

L-ACOUSTICS AV CONTROL SYSTEMS

FEATURE OVERVIEW

March 2023



INTRODUCTION

L-Acoustics sound systems integrate seamlessly with AV control solutions in both Pro Audio and Architectural (residential, hospitality, etc.) applications, leveraging the Ethernet connectivity of L-Acoustics electronics products as amplified controllers and audio processors.

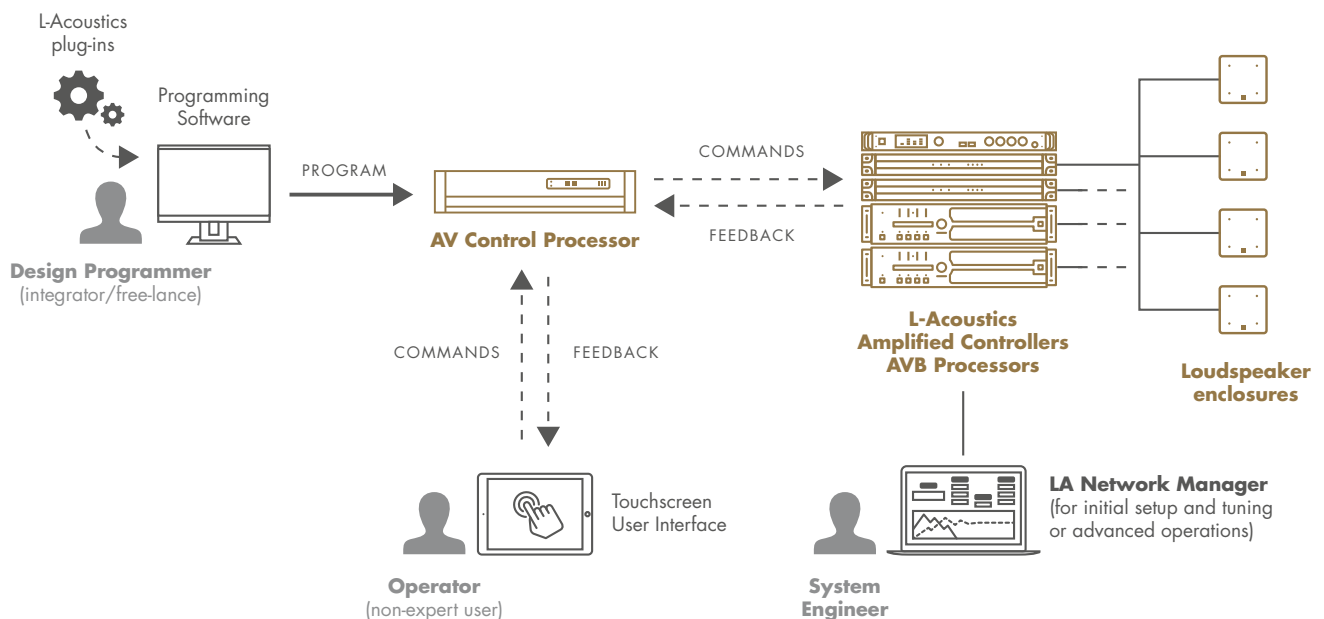
Typical venues and projects taking advantage of AV Control Systems:

- Sports venues
- Home Entertainment installations
- Cruise ships
- Performing Art Centers
- Theme Parks
- Hospitality
- Live & Night Clubs
- Houses of Worship

L-Acoustics partners with the major control system providers to elevate the experience of the end users, with the following example application:

- controlling the sound system using touch screen interfaces
- integrating with home automation for a smooth AV experience
- automating the control of the loudspeaker system with pre-defined scenarios, system events or schedulers, and other AV components
- monitoring the health of the system and reporting faults
- managing sound system presets
- fulfilling Voice Alarm requirements for continuous monitoring of the venue
- other applications...

For each control platform, L-Acoustics provides plug-ins or drivers to be used within the project design software offered by the control system manufacturer.






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L-ACOUSTICS AV CONTROL SYSTEMS FEATURE OVERVIEW



COMPATIBLE SOLUTIONS

	Partner Processors or Controllers	L-Acoustics Products	L-Acoustics Creations Systems
 https://www.qsys.com/ https://www.qsys.com/alliances-partnerships/l-acoustics/	vCore Core Nano Core 8 Flex Core 110f Core 510i Core 610 Core 5200	LA2Xi LA4X LA12X LA7.16i LA4 LA8 L-ISA Processor L-ISA Processor II P1	Fiji 2.1/5.1 Hawaii 2.1/5.1 Tahiti 2.1 Tonga 2.1/7.1 Ibiza Sky Bespoke
 https://www.crestron.com	3-Series Controllers 4-Series Controllers	LA2Xi LA4X LA12X LA7.16i LA4 LA8 L-ISA Processor L-ISA Processor II P1	Fiji 2.1/5.1 Hawaii 2.1/5.1 Tahiti 2.1 Tonga 2.1/7.1 Ibiza Sky Bespoke
 https://www.control4.com	Core X Controllers EA-X Controllers CA-X Controllers	LA2Xi LA4X LA12X	Fiji 2.1 Hawaii 2.1 Tahiti 2.1 Sky *Bespoke
 https://www.savant.com	Smart Hosts Pro Hosts	LA2Xi LA4X LA12X	Fiji 2.1 Hawaii 2.1 Tahiti 2.1 Sky *Bespoke

* Consult with L-Acoustics to learn if a bespoke system can be controlled with Control4 or Savant

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DOWNLOADING PLUGINS AND DRIVERS

Q-SYS

The L-Acoustics plug-ins are available directly from the Asset Manager in Q-SYS Designer Software.

Links: [L-Acoustics Q-SYS alliance page](#)
[L-Acoustics Q-SYS plug-ins documentation](#)

CRESTRON

The L-Acoustics modules for Crestron can be downloaded from the Crestron Application Market

Link: [L-Acoustics on Crestron Market](#)

CONTROL4

The L-Acoustics driver package for Control4 is available in the Documentation Center of the L-Acoustics website, in the downloads section of the compatible electronics products ([LA2Xi](#), [LA4X](#), [LA12X](#))

Link: [L-Acoustics Documentation Center \(LA2Xi page\)](#)
[Direct download](#)

SAVANT

The L-Acoustics driver package for Savant Systems is available in the Documentation Center of the L-Acoustics website, in the download section of the compatible electronics products ([LA2Xi](#), [LA4X](#), [LA12X](#))

Links: [L-Acoustics Documentation Center \(LA2Xi page\)](#)
[Direct download](#)

OTHER CONTROL SOLUTIONS

L-ISA PROCESSOR REST API

The documentation of the REST API for the L-ISA Processor and L-ISA Processor II is available in the Documentation Center of the L-Acoustics website, in the downloads section of L-ISA Processor II.

Links: [L-Acoustics Documentation Center \(L-ISA Processor II page\)](#)
[Direct Link](#)

SNMP

To apply to receive the documentation and instructions on how to use the L-Acoustics SNMP Agent or UDP/IP protocol, contact L-Acoustics at:

Link: avcontrol@l-acoustics.com

CONTACT

For any additional information or assistance with third-party control and integration with L-Acoustics products please use the following email address.

Link: avcontrol@l-acoustics.com



APPENDIX A: AMPLIFIED CONTROLLERS FEATURES COMPATIBILITY

		Q-SYS	Crestron	Control4	Savant	SNMP
Power management & monitoring	Power/Standby	✓	✓	✓	✓	✓
	Panel lock	✓	✓			
	LCD/LED brightness			✓		
	Reboot	✓				✓
	Temperature	✓	✓			✓
	Fuse Protect	✓	✓			✓
Presets/ configurations management	User preset loading	✓	✓			✓
	Configuration recall	✓	✓			
	Configuration store	✓	✓			
Input management	Source selection (Milan-AVB, AES/EBU, Analog)	✓	✓	✓		✓
	Digital input status	✓	✓			✓
	Fallback control	✓	✓			✓
	Input level meters	✓	✓			✓
Output management	Gain	✓	✓	✓	✓	✓
	Mute	✓	✓	✓	✓	✓
	Delay					✓
	Output level meters	✓	✓			✓
	Limit / Clip / Protect	✓	✓			✓
	Routing	✓	✓	✓	✓	✓
PA/VA system monitoring	Status monitoring	✓	✓			✓
	Pilot tone	✓	✓			✓
	AES/EBU input status	✓	✓			✓
	Milan-AVB input status	✓	✓			✓
	Speaker monitoring	✓	✓			✓



Q-SYS PLUG-IN USER INTERFACE EXAMPLES

4-channel amplified controllers (LA2Xi/LA4X/LA12X/LA4/LA8)

L-Acoustics LA2Xi / LA4X / LA12X 192.168.101.42

Main | Configurations | GPIO (LA2Xi) | PAVA

Controller Status: Plugin v1.4.0.0 **LA2Xi** IP: 192.168.101.42 FW: 2.11.0.18

Disconnect OK

Current Preset: F1:KIVA II Connected Temperature: Output 1 OK, Output 2 OK, Output 3 OK, Output 4 OK

On/Standby: Online Identify High Over: High Over, High Over, High Over, High Over

Display Lock Reboot Over: Over, Over, Over, Over

Input Settings: XLR Type: OK - AVB Locked 96kHz

Input Mode: AVB XLR Type: A/B C/D AES ANA Input Lock: AVB Pri. Sec. AES A/B AES C/D

AVB Stream Channel Mapping: A 1 B 2 C 3 D 4 AVB Fallback to XLR: AES Fallback to C/D

Audio Levels: Input Meters: Signal LED Threshold: -50.0dB Hold Time (s): 1

Output Meters: Gain: 0dB 0dB 0dB 0dB 0dB 0dB 0dB 0dB

Mute All Mute Protect Clip Limit

Signal Routing: Output mode (LA2Xi only): BTL PBT BTL PA PA PA PA

16-channel amplified controllers (LA7.16i)

L-Acoustics Amplified Controller 16 channels

Main | Inputs | Routing | Outputs | PAVA | Configurations

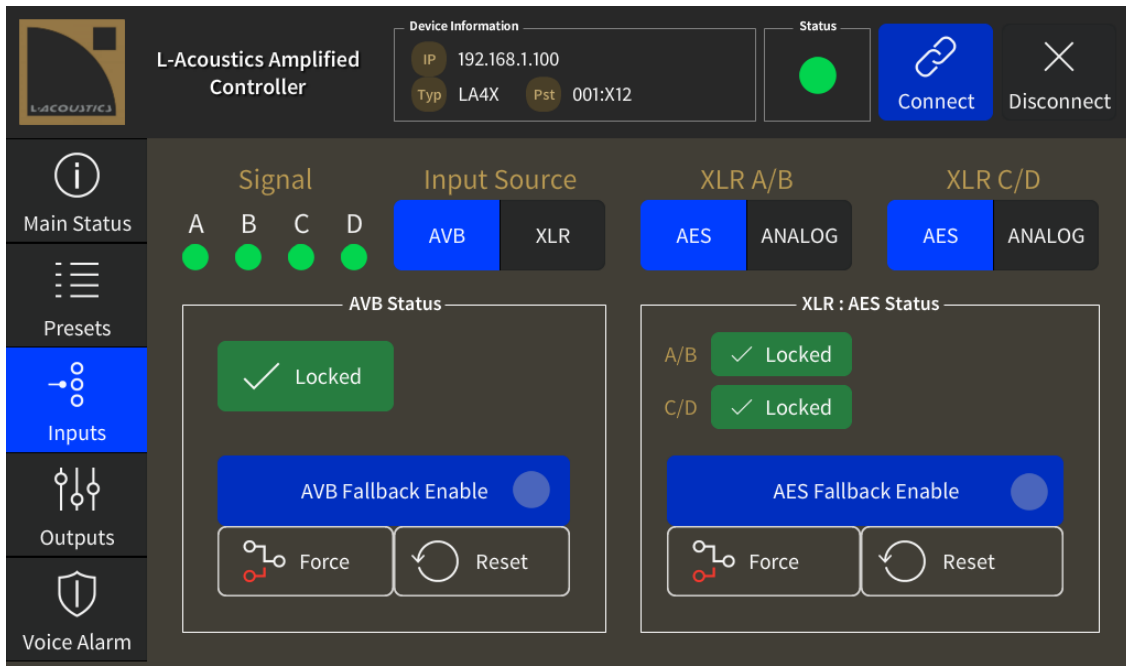
Output Settings

Outputs	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Enclosure Section	X4 PA	X12 PA	KARA II LF	KARA II HF	KARA II LF	KARA II HF	KARA II LF	KARA II HF	X12 PA	X12 PA	KARA II LF	KARA II HF	KARA II LF	KARA II HF	KARA II LF	KARA II HF
Master Gain	0dB	0dB	0dB	0dB	0dB	0dB	0dB	0dB	0dB	0dB	0dB	0dB	0dB	0dB	0dB	0dB
Mute	Mute	Mute	Mute	Mute	Mute	Mute	Mute	Mute	Mute	Mute	Mute	Mute	Mute	Mute	Mute	Mute
Protect	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Clip	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Limit	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Signal LEDs	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Threshold	-60.0dB	-60.0dB	-60.0dB	-60.0dB	-60.0dB	-60.0dB	-60.0dB	-60.0dB	-60.0dB	-60.0dB	-60.0dB	-60.0dB	-60.0dB	-60.0dB	-60.0dB	-60.0dB
Hold (s)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1



CRESTRON MODULE PROGRAM EXAMPLES: AMPLIFIED CONTROLLERS

4-channel amplified controllers (LA2Xi/LA4X/LA12X/LA4/LA8)





APPENDIX B: AUDIO PROCESSORS FEATURES COMPATIBILITY

		Q-SYS	Crestron	SNMP
Power management & monitoring	Panel lock	✓	✓	
	Reboot	✓		
	Temperature & Humidity	✓	✓	✓
Presets management	Configuration recall	✓	✓	✓
	Configuration store	✓	✓	
Input management	Digital input status	✓	✓	✓
	Fallback control	✓	✓	✓
	Gain	✓	✓	✓
	Mute	✓	✓	✓
	Input level meters	✓	✓	✓
	Mic preamp gain	✓	✓	
	Mic preamp +48V & HPF	✓		
DSP management	DSP Bus gain	✓	✓	✓
	DSP Bus delay	✓		✓
	DSP Bus limit	✓		✓
	Matrix mixer	✓		
	CUE selection	✓		
Output management	Gain	✓	✓	✓
	Mute	✓	✓	✓
	Output level meters	✓	✓	✓
	Routing	✓	✓	
Tools	Signal generator	✓	✓ (Sine only)	
	Media Player control	✓	✓	
	USB sensor	✓		
	GPIO control	✓	✓	
	GPIO functions	✓		



Q-SYS PLUG-IN USER INTERFACE EXAMPLES: P1 PROCESSOR

L-Acoustics Networked Audio Processor 192.168.101.41

Status | Inputs | DSP | Outputs | Media Player | Configurations

Processor Status Plugin v1.2.0.0 P1 IP: 192.168.101.41 FW: 2.11.0.18

Disconnect OK

Display Lock Reboot Connected Current Configuration #00: DEFAULT

Condition

Temperature	40 °C 104 °F	<input checked="" type="checkbox"/> OK
Humidity	57 % (0 ~ 70°C)	<input type="checkbox"/> High temp.
Fan Error	Humidity 22 %	<input type="checkbox"/> Over temp.

USB

USB 1	Connected <input checked="" type="checkbox"/>
USB 2	Temp. 28 °C 82 °F
	Humidity 48 %

GPI / GPI Status and Functions

IN1	Load configuration slot A Slot A 1	
	Load configuration slot B Slot B 2	
IN2	Load configuration slot A Slot A 3	
	Load configuration slot B Slot B 4	

GPO Status and Functions

OUT1	Manual state	<input type="checkbox"/> On	60
OUT2	Manual state	<input type="checkbox"/> On	60

Signal Status

Inputs Fallback

Input	Source	Active	Reset	Test
AES 1-2	Disabled	<input type="checkbox"/>	<input type="button" value="Reset"/>	<input type="button" value="Test"/>
AES 3-4	Disabled	<input type="checkbox"/>	<input type="button" value="Reset"/>	<input type="button" value="Test"/>
AVB 1-4	Disabled	<input type="checkbox"/>	<input type="button" value="Reset"/>	<input type="button" value="Test"/>
AVB 5-8	Disabled	<input type="checkbox"/>	<input type="button" value="Reset"/>	<input type="button" value="Test"/>

Input Lock AVB 1 2 AES 1-2 AES 3-4

Include in status AVB 1 AVB 2 AES 1-2 AES 3-4

Name P1 Media Clock Internal

Stream 1 AAF PCM32, 96kHz, 8 ch Include

Stream 2 AAF PCM32, 96kHz, 8 ch Include

Media Player

File Folder

Volume: -16.0dB

Enable Index 2 / 4 Time 00:00:27 / 00:03:50

Disk BL2 Folder /XSeries/X8 File 02 - Willy Deville - Assassin of Love.flac

Change Folder

Type existing path on USB drive to change current folder. (Optional: add '::N' at end of path to also load file at index N if it exists, e.g. /path/to/folder::3)

Auto Play: starts playback right after changing folder::index

Change Folder

Files List

- 01 - Jennifer Warnes - Somewhere, Somebody.flac
- 02 - Willy Deville - Assassin of Love.flac
- 03 - Herbie Hancock - Sister Moon.flac
- 04 - Eric Clapton - One Chance.flac

WARNING:
Downloading Folder Content stops the Media Player playback!



CRESTRON MODULE PROGRAM EXAMPLES: P1 PROCESSOR

The screenshot displays the L-Acoustics Networked Audio Processor interface. At the top left is the L-Acoustics logo and the text "L-Acoustics Networked Audio Processor". To the right, "Device Information" shows IP: 192.168.1.194, Typ: P1, and Cfg: 03: FOH. A "Status" indicator shows a green light, and there are "Connect" and "Disconnect" buttons.

The main interface is divided into four sections: **BUS**, **ANALOG**, **AES/EBU**, and **AVB**. Each section contains level meters, gain controls, and mute/unmute buttons. The AVB section has 8 channels, while the others have 4.

At the bottom, there are navigation tabs: "Main Status", "Input Levels", "Input Settings", "Input Fallback", "Routing", and "Output Levels" (which is highlighted in blue).

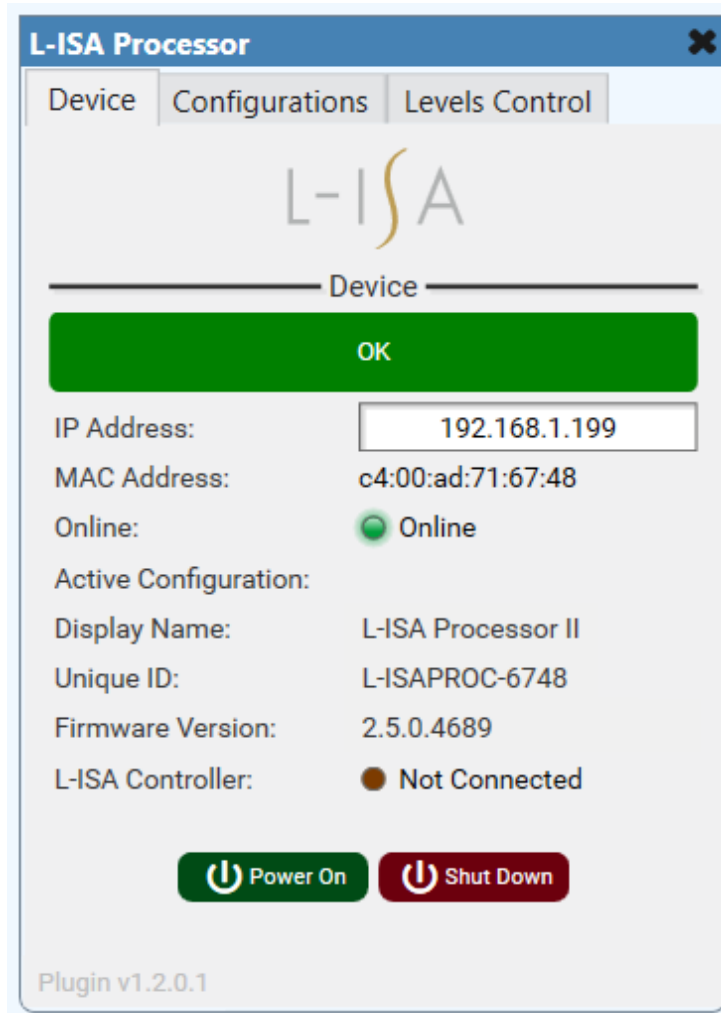


APPENDIX C: LISA PROCESSOR FEATURE COMPATIBILITY

		Q-SYS	Crestron	HTTP REST API
Monitoring	Power supplies	✓	✓	✓
	Disk health	✓	✓	✓
	Files system health	✓	✓	✓
	Emergency key detection	✓	✓	✓
Levels control	Gain	✓	✓	✓
	Mute	✓	✓	✓
Power management (LISA Processor II only)	Power On	✓	✓	✓
	Shutdown	✓	✓	✓
Presets management	Configuration recall	✓	✓	✓
	Configuration store	Use LISA Controller		



Q-SYS PLUG-IN USER INTERFACE EXAMPLES: L-ISA PROCESSORS





CRESTRON MODULE PROGRAM EXAMPLES: L-ISA PROCESSORS

The screenshot shows the L-ISA software interface. At the top left is the L-ISA logo. To its right are three status indicators: a green dot for 'Online', a grey dot for 'Locked', and a grey dot for 'Errors'. Further right are three tabs: 'General' (highlighted in blue), 'Configurations', and 'Levels Control'. Below the tabs, the following information is displayed:

- Display Name: L-ISA Processor II
- Firmware: 2.5.0.4738
- Unique ID: L-ISAPROC-6748
- Current Config: 27: Config027

At the bottom right, there are two buttons: a green 'Power On' button and a red 'Shut Down' button.

The screenshot shows the 'Levels Control' tab of the L-ISA software interface. It features five vertical sliders for different channels: Master, Reverb, Monitoring, Fader 1, and Fader 2. Each slider has a blue bar indicating the current level and a grey bar at the top. To the right of each slider are three buttons: a '+' button, a '-' button, and a mute button (represented by a speaker icon with an 'x'). Below each slider, the current level in dB is displayed: -7.2 dB for Master, -10.0 dB for Reverb, 0.0 dB for Monitoring, 0.0 dB for Fader 1, and 0.0 dB for Fader 2. At the bottom of each channel's control panel, there is a 'Safe Recall' section with 'Level' and 'Mute' buttons. The 'Level' button for Monitoring and Fader 1 is highlighted in blue, while the 'Mute' button for Reverb is also highlighted in blue.

L-ACOUSTICS AV CONTROL SYSTEMS

FEATURE OVERVIEW



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