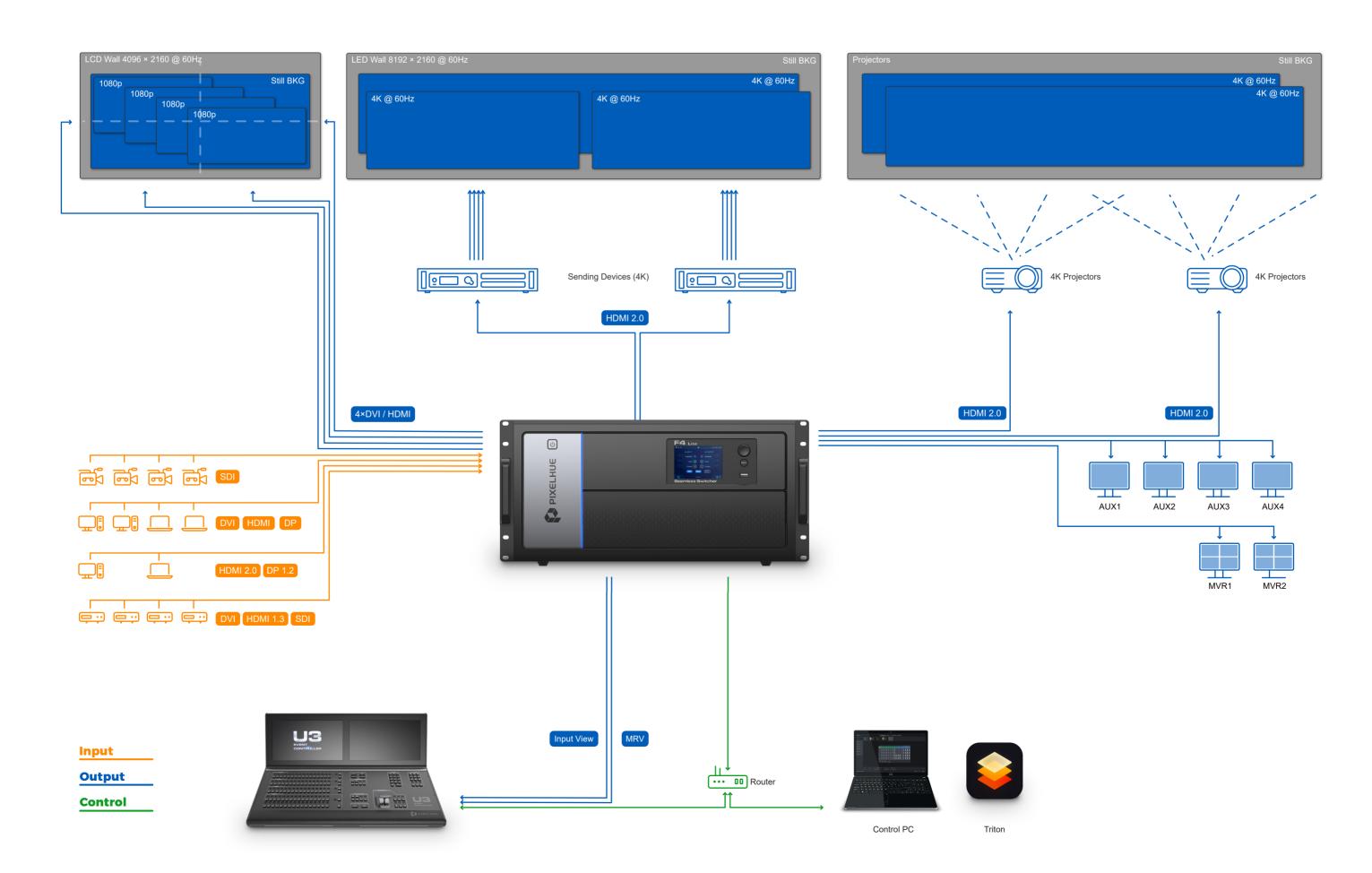


What F4 Lite Can Do for You



FEATURES

Pixelhue Flexi View series - F4 Lite, designed for easy management of multiple displays for shows or visual management systems. Whatever the input formats and display outputs your display system may require, rest assured the F4 Lite has the input and output flexibility to support your application or event.



Powerful Performance

Pixelhue Flex View series - F4 Lite, is designed for easy management of multiple displays in live shows and visua management systems. Flexible to use, with a variety of

Designed with the latest high-performance FPGA chipset, F4 Lite delivers reliable, stable, faster, and better image performance and outputs uncompressed 4K@60Hz 4:4:4

Built with a rugged and heavy-duty design, F4 Lite provides a great long-term solution by simplifying upgrades through modules for future use.

More optional I/O modules will be provided for upgrades in the future.

Total Event Control with U3 Controller

U3, a large-scale event controller, is equipped with 80 re-nameable buttons in 4 groups with OLED labels, and 64 levels of adjustment, allowing the operator to manage and monitor any show easily. It can execute the precise control of the transition effects between presets.

U3 features super backlit keys, a highly sensitive T-Bar, and two 21.5" HD ultra-clear capacitive touch screens. It can quickly satisfy any event requirements such as stage performance, auto shows, TV program recording, product launch events, or any large-scale exhibitions. For more information, please refer to the U3 info packages or our official website at www.pixelhue.com.

Key Features

FPGA based Apollo image processing architecture

Future-proof modular design

Dual hot swappable redundant power supplies

Up to 32 × 2K60p inputs and 20 × 2K60p outputs True 4K60p 4:4:4 10bit video processing

Field-installable I/O cards to provide a variety of connectivity Up to 40 × SL mixing layers, 20 × DL mixing layers or 10 × 4K mixing layers

Cross-connection layer within modular card

Input and PGM view on auxiliary output

Flexible arrangement of output connectors

Modular Design for a Flexible and Precise User Experience

F4 Lite chassis utilizes a hot-swappable modular design that supports 8 input slots, 5 PGM output slots, one MVR output slot that has one expansion slot for AUX or Link card. It supports at most 32 \times Full HD or 8 \times UHD 4K inputs and up to 20 \times Full HD or $5\times$ UHD 4K outputs. Each output card can offer up to 4K × 2K@60Hz loading capacity, and it can support up to 40 × Full HD mixing layers or 10 true 4K layers. It also supports a variety of input and output connectors, including DVI, DP, HDMI, and 3G SDI connectors, allowing easy customization for any project or show.

Easy to Use

F4 Lite works exceptionally well with Pixelhue's matching video processing software TRITON. TRITON provides an offline mode and pre-editing functionality, which can directly import while on-site and allows migration between different devices. This software is easy to master and a sophisticated yet user-friendly interface that guides you from beginning to the end of any event with as little complex operation as possible.

Reliable & Worry-Free Operations

Reliable technology plays an outstanding role in the rapidly evolving market, and F4 lite allows you to configure the system to accommodate a variety of connectivity arrangements and display requirements. It utilizes dual power supplies, full backup data of configuration to local storage. It features fast restore and can work reliably and efficiently 24/7. F4 Lite has also passed 35 rigorous testing that includes drop, shock, vibration, and thermal tests to ensure that it can survive in any road trip or event environment.

Support for virtual pixels

2 × Multiviewer outputs with flexible layouts, adjustable borders,

Input sync with Genlock, Genlock accepts bi-level or tri-level

Custom timing and frame rates on outputs

Edge blending, adjustable blending width, and Gamma

EDID management on every input channel

Adjustable layer mask, flipping, and border

Technical Specifications

Inputs

1. Up to 8 input cards

- a. 4K connector supports up to 4K2K@60 4:4:4 10-bit inputs
 b. DL connector supports up to 4K1K@60 4:4:4 10-bit inputs
 c. SL connector supports up to 2K1K@60 4:4:4 10-bit inputs
 d. 4K connectors include DP 1.2 and HDMI 2.0
 e. DL connectors include DP 1.1, HDMI 1.4 and Dual-link DVI

- f. SL connectors include HDMI 1.3, single-link DVI and 3G-SDI
- Standard, custom and advanced EDID supported Support for standard resolutions: 1920 × 1080p@60, 3840 × 1080p@60 and 3840 × 2160p@60, etc.
- 3. Support for motion adaptive deinterlacing
- 4. Input source cropping

Multiviewer Outputs

MVR connector can be single-link DVI or HDMI 1.3, with a fixed resolution of 1920 × 1080p@60

2. Monitor all inputs and screens (PVW and PGM)

3. UMD display and color settings 4. MVR background color settings

5. Multiple MVR layouts for easy use

6. Border adjustment for MVR window

Screens

1. Outputs configured as single screens, or outputs in mosaic mode for 2. Up to 128 presets

AUX

1. Support for AUX screen AUX connector can be used independently or mosaicing

2. AUX screen can follow the preset 3. Input and screen (PGM) view

Transition and Effect

1. Seamless transition via Take, cut or T-bar operation 2. Fade and Cut effects

3. Customized transition duration 4. Copy or swap mode

Outputs

1. Up to 5 outputs

- a. 4K connector supports up to 4K2K@60 4:4:4 8-bit outputs
 b. DL connector supports up to 4K1K@60 4:4:4 10-bit outputs
 c. SL connector supports up to 2K1K@60 4:4:4 10-bit outputs
 d. 4K connectors include HDMI 2.0
 e. DL connectors include HDMI 1.4 and Dual-link DVI
 f. DL connectors include HDMI 1.3, single-link DVI and 3G-SDI
 a.106 OPT conventant

- 2. Standard, custom and advanced output timing settings
- 3. Output width can be up to 8192 pixels, better choice for LED
- Output connector AOI settings
- 4. Auto report on output status

Layers

- Each output card supports up to 8 × SL mixing layers, 4 × DL mixing layers or 2 × 4K mixing layers
 Full screen roaming supported
- 2. Fade and cut transitions for all layers
- 3. Adjustable layer flipping, mask and border 4. Support for pure color layer

BKG & LOGO

- 1. BKG can be a captured or imported image
- 2. Still image library with maximum 512 MB storage space
- 4. Each screen can have its own BKG and LOGO
- 5. BKG auto fills full screen by default

Processing

- 1. High quality scaling
- 2. Extremely low latency, less than 1 frame 3. HDCP 1.4 and HDCP 2.2 compliant

Control

1. U3 event controller 2. U3 + PC dual control mode

MODULAR

Inputs

 $8 \times$ slots for input cards Each supports up to 4K@60Hz or 4×1080 p60Hz



SL-DVI Quad Input Card Single link DVI-D×4

- HDCP 1.4 compliant
- SL mode: Up to 2048×1080@60Hz 4:4:4 8-bit
 DL mode: Up to 4096×1080@60Hz 4:4:4 8-bit
- Dual link mode supported, connectors 2 and 4
- EDID management for VESA, and CVT compliant user timings
- Common resolutions

3G-SDI Quad Input Card

Deinterlacing by default

· Common resolutions

• 720×576i (PAL)@50Hz

and 259M

HDMI 2.0×1

1920×1080p@30/48/50/59.94/60Hz

• Downward compatible with SD/HD SDI

Support for SMPTE 425-1, 2048-2, 296M, 292M

Bi-level at SD and Tri-level at HD

720×480i (NTSC)@59.94Hz
 1920×1080i@50/59.94/60Hz

4K HDMI2.0/DP1.2 Input Card

• DP 1.2: HDCP 1.3 compliant

• HDMI 2.0: HDCP 2.2 compliant

compliant user timings

Common resolutions

· DP or HDMI can be used each time. • EDID management for VESA, and CVT

Up to 4096×2160@60Hz 4:4:4 10-bit

Up to 4096×2160@60Hz 4:4:4 8-bit

1920×1080p@30/48/50/59.94/60Hz
 3840×1080p@30/50/59.94/60Hz
 3840×2160p@30/50/59.94/60Hz

HDMI1.3 Quad Input Card HDMI1.3×4

- HDCP 1.4 compliant Up to 2048×1080@60Hz 4:4:4 8-bit
- EDID management for VESA, and CVT compliant user timings · Common resolutions
- · 1920×1080p@30/48/50/59.94/60Hz



- **DP1.1 Quad Input Card**
- HDCP 1.3 compliant SL mode: Up to 2048×1080@60Hz 4:4:4 8-
- DL mode: Up to 3840×1080@60Hz 4:4:4 8-
- EDID management for VESA, and CVT compliant user timings
- · Common resolutions
- 1920×1080p@30/48/50/59.94/60Hz
 3840×1080p@30/50/59.94/60Hz



Dual 4K HDMI2.0/DP1.2 Input Card **HDMI 2.0×2**

- DP1.2: HDCP 1.3 compliant Up to 4096×2160@60Hz 4:4:4 10-bit • HDMI: HDCP 2.2 compliant
- Up to 4096×2160@60Hz 4:4:4 8-bit Only one of the HDMI2.0 or DP1.2 can run simultaneously with that in the other parallel
- Group 2: Connectors 3&4) • EDID management for VESA, and CVT
- · Common resolutions 1920×1080p@30/48/50/59.94/60Hz
 3840×1080p@30/50/59.94/60Hz
 3840×2160p@30/50/59.94/60Hz

compliant user timings



AUX



AUX SL-DVI Output Card DVI1.3×4

HDCP 1.4 compliant

- Up to 2048×1080@60Hz 4:4:4 8-bit Max. output width: 2048 pixels
- Max. output height: 2048 pixels • Support for VESA/CVT and user timings
- Common resolutions
- 1920×1080p@30/48/50/59.94/60Hz

AUX HDMII Output Card

- HDMI1.3×4
- HDCP 1.4 compliant Up to 2048×1080@60Hz 4:4:4 8-bit Max. output width: 2048 pixels Max. output height: 2048 pixels
- Support for VESA/CVT and user timings Common resolutions
- 1920×1080p@30/48/50/59.94/60Hz

Outputs

6×slots for output cards Each supports up to 4K@60Hz or 4×1080p60Hz



- Single link DVI-D×4
- HDCP 1.4 compliant
- Support for VESA/CVT and user timings

DVI(HDMI1.4) Quad Output Card

- DVI(HDMI 1.4)×4
- HDCP 1.4 compliant · SL mode:
- o Up to 2048×1080@60Hz 4:4:4 8-bit Max. output width: 2048 pixels Max. output height: 2048 pixels
- Connectors 1, 2, 3 and 4 are all active.
- Up to 4096×1080@60Hz 4:4:4 8-bit Max. output width: 4096 pixels Max. output height: 4096 pixels
 Connectors 2 and 4 are active, connectors 1 and 3 copy
- the output on connectors 2 and 4.
- · Support for VESA/CVT and user timings • Support for single link (default) and dual link modes
- · Compatible with HDMI 1.4 in DL mode Common resolutions
- 1920×1080p@30/48/50/59.94/60Hz
 2048×1080p@30/48/50/59.94/60Hz
 3840×1080p@30/50/59.94/60Hz



4K HDMI2.0/OPT Output Card **HDMI 2.0×2**

- HDMI 2.0: HDCP 2.2 compliant Up to 4096×2160@60Hz 4:4:4 8-bit
- Max. output width: 4096 pixels
 Max. output height: 4096 pixels 4K mode: Max. output width: 8192 pixels
- Max. output height: 7680 pixels
 HDMI1: output interface, HDMI2: copy for HDMI1A
- OPT 1 and OPT 2 copy the output on HDMI. • OPT 3 and OPT 4 copy the output on OPT1 & OPT 2.
- Common resolutions

Support for VESA/CVT and user timings

- 1920×1080p@30/48/50/59.94/60Hz
 2048×1080p@30/48/50/59.94/60Hz
 3840×1080p@30/50/59.94/60Hz · 3840×2160p@30/50/59.94/60Hz
- RELEASED.

SL-DVI Quad Output Card



HDMI1.4 Quad Output Card

HDMI1.3 Ouad Output Card

Up to 2048×1080@60Hz 4:4:4 8-bit

Max. output width: 2048 pixels
Max. output height: 2048 pixels

Support for VESA/CVT and user timings

· 1920×1080p@30/48/50/59.94/60Hz

HDCP 1.4 compliant

Common resolutions

- HDCP 1.4 compliant SL mode:
- Up to 2048×1080@60Hz 4:4:4 8-bit Max. output width: 2048 pixels
 Max. output height: 2048 pixels Connectors 1, 2, 3 and 4 are all active
- Up to 4096×1080@60Hz 4:4:4 8-bit Max. output width: 4096 pixels Max. output height: 4096 pixels Connectors 2 and 4 are active, connectors 1 and 3 copy the output on connectors 2 and 4
- Support for VESA/CVT and user timings • Support for single link (default) and dual link modes
- Common resolutions
- 1920×1080p@30/48/50/59.94/60Hz 2048×1080p@30/48/50/59.94/60Hz
- 3840×1080p@30/50/59.94/60Hz
- DVI(HDMI 1.4)×2 DVI: HDCP 1.4 compliant
 Up to 4096×1080@60Hz 4:4:4 8-bit
 Max. output width: 4096 pixels

DVI(HDMI1.4)/OPT Output Card

- Max. output height: 4096 pixels • OPT 1 copies the output on DVI-1
- OPT 2 copies the output on DVI-2 • OPT 3 copies the output on OPT 1
- Support for VESA/CVT and user timings Common resolutions

• OPT 4 copies the output on OPT 2

- 1920×1080p@30/48/50/59.94/60Hz
 2048×1080p@30/48/50/59.94/60Hz
 3840×1080p@30/50/59.94/60Hz

Caution All the cards can be only installed into the designed slots as illustrated in the

- above figure. Installing a card into an incorrect slot will cause device failure. Specifications subject to change without prior notice.