

# **Epiphan Video Pearl-2**

ProdCode: EPIESP1150

All in one video encoder and video production system

[Download Images] (.zip file)

#### **Features**

- All in one video encoder and video production system
- Capture 6 video sources at once
- NDI® and NDI|HX support
- capture stunning 4K\* video at 30 fps.
- Seamless CMS support for Kaltura and Panopto
- Easily integrate with Crestron AV Systems
- Remote login Login to your Pearl-2 securely from anywhere over an Internet connection
- Supports Secure Reliable transport (SRT) with end-to-end 256 bit AES encryptions, HLS and MPEG-DASH over HTTPS, as well as Real Time Messaging Protocol Secure (RTMPS)
- Worry-free deployment in your enterprise network with support for 802.1x certificate authentication and HTTPS for encrypted admin access
- Simultaneously live stream to YouTube, Facebook and any other CDN or video portal
- Switch video sources live
- Design your own custom layouts, including picture in picture, using the dragand-drop editor in Pearl-2's web-based Admin panel
- Single person operation
- Output video to local displays

- Stream locally Use Pearl-2's built-in streaming server to share via unicast or multicast stream to up to 50 viewers
- Stream to CDNs Supported CDNs including Facebook Live, Youtube, Wowza, Livestream, Akamai, Ustream and others
- Capture ISOs in full detail
- CMS/LMS integration Blackboard, Kaltura, Mediasite and Moodle
- External keyboard control for the touch screen Connect a USB keyboard to any USB port on Pearl-2 and use that instead of the virtual keyboard
- Available as desktop, rackmount or rackmount twin
- **HETMA** approved

<sup>\*</sup>Requires the 4K feature add-on

<sup>\*</sup>Pearl-2 Rackmount Twin requires 2x 4K feature add-ons

# Epiphan Pearl-2<sup>™</sup> is the easiest way to do \*4K live streaming, switching, and recording

Manage your streaming, recording, and live switching in one place with this all-in-one video encoder and video production system.

### Stream to viewers everywhere

Simultaneously live stream to YouTube, Facebook or other content delivery networks and content management systems using SRT, HLS, MPEG-DASH, custom RTMP/RTMPS, and RTSP. At the same time, use the built-in streaming server to stream locally to web browsers, smart TVs, and set-top boxes. Integration with Kaltura and Panopto CMSs means no complicated stream URLs to set up. Just schedule your webcast event and start streaming.

### **Share your webcast**

Locally share unicast or multicast streams to up to 50 viewers with popular streaming protocols such as HTTP, HLS, FLV, ASF, UPnP, and SAP.

# **Secure streaming**

Stream content securely with Secure Reliable Transport (SRT) end-to-end 256 bit AES encryption, HLS and MPEG-DASH over HTTPS, as well as Real Time Messaging Protocol Secure (RTMPS).

# Leverage SRT for high-quality, low-latency video streaming

The Secure Reliable Transport (SRT) protocol uses the latest in live streaming technology to keep your live video productions looking great. Add a remote guest or contributor over SRT to bring professional-quality sources into your Pearl-powered productions.

# **4K\* Recording**

Harness the power of Pearl-2's 6th generation Intel i7 processor to capture stunning 4K\* video at 30 fps. Pearl-2's hardware-accelerated encoder provides flawless H.264 encoding for maximum compatibility and performance with any video portal or player.

<sup>\*</sup>Requires the 4K feature add-on

### Internal 500 GB SSD drive

Save recordings directly to the internal 500 GB solid state drive. Easily download recordings and manage files using the Admin panel or Epiphan Live.

### **Automatic or manual file uploads**

Fail-proof recording to the local SSD hard drive while automatically transferring recorded files to a USB drive, local server or network storage (FTP or SFTP).

#### Switch video sources live

Incredibly easy to use, Pearl 2's intuitive touch screen makes switching between your video sources and layouts a breeze. Or use the browser-based Epiphan Live and switch from almost anywhere using a tablet, PC, or mobile phone.

# **Custom layout designer**

Design custom layouts like PiP with the easy drag-and-drop custom layout editor. Combine, crop, and scale video sources to make dynamic layouts. Add transparent png images, custom backgrounds, text overlays, timestamps, and more.

## **Easy PiP layouts**

Make PiP, side-by-side, three-quarter layouts and more for dynamic-looking visual presentations. The possibilities are endless.

# Chroma key for green screens and graphics

Pearl-2's chroma key support allows for easy green screen setups and third party titling software to include rich animations and lower thirds.

# Images and dynamic text

Customize the look of your event with transparent PNG images and custom backgrounds. Easily add timestamps and other dynamic text content to layouts. Create custom system variables for even more flexibility, like adding the current GPS location.

# **Video inputs**

Connect cameras, computers, imaging equipment, or just about anything to Pearl-2. Standard and custom resolutions up to 4096×2160 from SDI, HDMI, and USB sources are accepted, as well as network-based H.264 RTSP, NDI®, NDI|HX, and SRT sources.

- 2x 12G SDI
- 2× HDMI 1.4a
- 2× 4K HDMI
- 2x USB 3.0 (UVC/UAC)
- NDI / NDI|HX
- SRT
- RTSP (H.264)

### Video output

Send an HDMI feed of your switched program to projectors for front-of-house presentations, display walls, or monitors for confidence monitoring. Share the program output or any individual input source.

- 2× HDMI
- NDI, RTSP, SRT

#### **Network**

Connect to the network over Ethernet.

• 1× 10/100/1000 Ethernet port (RJ45)

# **Audio inputs**

Mix embedded audio from you video sources with audio from professional mixers or other audio devices with individual input gain controls. Confidently monitor audio levels with on-screen VU meters and headphones.

- 4 x XLR pro line level (+4.0 dBu) up to 12.3 VRMS, +24 dBu (balanced/unbalanced, mono or two L/R stereo pairs)
- 1 x RCA consumer line level -10 dBV (L/R stereo pair)

# **Audio output**

Connect headphones to the front-mounted 3.5 mm audio jack and monitor audio levels with on-screen VU meters.

• 1 × 3.5 mm audio jack

### Plug and play, or tweak to perfection

Pearl-2 is ready to use out of the box. Connect video sources directly to the HDMI inputs and start recording those right away using the intuitive touch screen. Or dig into the control interface and create a truly custom video presentation experience for your viewers.

### Epiphan Live™

Switch your live program and instantly see the results using Epiphan Live.

### API and RS-232

Comprehensive HTTP/HTTPS and RS-232 APIs for third party integrations.

### Remote login

Login to your Pearl-2 securely from anywhere over an Internet connection. Quickly take control of Pearl-2 for remote rescue troubleshooting; support technicians in the field; and control recording, switching, and more.

### Web-based UI for advanced control

From the web-based Admin panel, set up your channels and recorders, select custom resolutions and streaming options, configure security features like 802.1x, monitor system health, and more.

# **Local Admin panel**

No need to bring along a laptop to configure Pearl-2. Connect a USB mouse, keyboard, and HDMI monitor for easy Admin panel access anywhere, anytime. You can even use a touch screen monitor.

# **Integrate with your Crestron System**

Integrate Pearl-2 encoders more easily into Crestron AV systems using the Crestrondeveloped Control Module for Pearl. The bulk of the coding is already done. Build upon the Crestron driver's existing code base for secure, API control over HTTP or HTTPS.

# **Comprehensive CMS support including Kaltura and Panopto**

Full API integrations provide an effortless lecture capture and enterprise communication setup experience. Simply register Pearl-2 with your CMS to start using the encoder for scheduled, multi-camera VOD events, ad hoc events, and webcasting without complicated programming.

### NDI® and NDI|HX for network video production

Pearl-2 supports NDI and alpha channels for broadcast quality video with low latency over Gigabit Ethernet networks. No extra HDMI or SDI cables required. Pearl-2 accepts video and audio from a wide variety of NDI enabled devices and cameras on the network. Plus it's just as easy to share the output from Pearl-2 with other NDI devices on the network.

# Secure live streaming and control

Stream securely using the latest protocols. Pearl encoders support Secure Reliable transport (SRT) with end-to-end 256 bit AES encryptions, HLS and MPEG-DASH over HTTPS, as well as Real Time Messaging Protocol Secure (RTMPS). And enjoy worry-free deployment in your enterprise network with support for 802.1x certificate authentication and HTTPS for encrypted admin access.

### Digital certificate management

Pearl-2 supports PEAP, EAP-TLS, and EAP-TTLS authentication access control methods on 802.1x networks using passwords, usernames, and digital certificates. Easily upload and manage digital certificates on Pearl-2 using the Admin panel.

# Role-based access control and LDAP support

Login to Pearl-2 with administrator, operator, or viewer privileges. LDAP authentication support on Pearl-2 lets you define domain name (DN) groups to assign user roles in bulk so users can login with their LDAP credentials.

# Secure streaming

Get end-to-end secure streaming with up to 256 bit AES encryption using SRT or encrypt content over TLS/SSL connections using RTMPS. Use HLS and MPEG-DASH to secure live streaming over HTTPS.

# **HTTPS and SFTP secure data transport**

Securely access the Admin panel and configure Pearl-2 over an HTTPS connection.

Encrypt and send sensitive recordings from Pearl-2 to offsite SFTP servers using the Automatic File Transfer.

### **Advanced networking**

Pearl-2 is flexible and easy to connect to the network with auto discovery. View and reconfigure the IP address directly on Pearl-2 using the touch screen. Configure DHCP and perform network diagnostic troubleshooting from the Admin panel. In the box:

- Pearl 2
- 1 x hard shell case
- 1 x SDI cable (3 feet / 1 meter in length)
- 1 x HDMI cable (3 feet / 1 meter in length)
- 1 x HDMI to DVI adapter
- 1 x Ethernet cable
- 1 x region-specific power supply cable (6 feet / 1.8 meters in length)

