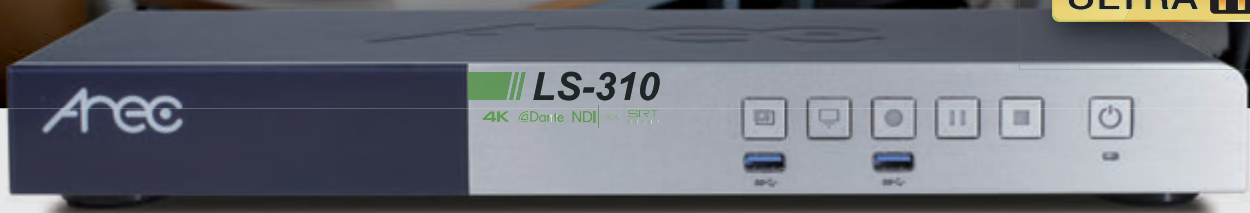


Arec

LS-310 Media Station



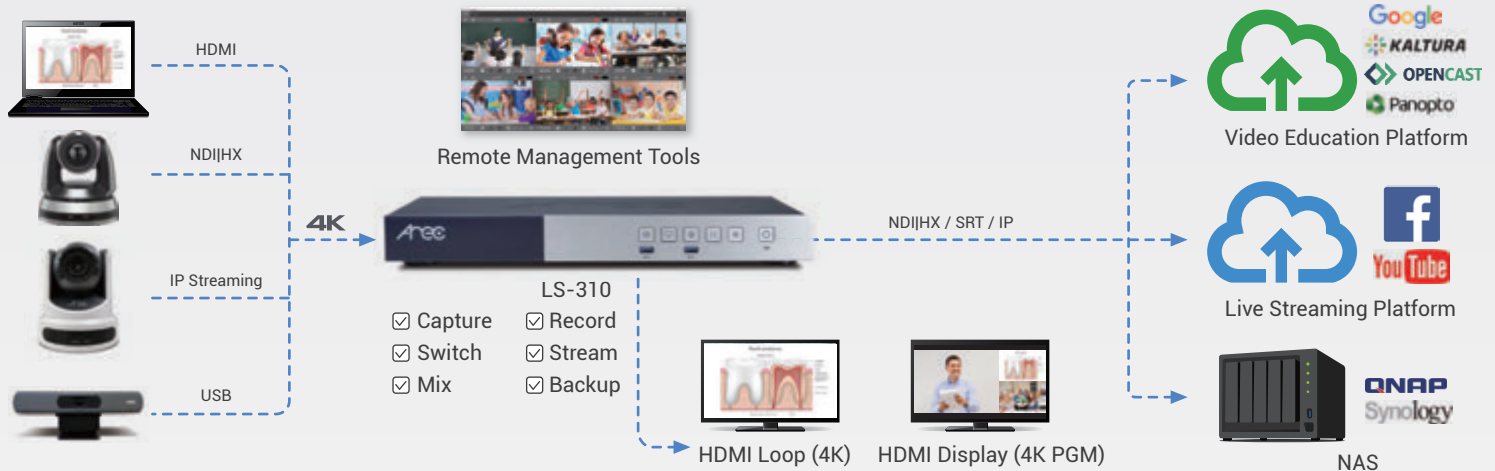
4K @Dante® NDI® HX SRT READY

- All-in-One Device to Offer 2CH 4K UHD or 3CH FHD Video Sources Capturing, Mixing, Switching, Recording and Live Streaming
- Supports USB Audio and Video Input Devices
- PGM Recording up to 4K UHD 30fps with 2TB Internal Storage
- Supports Dante Audio, NDI|HX and SRT Streaming Protocols

Main Features

Capture Up to 3 Video Sources From a Variety of Options

AREC LS-310 Media Station offers diverse connectivity options through its newly added USB jack, HDMI, and RJ-45 interfaces. It enables the capture, mixing, switching, recording, streaming, and backup of 2CH 4K UHD or up to 3CH Full HD video sources. LS-310 is compatible with network-based H.264/ H.265 (HEVC) RTMP/RTP/RTSP/SRT, and NDI|HX video sources. In terms of audio, LS-310 supports HDMI, 3.5mm stereo audio, Phoenix balanced audio, USB, NDI|HX, and Dante inputs by 2x2.



Intuitive and Versatile Control Options

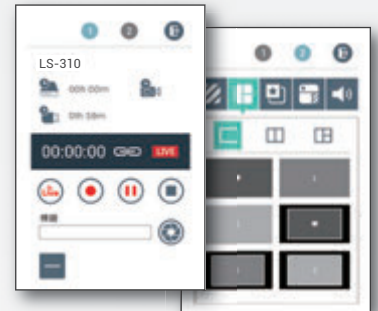
AREC LS-310 supports a wide range of control options: web-based Online Director (Chrome, Edge), touch-friendly Graphical User Interface, Mini Controller for Mobile Devices, physical control buttons, and RS-232/TCP commands among others.



On-screen GUI with mouse/ touch USB control



Web/ SW-based Online Director

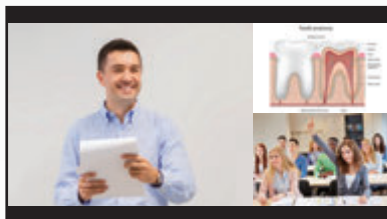


Mini Controller from Mobile Devices

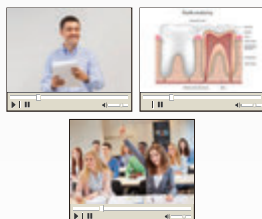
AV Recording with Metadata

LS-310 is capable of recording 1 video channel up to 4K 2160p 30fps, ensuring exceptional quality to meet specific needs. Users have the flexibility to choose between two recording modes: 1 mixed mode (PGM video recording) or 1 mixed + 3 individual input sources recording mode. The recorded files include not only the video content but also metadata, keynotes, and thumbnails. Available APIs for LS-310 make it easy to deliver all of the data seamlessly for CMS/LMS and center control systems integration.

• Mixed Mode

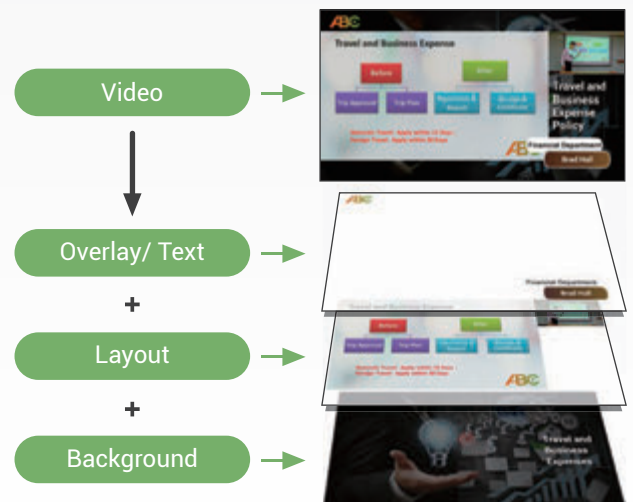


• Original Sources Mode



Real-Time Assistant in Video Making

LS-310 streams mixed video to up to 2 platforms simultaneously, such as YouTube, Facebook, and other live broadcasting websites. AREC inbuilt tools like Online Director allow users to be in control of their video recording/streaming in real time. It lets users easily switch and mix different sources, add or remove logos, backgrounds, overlay graphics, and text titles for live production.



Backup & Upload Your Recordings

LS-310 can save hundreds of hours of recorded videos thanks to its internal 2TB hard drive. To increase security and user convenience, the station can automatically backup and upload recordings to AREC Media Center, FTP, SFTP, NAS, Google Drive, Open-cast, Kaltura, Panopto, and other kinds of servers.

Management APP and Integration API

AREC's hardware system is further optimized for hybrid usage via software options and API. To manage multiple devices conveniently, AREC offers the Station Manager software tool, AREC extends its support by providing NAS VOD software, a user-friendly solution that enables easy video content sharing for small to medium-sized organizations.



SATA 2TB HDD



FTP/ SFTP Backup



Google



KALTURA



OPENCASST



Panopto

* Users will need to have a valid account on Opencast, Panopto, or Kaltura to use these platforms together with the LS-310.



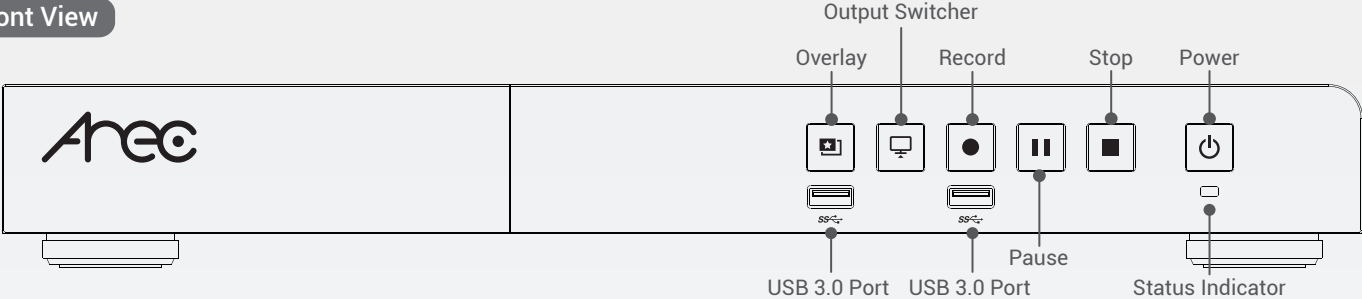
Station Manager



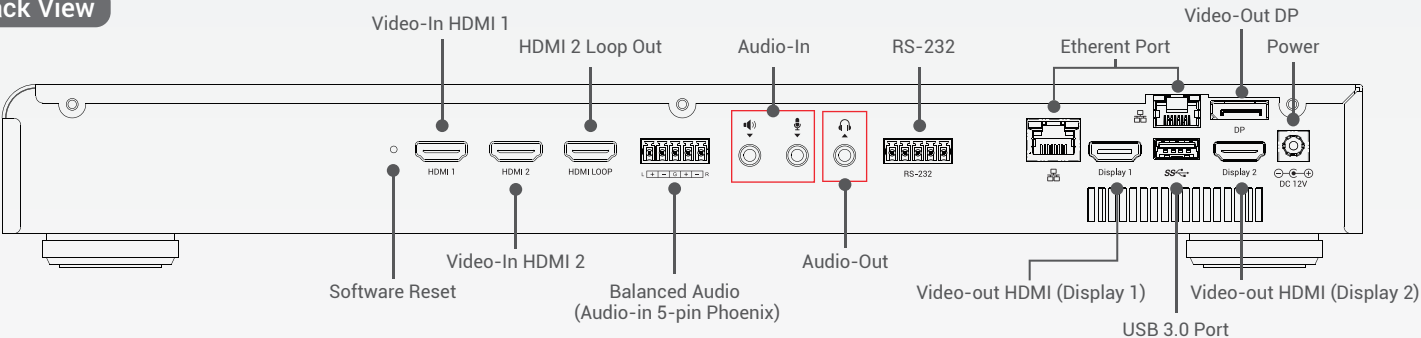
NAS VOD

Product Interface

Front View



Back View



On-Screen Graphical User Interface



- 1 Overlay Images
- 2 Recording Layouts
- 3 Background
- 4 Custom Theme
- 5 Timer
- 6 Start / Stop Streaming
- 7 Start / Stop Recording
- 8 Snapshot
- 9 Playback Video
- 10 Setting
- 11 Camera Control
- 12 LS-310 IP Address
- 13 Audio Volume Bar
- 14 HDMI Display
- 15 DP Display

* The on-screen GUI supports mouse and touch control through USB.

Specifications

Model Name	AREC LS-310 Media Station
Input Connection	
Video Input Interface*	• 2 x HDMI • 2 x RJ-45 (Supports network cameras or IP streaming : up to 3 channels)¹ • 3 x USB (UVC) Note 1: Supports network H.264/ H.265 (HEVC) protocol: RTMP/ RTMPS/RTP/RTSP, NDI HX, SRT(push)**. The RJ-45 ports can support AREC network cameras, compatible with 3rd party network cameras, encoders, streaming sources via IP streaming
Max. Video-In Channels*	Maximum 3 channels synchronized recording
Resolution Range	• HDMI: 480i~2160p60 • RTMP/RTMPS/RTP/RTSP Max.: 2160p30 • USB(UVC) Max.: 2160p30
Audio-In Channels	• 1 x 3.5mm Stereo Mic in • 1 x 3.5mm Stereo Line in • 2 x HDMI • 1 x Balanced audio-in with a 5-pin Phoenix connector • 1 x USB (UAC) • 2 x RJ-45¹ (Supports digital audio inputs) Note 1: Supports network protocol: RTMP/RTMPS/RTP/RTSP, NDI HX, SRT(push)**, and Dante 2x2
Video Processing	
Compression	H.264/ H.265 (HEVC)/ AVC
Frame Rate	4K UHD: Max. 30fps Full HD: Max. 60fps
Bit Rate	300Kbps~32Mbps
Resolution	Max. 4K UHD (640x360 ~ 3840x2160)
Audio Processing	
Compression	AAC-LC
Bit Rate	80Kbps~320Kbps
Video / Audio Outputs	
Video Outputs*	• 1 x HDMI for loop out (Max. 4K UHD, HDMI2 loop through) • 1 x HDMI for preview (Max. 1080p, PGM with graphic user interface) • 1 x HDMI for display (Max. 4K UHD, single source or multi-source monitoring or PGM) • 1 x DP for display (Max. 1080p, single source or multi-source monitoring or PGM) • 1x RJ-45¹ (digital video over Ethernet) Note 1: Supports network protocol: H.264/ H.265 (HEVC) RTMP/ RTMPS/RTP/RTSP, NDI HX, SRT(push)**. Up to 1CH 2160p streaming at 30 fps
Audio Outputs	• 1 x 3.5mm Stereo Line out • 2 x HDMI • 1 x DP • 1 x RJ-45¹ (digital video over Ethernet) Note 1: Supports network protocol: RTMP/RTMPS/RTP/RTSP, NDI HX, SRT(push)**, and Dante 2x2
Streaming Parameters	
Streaming Delay	1 sec.
Compatible Streaming Input Protocols	RTSP, RTP, RTMP (RTMPS), NDI HX, SRT, Dante Audio
Streaming Output Protocols	RTP, RTMP (RTMPS), RTSP, NDI HX, SRT, Dante Audio Note: 1. Users can choose output options from RTP or RTMP (RTMPS) 2. RTP : MPEG2-TS over RTP unicast; MPEG2-TS over RTP multicast 3. RTSP (TCP/ UDP): Max 6 clients (RTSP streams can only pull from URL)
Storage, Backup, and Compatibility	
Built-in Local Storage	2TB 2.5" SATAIII Hard Drive
External Storage	Supports USB drive recording. NAS storage is also supported
Locally Stored File Format	MP4
Backup	FTP/ SFTP/ Google Drive
Third-Party Video Management System	Compatible with Opencast, Panopto, and Kaltura

Recording	
Recording Modes*	Mixed mode, 1 Mixed + 3 individual original sources
Scheduled Recording	Yes, supports iCalendar format (.ics file), such as Google Calendar, Opencast, Panopto, and Kaltura
Recording Layouts*	Supports default layouts which can be adjusted by Layout Editor software.
Bookmark	Automatic and manual bookmark insertion
Background Images	Supports up to 10 default and user-uploaded images
Onscreen Overlay Images	Supports up to 20 default and user-uploaded images
Text Title	Text can be added manually via the built-in web interface
Custom Themes	Supports up to 50 themes can be created and adjusted
Live Broadcasting	
Live Broadcast to CDN or Stream Server*	Mixed video: supports RTMP (RTMPS) protocol. Streams up to 2 platforms simultaneously
Video Information Editing	
Post Video Info Editing	Yes, through the Video Manager web page
Video Info Adding	Video info will be added to the video automatically while the station finishes outputting it or uploading
Controls of LS-310 and Network Cameras	
Touch Interface	Through recommended touch screens and interactive projectors
Mouse Device and Numeric Keypad	Through USB interface connection
Video Switcher*	Yes, through web-based AREC Online Director or on-screen GUI for manual controls
Mini Controller	Through mobile web browser and wireless connection for manual controls
External Control	Yes, supports RS-232 interface port
Control Buttons	Yes, at the front of the media station
Video Manager Platform*	Built-in video manager platform: through web-based control interface
Group Management	Yes, through Station Manager
Camera Control	VISCA / PELCO-D / PELCO-P / VISCA over IP/ ONVIF profile S / NDI®
General Information	
Operation System	Embedded Linux system
Power Supply	12V/ 3.34A/ 40W
Temperature / Humidity	0~40°C/ 90%
Dimension	401.4 mm(L) x 167.4mm(W) x 54mm(H)
Weight	2.25kg (5 lbs)
Language	SC/ TC/ English/ Russian/ Spanish/ Czech/ Korean/ Latvian/ German/ Estonian
Accessories	Power adapter/ quick guide/ ear mounts/ USB numeric keypad

* When switching to 1080p50/60, 2160p30, and HEVC modes, there might be some function restrictions. Please refer to user manual for more details.

** The SRT feature will be available through a firmware update. Please reach out to your sales representative to confirm its availability.



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Preliminary version, AREC reserves the right to modify product specification without prior notice.
Please contact your sales representative for further confirmation.