultaneous input of primary and backup video sources, enabling seamless transition when necessary.			
	100G OPT	2	1 primary and 1 backup per input card	
			Max resolution	4x 4K×2K@60Hz 12bit 4:4:4
			Max width/height	• Max width: 8192 pixels (8192×1080@60Hz) • Max height: 7680 pixels (1080×7680@60Hz)
			Bit depth	8bit/10bit/12bit
			Sampling	4:2:2/4:4:4
			Standard	SMPTE ST 2110 (-10, -20)/SMPTE 2059 (-1, -2)
			Backup	SMPTE 2022-7
			EDID management	• Support for standard resolutions up to 8192×1080@60Hz • Support for custom resolutions
			PixelFlow control	• Support loading video stream configuration by SDP file or directly inputting. Exporting SDP file is also supported. • Support setting the resolution when managing ST 2110 source in PixelFlow. – Support for standard resolutions up to 4096×2160@60Hz – Support for custom resolutions.
			Color gamut	Rec.601/Rec.709/Rec.2020/DCI-P3
			PTP settings	Support for the IEEE 1588-2008 standard, enabling high-precision synchronization across different input sources when Lock Input to PTP is activated
			FEC configuration	With parameters set at the card level, this feature can automatically detect and correct errors during data transmission, enhancing the reliability of video signal transfer. Support RS-FEC and NO-FEC encoding methods. This feature requires configuration on the switch before it can be used.
			IP address	IPv4 DHCP and static IP

No.	Name	Qty	Description	
			Multicast protocol	IGMPv3
			Ethernet	• 100 GbE IEEE 802.3ba (100GBASE-LR) • 100 GbE IEEE 802.3ba (100GBASE-SR) • 100 GbE IEEE 802.3ba (100GBASE-CR)
			Port configuration	You can configure the port information through the following two methods: • Import the SDP file in PixelFlow for configuration. • Directly input the video stream configuration in PixelFlow: Video stream destination IP (primary/backup), port (primary/backup), video source IP (primary/backup), and video source details (resolution, frame rate, color/sample, bit depth)
	HDMI 2.1	2	One HDMI 2.1 and one DP 1.4 form a group, with only one usable at a time	
			Max resolution	8K×4K@30Hz 10bit 4:4:4 (Currently limited to 4K×2K@60Hz 8bit 4:4:4)
			Max width/height	• Max width: 8192 pixels (8192×1080@60Hz) • Max height: 7680 pixels (1080×7680@60Hz)
			Bit depth	8bit/10bit/12bit
			Sampling	4:2:0/4:2:2/4:4:4
			Dynamic range	HDR10/HLG/SDR
			Quantization range	Full/Limited
			EDID management	• Support for standard resolutions up to 8192×1080@60Hz • Support for custom resolutions
			HDCP	HDCP 2.3 and HDCP 1.4 compliant
			Interlaced signal	Supported
			Embedded audio	Support for 8-channel embedded audio (24bit/48kHz)
	DP 1.4	2	One HDMI 2.1 and one DP 1.4 form a group, with only one usable at a time	
			Max resolution	8K×4K@30Hz 10bit 4:4:4 (Currently limited to 4K×2K@60Hz 10bit 4:4:4)
			Max width/height	Max width: 8192 pixels (8192×1080@60Hz) Max height: 7680 pixels (1080×7680@60Hz)
			Bit depth	8bit/10bit/12bit
			Sampling	4:2:2/4:4:4
			Quantization range	Full/Limited
			Dynamic range	HDR10/HLG/SDR
			EDID management	• Support for standard resolutions up to 8192×1080@60Hz • Support for custom resolutions
			HDCP	HDCP 2.3 and HDCP 1.3 compliant

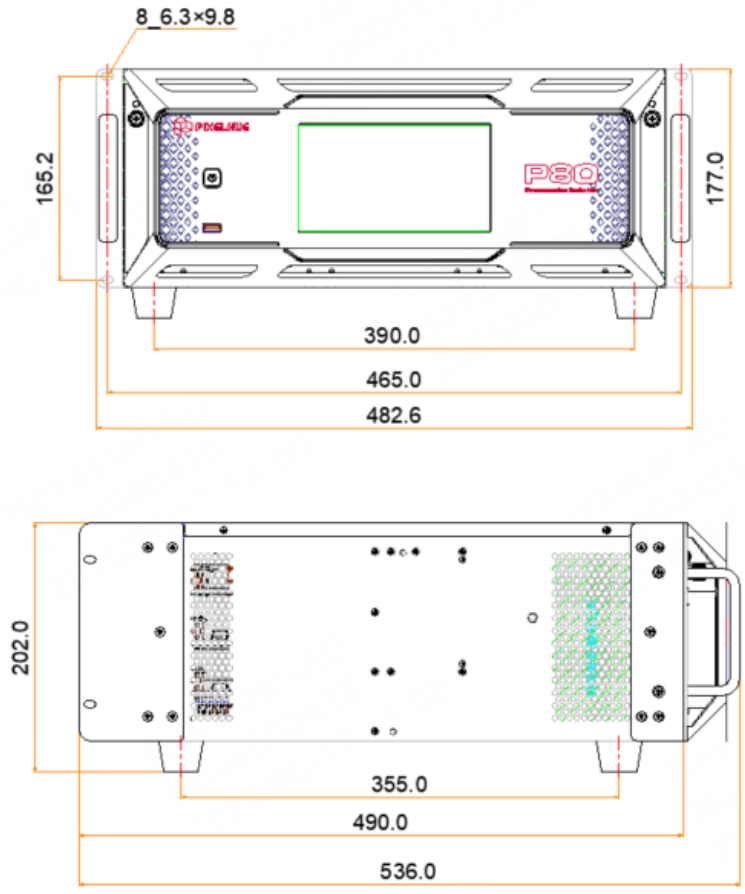
No.	Name	Qty	Description	
			Interlaced signal	Not supported
			Embedded audio	Support for 8-channel embedded audio (24bit/48kHz)
3	**Main output connectors**			
	HDMI 2.0	8	8x HDMI 2.0 connectors are divided into four groups: • Group 1: HDMI 1 and HDMI 2 • Group 2: HDMI 3 and HDMI 4 • Group 3: HDMI 5 and HDMI 6 • Group 4: HDMI 7 and HDMI 8 The two connectors within a group can work in copy mode or split mode. • In copy mode, one of the connectors within a group copies the other's output content and the output resolution is up to 4K. – Group 1: HDMI 2 copies HDMI 1. – Group 2: HDMI 4 copies HDMI 3. – Group 3: HDMI 6 copies HDMI 5. – Group 4: HDMI 8 copies HDMI 7. • In split mode, both connectors within a group collaborate to output content and the output resolution of each connector is half of the content resolution. The output resolution per connector is up to DL. – Group 1: HDMI 1 outputs the left half and HDMI 2 outputs the right half. – Group 2: HDMI 3 outputs the left half and HDMI 4 outputs the right half. – Group 3: HDMI 5 outputs the left half and HDMI 6 outputs the right half. – Group 4: HDMI 7 outputs the left half and HDMI 8 outputs the right half.	
			Max resolution	4096×2160@60Hz 8bit 4:4:4
			Max width/height	• Max width: 8192 pixels (8192×1080@60Hz) • Max height: 7680 pixels (1080×7680@60Hz)
			Bit depth	8bit/10bit/12bit
			Sampling	4:4:4/4:2:2
			Color space	YCbCr/RGB
			Dynamic range	HDR10/HLG/SDR
			EDID management	• Support for standard resolutions up to 8192×1080@60Hz • Support for custom resolutions
			HDCP	HDCP 2.2 and HDCP 1.4 compliant
			Interlaced signal	Supported
			Embedded audio	Support for 8-channel embedded audio (24bit/48kHz)
	OPT	8	10G SFP optical ports are offered to copy HDMI 2.0 outputs. • Copy mode – OPT 1 copies the left half of the HDMI 1 output image. – OPT 2 copies the right half of the HDMI 1 output image. – OPT 3 copies the left half of the HDMI 3 output image. – OPT 4 copies the right half of the HDMI 3 output image.	

No.	Name	Qty	Description
			– OPT 5 copies the left half of the HDMI 5 output image. – OPT 6 copies the right half of the HDMI 5 output image. – OPT 7 copies the left half of the HDMI 7 output image. – OPT 8 copies the right half of the HDMI 7 output image. • Split mode – OPT 1 copies HDMI 1. – OPT 2 copies HDMI 2. – OPT 3 copies HDMI 3. – OPT 4 copies HDMI 4. – OPT 5 copies HDMI 5. – OPT 6 copies HDMI 6. – OPT 7 copies HDMI 7. – OPT 8 copies HDMI 8. Each port supports up to 4K output and the transmission distance is up to 10 km.
4	**Flex and matrix output connectors**		
	HDMI 2.0	4	Flex output connectors
			Max resolution: 4096×2160@60Hz 8bit 4:4:4
			Max width/height: • Max width: 8192 pixels (8192×1080@60Hz) • Max height: 7680 pixels (1080×7680@60Hz)
			Bit depth: 8bit/10bit/12bit
			Sampling: 4:4:4/4:2:2
			Color space: YCbCr/RGB
			Dynamic range: HDR10/HLG/SDR
			EDID management: • Support for standard resolutions up to 8192×1080@60Hz • Support for custom resolutions
			HDCP: HDCP 2.2 and HDCP 1.4 compliant
			Interlaced signal: Supported
			Embedded audio: Support for 8-channel embedded audio (24bit/48kHz)
	12G-SDI	4	• Matrix outputs of the input sources, Multiviewer, and PGM • Compatible with HD-SDI, 3G-SDI and 6G-SDI • No support for bit depth and color space settings • Support for 8-channel embedded audio (24bit/48kHz)
5	**Control connectors**		
	ETHERNET	2	• Gigabit Ethernet ports for device control and input view (transmission at 10fps) • One works as primary and the other as backup.
	MVR	2	• HDMI 2.0 connectors for Multiviewer. • Two output modes are supported: – Copy mode: 1x 4K output and 1x copying output are supported.

No.	Name	Qty	Description
			– Independent mode: 2x concurrent DL outputs are supported. • The output resolution and frame rate can be changed. • HDCP 2.2 and HDCP 1.4 compliant
	TYPE-C	1	USB 3.0 Type-C port for USB device connection (*to be implemented in future updates)
	USB	1	USB 3.0 Type-A port used to update firmware, import and export files such as logs, projects and images, connect to Stream Deck, etc.
	Dante	2	Dual redundant Gigabit Ethernet ports for 48kHz 64x64 Dante audio networking
	LTC IN	1	For timecode input (*to be implemented in future updates)
	GENLOCK	2	Genlock synchronization signal connectors, supporting tri-level sync for input and output. • IN: Synchronization signal input • OUT: Synchronization signal output (with support for loop-through)
6	**Power connectors**		
	100-240V~, 50/60Hz	2	• 2x AC power connectors (100-240V, 50/60Hz) • One for primary power supply and the other as backup

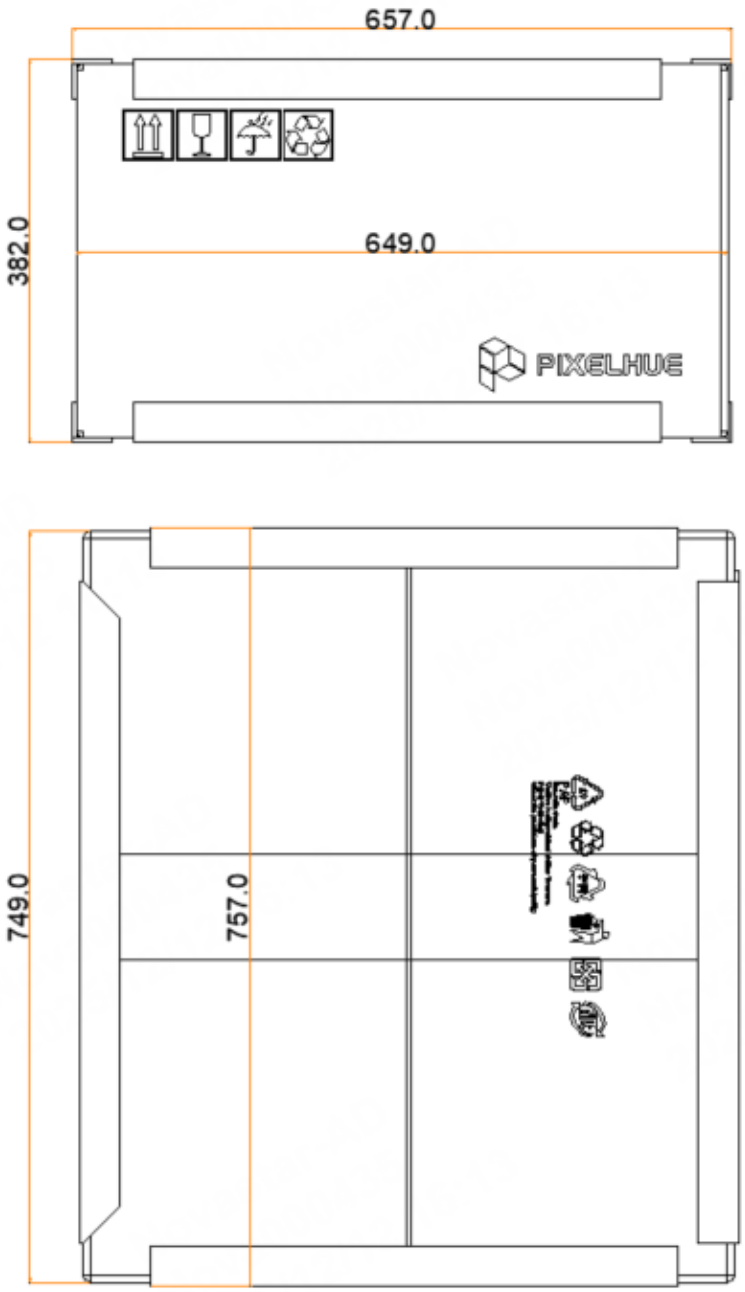
Dimensions

P80



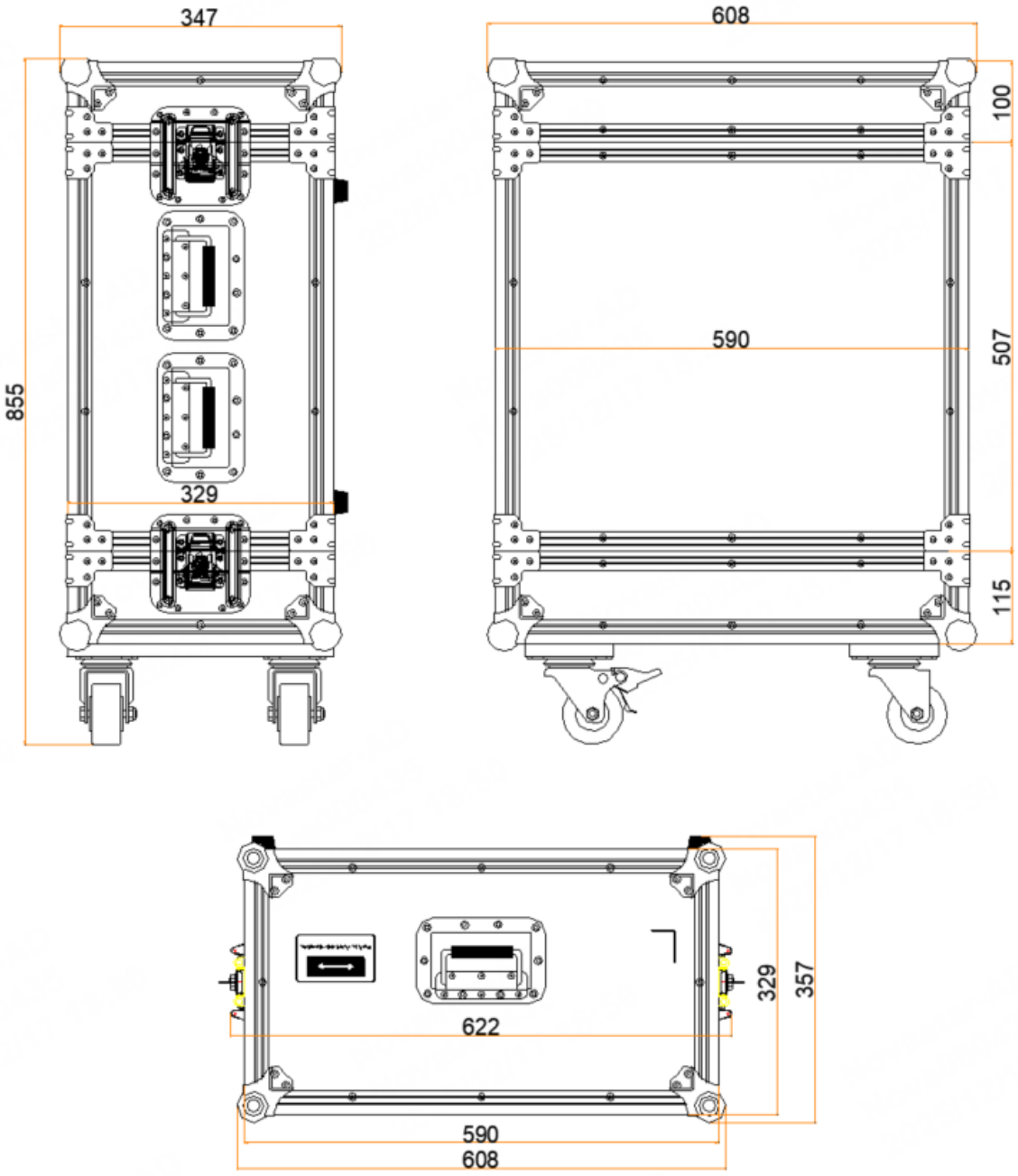
Tolerance: ±0.5 Unit: mm

Paper Box for P80



Tolerance: ±5 Unit: mm

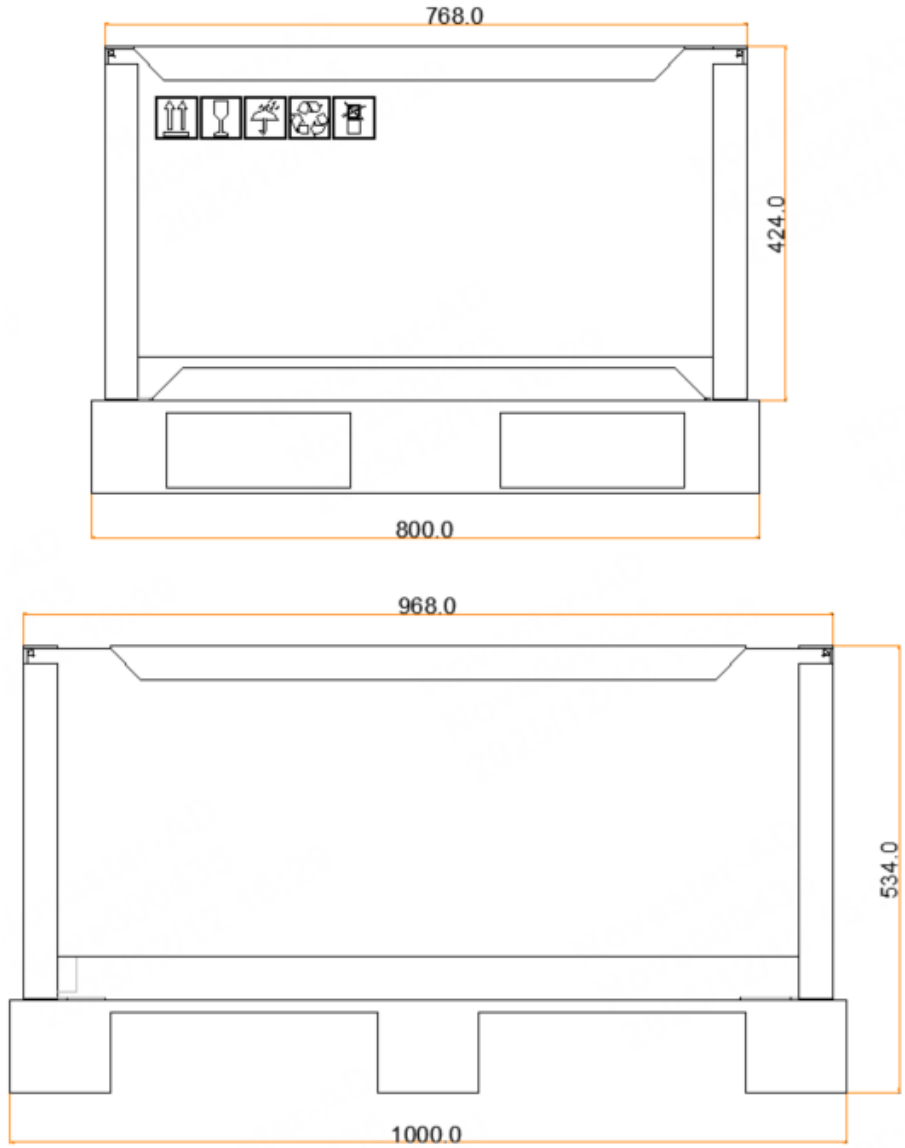
Flight Case



Tolerance: ±5 Unit: mm

Paper Box and Wooden Pallet for Flight Case

As of December 25, 2025, the flight case will be packed in a paper box and secured on a wooden pallet for shipment.



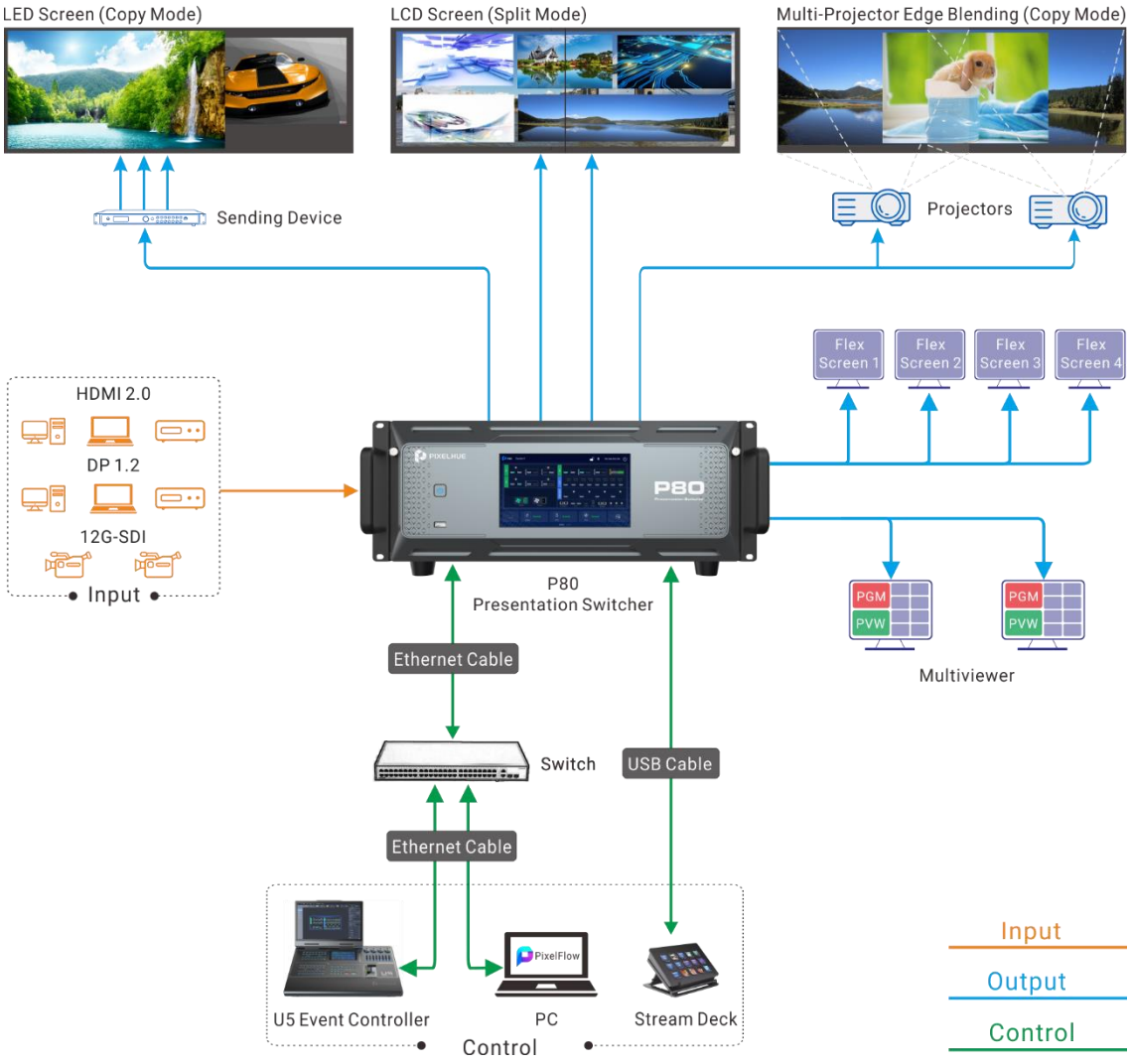
Tolerance: ±5 Unit: mm

Notes

If you require detailed dimensions and drawings, please contact PIXELHUE customer service team.

Applications

The P80 presentation switcher can work with the U5, U5 Pro, or U5 MINI event controller. The following uses the U5 as an example.



Specifications

Electrical Specifications	Power supply	100-240V~, 50/60Hz
	Max power consumption	450 W
Operating Environment	Temperature	0°C to 50°C (32°F to 122°F)
	Humidity	5% RH to 85% RH, non-condensing
Storage Environment	Temperature	–20°C to +70°C (–4°F to 158°F)
	Humidity	5% RH to 95% RH, non-condensing
Physical	Dimensions	W 482.6 mm × D 536.0 mm × H 177.0 mm

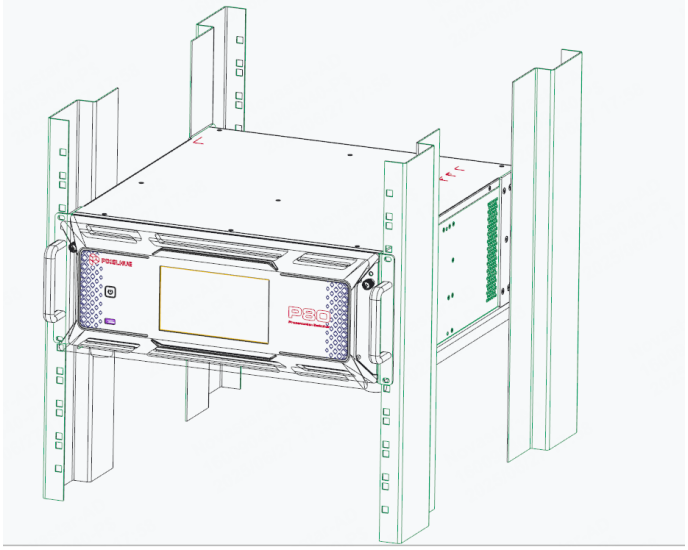
Specifications			W 19.0 in × D 21.1 in × H 7.0 in
	Net weight		23.0 kg / 50.7 lbs
	Gross weight	Packed with a paper box	32 kg / 70.5 lbs Note: It is the total weight of the product, accessories, and packing materials packed with a paper box.
		Packed with a flight case	59.6 kg / 131.4 lbs Note: It is the total weight of the product, accessories, and packing materials packed with a flight case.
		Packed with a flight case, a paper box and a wooden pallet	84 kg / 185.1 lbs Note: It is the total weight of the product, accessories, and packing materials packed with a flight case, a paper box and a wooden pallet.
Packing Information	Paper box for P80		757 mm × 657 mm × 382 mm 30 in × 26 in × 15 in
	Flight case		622 mm × 357 mm × 855 mm 24 in × 14 in × 34 in
	Paper box and wooden pallet for the flight case		1000 mm × 800 mm × 534 mm 39 in × 31 in × 21 in
	Accessories		• 2x AC power cords • 1x DC power cord • 1x Ethernet cable • 3x HDMI cables • 3x DP cables • 8x Optical modules • 1x Phillips screwdriver • 1x Customer Letter • 1x Quick Start Guide • 1x Safety Manual • 1x Certificate of Approval
Noise (Typical at 25°C/77°F)	45 dB (A)		

The amount of power consumption may vary depending on various factors such as product settings, usage, and environment.

Notes and Cautions

Notes for Installation

When the product needs to be installed on the rack, 4 screws at least M5*12 should be used to fix it. The rack for installation shall bear at least 92.0kg weight.



- Elevated Operating Ambient - If installed in a closed or multi-unit rack assembly, the operating ambient temperature of the rack environment may be greater than room ambient. Therefore, consideration should be given to installing the equipment in an environment compatible with the maximum ambient temperature (Tma) specified by the manufacturer.
- Reduced Air Flow – Installation of the equipment in a rack should be such that the amount of air flow required for safe operation of the equipment is not compromised.
- Mechanical Loading – Mounting of the equipment in the rack should be such that a hazardous condition is not achieved due to uneven mechanical loading.
- Circuit Overloading – Consideration should be given to the connection of the equipment to the supply circuit and the effect that overloading of the circuits might have on overcurrent protection and supply wiring. Appropriate consideration of equipment nameplate ratings should be used when addressing this concern.
- Reliable Earthing – Reliable earthing of rack-mounted equipment should be maintained. Particular attention should be given to supply connections other than direct connections to the branch circuit (e.g. use of power strips).

FCC Caution

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Others

This is Class A product. In a domestic environment, this product may cause radio interference in which case the user may be required to take adequate measures.

This product can only be placed horizontally. Do not mount vertically or upside-down.

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This document could contain technical inaccuracies or typographical errors. Changes are periodically made to the information in this document; these changes are incorporated in new editions of this document.

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