

# L-Acoustics AV Control Systems

## FEATURE OVERVIEW

February 2024



### 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.

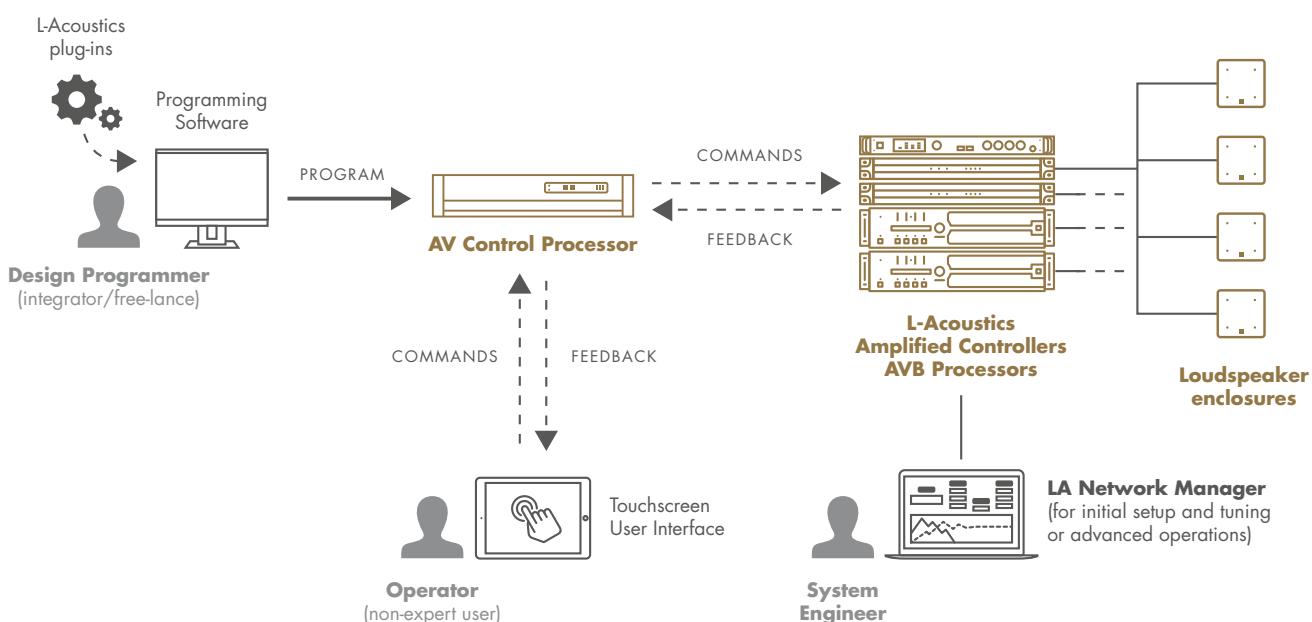
Typical venues and projects taking advantage of AV Control Systems:

- 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.



# L-ACOUSTICS AV CONTROL SYSTEMS

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### COMPATIBLE SOLUTIONS

	<b>Partner Processors or Controllers</b>	<b>L-Acoustics Products</b>
 <a href="https://www.qsys.com/">https://www.qsys.com/</a> <a href="https://www.qsys.com/alliances-partnerships/l-acoustics/">https://www.qsys.com/alliances-partnerships/l-acoustics/</a>	vCore Core Nano Core 8 Flex Core 110f Core 510i Core 610 Core 5200	LA2Xi LA4X LA12X LA7.16(i) LA4 LA8 L-ISA Processor L-ISA Processor II P1
 <a href="https://www.crestron.com">https://www.crestron.com</a>	3-Series Controllers 4-Series Controllers	LA2Xi LA4X LA12X LA7.16(i) LA4 LA8 L-ISA Processor L-ISA Processor II P1
 <a href="https://www.control4.com">https://www.control4.com</a>	Core X Controllers EA-X Controllers CA-X Controllers	LA2Xi LA4X LA12X
 <a href="https://www.savant.com">https://www.savant.com</a>	Smart Hosts Pro Hosts	LA2Xi LA4X LA12X



## DOWNLOADING PLUGINS AND DRIVERS

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### 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

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### DRIVE SYSTEM HTTP API

To apply to receive the documentation and instructions on how to use the L-Acoustics Drive System HTTP API contact L-Acoustics at:

**Link:** [avcontrol@l-acoustics.com](mailto:avcontrol@l-acoustics.com)

### 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 and can be accessed from the downloads section of L-ISA Processor II.

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

[Direct Link](#)

## CONTACT

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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](mailto:avcontrol@l-acoustics.com)

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### APPENDIX A: AMPLIFIED CONTROLLERS FEATURES COMPATIBILITY

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

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### Q-SYS PLUG-IN USER INTERFACE EXAMPLES

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

The screenshot displays the L-Acoustics Q-SYS Plug-in User Interface for a LA2Xi controller. The main window includes:

- Controller Status:** Shows the IP address (192.168.101.42) and Firmware version (FW: 2.11.0.18).
- Input Settings:** Includes XLR Type (A/B, C/D), Input Mode (AVB, AES, ANA), and AVB Stream Channel Mapping (A1, B2, C3, D4).
- Output Meters:** Shows levels for Output 1 (0dB), Output 2 (-22.0dB), Output 3 (-22.0dB), and Output 4 (-22.0dB).
- Signal Routing:** PA A, PA B, PBTL, and BTL.
- Audio Levels:** Input Meters for Signals A, B, C, and D, and Output Meters for Outputs 1 through 4.

16-channel amplified controllers (LA7.16i)

The screenshot displays the L-Acoustics Q-SYS Plug-in User Interface for a LA7.16i controller. The main window includes:

- Output Settings:** A grid of controls for 16 channels, showing outputs for X4, X12, KARA II, and KARA II sections.
- Outputs:** A table mapping channels 1-16 to specific output configurations.
- Signal LEDs:** Threshold (-50.0dB) and Hold (s) settings.

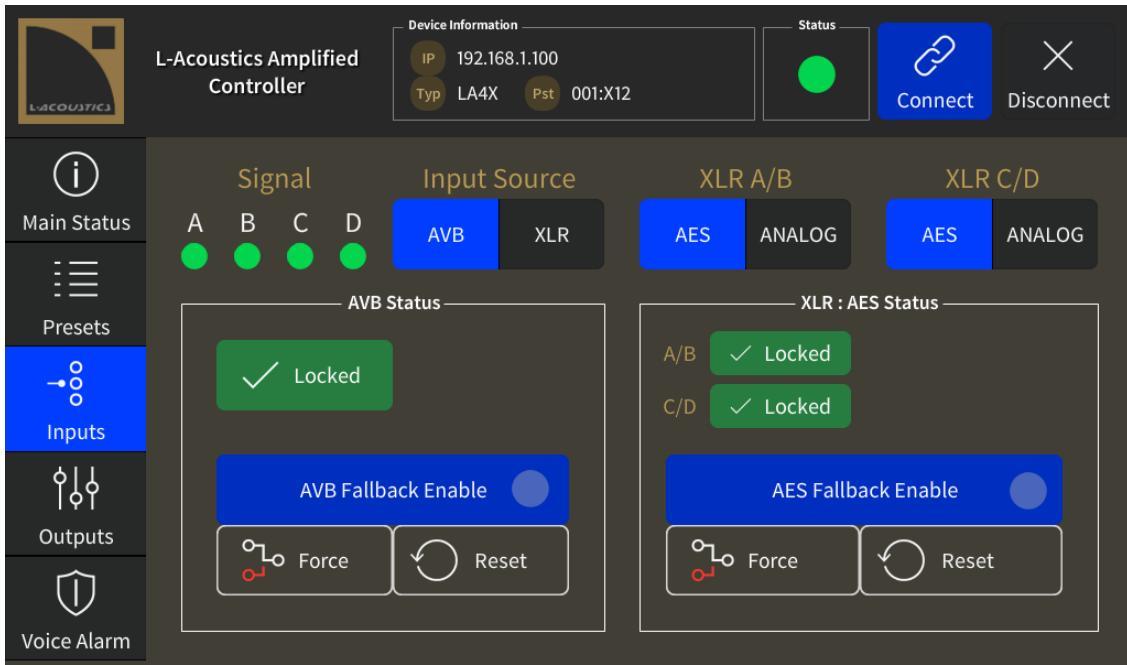
# L-ACOUSTICS AV CONTROL SYSTEMS

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### CRESTRON MODULE PROGRAM EXAMPLES: AMPLIFIED CONTROLLERS

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



# L-ACOUSTICS AV CONTROL SYSTEMS

## FEATURE OVERVIEW



### APPENDIX B: AUDIO PROCESSORS FEATURES COMPATIBILITY

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

# L-ACOUSTICS AV CONTROL SYSTEMS

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### 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: Connected Current Configuration: 00: DEFAULT

Reboot

Condition: Temperature 40 °C 104 °F OK (Green)

Fan Error Humidity 22 % (OK)

USB: USB 1 Connected Temp. 28 °C 82 °F (OK)

USB 2 Humidity 48 % (OK)

**GPIO**

GPI Status and Functions		GPO Status and Functions	
IN1	Load configuration slot A Slot A 1	Slot B 2	Manual state (sec)
	Load configuration slot B	Slot A 3	On 60
IN2	Load configuration slot A Slot B 4	Slot B 4	Manual state (sec)
	Load configuration slot B	Slot A 3	On 60

**Signal Status**

Inputs Fallback

Input	Source	Active	Reset	Test
AES 1-2	Disabled	●	Reset	Test
AES 3-4	Disabled	●	Reset	Test
AVB 1-4	Disabled	●	Reset	Test
AVB 5-8	Disabled	●	Reset	Test

Output Lock: AVB 1 ● 2 ● AES 1-2 ● AES 3-4 ● (OK)

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

AVB Talker(s): 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 Back Forward Stop Repeat Index 2 / 4 Time 00:00:27 / 00:03:50 Disk BL2 Folder /XSeries/X8 File 02 - Willy Deville - Assassin of Love.flac Mute

Enable

-16.0dB -22.0dB

Change Folder: /XSeries/X8:::2 Auto Play

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: /XSeries/X8:::2

Files List

Download Folder Content

WARNING: Downloading Folder Content stops the Media Player playback!

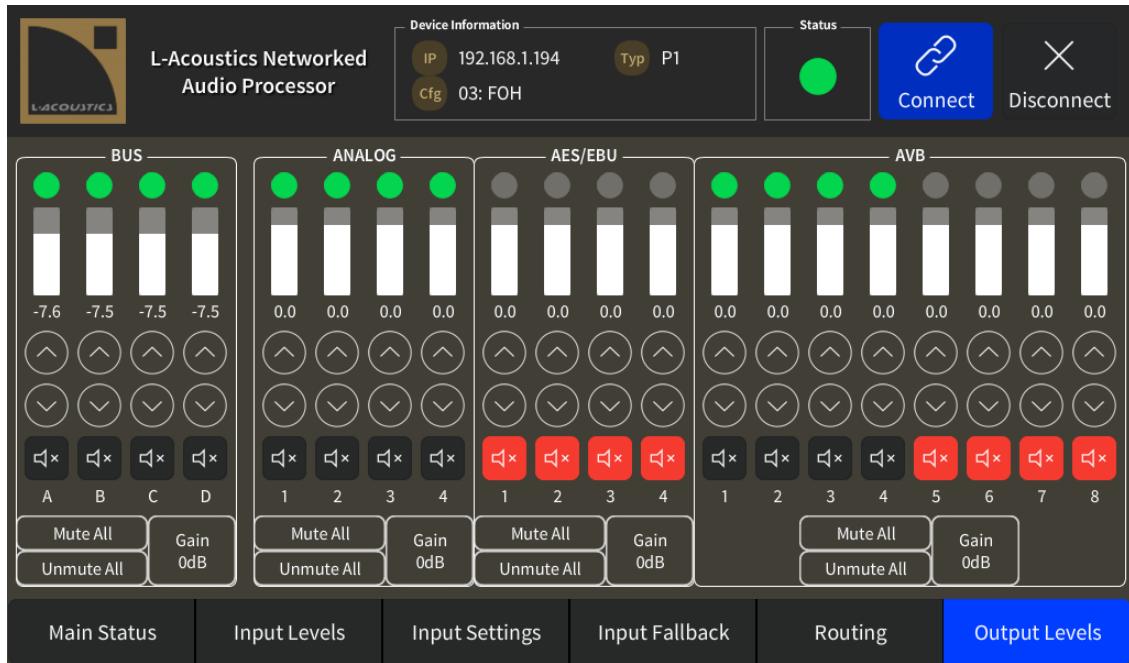
- 01 - Jennifer Warnes - Somewhere, Somebody.flac
- 02 - Willy Deville - Assassin of Love.flac
- 03 - Herbie Hancock - Sister Moon.flac
- 04 - Eric Clapton - One Chance.flac

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### CRESTRON MODULE PROGRAM EXAMPLES: P1 PROCESSOR



# L-ACOUSTICS AV CONTROL SYSTEMS

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### APPENDIX C: L-ISA PROCESSOR FEATURE COMPATIBILITY

		Q-SYS	Crestron	REST API
<b>Monitoring</b>	Power supplies	✓	✓	✓
	Disk health	✓	✓	✓
	File system health	✓	✓	✓
	Emergency key detection	✓	✓	✓
<b>Levels control</b>	Gain	✓	✓	✓
	Mute	✓	✓	✓
<b>Power management</b> (L-ISA Processor II only)	Power On	✓	✓	
	Shutdown	✓	✓	✓
<b>Presets management</b>	Configuration recall	✓	✓	✓
	Configuration store	Use L-ISA Controller		

# L-ACOUSTICS AV CONTROL SYSTEMS

## FEATURE OVERVIEW



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

**L-ISA Processor**

Device Configurations Levels Control

L-ISA

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Device

OK

IP Address: 192.168.1.199

MAC Address: c4:00:ad:71:67:48

Online: Online

Active Configuration:

Display Name: L-ISA Processor II

Unique ID: L-ISAPROC-6748

Firmware Version: 2.5.0.4689

L-ISA Controller: Not Connected

Power On Shut Down

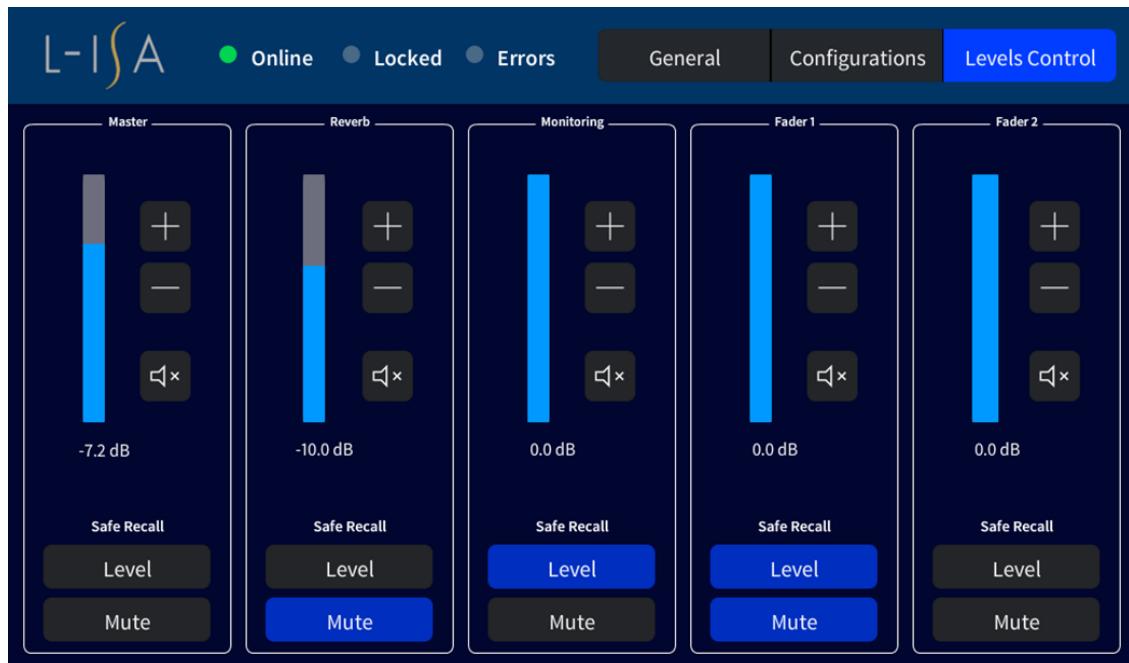
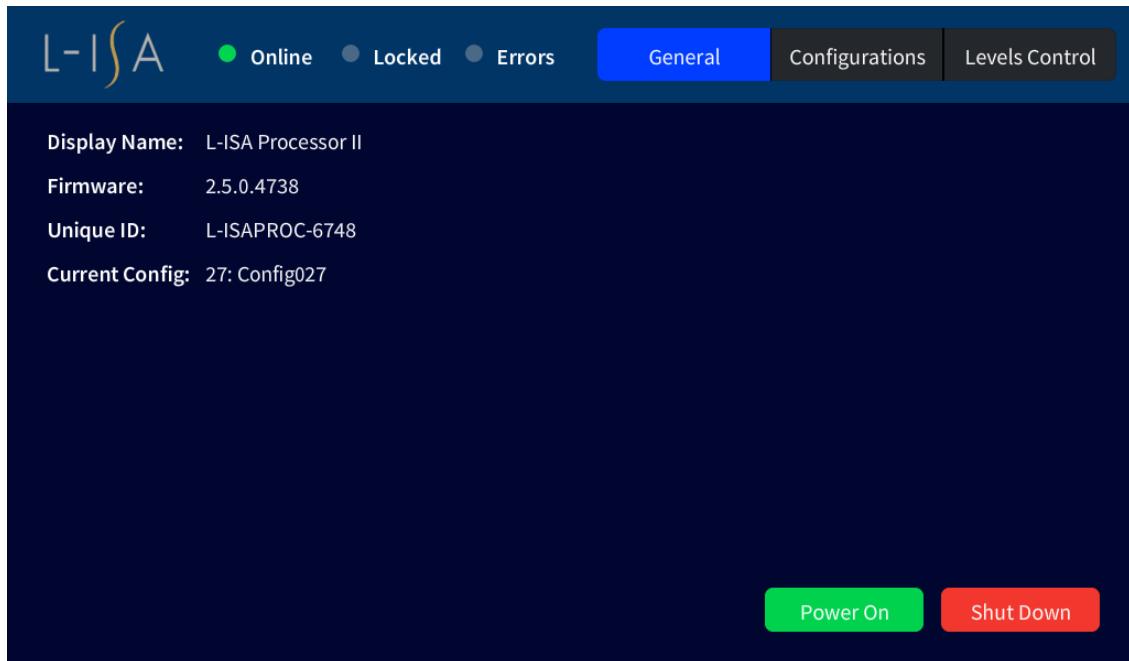
Plugin v1.2.0.1

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### CRESTRON MODULE PROGRAM EXAMPLES: L-ISA PROCESSORS



# L-ACOUSTICS AV CONTROL SYSTEMS

## FEATURE OVERVIEW



### NOTES:

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