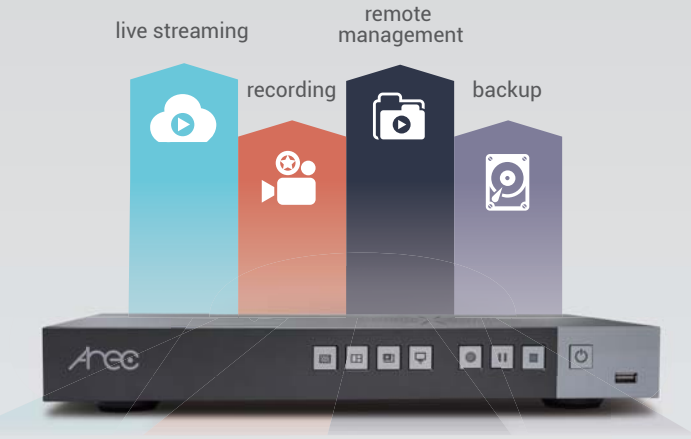# Aʀec

LS-300
Media Station

- All-in-One Device to Offer up to 3 Full HD Video Sources Capturing, Mixing, Switching, Recording and Live Streaming
- Supports Automated and Scheduled Recording/Streaming
- Fully Integrated with Kaltura, Panopto and Opencast Video Management Systems

Main Features

Easy to Create Your Live Video Like a Pro

Designer to lower the entry barriers of using professional AV equipment, AREC LS-300 is an all-in-one Media Station with reliable performance, allowing users to simultaneously capture, switch, mix, stream and record live activities in a simple and efficient way.

live streaming

remote management

recording

backup

Capture Up to 3 Video Sources at the Same Time

Via HDMI, VGA, RJ-45 interfaces or streaming inputs, AREC LS-300 supports up to 3 Full HD 1080p video sources capturing, mixing, switching, recording and live streaming. Users can choose 1 mixed video plus 3 individual videos recording for flexible use. LS-300 can mix audio via HDMI, 3.5mm stereo audio jacks and balanced input with a 6-pin Phoenix connector.

Recording

Mixed Mode

Original Sources Mode

Broadcast Your Mixed Video

LS-300 can stream mixed video to up to 2 platforms simultaneously, such as YouTube, Facebook, Twitch and other live broadcasting websites.

YouTube

Twitch

Facebook

Adding Titles & Graphics to Your Video

With LS-300, users can easily switch and mix between sources, add or remove logos, backgrounds, overlay graphics, and subtitles to create their own custom and professional lecture video.

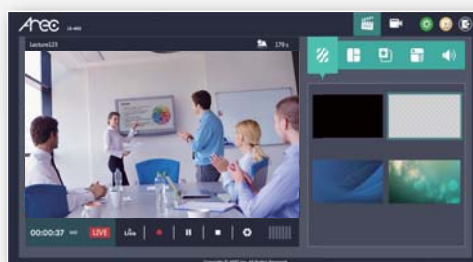Video

Overlay/ Subtitle

+

Layout

+

Background

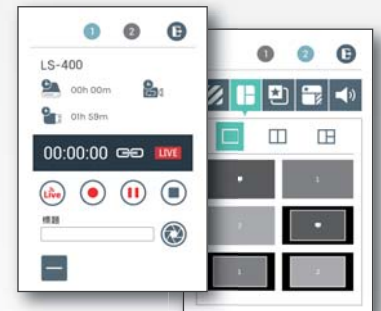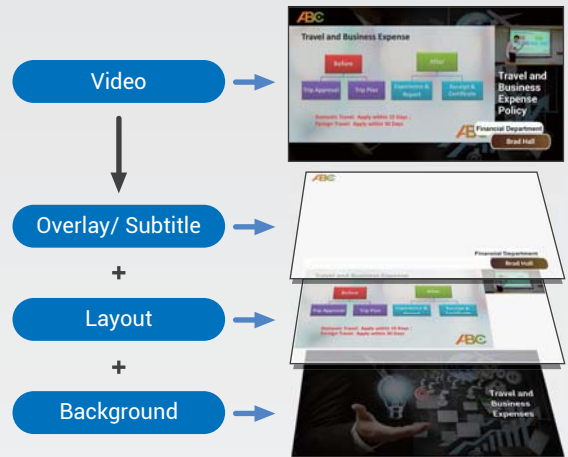## Versatile Control Options and Remote Management Tools

LS-300 comes with numerous control options, including AREC Online Director web page (Chrome, Edge, IE), software-based Online Director application (Windows, Mac OS), Interactive Graphical User Interface (GUI), and Mini Controller web interface for mobile devices. Control buttons on the front of LS-300 are also provided. LS-300 is also fully compatible with free to use AREC software and cloud service for remote management, such as Station Manager and ARECloud.

On-screen GUI & USB Interface*

Web/ SW-based Online Director

Mini Controller from Mobile Device

*The on-screen GUI supports mouse device control through USB connection.

AREC Video Manager : Videos With Just One Click

With the built-in Video Manager, administrators or teachers can manage videos stored in the local LS-300 Media Station remotely. They can download, upload or delete video files, and edit video metadata. With available APIs, all of the metadata, thumbnail and video content can be delivered seamlessly for integration.

Recording and Backup

LS-300 is integrated with Panopto, Kaltura, and Opencast platforms*. With internal 1TB hard drive, LS-300 can save hundreds of hours recording videos. It supports automatic backup and upload of recordings after their completion to AREC MediaCenter, FTP and SFTP servers, and NAS can be used for storage.
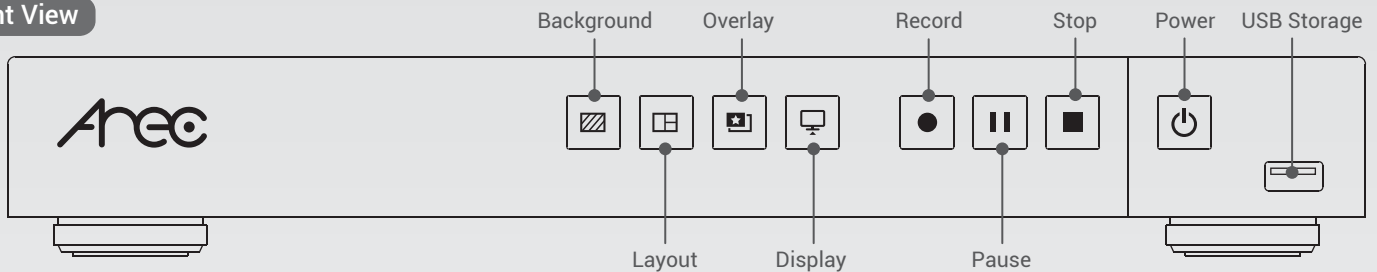
SATA 1TB HDD
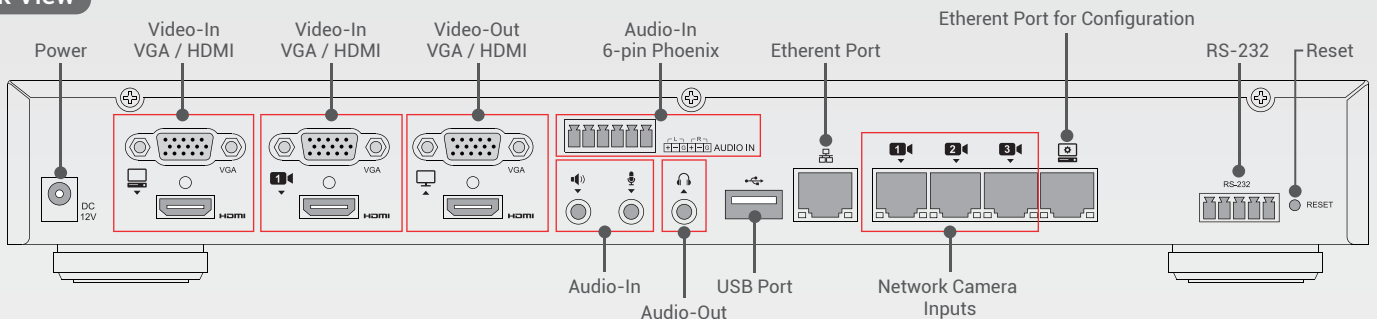
OPENCAST Panopto KALTURA

FTP/ SFTP Backup

* Users will need to have a valid account on Opencast, Panopto, or Kaltura to use these platforms together with LS-300.

Product Interface

Front View

Background   Overlay   Record   Stop   Power   USB Storage

Arec

Layout   Display   Pause

Back View

| Power | Video-In VGA / HDMI | Video-In VGA / HDMI | Video-Out VGA / HDMI | Audio-In 6-pin Phoenix | Etherent Port | Etherent Port for Configuration | RS-232 | Reset |

DC 12V   VGA   VGA   VGA   AUDIO IN   RS-232   RESET

HDMI   HDMI   HDMI

Audio-In   USB Port   Network Camera Inputs

Audio-Out

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-300 IP Address
13 Audio Volumn Bar
14 Display Switch

LIVE 00:00:00   10.2.50.152

* The on-screen GUI supports mouse device control through USB connection.

Specifications

Model Name	AREC LS-300 Media Station

Input Connection	
Video Input Interface	HDMI: 2 channels/ VGA: 2 channels RJ-45: 4 channels (supports Full HD network camera/ IP streaming)
	Note: Supports DVI and component video cable inputs with appropriate DVI to HDMI or component to VGA adaptors
Max. Video-In Channels	Maximum 3 channels synchronized recording
	HDMI/VGA: up to 2 channels Full HD network camera: up to 3 channels
Resolution Range	HDMI: 480i~1080p60 VGA: 480i~1080p60 RTP/ RTMP/ RTSP, Max.: 1080p30
Audio-In Channels	3.5mm Stereo Mic in: 1 channel; 3.5mm Stereo Line in: 1 channel; HDMI: 2 channels Balanced audio-in with a 6-pin Phoenix connector

Video Processing	
Compression	H.264/ AVC
Frame Rate	Max. 30fps
Bit Rate	300Kbps~8Mbps
Resolution	Max. 1080p (640x360 ~ 1920x1080)

Audio Processing	
Compression	AAC-LC
Bit Rate	80Kbps~320Kbps

Video / Audio Outputs	
Video Outputs	1x HDMI display port 1x VGA display port (1 output option from loop-through, inputs monitoring and multi-source display) 2x H.264/AVC digital video over Ethernet
	Note: on-screen GUI is selectable between HDMI and VGA display port
Max. Output Resolution	HDMI/ VGA: 1080p60
Audio Outputs	3.5mm Stereo Line out: 1 channel; HDMI: 1 channel

Streaming	
Streaming Delay	1 sec.
Compatible Streaming Input Protocols	RTSP, RTP, RTMP
Streaming Output Protocols	RTP, RTMP (RTMPS), RTSP
	Note: 1. Users can choose 1 output option from RTP or RTMP only 2. RTP: MPEG2-TS over RTP unicast; MPEG2-TS over RTP multicast 3. RTSP (TCP/ UDP): Max 6 clients RTSP streams available via public URL (example: pulled streams)

Storage, Backup, and Compatibility	
Built-in Local Storage	1TB 2.5" SATAIII Hard Drive
External Storage	Supports USB drive recording through the front port. NAS storage is also supported.
Locally Stored File Format	MP4
Backup	FTP/ SFTP
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
Recording Layouts	Multiple default and user-defined layouts, including full screen/ picture-in-picture/ picture-by-picture/ multi-channel split screen
Bookmark	Automatic and manual bookmark insertion
Background Images	Multiple default and user-uploaded images
On-Screen Overlay Images	Multiple default and user-uploaded images
Subtitle	Text can be added manually via the built-in web interface
Custom Themes	Multiple themes can be created and adjusted

Live Broadcasting	
Live Broadcast to CDN or Stream Server	Yes, support RTMP (RTMPS) protocol. Stream up to 2 platforms simultaneously

Video Information Editing	
Post Video Info Editing	Yes, through Video Manager web page
Video Info Adding	Video info can be added automatically before the video is recorded. Manual input is available before and after the recording finishes

Controls of LS-300 and Network Cameras	
Touch Interface	Touch control is supported via USB connection
Mouse Device and Numeric Keypad	Through USB interface connection
Video Switcher	Yes, through AREC Online Director (web-based or desktop applications) 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 port and TCP protocol
Control Buttons	Yes, at the front of the media station
Video Manager Platform	Yes, through built-in web interface
Group Management	Available via ARECloud (upgrading firmware to v2.11 version or above)
Camera Control	VISCA/ PELCO-D / PELCO-P / VISCA over IP/ ONVIF Profile S

General Information	
Operation System	Embedded Linux system
Power Supply	12V/ 2A
Temperature / Humidity	0~40°C/ 90%
Dimensions	366.4 mm(L) x 187.3mm(W) x 53.1mm(H)
Weight	2.27kg (5 lbs)
Language	SC / TC / English/ Russian/ Spanish/ Czech/ Korean/ Latvian/ German/ Estonian
Accessories	Power adapter/ quick guide