

EPIPHAN VIDEO

# Pearl Mini Plays



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**Pearl Mini** is the easiest all-in-one live video production system available. Sit back, relax and quickly get professional results with a simple setup, or customize every aspect of your production for exceptional live events and lecture capture presentations.

Pearl Mini is great for easy live event production, lecture capture for education, worship, and corporate events. You can even use Pearl Mini to do simple UX observation.

Pearl plays outline some common ways you can set up Pearl Mini. Each play outlines specifically the live streams, recordings, and video output results you get! Plus there's step-by-step instructions for each setup. Here are some Pearl plays to check out.

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# DUAL SOURCE RECORD AND STREAM

Perfect for when you have one or two sources, such as a presenter with slides, at a live event and you want to stream and record each source separately.



## Channel 1



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

## Channel 2



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

# DUAL SOURCE RECORD AND STREAM

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 lecture capture, 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 and LUMiO 12x to the HDMI ports\* on Pearl Mini.

From your audio mixer, connect two outputs (L/R stereo) to the two TRS (balanced/unbalanced) audio inputs on Pearl Mini.

\* Or an HDMI and SDI port.

2

Create two channels for your ISOs and add the stereo XLR/TRS audio source to each.

3

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!

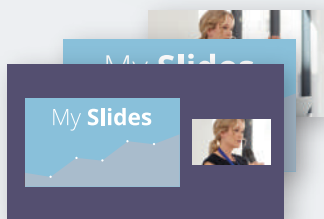
- Configure automatic file upload to copy your recordings from Pearl to your content management server.
- Adjust your video sources by cropping to get the most of the layout space.
- Stream using modern protocols like SRT, HLS, or MPEG-DASH for better reliability and efficiency.

# 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

## ISO



- **Recording**  
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 a high quality recording of your presenter as an ISO for post production later.

## Run the play

Get what you need for an engaging live stream and high-quality post-production.

1

Connect your laptop and LUMiO 12x to the HDMI ports\* on Pearl Mini.

Connect two mics (condensers with 48V phantom or dynamic) to the XLR (balanced) audio inputs on Pearl Mini.

\* Or an HDMI and SDI port.

2

Create two channels: one for the switched program and another one for a high bit-rate ISO recording.

3

For the program channel, develop engaging and creative layouts containing any combination of your video sources, background images and audio. 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 both channels, and start streaming your program channel.

Keep your presentation interesting. Use the touch screen or Epiphan Live to switch between the layouts on your program channel.

## GET EVEN MORE FROM PEARL!

- Show one of your sources or your live produced channel through a projector at your venue!
- Have only a few presentation slides? Connect a second camera instead of a laptop and upload the slides as .jpegs and switch them in to your live program.

# DUAL SOURCE PROGRAM AND ISOs

Give yourself more post-production options. Record two separate ISOs at the same time that you record and stream your switched program when you use a low frame rate for one of your ISOs. Add a custom PiP layout to your switched program channel for a dynamic presentation.



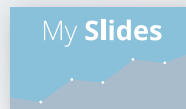
## Program with live switching



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

## ISOs

### ISO A



- **Recording** - 1080p 1 fps, 1 Mbps

### ISO B



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

# DUAL SOURCE PROGRAM AND ISOs

Stream and record your switched program in a channel that includes your two HD sources and a custom PiP layout. Create two more channels to record separate ISOs of each video source and set a low frame rate for the ISO channel with the slides.

## Run the play

For more post-production options after your live event.

- 1 Connect your laptop to HDMI-A and your main camera to HDMI-B. Connect one mic to the XLR (balanced) audio input port on Pearl Mini.
- 2 Create Channel 1 for the switched program. Add your two video sources in separate layouts and arrange the HDMI-A and HDMI-B sources in a custom PiP layout.
- 3 Configure Channel 1 for recording and streaming at 1080p 30 fps, 4 Mbps.
- 4 Create a second channel to record an ISO of HDMI-A at a low frame rate. Set it to 1080p 1 fps, 1 Mbps.
- 5 Create a third channel to record an ISO of HDMI-B. Set it to 1080p 30 fps, 8 Mbps.
- 6 When it's time to start the event, use Pearl's touch screen or Epiphan Live to start recording and streaming on Channel 1 and recording on Channels 2 and 3.



## GET EVEN MORE FROM PEARL!

- Copy a recording of your switched program to a USB memory device and give that to your presenter as soon as the live event ends.
- Make one of your video inputs a USB web camera or RTSP stream.



# EXPAND YOUR AUDIENCE

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



## EXPAND YOUR AUDIENCE

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 HDMI output port to show your slides on a local monitor or projector.

## Run the play

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

1

Connect your laptop and LUMiO 12x to the HDMI ports\* on Pearl Mini.

From your audio mixer, connect two outputs (L/R stereo) to the two TRS (balanced/unbalanced) audio inputs on Pearl Mini.

\* Or an HDMI and SDI port.

2

Create two channels: one for the switched program and another one for a high bit-rate ISO recording.

3

Configure the HDMI output port on Pearl Mini to display the laptop slides. Connect your in-room projector to this port.

4

Configure the switched program 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 Mini's single touch recording to include both 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!

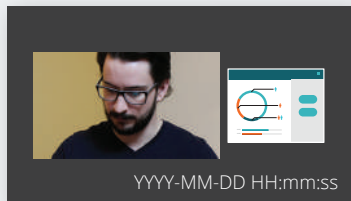
- Also need to stream to a CDN? No problem! Simply configure and start streaming.



# UX OBSERVATION

Optimize usability and user experience testing labs with this simple setup.

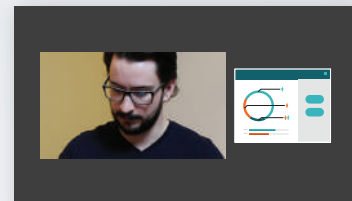




## Side-by-side layout with timestamp



-  **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

# UX OBSERVATION

Use Pearl Mini's HDMI output port for real-time observation and watch from another room without missing a moment. Simultaneously stream to offsite researchers via YouTube, a CDN, or direct streaming connection and record at a higher bit-rate.

## Run the play

See two displays or video sources concurrently.

1

Connect your video and audio sources to Pearl Mini.

2

Create the side-by-side local monitoring and high-res recording channel and arrange your sources in a custom layout along with a timestamp text overlay.

3

Configure an HDMI 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 Epiphany 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.
- Highlight points of interest in the video by switching to a layout with a reference point indicator (e.g. an overlay image).
- Stream and record your custom layout channel at the same bit-rate and use the second channel to record and stream a separate ISO of just your subject.





# CAPTURE THREE SOURCES

Get more from your Pearl Mini with this simple setup and capture up to three video sources in a single channel.



Program with live switching



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

## CAPTURE THREE SOURCES

Add full screen layouts of each video source to your program channel and switch between layouts for high quality recordings and streams.

## Run the play

Streaming and recording your switched program with three video sources is easy!

1

Connect your laptop and cameras to the SDI and HDMI ports on Pearl Mini.

Connect one mic to the XLR (balanced) audio input on Pearl Mini.

2

Create one channel for the switched program that you can stream and record at 1080p 30 fps and use a high bit rate of 8 Mbps.

3

Create a layout for each video source that fills the screen and add the audio source to each.

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 and streaming your program channel.

Use the touch screen or Epiphan Live to switch between layouts on your program channel to keep your presentation interesting.

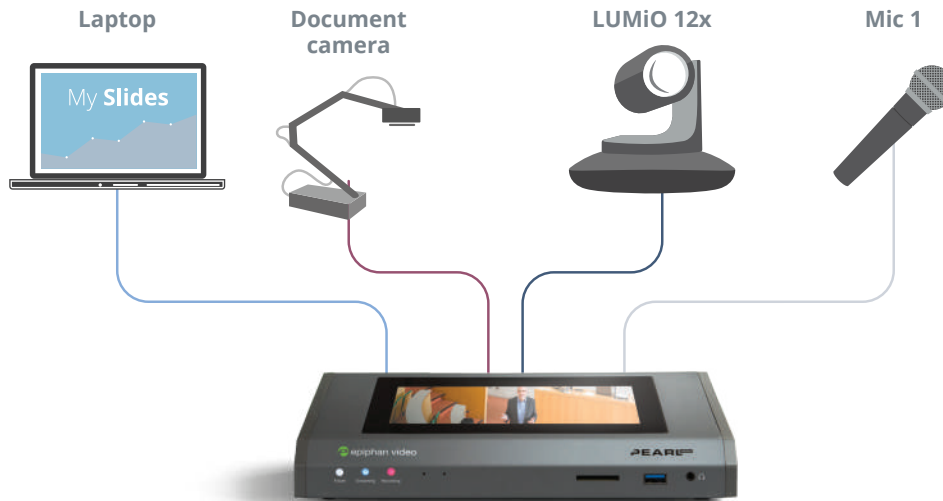


## GET EVEN MORE FROM PEARL!

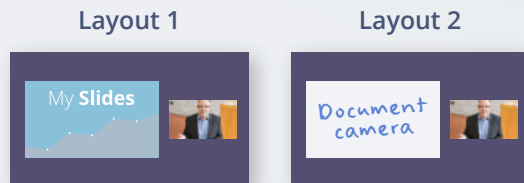
- Download the high bit rate recording of the program channel to a connected USB memory device that you can give to event organizers when the event ends. Use automatic file upload for even faster delivery.

# THREE SOURCES WITH PiP

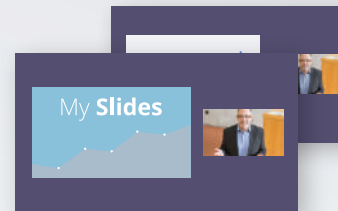
When you need to squeeze just one more video input into the mix, this setup gives you a dynamic presentation that includes creative layouts for switching, streaming, and recording.



## Side-by-side program



## Re-encoded program



● **Recording** - 1080p 30 fps, 8 Mbps

● **Streaming** - 720p 30 fps, 2 Mbps

## THREE SOURCES WITH PiP

Make creative presentations using two side-by-side layouts with three video sources. Then stream a second channel with duplicate content at a lower bit rate.

### Run the play

Get more creative options for your next live event.

- 1 Connect your laptop to HDMI-A, document camera to HDMI-B, and your main camera to the SDI port. Connect one mic to the XLR (balanced) audio input port on Pearl Mini.
- 2 Create Channel 1 for the side-by-side program and arrange the HDMI-A and SDI sources in a custom layout.
- 3 Configure Channel 1 for recording at 1080p 30 fps, 8 Mbps.
- 4 Create a second channel and add Channel 1 as the video source in a custom layout. Set it to 720p 30 fps, 2 Mbps for streaming to YouTube or the CDN of your choice.
- 5 When it's time to start the event, use Pearl's touch screen or Epiphan Live to start recording on Channel 1 and streaming on Channel 2.



## GET EVEN MORE FROM PEARL!

- Add background images and logos to enhance your program material.




# RECORD AND STREAM THREE ISOs

More possibilities are within reach when you record and stream three video inputs as separate ISO channels.



## Channel 1



 **Streaming**  
1080p 30 fps, 8 Mbps

 **Recording**  
1080p 30 fps, 8 Mbps

## Channel 2





 **Streaming**  
1080p 30 fps, 8 Mbps

 **Recording**  
1080p 30 fps, 8 Mbps

## Channel 3



 **Streaming**  
1080p 30 fps, 8 Mbps

 **Recording**  
1080p 30 fps, 8 Mbps

# RECORD AND STREAM THREE ISOs

Realize creative possibilities and record three video inputs in separate ISO channels for post production while you stream each ISO to different destinations.

## Run the play

Get more creative options for your next live event.

1

Connect your laptop to HDMI-A, document camera to HDMI-B, and your main camera to the SDI port. Connect one mic to the XLR (balanced) audio input port on Pearl Mini.

2

Create Channel 1 and select HDMI-A as the video source without any scaling or cropping.

3

Configure Channel 1 for recording at 1080p 30 fps, 8 Mbps.

Connecting the HDMI output and remote monitoring using Epiphan Live is not recommended.

4

Repeat steps 2 to 3 to create Channel 2 and Channel 3. Select HDMI-B as the only video source for Channel 2 and SDI as the only source for Channel 3. Again, no scaling or cropping in either channel.

5

Configure stream settings for each channel.

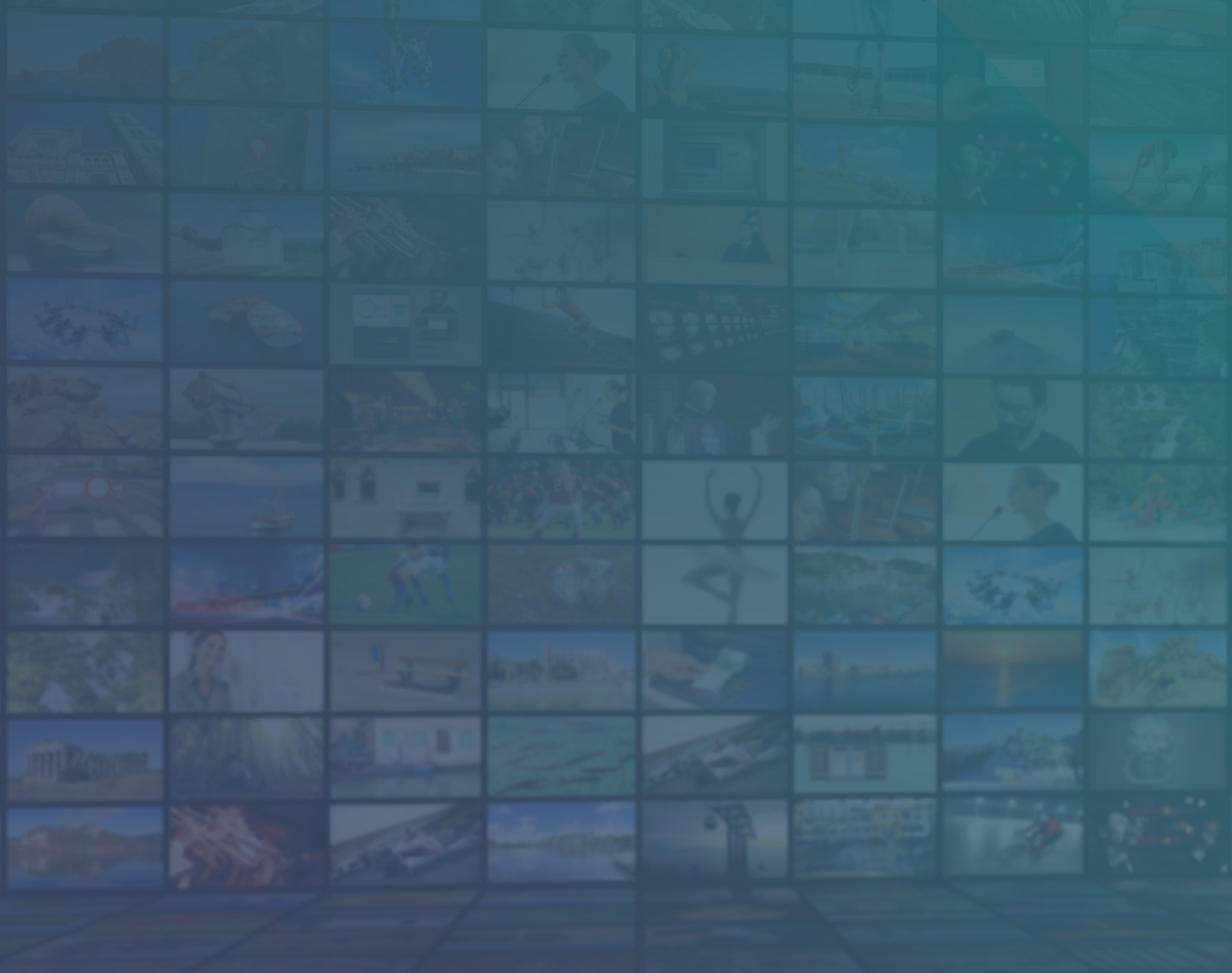
6

When it's time to start the event, use Pearl's One Touch control feature on the touch screen or Epiphan Live to start recording and streaming all three channels.



## GET EVEN MORE FROM PEARL!

- Set up automatic file upload (AFU) to send recordings directly to a remote server as soon as the event ends.



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