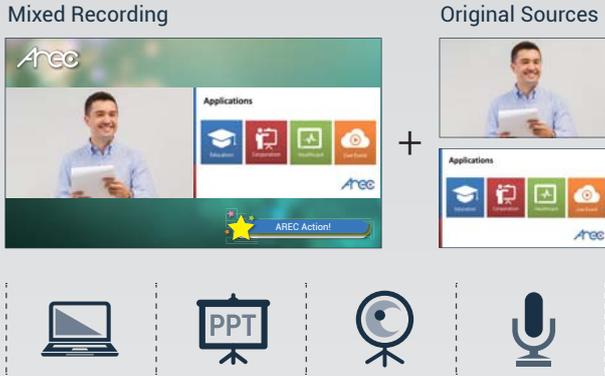# Arec

LS-200
Media Station

- 2 Video Sources Mixing, Switching, Recording and Live Streaming
- Supports Automated and Scheduled Recording/Streaming
- Fully Integrated with Kaltura, Panopto and Opencast Video Management Systems
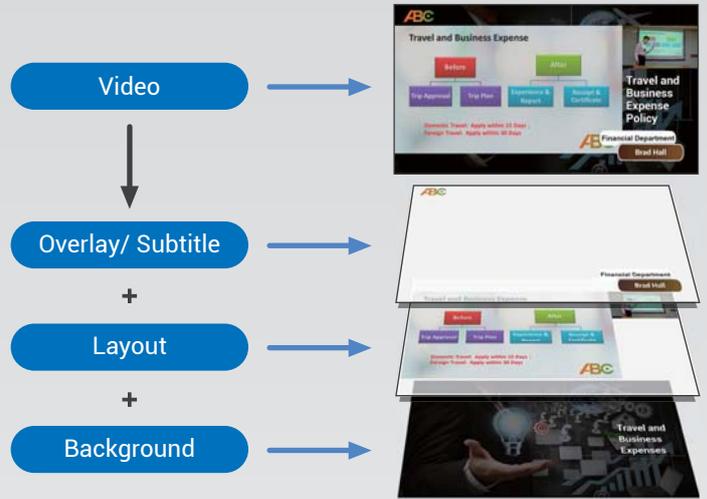
Main Features

Capture Up to 2 Video Sources at the Same Time

Via HDMI, VGA, RJ-45 interfaces or streaming inputs, AREC LS-200 supports up to 2 Full HD 1080p video sources capturing, mixing, switching, recording and live streaming. Users can choose 1 mixed video plus 2 individual videos recording for flexible use. LS-200 can mix audio via HDMI, 3.5mm stereo audio jacks and balanced input with a 6-pin Phoenix connector.

Mixed Recording

Original Sources

Adding Titles & Graphics to Your Video

With LS-200, 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

Broadcast Your Mixed Video

LS-200 can stream mixed video to up to 2 platforms simultaneously, such as YouTube, Facebook, Twitch and other live broadcasting websites.

YouTube

Twitch

Facebook

ARECloud: Your Remote Control Center

With ARECloud, a free cloud service, administrators can easily monitor and control multiple AREC Media Stations in your campus or enterprise, including changing the recording themes or starting recording.

Versatile Control Options and Remote Management Tools

LS-200 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-200 are also provided. LS-200 is also fully compatible with free to use AREC software and cloud service for remote management, such as Station Manager and ARECloud.

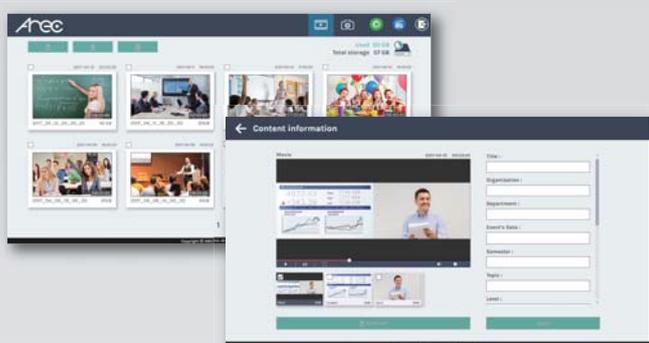On-screen GUI & USB Interface*

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-200 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-200 is integrated with Panopto, Kaltura, and Opencast platforms*. With internal 1TB hard drive, LS-200 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.
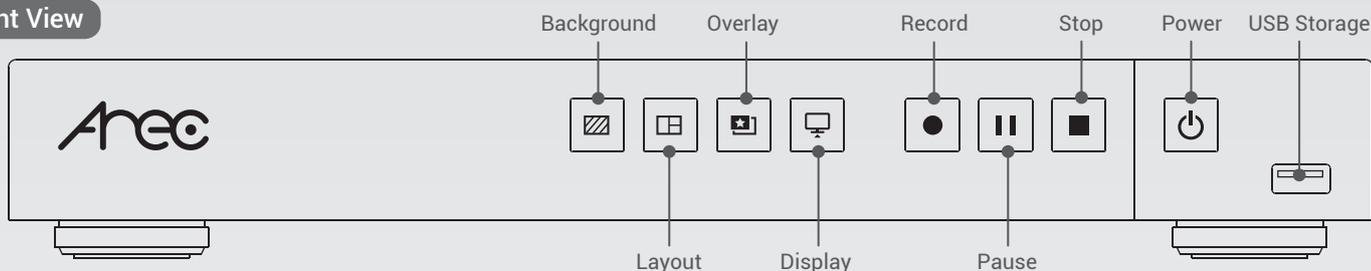
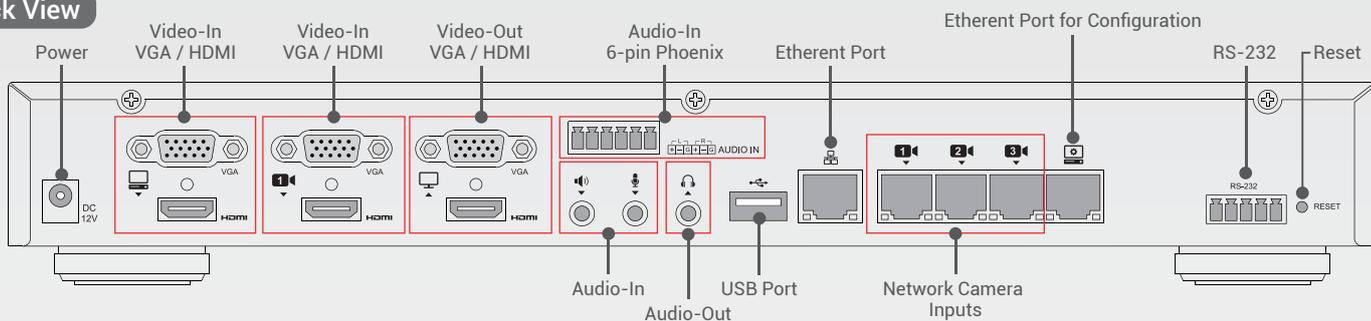SATA 1TB HDD

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-200.

Product Interface

Front View

| Background | Overlay | | Record | Stop | Power | USB Storage |

Layout Display Pause

Back View

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

DC 12V

Audio-In Audio-Out USB Port Network Camera Inputs

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-200 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-200 Media Station

Video Inputs

Video-in Interface	HDMI: 2 channels/ VGA: 2 channels RJ-45: 4 channels (supports Full HD network camera/ IP streaming)
	Note: Compatible with DVI and Component signals via using DVI to HDMI or Component to VGA adaptor cable
Max. Video-In channels	Maximum 2 channels synchronized recording
	HDMI/VGA: up to 2 channels Full HD network camera: up to 2 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
Audio Outputs	3.5mm Stereo Line out: 1 channel; HDMI: 1 channel
Max. Output Resolution	HDMI/ VGA: 1080p60

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 + 2 individual original sources
Scheduled Recording	Yes, supports iCalendar format (.ics file) for automatic recording/streaming, 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-200 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 Button	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