PEARL NANO

The perfect-fit
streamer and recorder

epiphan video

Works with

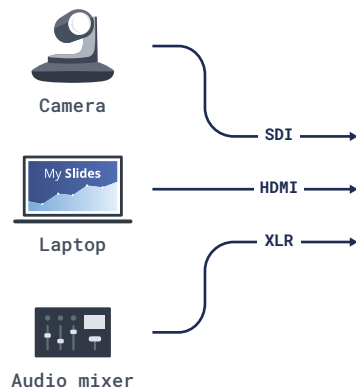Panopto   kaltura   YuJa   CRESTRON

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.
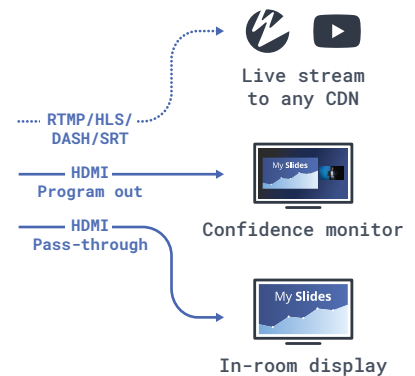
CONNECT YOUR SOURCES

OUTPUT YOUR VIDEO

Camera — SDI →

Laptop — HDMI →

Audio mixer — XLR →

● REC Record to SD card or SSD

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 XLR, RCA, or USB 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.
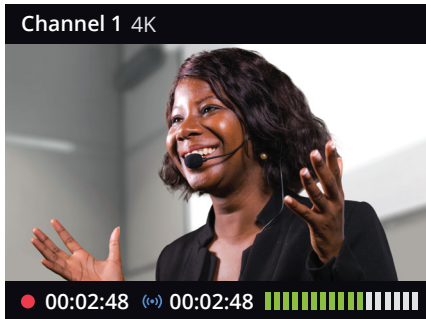
SD card

Convenient SD card slot on the front of the device for storage.

SSD drive

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

Easy file transfer

Nano can automatically transfer recorded files to a USB drive, local server, or network-attached storage device.
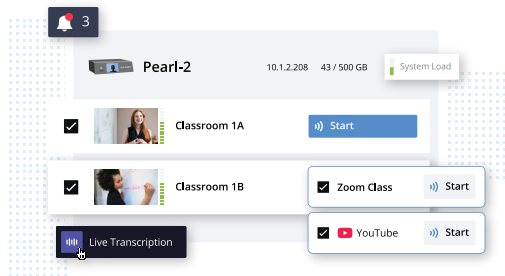
Serious power in a compact package

Create stunning video content with the ability to stream and record in 4K (requires optional feature add-on). Use ultraefficient H.265/HEVC encoding to halve your video file sizes and bandwidth use (compared to H.264/AVC) without compromising on quality.

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.
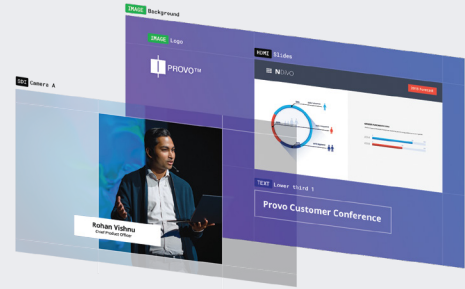

Cloud-based configuration and monitoring

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.

Enhance your CMS workflows

Deep integration with Panopto, Kaltura, and YuJa lets you automatically start and stop streaming or recording at scheduled times. For added efficiency, Pearl Nano can push recordings to your preferred platform 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.

4K streaming and recording
Upgrade your device with the optional feature add-on.

H.265/HEVC video compression
Halve your file sizes and bandwidth use.

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.

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

XLR, RCA, and USB audio
Connect professional audio equipment with line-level XLR.

Key features

- Front screen for basic configuration/control and confidence monitoring

- Video inputs for HDMI and SDI

- 4K streaming and recording (with feature add-on)

- Audio inputs for line-level XLR, RCA, and USB

- 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

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

- H.265/HEVC video compression

- Cloud-based configuration and control via Epiphan Cloud

- Comprehensive integration with Kaltura, Panopto, and YuJa

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

- Save recordings directly to an SD card (user supplied)

- Expansion bay for user-supplied M.2 SATA SSD

- Automatically transfer recordings to a USB drive or networked server

- 802.1x network access control

- Lightweight Directory Access Protocol (LDAP)

- Secure Sockets Layer (SSL)

- Integration with Crestron AV systems

Video inputs	Connectors:	1 × HDMI™, 1 × 12G SDI
	Network inputs:	SRT and RTSP
Audio inputs	Connectors:	2 × XLR line level (stereo pair or two mono), 1 × USB, 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/AVC, H.265/HEVC
	Color resolution:	4:2:0
	Resolution:	User selectable up to 1920 × 1200; 4K with paid upgrade
Streaming protocols	RTMP/RTMPS, SRT, HLS, MPEG-DASH, RTSP, MPEG-TS, UPnP	
Encoded programs	1 × 1080p program at 60 fps (with up to 2 Full HD sources); 1 × 4K program at 30 fps (with up to 2 4K sources)	
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)	