EPIPHAN VIDEO

Pearl Plays

epiphan video

capture • stream • record

Contents

Pearl is a dynamic all-in-one live video system that lets you sit back and relax with auto-setup or lets you customize every aspect of your production. As a result, there are as many different potential Pearl configurations as there are Pearl users!

We've outlined some of the **most common** and **most interesting** things our customers do with Pearl - we call them Pearl plays. Each play outlines specifically what live streams, recordings, and video outputs you'll get plus gives you step-by-step instructions for how to set it up.

Based on what you might be doing with Pearl, here are some suggestions for plays to check out first.

For live event production see:

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- Simplicity
- No fail live streaming
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- Multi-source recorder
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- Dynamic live event

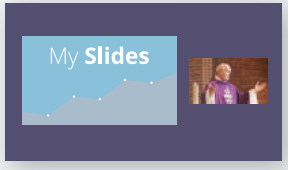
For security and video wall operator monitoring see:

- Multi-source recorder
- No fail live streaming
- Outside the box

SIMPLICITY

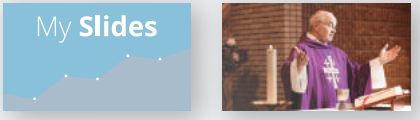
Perfect for when you have one or two sources such as a presenter with slides, a teacher and a whiteboard, or two cameras at a small live event.

Picture in picture program



- **Streaming -** 1080p 30 fps, 4 Mbps
- **Recording -** 1080p 30 fps, 4 Mbps

ISOs



- **Recording both connected sources**
  1080p 30 fps, 8 Mbps

SIMPLICITY

A live streaming configuration that is so easy to use, it needs no operator interaction beyond the touch of a finger to start streaming and recording. Whether your main goal is live streaming, recording or both, you'll get exactly what you need.

Run the play

Get everything you need for streaming, recording and post-production.

1. Connect your laptop to a port on row A at the back of Pearl and Lumio 12x into the HDMI or SDI port in row B. Connect audio from your mixing panel to the TRS ports in row A or B.

2. Use Pearl's two auto channels (add your analog audio) for your program ISOs.

3. Create a third channel with a layout that includes your two video sources arranged overtop of a background image. Configure streaming to YouTube or the CDN of your choice.

4. When it's time to start streaming and recording, touch the streaming and recording controls on Pearl's touchscreen and you're live!

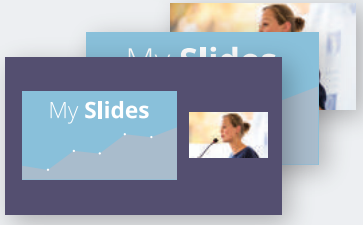
GET EVEN MORE FROM **PEARL!**

- Configure automatic file upload to copy your recordings from Pearl to your content management server.
- Adjust your video sources by cropping to get the most of the layout space.

DYNAMIC LIVE EVENT

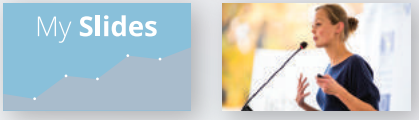
The best solution when you need to stream and record a dynamic presentation that includes live switching between multiple sources and fully-customized layouts.

Program with live switching



- **Streaming -** 1080p 30 fps, 4 Mbps
- **Recording -** 1080p 30 fps, 4 Mbps

ISOs



- **Recording both connected sources**
  1080p 30 fps, 8 Mbps

DYNAMIC LIVE EVENT

Deliver a visually dynamic live production using two different video sources and custom layouts to keep your viewers glued to the screen. Get high quality recordings of both video inputs so you can create a variety of related products in post-production.

Run the play

Everything you need for an engaging live stream and easy post-production.

1. Connect your laptop to a port on row A at the back of Pearl and Lumio 12x into the HDMI or SDI port in row B. Connect audio from your mixing panel to the TRS ports in row A or B.

2. Use Pearl's two auto channels (add your analog audio) for your program ISOs.

3. Add a third channel. Develop engaging and creative layouts containing any combination of your video sources, background images and logos. Configure streaming to YouTube or the CDN of your choice.

4. When it's time to start the event, use Pearl's touch screen or Epiphan Live to start recording on all three channels, start streaming on channel three.

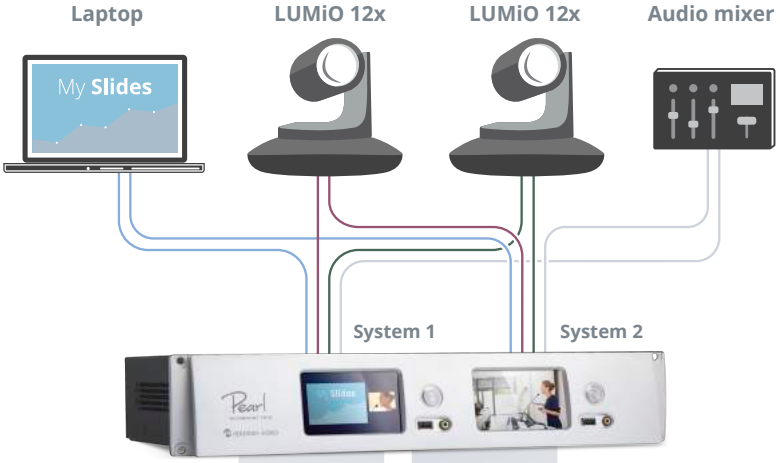
Throughout the event, keep your presentation interesting. Use the touch screen or Epiphan Live to control live switching between your layouts on channel 3.

GET EVEN MORE FROM **PEARL!**

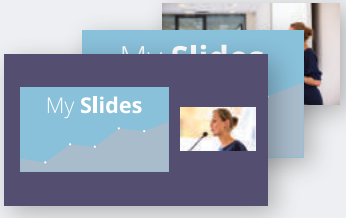
- Reduce system load by encoding your channels at 25 fps and add the capacity to show one of your sources or your live produced channel through a projector at your venue!
- Don't need ISOs? Create your dynamic program from up to 4 HD video sources instead of two!
- Upgrade to Pearl Rackmount Twin to do even more.

NO FAIL LIVE STREAMING

When you absolutely need to make sure you capture the moment! Create the ultimate dynamic live switched streaming program with ISOs for post-production.

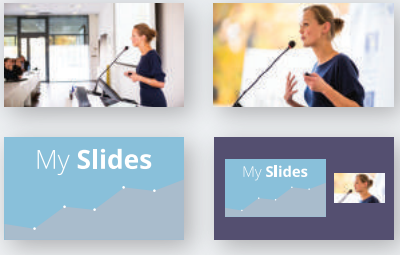


Program with live switching



- **Streaming -** 1080p 30 fps, 4 Mbps
- **Recording -** 1080p 30 fps, 8 Mbps

ISOs



- **Recording all connected sources**
  1080p 30 fps, 8 Mbps
- **Recording a static PIP layout**
  1080p 30 fps, 8 Mbps

NO FAIL LIVE STREAMING

With two independent Pearl systems, everything's under control, even in the face of human error. Includes three HD video sources, a live PIP backup, and ISO recordings of each source.

Run the play

Use high-quality splitters with locking cables to split your signals (video and audio) so each independent Pearl system gets the full set of audio-visual inputs.

System 1: Live switching

1

Connect your sources and create your live program channel. Develop a set of engaging and creative PIP layouts containing your sources, images, and branding content.

2

Create a new RTSP source from program output (channel 1). Create a channel with audio and video from your new source and configure encoding at a lower bitrate. Configure streaming.

3

During the event, use Pearl's touch screen or Epiphan Live to control live switching and recording for channel 1, and to start and stop streaming the same program data (at lower bitrate) via channel 2.

NO FAIL LIVE STREAMING

System 2: 150s

1

Connect your sources and make a channel for each source. Remember to select your desired recording format (MP4, AVI, MOV, or MPEG-TS).

2

Create a fourth channel featuring a static PiP layout containing your preferred video sources. Configure your streaming settings for backup purposes.

3

When your event begins, start recording for each of the 4 channels.

4

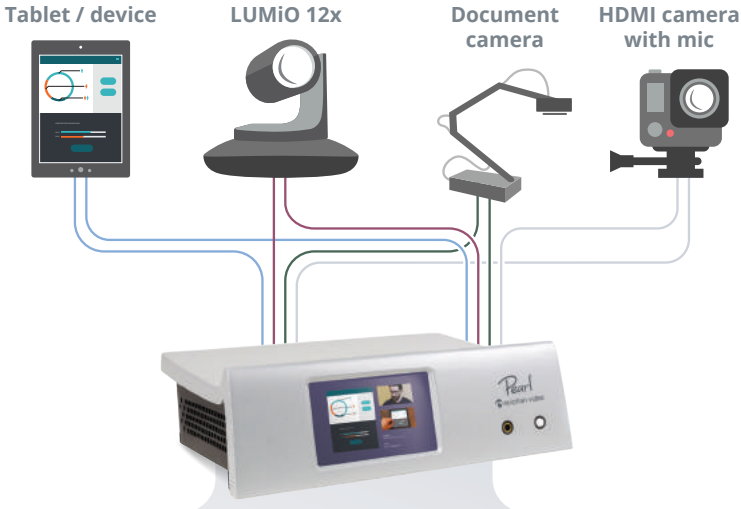
If there's an error during the live switched stream, you'll always have this backup PiP layout! Just start streaming it in place of channel 2 from the other Pearl system.

GET EVEN MORE FROM **PEARL!**

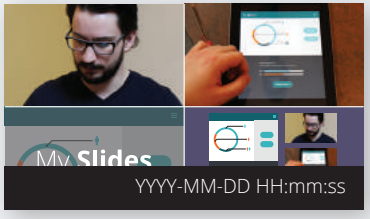
- Automatically copy your recorded program to a USB drive and give speakers a copy of their presentation immediately after it finishes!
- Don't need the backup layout on the second Pearl system? Switch it out for a confidence monitoring channel that includes all your sources and display it on a big screen.

EFFORTLESS OBSERVATION

Optimize usability and user experience testing labs with this simple, powerful setup that captures every detail, from every angle.

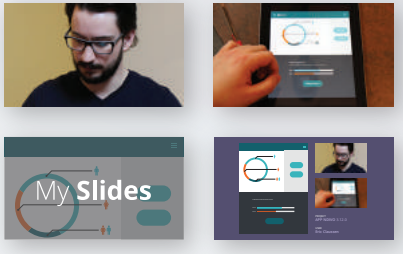


4-up layout with timestamp



- **Streaming -** 720p 30 fps, 2 Mbps
- **Recording -** 1080p 30 fps, 8 Mbps

Local monitor



Live monitoring
Displays live feed of test subject

Automatic uploads
Files automatically uploaded to backup server

EFFORTLESS OBSERVATION

Use Pearl's video output ports for real-time observation to discretely watch from another room without missing a moment in your observations. Simultanously stream to offsite researchers via YouTube, a CDN, or direct streaming connection.

Run the play

See four displays or video sources concurrently.

1. Connect your video and audio sources to Pearl.
2. Create the 4-up local monitoring and high-res recording channel by arranging your sources in a matrix format with a small timestamp overlay.
3. Configure a video output port to display this channel on your observation monitor.
4. Create a second channel with the same layout but use a smaller frame size for streaming. Configure your streaming settings or copy the streaming url and forward it to viewers who will connect directly.
5. Configure AFU to automatically upload and videos to your servers.
6. When it's time to record your subjects, use Epiphan Live to start recording and streaming without disturbing your test subject.

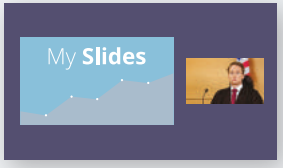
GET EVEN MORE FROM **PEARL!**

- Create extra layouts on channel one, permitting the observer to switch between different video sources as needed.
- Bookmark points of interest in the video by switching to a layout with a reference point indicator (e.g. an overlay image).
- Upgrade to Pearl Rackmount Twin to also record full-sized ISOs of each input.

OUTSIDE THE BOX

Deliver your live presentation to audience members in different locations by taking advantage of overflow rooms.

Picture in picture program



- **Streaming to smart TV**
  1080p 30 fps, 4 Mbps
- **Recording -** 1080p 30 fps, 4 Mbps

ISOs

- **Recording both connected sources**
  1080p 30 fps, 8 Mbps

Output to projector

OUTSIDE THE BOX

When room size limitations prevents all audience members from attending in the same room, use smart TVs to display the video stream in other locations. Take advantage of Pearl's video output ports to also show your slides on a local monitor or projector.

Run the play

Share your picture in picture view via Smart TV while simultaneously creating high quality ISO recordings.

1. Connect your laptop to a port on row A at the back of Pearl and Lumio 12x into the HDMI or SDI port in row B. Connect audio from your mixing panel to the TRS ports in row A or B.
2. Use Pearl's two auto channels (add your analog audio) for your program ISOs.
3. Configure one of Pearl's video output ports to display the laptop slides. Connect your in-room slide projector to this port.
4. Create a third channel with a layout that includes both your video sources arranged overtop of a background image. Turn on UPnP sharing for this channel.
5. Configure your Smart TV(s) to show this live stream.
6. Configure Pearl's single touch recording to include all three of your channels.

When it's time to start your event, begin recording your presentation and accompanying ISOs with the touch of your finger on Pearl's touch screen.

GET EVEN MORE FROM **PEARL!**

- Don't need ISOs of every video feed? Add up to 4 video sources to your PIP layout.
- Also need to stream to a CDN? No problem! Simply configure and start streaming.
- Gain capacity to display your program on a large local display for monitoring by choosing a lower encoding frame rate.

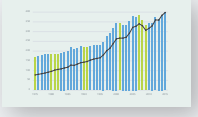
LOWER THIRDS

Keep your audience informed and direct their attention to the screen with this dynamic setup using lower thirds and chroma keying on Pearl.

Program with lower thirds

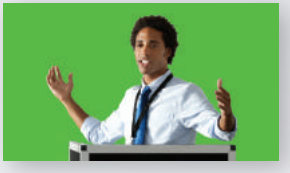
- **Streaming -** 720p 30 fps, 4 Mbps
- **Recording -** 720p 30 fps, 4 Mbps

Slides-only ISO



- **Recording -** 720p 30 fps, 6 Mbps

Camera-only ISO



- **Recording -** 720p 30 fps, 6 Mbps

LOWER THIRDS

Brand your content and provide informational lower thirds using titler software and Pearl's chroma key feature. Add a custom background matte using green screen for more punch.

Run the play

Create a 720p switched program with lower thirds, slides, and a main camera that's setup to use Pearl's chroma key feature to replace a green screen background.

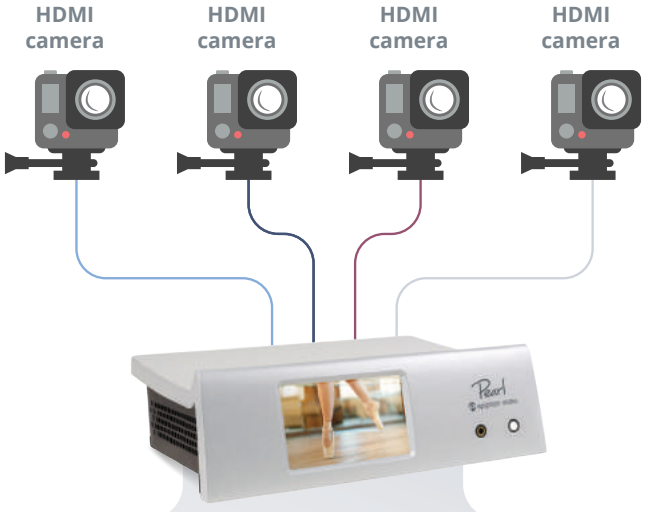
1. Connect your camera, laptop, and effects computer with lower thirds to Pearl.
2. Create a channel for the laptop and another one for the camera to record ISOs.
2. Create your program channel with a variety of layouts.
3. Include the green screen in layouts by uploading your background matte image and making it full frame. Add your camera source to the layout, enable chroma keying and choose a keying color.
4. Include the lower thirds in layouts by adding your effects computer source over top of your slides or green screen. Crop it to remove any unused chroma key areas.
5. Configure recording and YouTube streaming settings for your switched program channel.
6. Be sure to test your stream! When it's time to start your event, use the front touch screen or Epiphan Live to start streaming and recording your channels.

GET EVEN MORE FROM **PEARL!**

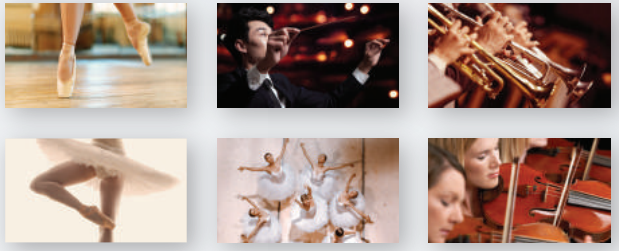
Add a camera-only layout to your live program channel. Switch to this layout when the lower thirds has been up long enough to read or while you are changing the content of the lower thirds feed from your effects computer.

MULTI-SOURCE RECORDER

When you have multiple sources that you need to record in high definition and perfect synchronicity.



Program and ISOs



Streaming - 1080p 30 fps, 4 Mbps

Recording - 1080p 30 fps, 4 Mbps

MULTI-SOURCE RECORDER

Whether you're capturing a performance rehearsal or a video wall operator, get perfectly crisp, completely synchronized video at 1080p30 from up to four sources.

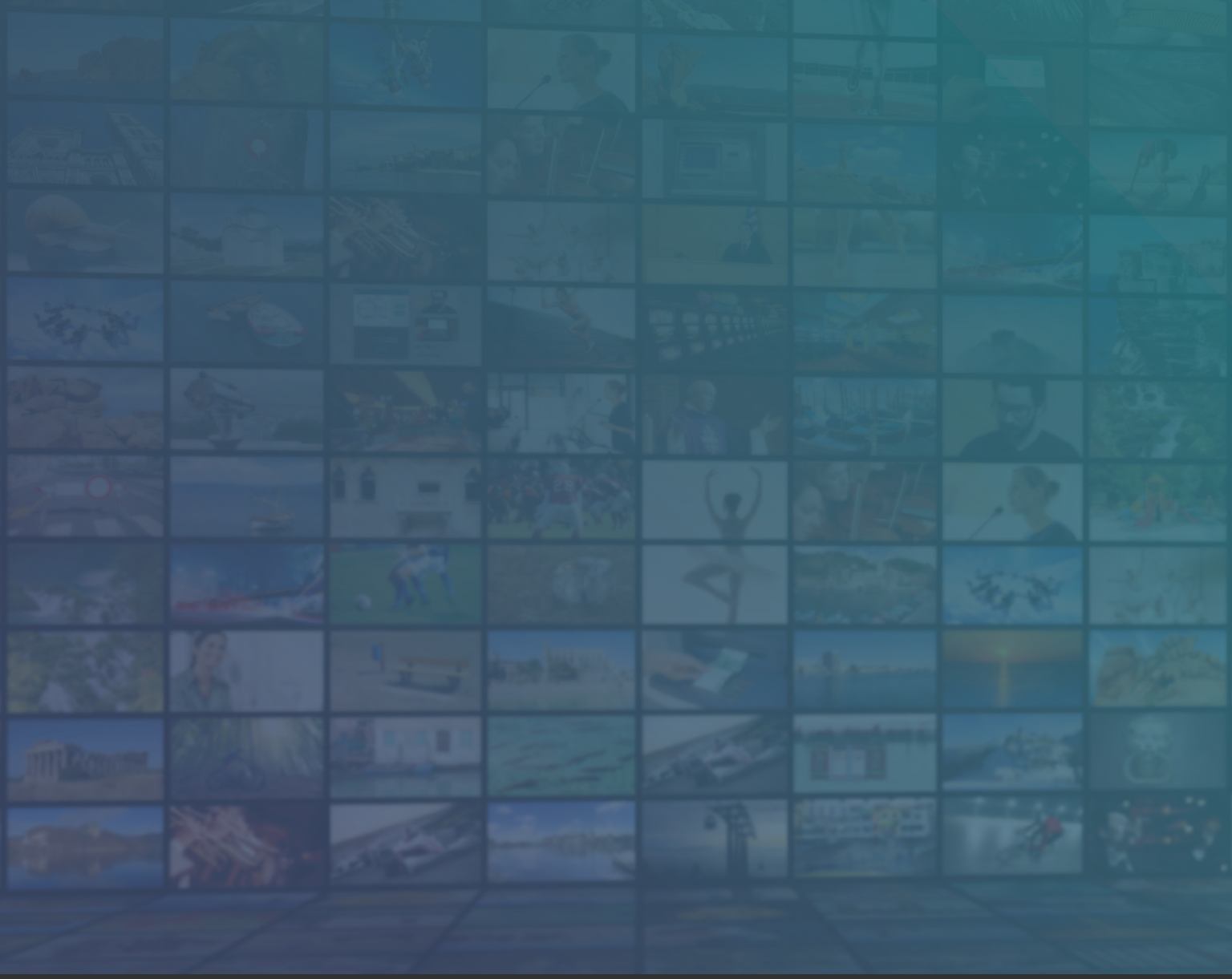
Run the play

Each source is captured perfectly in its original resolution. Recording and streaming are controlled for all sources with a simple touch!

1. Connect your sources to the ports on the back of Pearl (up to 4 sources).
2. Create a channel per source and configure the layout to show the source full screen. Set encoding and streaming for each channel.
3. Configure all channels to be part of Pearl's single touch streaming and recording control.
4. When it's time to start streaming and recording, use Pearl's one touch streaming and recording controls to go live!

GET EVEN MORE FROM **PEARL!**

- For even more sources, try Pearl Rackmount Twin.
- Reduce system load by encoding your channels at 25 fps and add the capacity to show one of your sources on a large display for confidence monitoring!
- Try Pearl's multi-track recorder to create a single multi-track file with all the recordings.



Your address and contact information here.

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