X¹⁴

UNIVERSAL VIDEO PROCESSOR

RGBlink®

X14

## 80 Mega Pixel Multi-Window Video Display Processing. When size matters

For entire video display systems, X14 brings a new level of efficiency, capability and control. Supporting up to massive 52 inputs and up to 40 outputs, X14 truly brings together large videos systems for system-in-box approaches to video presentation and integration. Modular throughout RGBlink technologies support user fit input and output signals with each slot configurable up to 4K/UHD resolutions at full frame rates. With so many inputs, windowing and layering capabilities have been dramatically enhanced over earlier models and the output canvas is up to 80 Mega pixels. Dedicated preview functionality is available both remotely via XPOSE and on the inbuilt LCD display. XPOSE is embedded directly into X14 too, providing not just monitoring but extensive control capabilities . X14 takes advanced video processing and scaling to a whole new level.

Modular Design

X14 has 52 input slots which may be configured with universal quad modules. Similarly for output universal quad modules maybe fitted to any of the ten slots for 40 2K output, 20 HDMI 2.0 4K outputs or a combinations of both. A wide range of signal options are available including digital input and output modules, SDI up to 12G and conventional signal types.

Multi Role, Multi Application

Select the operation mode suitable for the application from continuous video wall mode to presentation mode and routing modes. There is also processing capabilities for 3D and mixed device application.
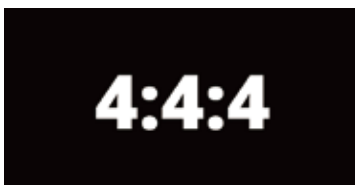
Full Color Space

Video scaling and conversion takes advantage of the RGBlink full 4:4:4 in hardware processing engine for the maximum visual performance.

HDR Support

Signals with High Dynamic Range are supported for processing via the processor with high bandwidth and wide gamut 12bit grey level processing.

Preview On Board

With a dedicated integrated LCD display for preview, sources and output video can be shown directly from the front panel, providing monitoring beyond simply signal status.

Local XPOSE® Controls

RGBlink XPOSE is built right in, and with a touch screen interface a wide set of functionality can be undertaken with out the need to connect external control. Features including preset switching and systems settings are available.

Streaming preview

Manage and operate on XPOSE interface to monitor presets and preview all input source.
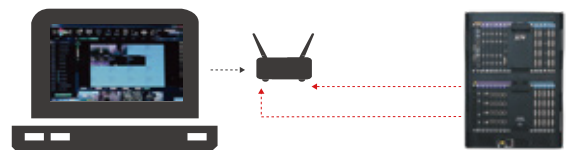
System info
Display model number and version of input and output modules installed.

Touch panel display
XPOSE software pre-installed for device control; Preview all

Power & Load
Illuminated recessed power button. USB input for settings/ scripts and other media.

*X14 shown with optional modules as an example configuration. Refer Product Codes and Specifications for details.

80 Mega Pixel Capacity

Arrange outputs on a virtual canvas to create very large display surfaces or multiple display arranged as completed synchronised system all at high 60Hz digital refresh.
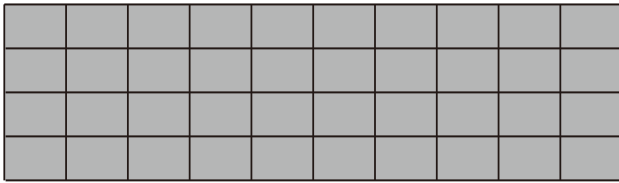
Rotate & Flip

Rotate outputs in 90deg increments, flip, invert. . X14 also supports RGBlink ARO™ modules for advanced 1 degree rotation and edge blending.

Chroma Key/DSK

Apply a key from presets or specify to requirement for foreground keying against the background layer.

4K / UHD Support

Select from digital input and output options including HDMI and DisplayPort.
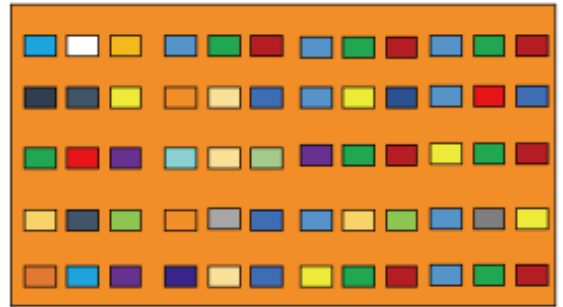
4K 60

Genlock

Genlock Y In is provided along allowing X14 to be synchronised with a Genlock generator and other devices, with a Genlock Y loop out also built in.

Windowing & Video Layers

Display up to 160 video layers from any combinations of signals or sources. All video presented to output is fully synchronised and converted for output across the output channels.

Video Over IP

X14 includes options for video over ethernet standards including HDBaseT modules allowing direct connection to displays without conversion .
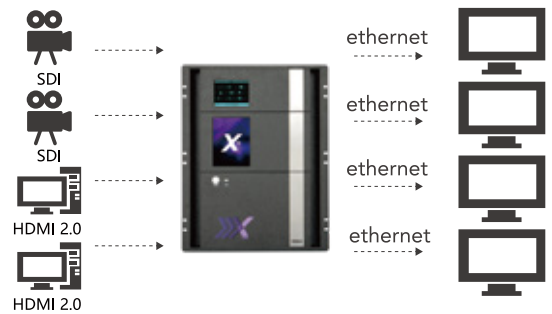
Connect and Control

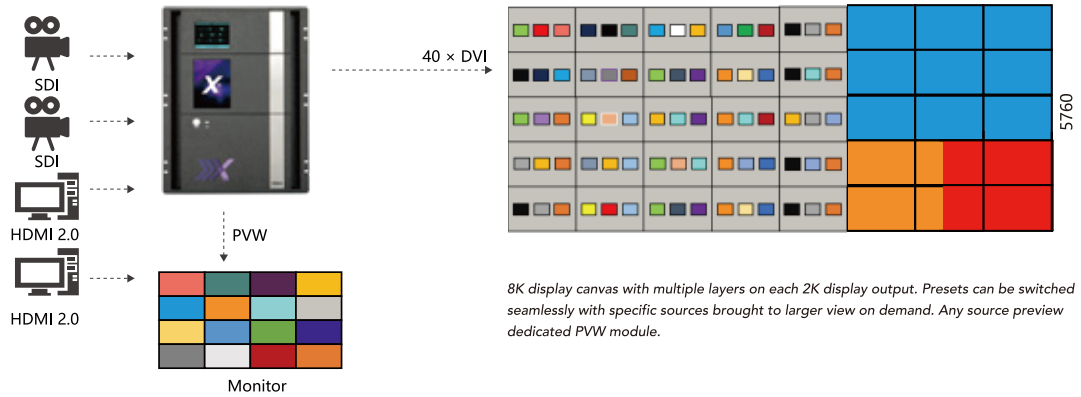Unleash powerful X14 capabilities with remote configuration and control via the XPOSE platform. XPOSE embedded available on board for localised control, with XPOSE for Windows or macOS.
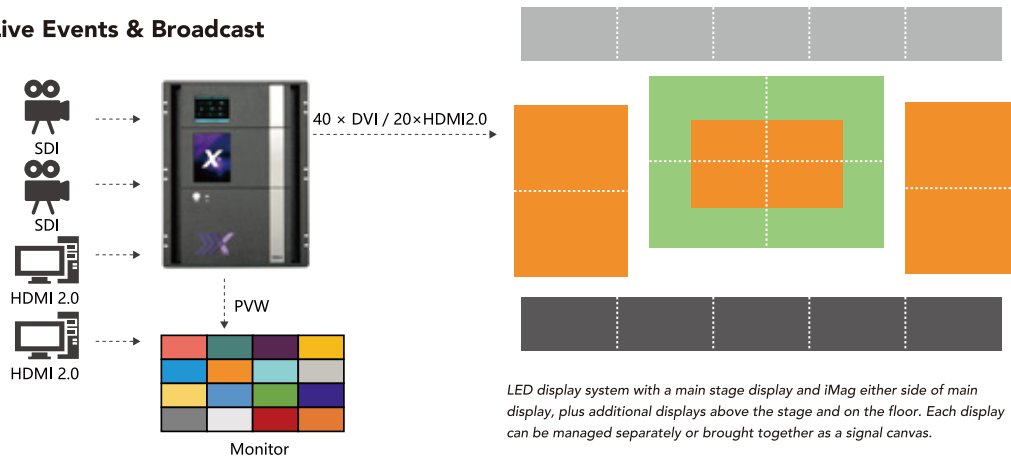

High Availability Power

X14 is suppled with a 1200W server grade, self contained modular power supply which may be completed with a redundant power supply enabling hot-swap capabilities for mission critical applications.

Monitoring/Control Room

16384

5760

8K display canvas with multiple layers on each 2K display output. Presets can be switched seamlessly with specific sources brought to larger view on demand. Any source preview dedicated PVW module.

SDI
SDI
HDMI 2.0
HDMI 2.0

40 × DVI

PVW

Monitor

Live Events & Broadcast

SDI
SDI
HDMI 2.0
HDMI 2.0

40 × DVI / 20×HDMI2.0

PVW

Monitor

LED display system with a main stage display and iMag either side of main display, plus additional displays above the stage and on the floor. Each display can be managed separately or brought together as a signal canvas.

Integration/Installation

SDI
SDI
HDMI 2.0

40 × DVI

16384

5760

Video Wall

PVW

Monitor

LED display installation with background video graphics across a 16K canvas,

SDI
SDI
HDMI 2.0

40 × DVI

LED

AUX

LCD   LCD   LCD

PVW

Monitor

Stage presentation with main LED display divided into sections using video layers, relay LCD monitors allow viewing of content by people further from the stage or in backstage areas. All processing output from common sources connected to X14.

*Shown with option modules fitted. Refer to specifications and guides

Video Display as a System

X14 is unique adaptable to multi-role systems with the capacity for both a large number of inputs and outputs. The range of u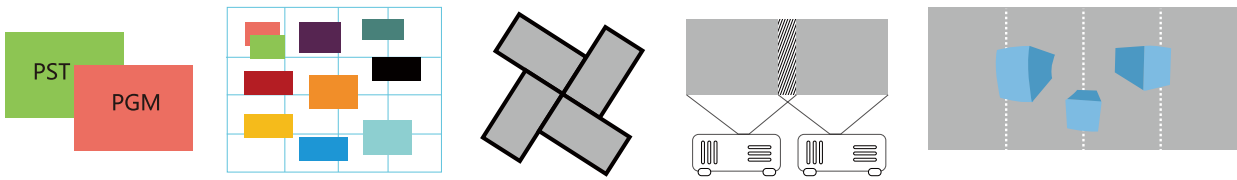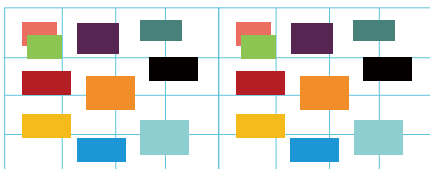ser-ft modules allows X14 to be customised on demand and brings together usually diverse display solutions as a signal system reducing complexity, reducing the need for ancillary equipment and enhancing overall system performance. Multiple operation modes allow X14 to be deployed in a wide range of applications.
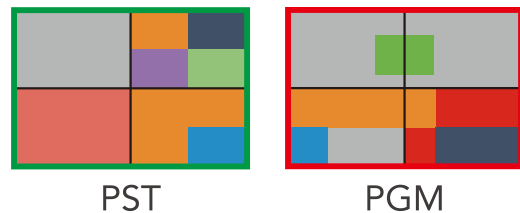

Video Wall Processor

Configure X14 as video wall splicing processor with up to 20 4K outputs connected or up to to 4K outputs. Outputs may be arranged in pixel space as one or more displays with video mapped across the pixel space. Switch between presets seamlessly.

3D Processing

X14 includes 3D processing capabilities for common industry standards and allows seamless switching between 3D signals. Display massive 3D videos across up to 80 Mega pixel canvasses.

Presentation Switch

Set X14 in presentation mode to configure the outputs as for full preview (PST) and program (PST) operations with multiple layers across outputs. Seamlessly switch between presets.

PST   PGM
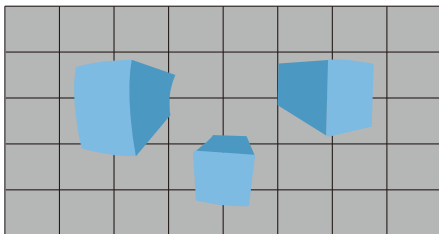
ARO™ Advanced Rotation & Blending

Fit RGBlink ARO output modules to take advantage of on-processor fine rotation and positioning capabilities or variable edge blending. All processing undertaken on the processor without media applications.
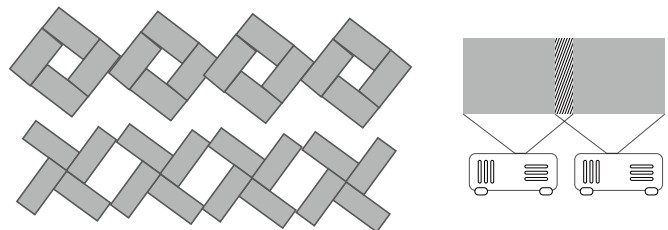
Mixed Display Systems

Content a diverse range of displays to X14 for full synchronised display making use of use common sources of any type.

Specifications

<table>
<tr><td rowspan="8">Connectors</td><td rowspan="3">Input</td><td colspan="4">13 slots, Up to 52 2K inputs / 13 4K inputs, select from below</td></tr>
<tr><td>4K@60 Module
12G SDI Module
HDBaseT Module</td><td>1 x DVI-I | 2 x HDMI-A | 1 x DisplayPort
4 x BNC (1x 12S SDI or 4 x 3G SDI)
4 x RJ45</td><td>3G SDI Module
HDMI Module
H.264 Module</td><td>8 x BNC (4 In | 4 Loop)
4 x HDMI-A
4 x RJ45</td></tr>
<tr><td colspan="4"></td></tr>
<tr><td rowspan="2">Output</td><td colspan="4">10 slots, up to 40 2K outputs/20 4K outputs, select from below</td></tr>
<tr><td>4K HDMI Module
2K HDMI Module
3G SDI Module
DVI Module</td><td>2 x HDMI-A
4 x HDMI-A
4 x BNC
4 x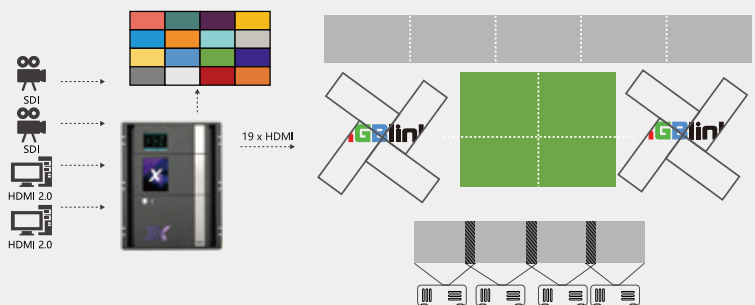 DVI-I</td><td>HDBaseT Module
H.264 Module
Rotation Module</td><td>4 x RJ45
4 x RJ 45 | 2 x HDMI-A
4 x DVI-I</td></tr>
<tr><td rowspan="2">Communication</td><td>UART</td><td>2 x DB9</td><td>USB</td><td>4 x USB-A</td></tr>
<tr><td>IP Config/Central Control</td><td>2 x RJ45</td><td>Genlock In/Loop</td><td>2 x BNC</td></tr>
<tr><td>Power</td><td colspan="4">2 slots,up to 2 power inputs</td></tr>
</table>

<table>
<tr><td rowspan="20">Performance</td><td rowspan="10">Input Resolutions</td><td colspan="2">SDI</td></tr>
<tr><td>SMPTE</td><td>480i | 576i | 720p@50/60 | 1080i@59.94/60| 1080p@23.98/24/25/29.97/30/59/59.94/60 I 1080psf@23.98/24/25/29.97/30 I 2160p@23.98/24/25/29.97/30/50/59.94/60</td></tr>
<tr><td colspan="2">H.264</td></tr>
<tr><td>SMPTE</td><td>176x144 | 240x180 | 320x180 | 320x240 | 320x256 | 352x228 | 352x480 | 400x224 | 400x320 | 480x270 | 480x272 | 480x320 | 480x360 | 480x480 | 544x480 | 608x448 | 640 x 360 | 640x480 | 704x576 | 720x404 | 720x480 | 720x540 | 720x576 | 850x480 | 1024x576 | 1280x720 | 1680x1056 | 1920x1080</td></tr>
<tr><td colspan="2">DVI</td></tr>
<tr><td>SMPTE</td><td>720p@23.98/24/25/29.97/30/50/59.94/60 | 1080p@239.98/24/25/29.97/30/50/59.94/60 |</td></tr>
<tr><td>VESA</td><td>800x600@60 | 1024x768@60 | 1280x768@60 | 1280x960@60 | 1280x1024@60 | 1360x768@60 | 1440x900@60 | 1400x1050@60 | 1600x1200@60 | 1680x1050@60 | 1920x1080@60 | 2048x1080@60 | 2048x1152@60 | 2560x960@60| 3840 x 2160@30</td></tr>
<tr><td colspan="2">HDMI |DisplayPort</td></tr>
<tr><td>SMPTE</td><td>720p@23.98/24/25/29.97/30/50/59.94/60 | 1080p@50/59.94/60 | 2160p@30/60</td></tr>
<tr><td></td><td>800x600@60 | 1024x768@60 | 1280x768@60 | 1280x800@60 |1280x1024@60 | 1360x768@60 | 1366x768@60 | 1400x900@60 | 1600x1050@60 | 1600x1200@60 |1680x1050@60 | 1920x1080@60 | 1920x1200@60 | 2048x1152@60 | 2048x1152@60 | 2560x812@60 | 2560x960@60 | 2560x1600@60 | 3840x1080@60| 3840x2160@30 | 3840x2160@60</td></tr>
<tr><td rowspan="10">Output Resolutions</td><td colspan="2">Select from below or configure customized</td></tr>
<tr><td>SDI
SMPTE</td><td>720p@23.98/24/25/29.97/30/50/59.94/60 | 1080p@23.98/24/25/29.97/30/50/59.94/60 | 1080psf@23.8/24/25/29.7/30</td></tr>
<tr><td>DVI
SMPTE</td><td>720p@50/59.94/60| 1080p@50/59.94/60</td></tr>
<tr><td>VESA</td><td>800x600@60 | 1024x768@60/75/85 | 1280x720@50/59.94/60 | 1280x800@60 | 1280x960@60 | 1280x1024@60/75/85 | |2048x1152@60 1400x1050@60 | 1600x1200@60 | 1920x1080@23.98/24/25/29.97/30/50/59.94/60 |2048x1152@60</td></tr>
<tr><td colspan="2">H.264</td></tr>
<tr><td>SMPTE</td><td>176x144 | 240x180 | 320x180 | 320x240 | 320x256 | 352x228 | 352x480 | 400x224 | 400x320 | 480x270 | 480x272 | 480x320 | 480x360 | 480x480 | 544x480 | 608x448 | 640 x 360 | 640x480 | 704x576 | 720x404 | 720x480 | 720x540 | 720x576 | 850x480 | 1024x576 | 1280x720 | 1680x1056 | 1920x1080</td></tr>
<tr><td colspan="2">HDMI</td></tr>
<tr><td>SMPTE</td><td>720p@25/30/50/60 | 1080p@23.98/24/25/29.97/30/50/59.94/60 | 2160p@23.98/24/25/29.97/30/50/60</td></tr>
<tr><td>VESA</td><td>800x600@60 | 1024x768@60 | 1280x768@60 | 1280x800@60 |1280x1024@60 | 1360x768@60 | 1366x768@60 | 3840x1080@60| 3840x2160@23.98/24/25/29.97/30/50/60 | 4096x2160@60 1400x900@60 | 1600x1050@60 | 1600x1200@60 |1680x1050@60 | 1920x1080@60 | 1920x1200@60 | 2048x1152@60 | 2560x812@60 | 2560x816@60 | 2560x1600@60 |3840x1080@60 | 3840x2160@ | 4096x2160@60</td></tr>
</table>

<table>
<tr><td>Supported Standard</td><td>HDMI
SDI
DP</td><td>2.0
SMPTE ST 2082-1, SMPTE ST 2081-1, SMPTE ST 424, SMPTE ST 292-1,
1.2</td><td>DVI
HDBaseT
VGA
USB</td><td>Dual Link
1.0
UXGA
2.0</td></tr>
<tr><td>Grey Level</td><td colspan="4">12 Bit</td></tr>
</table>

<table>
<tr><td rowspan="4">Features</td><td>Splicing</td><td>80KK</td></tr>
<tr><td>Max Numbers of Layers</td><td>160</td></tr>
<tr><td>EDID Management</td><td>Yes</td></tr>
<tr><td>Remote Control</td><td>XPOSE (Windows/MacOS) | OpenAPI | T Series Consoles</td></tr>
<tr><td rowspan="2">Power</td><td>Input Voltage</td><td>100V-240V 50/60-Hz auto ajusted</td></tr>
<tr><td>Max Power</td><td>1200W</td></tr>
<tr><td rowspan="2">Enviroment</td><td>Temperature</td><td>0℃～40℃</td></tr>
<tr><td>Humidity</td><td>10%~85%</td></tr>
<tr><td rowspan="2">Physical</td><td>Weight</td><td>Net　　50kg
Packaged　70kg</td></tr>
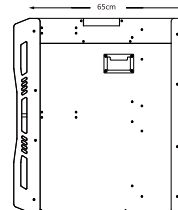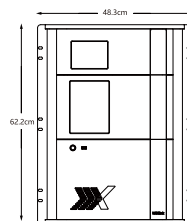<tr><td>Dimensions</td><td>Net　　483mmx550mmx622mm
Packaged　842mmx700mmx565mm</td></tr>
</table>

Order Codes

Product Code	Item
310-0014-01-0	X14

Refer to specifications for module options

Dimensions

48.3cm
62.2cm
65cm

HDMI® **HDCP**™

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Proudly designed and manufactured in Xiamen Hi Technology Zone, China

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090-0X14-02-1-E