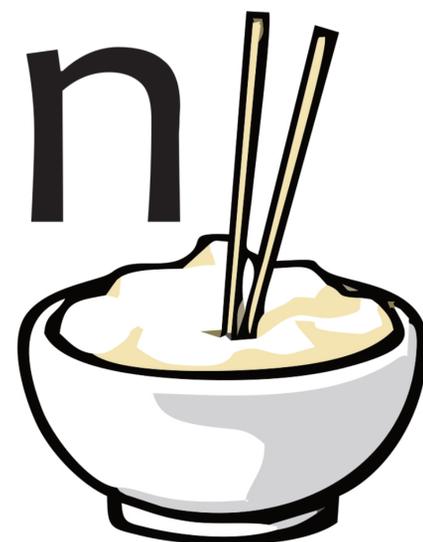


# chowmain

software & apps



## **Jamo JDA Crestron Module**

Installation and Usage Guide

# **Jamo**<sup>®</sup>

**"THE SOUND OF EXCELLENCE"**

**Revision:** 20180104

**Date:** Friday, January 5, 2018

**Author(s):** Richard Mullins

# Contents

<b>Overview</b>	<b>2</b>
<b>Installation</b>	<b>3</b>
Copy the files to your project	3
<b>Module Configuration</b>	<b>4</b>
<b>Module Joins</b>	<b>4</b>
Initialisation and state	4
<b>Module Joins</b>	<b>5</b>
enable and enabled feedback	5
refresh and refreshing feedback	5
LED_Flash and LED_Flash_FB feedback	5
<b>Module Joins</b>	<b>6</b>
Mute Joins	6
mute and mute_fb	6
<b>Module Joins</b>	<b>7</b>
Channel Input Joins	7
channel and channel_fb	7
<b>Module Joins</b>	<b>8</b>
Volume Joins	8
volume and volume_fb	8
<b>Module History</b>	<b>9</b>

# Overview

---

The Jamo JDA amplifier module allows for complete control of the Jamo JDA line of multichannel amplifiers.

The module provides source selection, volume and mute control over each of the 4 channels. It also provides the ability to flash the LED's on the front of the unit to help locate the device.

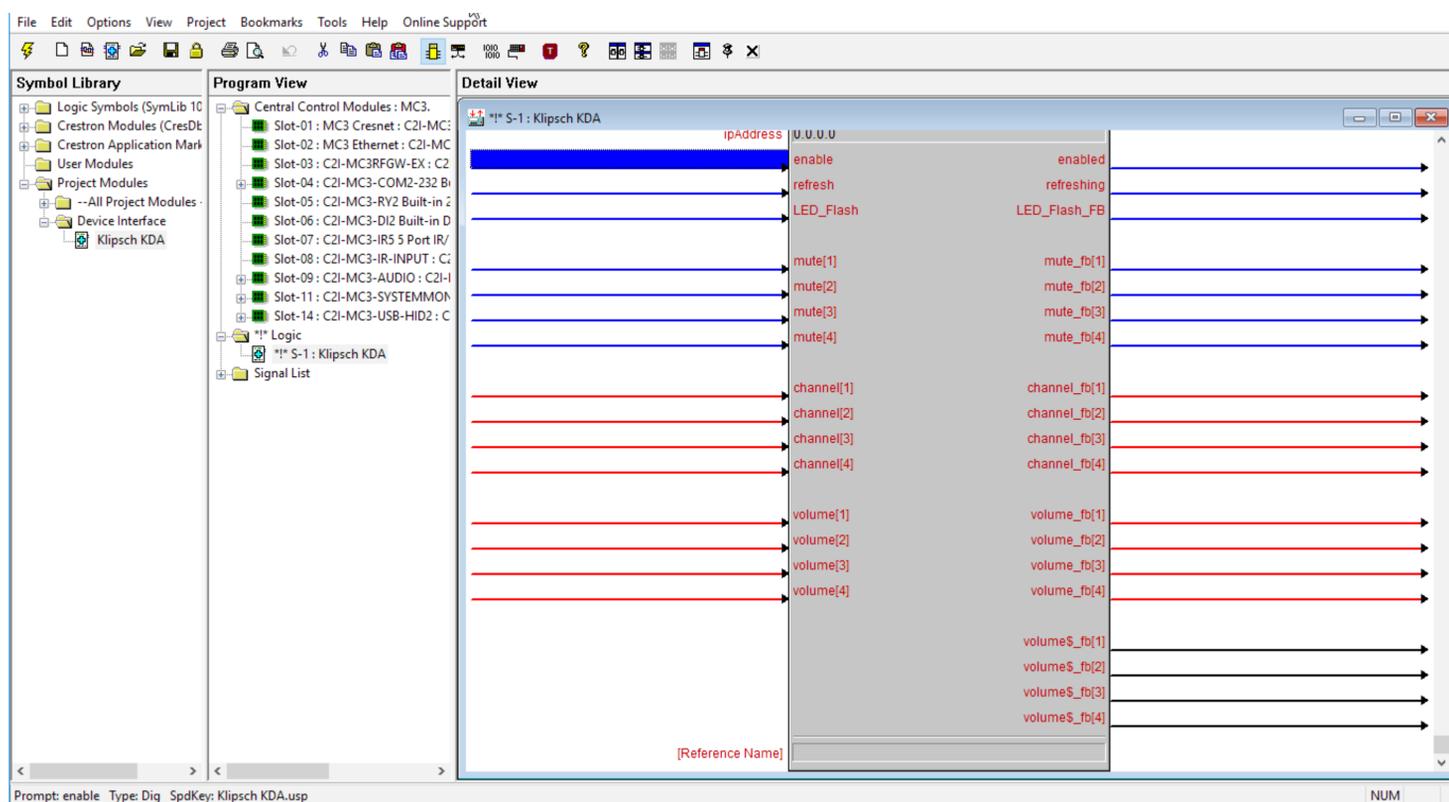
The module provides analog feedback for the source, analog and a string join for the volume and digital feedback for the mute status. The frequency to refresh the status can be set by the integrator to suit the project.

The module includes a sample SIMPL project and 2 Xpanel layouts (one with and one without smart graphics).

# Installation

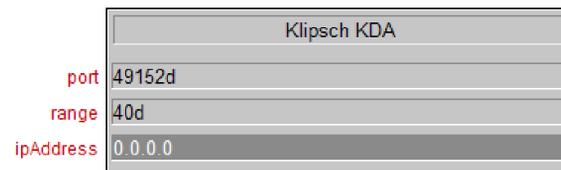
## Copy the files to your project

Copy the Jamo JDA.usp and Jamo JDA.ush files to your project folder. Once the files are in place re-sync your project and the module should appear under the Project Modules section in the Symbol Library.



# Module Configuration

The Jamo JDA module requires three parameters to be set for it to be able to communicate. The parameters are the IP Address of the Jamo JDA unit, the port number (which can be left at the default 49152) and the volume range supported by the firmware on this unit. The range is typically either 40 or 80.



KEY	PARAMETER
<b>ipAddress</b>	The ip address of the Jamo JDA
<b>Port</b>	The port number of the Jamo JDA (default 449152)
<b>Range</b>	The volume range of the amplifier. This is typically wither 40 or 80.

## Module Joins

### Initialisation and state

KEY	TYPE	IN/OUT	DESCRIPTION
<b>enable</b>	Digital	Input	This will enable the module and open the connection to the KDA
<b>refresh</b>	Digital	Input	This join will cause an refresh of the all state for the KDA
<b>LED_Flash</b>	Digital	Input	This will cause the LED's on the front panel of the KDA to flash
<b>enabled</b>	Digital	Output	This signal will stay high while the KDA has an active connection
<b>refreshing</b>	Digital	Output	This signal will stay high while the state refresh is taking place
<b>LED_Flash_FB</b>	Digital	Output	The signal will stay high when the LED flash discovery is active



# Module Joins

---

## **enable and enabled feedback**

To communicate to the Jamo JDA the enable signal must be held high. This is typically done with a toggle symbol. Lowering the signal will cause the communication channel to close and for the module to ignore incoming commands.

The enabled digital output will remain high while the communication channel is open.

## **refresh and refreshing feedback**

The Jamo JDA does not provide feedback when the state changes outside of the module. For this reason it is good practice to poll the unit periodically to get the correct state. The polling interval can be set externally to the module using an oscillator. Depending on your requirements a typical poll cycle would be 60 seconds. If you are only communicating with the unit via this module you could ignore the polling. The correct state is recovered each time you make a change to the mute, volume or source inputs.

## **LED\_Flash and LED\_Flash\_FB feedback**

The Jamo JDA uses the front panel LED's as a way of discovering the units once they have been installed. Raising the LED\_Flash input will start the LED's on the front panel flashing. Lowering this signal will stop the flashing.

While the LED's are flashing the LED\_Flash\_FB signal will remain high.

# Module Joins

## Mute Joins

KEY	TYPE	IN/OUT	DESCRIPTION
<b>mute[1 - 4]</b>	Digital	Input	When the signal is high the chosen channel will be muted
<b>mute_fb[1-4]</b>	Digital	Output	When the chosen channel is muted, this signal will be high



### mute and mute\_fb

There are four mute joins labeled `mute[1]` to `mute[4]` representing each available channel. When you raise the join going to the channel you want to affect that channel will be muted. When you lower the signal it will be un-muted. Typically this will be done with a toggle in SIMPL.

If a channel is currently mute the matching `mute_fb` signal will remain high.

There is no dedicated power off command so `mute` is used to turn the channel off.

# Module Joins

## Channel Input Joins

KEY	TYPE	IN/OUT	DESCRIPTION
<code>channel[1 - 4]</code>	Analog	Input	Change the selected channel to the input represented by the analog join
<code>channel_fb[1-4]</code>	Analog	Output	Analog value of current source for the selected channel



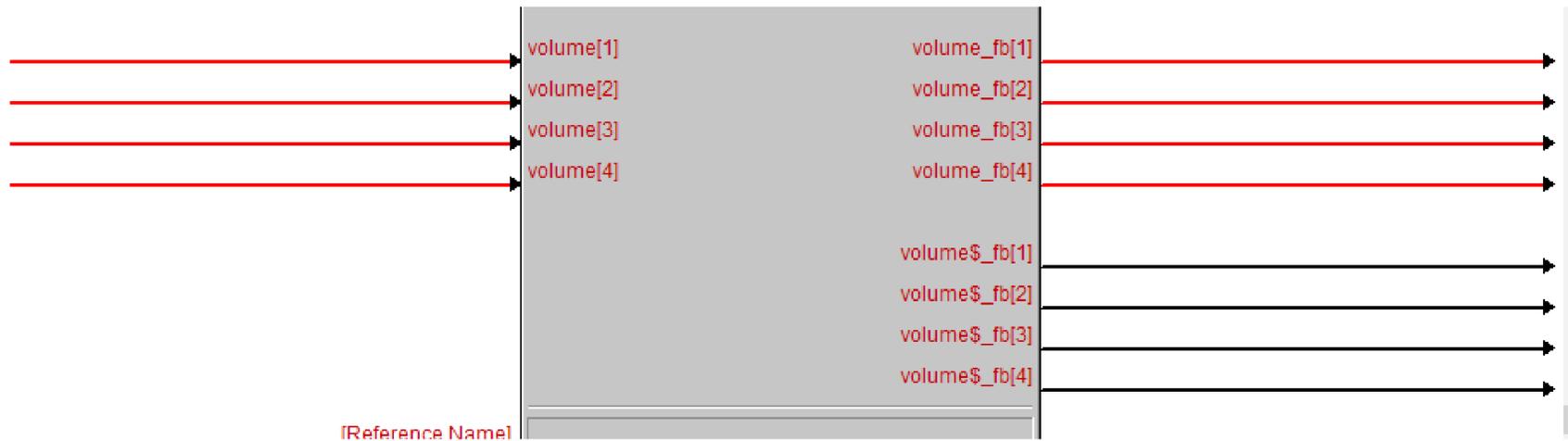
### **channel and channel\_fb**

The channel input requires an analog value between 1 and 12 (see table below for input mapping). When you select a new input the amp will change the input and then ask the KDA for the current input. Once it gets the current input state from the KDA it will change the `channel_fb` to represent the correct input.

# Module Joins

## Volume Joins

KEY	TYPE	IN/OUT	DESCRIPTION
<b>channel[1 - 4]</b>	Analog	Input	Change the selected channel to the input represented by the analog join
<b>channel_fb[1-4]</b>	Analog	Output	Analog value of current source for the selected channel
<b>volume_fb[1-4]</b>	String	Output	



### volume and volume\_fb

The volume can be adjusted by attaching an analog join to the desired channel. The volume will only be sent to the amp when it needs to change so it will work with ramping without causing an overload in traffic.

The current volume is output as both an analog signal and a text string that shows the current volume in dB as per the amp's built in web interface.

# Module History

---

## **Version 20180104**

- Initial release