

# ANALOG WAY LIVEPREMIER™

## Module: AUDIO

### Crestron 3-series & 4-series

Date:	August 30 <sup>th</sup> 2025
Driver version:	V5.0.0
Compatible with:	LivePremier™ Firmware V5.0.0 or above

## GENERAL

This module reads LivePremier™ audio status and provides audio routing as well as audio mute commands.

**Important Note:** Since V5.0.0, audio input are numbers and are not automatically related to video input number. Indeed, because new input cards can now have 8 video inputs, 8 audio inputs are systematically reserved per card. It means that if a setup only use 4 input cards, there will be an offset between audio and video input numbering. **It is up to the developer to find and use active audio inputs and not reserved ones to have a working system.**

Formula to find the first audio input number of an input card:  **$1 + (\text{Card-Number} - 1) \times 8$**

Examples:

- CardNb = 5 => First Audio Input = 33
- CardNb = 3 => First Audio Input = 17
- CardNb = 2 => First Audio Input = 9
- CardNb = 7 => First Audio Input = 49

The following table illustrates the matching of a setup with both 4 and 8 Aquilon input cards:

<b>Aquilon Card type</b>	<b>Card Number</b>	<b>Video Inputs (dynamic Nb)</b>	<b>Audio Inputs (always 8 inputs)</b>
4 inputs	1	1/2/3/4	<b>1/2/3/4</b> <i>5/6/7/8 (reserved)</i>
4 inputs	2	5/6/7/8	<b>9/10/11/12</b> <i>13/14/15/16 (reserved)</i>
8 inputs	3	9/10/11/12/13/14/15/16	<b>17/18/19/20/21/22/23/24</b>
8 inputs	4	17/18/19/20/21/22/23/24	<b>25/26/27/28/29/30/31/32</b>
4 inputs	5	25/26/27/28	<b>33/34/35/36</b> <i>37/38/39/40 (reserved)</i>
4 inputs	6	29/30/31/32	<b>41/42/43/44</b> <i>45/46/47/48 (reserved)</i>
8 inputs	7	33/34/35/36/37/38/39/40	<b>49/50/51/52/53/54/55/56</b>
4 inputs	8	41/42/43/44	<b>57/58/59/60</b> <i>61/62/63/64 (reserved)</i>

*Tableau 1: Example of Video and Audio inputs matching*

## SOURCES

Audio channels embedded in live sources and Dante audio channels are grouped into units of 8 channels. Each group of 8 channels will provide the same commands and feedbacks.

AUDIO_SOURCES	[1, 512] audio channels (64 inputs of 8 channels)
DANTE_SOURCES	[513, 576] Dante audio channels (8 inputs of 8 channels)

## Control

### Parameters

DeviceNumber	Param	Represents the device number when Analogway devices are linked. Equals 1 for standalone device,
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### General

Audio_RefreshInfos	Digital_in	Pulse this signal to force information retrieval. Most of the time this signal is never use
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### Inputs [Gr01, Gr64]

GrXX_In_MuteOn_Cmd[Y]	Digital_in	Pulse this signal to mute channel Y (input XX)
GrXX_In_MuteOff_Cmd[Y]	Digital_in	Pulse this signal to unmute channel Y (input XX)
GrXX_InAudioDetected_FB[Y]	Digital_out	Equals 1 when audio is detected on channel Y (input XX)
GrXX_InMutelsOn_FB[Y]	Digital_out	Equals 1 when audio is muted on channel Y (input XX)

### Dante inputs [Gr01, Gr08]

GrXX_DanteIn_MuteOn_Cmd[Y]	Digital_in	Pulse this signal to mute channel Y (Dante input XX)
GrXX_DanteIn_MuteOff_Cmd[Y]	Digital_in	Pulse this signal to unmute a channel (Dante input XX)
GrXX_DanteInAudioDetected_FB[Y]	Digital_out	Equals 1 when audio is detected on channel Y (Dante input XX)
GrXX_DanteInMutelsOn_FB[Y]	Digital_out	Equals 1 when audio is muted on channel Y (Dante input XX)

### Outputs [Gr01, Gr20]

See audio and Dante audio source values for audio routing and feedbacks.

GrXX_OutSrc_Cmd[Y]	Analog_in	The value of the input audio channel to assign to channel Y (output XX)
GrXX_OutMuteOn_FB[Y]	Digital_in	Pulse this signal to mute channel Y (output XX)
GrXX_OutMuteOff_FB[Y]	Digital_out	Pulse this signal to unmute channel Y (output XX)
GrXX_OutSrc_FB[Y]	Analog_out	Input audio channel associated to channel Y (output XX)
GrXX_OutAudioDetected_FB[Y]	Digital_out	Equals 1 when audio has been detected on channel Y (output XX)
GrXX_OutMutelsOn_FB[y]	Digital_out	Equals 1 when channel Y is muted (output XX)

### DanteOutputs [Gr01, Gr08]

See audio and Dante audio source values for audio routing and feedbacks.

GrXX_DanteOutSrc_Cmd[Y]	Analog_in	The value of the audio channel to assign to channel Y (Dante output XX)
GrXX_DanteOutMuteOn_FB[Y]	Digital_in	Pulse this signal to mute channel Y (Dante output XX)

GrXX_DanteOutMuteOff_FB[Y]	Digital_out	Pulse this signal to unmute channel Y (Dante output XX)
GrXX_DanteOutSrc_FB[Y]	Analog_out	Input audio channel associated to channel Y (Dante output XX)
GrXX_DanteOutAudioDetected_FB[Y]	Digital_out	Equals 1 when audio has been detected on channel Y output (Dante output XX)
GrXX_DanteOutMutelsOn_FB[y]	Digital_out	Equals 1 when channel Y is muted (Dante output XX)

### Multiviewer\_01, Multiviewer\_02

See audio and Dante audio source values for audio routing and feedbacks.

MvwX_OutSrc_Cmd[Y]	Analog_in	The value of the audio channel to assign to channel Y
MvwX_OutMuteOn_Cmd[Y]	Digital_in	Pulse this signal to mute channel Y
MvwX_OutMuteOff_Cmd[Y]	Digital_in	Pulse this signal to unmute channel Y
GrXX_OutSrc_FB[Y]	Analog_out	Input audio channel associated to channel Y
GrXX_AudioDetected_FB[Y]	Digital_out	Equals 1 when audio has been detected on channel Y output
GrXX_OutMutelsOn_FB[y]	Digital_out	Equals 1 when channel Y is muted (Dante output XX)