The perfect-fit
streamer and recorder
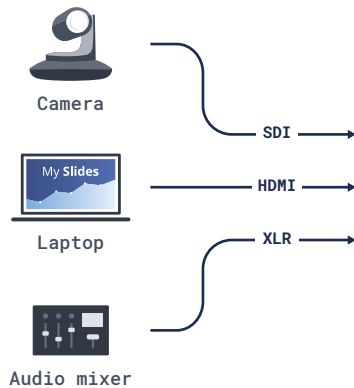
epiphan video

Pearl Nano™ Portable and versatile hardware encoder

Pearl Nano offers the ultimate blend of portability and versatility with a refined yet robust feature set that includes ingestion, encoding, HDMI pass-through, and recording.
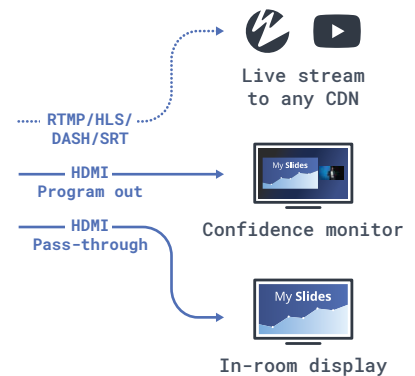

CONNECT YOUR SOURCES

Camera — SDI →

Laptop — HDMI →

Audio mixer — XLR →

REC Record to SD card or SSD

OUTPUT YOUR VIDEO

RTMP/HLS/DASH/SRT → Live stream to any CDN

HDMI Program out → Confidence monitor

HDMI Pass-through → In-room display

Fine-tuned for your productions

Streamline your setup with the ability to directly connect HDMI and SDI video sources and professional XLR or RCA audio to Nano along with Power over Ethernet Plus (PoE+). For zero-latency display of video sources on in-room monitors, Nano also features a built-in HDMI pass-through.

Flexible recording and storage

Nano makes it easy to record, transfer, and back up files with a variety of storage options.

Remove
An SD card slot on the front of the device allows for removable storage.

Expand
Need more local storage? Just add an M.2 SSD to Nano's expansion bay.

Attach
Nano can automatically transfer recorded files to a USB drive, local server, or network-attached storage device.
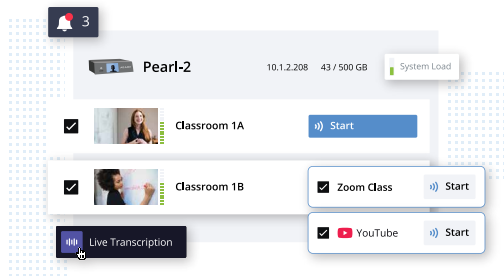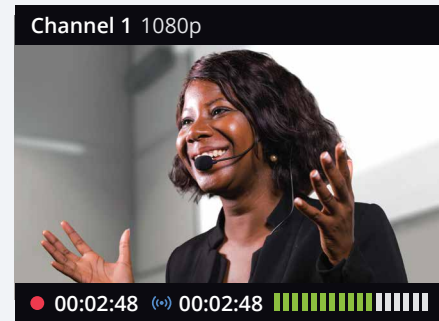
Control Nano your way

Use Pearl Nano's front screen for basic configuration and control, jump into the browser-based interface or local console to access all the features this small but mighty encoder has to offer, or centralize configuration and monitoring with Epiphan's cloud-based platform.

Key functions at your fingertips

Nano's front screen offers quick access to essential functions including basic configuration and easy streaming and recording. During events, the built-in screen serves as at-a-glance verification of your audio level and video program for production peace of mind.
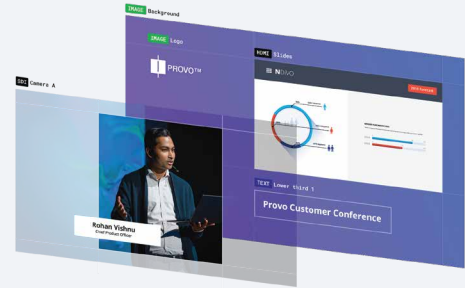
Cloud-based configuration and monitoring

Epiphan Cloud streamlines configuration and monitoring of multiple Pearl Nanos and other Epiphan hardware with centralized access to key device statistics including operational status, system load, unit temperature, available storage, and overall health.

Elevate your productions

Build a beautiful layout for your video program with Nano's powerful custom layout designer. Create anything from simple picture-in-picture layouts to eye-popping compositions featuring dynamic backgrounds and other custom graphics – whatever suits your event best.

Ideal for SRT contributions

The compact and lightweight Pearl Nano supports Haivision's open-source Secure Reliable Transport (SRT) protocol for secure, high-quality, low-latency video streaming over any given network.

Pair with Panopto or Kaltura

Deep integration with Panopto and Kaltura lets you start and stop scheduled streaming or recording events using Nano's built-in screen and controls. The system can also push recordings to a user's folder on either platform to save administration time after events.

Small size, big capabilities

Screen for monitoring and config
Use the front screen for basic configuration/control and confidence monitoring

HDMI pass-through
Display video sources on in-room monitors with zero latency

HDMI and SDI video inputs
Directly connect HDMI and/or SDI video sources to Nano

XLR professional audio and RCA
Connect professional audio equipment with line-level XLR

Custom layout builder
Enhance your video program with a tailored layout

SRT encoding and decoding
Stream via SRT or use as a compact SRT contribution encoder

Key features

- Front screen for basic configuration/control and confidence monitoring

- Inputs for HDMI and SDI, line-level XLR and RCA

- HDMI program out and pass-through for zero-latency content display

- Custom layout builder for a tailored video program

- Intuitive browser-based UI and local console

- Cloud-based configuration and control via Epiphan Cloud

- SRT, HLS, MPEG-DASH, RTMP, and RTMPS streaming protocol support

- Comprehensive integration with Kaltura and Panopto

- Power over Ethernet Plus (PoE+) and DC power

- SD card slot for removable storage

- Expansion bay for user-supplied M.2 SSD

- USB input for attached storage

- 802.1x network access control

- Lightweight Directory Access Protocol (LDAP)

- Secure Sockets Layer (SSL)

Video inputs	**Connectors:**	1 × HDMI™, 1 × 12G SDI, 1 × USB 3.0 (coming soon)
	Network inputs:	SRT and RTSP
Audio inputs	**Connectors:**	2 × XLR pro line level (stereo pair or two mono), 1 × SDI, 1 × HDMI, 1 × RCA
	Audio gain control:	0 dB to +30 dB
Video outputs	1 × HDMI pass-through, 1 × HDMI program out	
Video encoding	**Codecs:**	H.264, H.265 (coming soon as a paid upgrade)
	Color resolution:	4:2:0
	Resolution:	User selectable up to 1920 × 1200 (4K coming soon as a paid upgrade)
Streaming protocols	RTMP/RTMPS, SRT, HLS, MPEG-DASH, RTSP, MPEG-TS, UPnP	
Encoded programs	1 × 1080p program at 30 fps (with up to 2 Full HD sources; 4K coming soon as a paid upgrade)	
Audio encoding	MP3, PCM, and AAC (sampling 16 to 48 kHz with bitrate up to 320 kbps)	
Network	1 × 10/100/1000 Ethernet port (RJ45) 802.1x network security and certificate management	
Storage	**SD card:**	Up to 512 GB EXT4
	Internal storage:	SATA M.2 2280 SSD (M Key connector)
	Local USB:	Automatic or manual copy via 1 USB 3.0 port
	Network storage:	FTP, SFTP, SCP, RSYNC, CIFS, AWS, or WebDav servers
Recording formats	AVI, MP4, MOV, or MPEG-TS	
Control	Browser-based Admin panel, front screen and control keys, remote login, HTTP, and RS-232 APIs	
Dimensions (W × D × H)	8 ⅛″ × 5 ⅞″ × 1⅝″ (206 mm x 149 mm x 41 mm), 2 lbs (907 g)	