










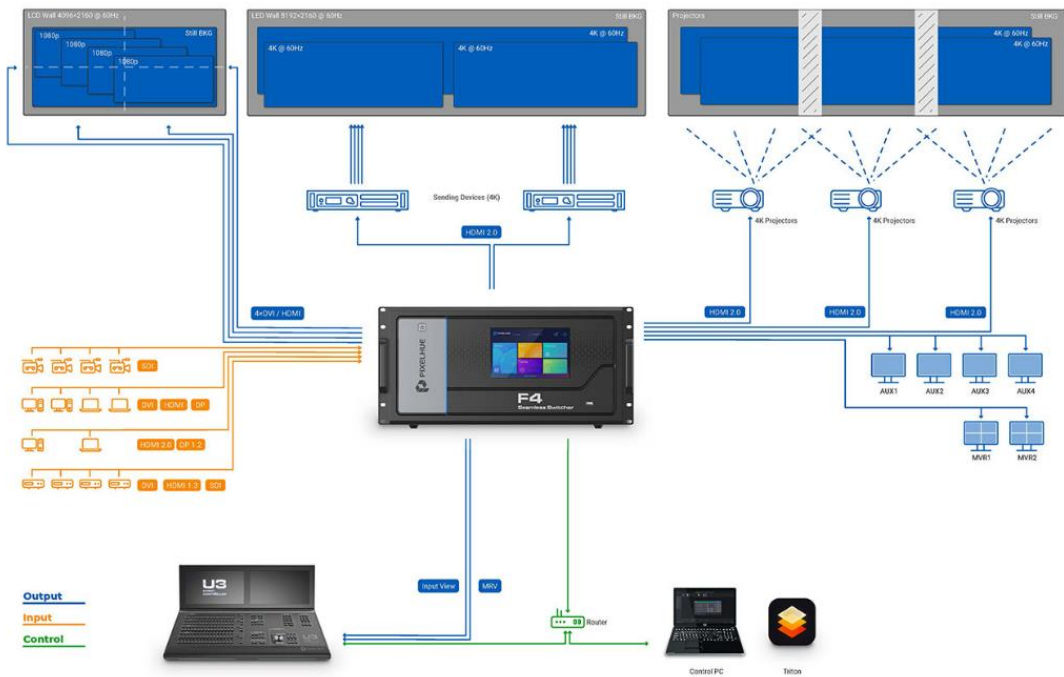


PRESENTATION SWITCHER F4



-  MODULAR
-  HDMI
-  HDCP
-  SCALABLE
-  4K@60HZ
-  BLEND
-  LED COMPATIBLE
-  60HZ 4:4:4 10bits
-  UP TO 32 INPUTS
-  OPTICAL FIBER
-  DP 1.2

Usage Scenarios



Specification

Technical Specification

| | |
|---------------------|--|
| INPUTS | <ol style="list-style-type: none"> 1. Standard, custom and advanced EDID settings Common resolutions: 1920×1080p@60Hz, 3840×1080p@60Hz and 3840×2160p@60Hz, etc. 2. Input source deinterlacing processing 3. Input source cropping |
| OUTPUTS | <ol style="list-style-type: none"> 1. Standard, custom and advanced output timing settings 2. Output width can be up to 8192 pixels, better choice for LED applications |
| MULTIVIEWER OUTPUTS | <ol style="list-style-type: none"> 1. Two dedicated output connectors configured as MVR connectors, with a fixed resolution of 1920×1080p@60Hz 2. Monitor all inputs and screens (PVW and PGM) 3. UMD display and color adjustment 4. MVR background color adjustment 5. Customizable layouts for easy use 6. Border adjustment for MVR window |
| AUX | <ol style="list-style-type: none"> 1. AUX screens supported AUX connector can be in independent or mosaic use 2. AUX screen can follow the preset switching 3. Free view of inputs and screens (PGM) |
| Screens | <ol style="list-style-type: none"> 1. Outputs configured as single screens or edge-blended widescreens 2. Bezel compensation and edge blending 3. Irregular screen mosaic and output AOI function, ideal for complex and irregular LED screen applications 4. Dedicated BNC with loop-through for Genlock to ensure a synchronized output 5. Virtual pixels supported 6. Up to 128 presets |

| | |
|-----------------------|---|
| Transition and Effect | <ol style="list-style-type: none"> 1. Send PVW to PGM via Take, Cut or T-bar operation 2. Fade transition 3. Customizable transition durations 4. Copy or swap display on PVW and PGM |
| Layers | <ol style="list-style-type: none"> 1. Each output card supports up to 8x SL mixing layers, 4x DL mixing layers or 2x 4K mixing layers 2. Full screen roaming supported 3. Fade and cut transitions on all layers 4. Adjustable layer mask and border with different border effects 5. Layer flipping, copying and mirroring 6. Pure color layer can be used as background |
| BKG&LOGO | <ol style="list-style-type: none"> 1. BKG can be a captured or imported image 2. Unlimited BKG quantity in 512 MB storage space 3. Imported LOGO images supported 4. Independent BKG and LOGO for each screen 5. BKG fills the whole screen by default. |
| PROCESSING | <ol style="list-style-type: none"> 1. High quality scaling engine 2. Low latency processing 3. Compliant with HDCP 1.4 and HDCP 2.2 |
| Control | <ol style="list-style-type: none"> 1. Intuitive control via U3 event controller 2. Dual control modes, U3 event controller and control PC |
| Others | <ol style="list-style-type: none"> 1. Free conversion between HDR10, HLG and SDR 2. User keys (containing layer properties such as size, position, border color, etc.) for more convenient and fast layer properties configuration |

Modular

Inputs



- Input Card - HDMI 1.4 Quad**
4x HDMI 1.4
(Modular for F series)
- HDCP 1.4 compliant
 - SL: Up to 2048×1080@60Hz 4:4:4 8-bit
 - DL: Up to 3840×1080@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
 - 3840×1080p@30/50/59.94/60Hz



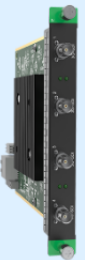
- Input Card - Dual 4K HDMI 2.0/DP 1.2**
DP 1.2×2
HDMI 2.0×2
(Modular for F series)
- DP 1.2: HDCP 1.3 compliant
 - Up to 4096×2160@60Hz 4:4:4 10-bit
 - HDMI: HDCP 2.2 compliant
 - Up to 4096×2160@60Hz 4:4:4 8-bit
 - Only two connectors can be used simultaneously and these two connectors must come from different groups. (Group 1: Connectors 1&2.Group 2: Connectors 3&4)
 - 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
 - 3840 × 2160p@30/50/59.94/60Hz



- Input Card - 4K HDMI 2.0/DP 1.2**
DP 1.2×1
HDMI 2.0×1
(Modular for F series)
- DP 1.2: HDCP 1.3 compliant
 - Up to 4096×2160@60Hz 4:4:4 10-bit
 - HDMI 2.0: HDCP 2.2 compliant
 - Up to 4096×2160@60Hz 4:4:4 8-bit
 - DP or HDMI can be used each time
 - 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
 - 3840 × 2160p@30/50/59.94/60Hz



- Input Card - SL-DVI Quad**
Single link DVI-D×4
(Modular for F series)
- HDCP 1.4 complicant
 - 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 adn 4 active
 - EDID management for VESA, and CVT compliant user timings
 - Common resolutions
 - 1920 × 1080p@30/48/50/59.94/60Hz



- Input Card - 3G-SDI Quad**
3G SDI×4
(Modular for F series)
- Downward compatible with SD/HD SDI
 - Bi-level at SD and Tri-level at HD
 - Deinterlacing by default
 - Support for SMPTE 425-1, 2048-2, 296M, 292M and 259M
 - Common resolutions
 - 720×576i (PAL)@50Hz
 - 720 × 480i(NTSC)@59.94Hz
 - 1920 × 1080i@50/59.94/60Hz



- Input Card - HDMI 1.3 Quad**
HDMI 1.3×4
(Modular for F series)
- HDCP 1.4 complicant
 - 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


Input Card - DP1.1 Quad
DP1.1x4
(Modular for F series)

- HDCP 1.3 compliant
 - = SL mode: Up to 2048 × 1080@60Hz 4:4:4 8-bit
 - = DL mode: Up to 3840 × 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
 - = 3840 × 1080p@30/50/59.94/60Hz


Input Card - 12G-SDI
2x 12G-SDI or 4x 3G-SDI or 1x 12G-SDI + 2x 3G-SDI

- 12G-SDI
 - = Downward compatible with 6G-SDI, 3G-SDI, HD-SDI and SD-SDI
 - = Connectors 1 and 3 are available
- 3G-SDI
 - = Downward compatible with HD-SDI and SD-SDI
 - = Four connectors are available
- Deinterlacing by default
- Common resolutions
 - 12G-SDI
 - = 720×480i@59.94Hz
 - = 720×576i@50Hz
 - = 1920×1080i@50/59.94/60Hz
 - = 3840×2160p@23.98/24/25/29.97/30/50/59.94/60Hz
 - 3G-SDI
 - = 720×576i(PAL)@50Hz
 - = 720×480i(PAL)@59.94Hz
 - = 1920×1080i@50/59.94/60Hz


Outputs

Output Card - 3G-SDI Quad
4x 3G-SDI
(Modular for F series)

- Backward compatible with HD-SDI and SD-SDI
- Support for ST-424 (3G), ST-292 (HD) and SMPTE259 SD
- Under 1920×1080@50/59.94/60Hz, Level A and Level B adjustment supported
- Support for interlaced signal timing settings
- Connector copying supported Connectors 2 and 4 are active, while connectors 1 and 3 copy the outputs on connectors 2 and 4 respectively
- Common resolutions
 - = 720 × 480i(NTSC)@59.94Hz
 - = 720 × 576i(PAL)@50Hz
 - = 1280 × 720p@23.98/24/25/29.97/30/50/59.94/60Hz
 - = 1920 × 1080p@23.98/24/25/29.97/30/50/59.94/60Hz
 - = 1920 × 1080i@50/59.94/60Hz



Output Card - 4K HDMI2.0/OPT
(Coming soon)
(Modular for F series)
HDMI 2.0x2
10G OPTx4

- HDMI 2.0: HDCP 2.2 compliant
 - = Up to 4096×2160@60Hz 4:4:4 8-bit
 - = Support DL (default) and 4K connector capacity
- DL mode:
 - = Max. output width: 4096 pixels
 - = Max. output height: 4096 pixels
 - = Only two connectors (free combination) can be used in DL mode
- 4K mode:
 - = Max. output width: 8192 pixels
 - = Max. output height: 7680 pixels
 - = Two connectors output the same content in 4K mode
- OPT 1 and OPT 2 copy the output on HDMI.
- OPT 3 and OPT 4 copy the output on OPT1 & OPT2.
- Support for VESA/CVT and user timings
- 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
 - = 3840 × 2160p@30/50/59.94/60Hz



Output Card - SL-DVI Quad
Single Link DVI-Dx4
(Modular for F series)

- 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



Output Card - HDMI 1.3 Quad
HDMI 1.3x4
(Modular for F series)

- 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




Output Card - HDMI 1.4 Quad
HDMI 1.4x4
(Modular for F series)

- 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.
- DL mode
 - = 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 timing
- 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

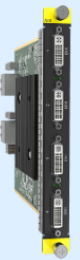
UE

Aux



AUX - HDMI Output Card
HDMI 1.3x4

- 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 - SL-DVI Output Card
DVI 1.3x4

- 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