

ALLEN AND HEATH MIDI Control



# ALLEN AND HEATH MIDI Control User Guide

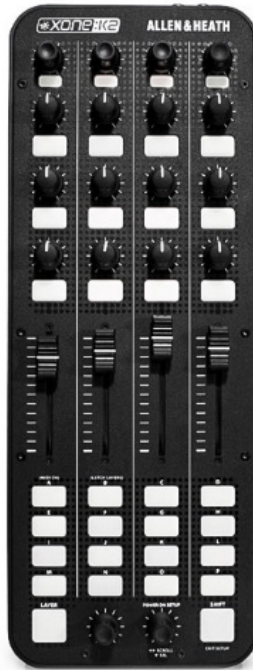
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**ALLEN&HEATH**

**ALLEN AND HEATH MIDI Control**



## Product Information

### Specifications

- Product Name: Allen & Heath MIDI Control
- Version: V2.10
- Supported Operating Systems:
  - Windows 7, Windows 8, Windows 10, Windows 11
  - macOS 10.14 Mojave, 10.15 Catalina, 11 Big Sur, 12 Monterey, 13 Ventura, 14 Sonoma

## Product Usage Instructions

### Setting Up Virtual MIDI Ports

To create virtual MIDI ports, start Allen & Heath MIDI Control. Ensure the mixer is connected and set up before launching any DAW or application.

### Using MIDI Control for Mixer Parameters

You can send and receive MIDI control messages to control mixing parameters, scene changes, and other functions of compatible Allen & Heath mixers.

### Using CC Translator for Simplified Control

For simplified control of common mixer parameters using MIDI CC messages from the computer, utilize the 'CC Translator' options available.

### Direct USB Connection

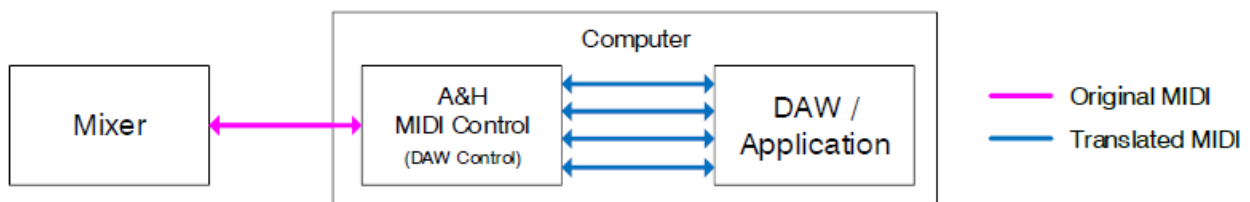
your mixer supports a built-in USB-B audio/MIDI interface (CQ, Qu, SQ mixers), you can connect it to Allen & Heath MIDI Control. Disable direct USB MIDI connection in your software to avoid conflicts with virtual ports.

## Configure Allen & Heath MIDI Control

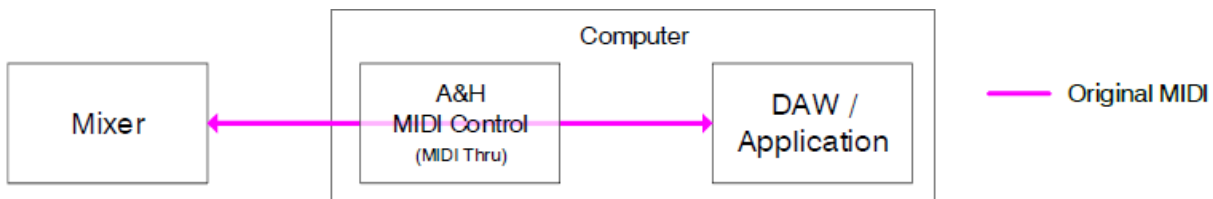
1. Download Allen & Heath MIDI Control from the official website and install it on your computer.
2. Launch the application which will run as a background task.
3. To access preferences, right-click on the system tray icon (Windows) or right-click/control-click on the menu bar icon (Mac) and select 'Show Preferences'.
4. Check the MIDI I/O activity indicators to ensure proper connection to the mixer.

## Introduction

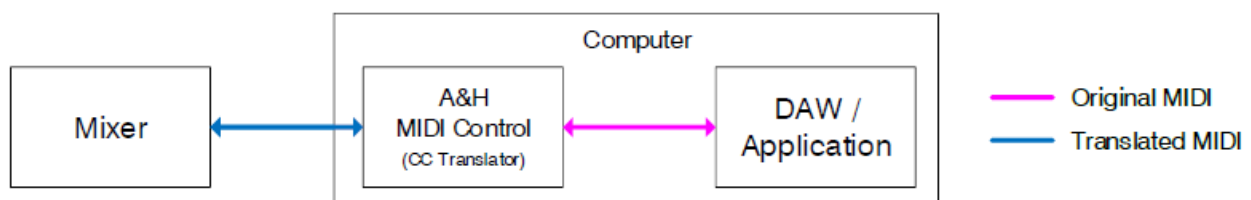
Previously known as the 'DAW Control Driver', Allen & Heath MIDI Control works by creating virtual MIDI ports in Mac OS or Windows and then facilitating a MIDI connection between these virtual ports and the mixer either with or without translation. This enables compatible Allen & Heath mixers to control DAW software on Mac OS or Windows by emulating popular HUI or Mackie Control protocols



It can be used to send and receive MIDI control messages directly to and from a digital mixer's core for remote control of mixing parameters, scene changes, and other functions.



Compatible mixers send and respond to MIDI messages as detailed in the MIDI Protocol specification documents for each range, available for download from [www.allen-heath.com](http://www.allen-heath.com). Simplified control of the most common mixer parameters with MIDI CC messages from the computer is also made possible with the 'CC Translator' options.



## About this version (V2.10)

- Support for control of CQ (firmware V1.2 or higher) via MIDI Thru or CC Translator options
- Support for dLive firmware V2.0
- Connect to dLive MixRack or dLive Surface options added

## Supported operating systems

Windows 7, Windows 8, Windows 10, Windows 11. macOS 10.14 Mojave, 10.15 Catalina, 11 Big Sur, 12 Monterey, 13 Ventura, 14 Sonoma

## Creation of virtual MIDI ports

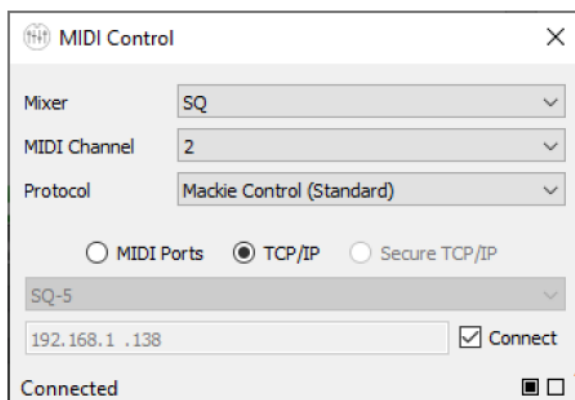
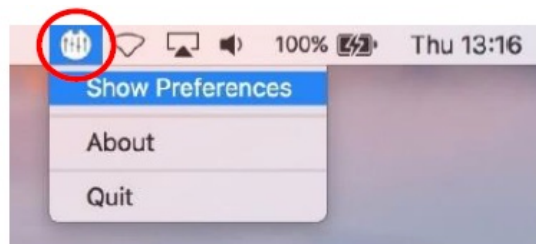
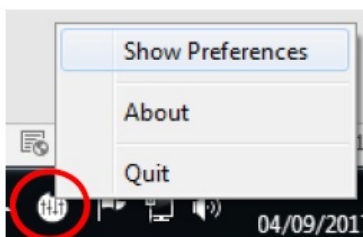
- Virtual MIDI ports are created every time Allen & Heath MIDI Control is started up and whenever the protocol setting is changed.
- Therefore, to ensure that your DAW or any other application recognizes these ports correctly, it is best practice to set up your mixer and MIDI Control before starting your DAW or any other application.

## Use alongside direct USB connection

CQ, Qu, and SQ mixers feature a built-in USB-B audio/MIDI interface. The MIDI side of this can be connected to Allen & Heath MIDI Control, but this will mean that any DAW or other application on the computer will have access to both the direct (USB-B) MIDI port and any virtual ports at the same time. Therefore, to avoid issues when using Allen & Heath MIDI Control for DAW Control purposes, it is best to disable the direct USB MIDI connection in your software where possible. This will ensure that only the translated messages from the virtual ports are being received and used.

## Configure Allen & Heath MIDI Control

Download Allen & Heath MIDI Control from [www.allen-heath.com](http://www.allen-heath.com) and install it on your computer. Launch Allen & Heath MIDI Control which will open and run as a background task. Right-click on the icon in the system tray (Windows) or right-click/control click on the icon in the menu bar (Mac) then click on Show Preferences in the menu to access the preferences panel



The two squares at the bottom right of the window display MIDI I/O activity. To check you are connected to the mixer, move any MIDI fader on the mixer and the left indicator should flash. Similarly, when messages are being sent from the computer, the right indicator will flash.

### Mixer

Select the mixer type/range you are connecting to.

### MIDI

Channel This should match either the MIDI channel of the mixer itself or for control surface use, the DAW Control MIDI channel. For example, by default, the Qu MIDI channel is 1 and the Qu DAW Control MIDI channel is 2.

### Protocol

Select a protocol to choose whether translation is carried out.

- **HUI/Mackie Control** Translates MIDI messages from the mixer to emulate a control surface.
- **Mackie Control (Standard/Alt Display)** This option is available for SQ, which can display channel naming on

the channel strip LCDs. The Mackie control protocol allows for two rows of text, so these options simply switch which row is displayed.

- **MIDI Thru** All messages are passed to and from the mixer without translation. Use this to control the mixer according to its MIDI protocol, or to receive direct MIDI output from MIDI channel strips. This should also be used for simple program/scene changes and to receive MIDI output from SoftKeys or Soft Rotaries.
- **CC Translator** Translates simple MIDI Control Change (CC) messages and Note On/Off messages from the computer to NRPN messages for control of a mixer's audio channel faders and mutes (see page 6).

### Connection

Select MIDI Ports for USB connection to the mixer (CQ, Qu, SQ), TCP/IP for a network connection, or Secure TCP/IP for a secured network connection.

- **MIDI Ports** Select the MIDI Input and Output ports to be used, these could be via a MIDI interface or a direct USB connection to the mixer (CQ, Qu, SQ), for example, Qu-16 MIDI Out and Qu-16 MIDI In.
- **TCP/IP or Secure TCP/IP** Select the mixer from the drop-down box or select Custom and type in the IP address of the mixer, then tick the Connect checkbox.

For a network connection, make sure your Computer and the mixer are set to compatible IP addresses within the same subnet.

### Configure your mixer for use as a DAW control surface

Qu (firmware V1.2 or higher)

The Custom Layer can be populated with MIDI strips which are automatically assigned with the correct control messaging for each physical channel strip.

1. Go to Setup / Control / Custom Layer and set the required fader strips to MIDI by selecting first and then scrolling with the screen rotary.
2. Use the Fn '+1' key to auto-assign the next fader sequentially.
3. Set the MIDI Channel in the mixer's Setup / Control / MIDI screen.
4. Qu defaults to MIDI Ch. 2 for DAW control.
5. If required, set SoftKeys to MMC transport controls or DAW Bank Up/Down in Setup / Control / SoftKeys.



**drive** (firmware V1.5 or higher)

**Avantis** (firmware V1.1 or higher)

**SQ** (firmware V1.2 or higher)

**GLD** (firmware V1.4 or higher)

Up to 32 MIDI strips can be freely assigned to channel strips.

1. Drag and drop MIDI strips to the desired Banks and Layers in Surface / Control / Strip Assign (dLive/Avantis), Setup / Surface / Strip Assign (SQ) or Setup / Control / Strip Assign (GLD). Although MIDI strips can be freely assigned, for logical operation as a control surface, they should be added in blocks of 8 and in order (see 'Number of virtual control surfaces' below).
2. Set the MIDI Channel in Utility / Control / MIDI (dLive/Avantis), Utility / General / MIDI (SQ), Setup / Control / MIDI (GLD), and note the DAW Control MIDI channel.

On dLive and GLD, the set of MIDI messages for each strip can be customized to suit user requirements. Leave the default values for use with DAW Control. You can restore the factory default MIDI messages by recalling the 'Reset MIDI' Scene in any Template Show. With Avantis, the 'Reset Settings' scene can be used in combination with recall filters to achieve the same result.

Refer to mixer Reference Guides for further information on mixer setup including SoftKey assignment.

## Number of ports and 'virtual control surfaces'

- When using a control surface protocol, Allen & Heath MIDI Control will create 4 virtual inputs and 4 virtual output ports labeled 'DAW Control MIDI 1-4'.
- This is because the control surfaces being emulated have only 8 channel faders, meaning it is only possible to use 8 physical faders from the mixer for each 'virtual control surface'.
- To allow all physical faders to be used (up to 32 on a Qu-32 for example) therefore, up to 4 separate virtual control surfaces must be set up in the DAW or other application, each using a separate port.

Virtual control surface	Physical mixer channel strips	Input and Output port
Virtual control surface #1	Mixer MIDI Channel Strips 1-8	DAW Control MIDI 1
Virtual control surface #2	Mixer MIDI Channel Strips 9-16	DAW Control MIDI 2
Virtual control surface #3	Mixer MIDI Channel Strips 17-24	DAW Control MIDI 3
Virtual control surface #4	Mixer MIDI Channel Strips 25-32	DAW Control MIDI 4

## Configure your DAW/software for use with a control surface

Connect your mixer and configure MIDI Control preferences before opening your DAW. Follow the instructions specific to your DAW on the following pages to assign the Faders, PAFL, Sel/Mix, and Mute keys from mixer MIDI strips to Levels, Solo, Select, and Mute controls in your DAW. This will also assign MMC transport controls from the mixer to the corresponding DAW controls. By assigning Bank Up / Down functions to the mixer's SoftKeys, fader bank navigation is also possible. Any DAW or application that features MCU or HUI control surface support but is not mentioned here should also work. Simply follow the standard control surface setup instructions for your application and connect up to 4 control surface instances using the virtual ports created by Allen & Heath MIDI Control.

### Avid Pro Tools

1. Select the HUI protocol in MIDI Control preferences and launch Pro Tools.
2. Go to Setup / MIDI / Input Devices and enable all DAW Control MIDI ports.
3. Open the Setup / Peripherals window and navigate to the MIDI Controllers tab.
4. Create an HUI device for each block of 8 MIDI strips present on the mixer and assign it to the corresponding MIDI ports. The following example assumes 16 MIDI strips are used:
  - In row #1, select HUI as the Type and DAW Control MIDI 1 as the Receive From and Send To ports.
  - In row #2, select HUI as the Type and DAW Control MIDI 2 as the Receive From and Send To ports.

- Click OK.

## Steinberg Cubase

- Select the Mackie Control protocol in MIDI Control preferences and launch Cubase.  
When using SQ, select Mackie Control (Alt. Display) to show track names correctly
- Open the Studio / Studio Setup window.
- Create a Mackie Control device for each block of 8 MIDI strips present on the mixer and assign it to 'not connected' before assigning the corresponding MIDI ports.

Note that the top-most device in the left-hand list represents the right-most block of MIDI channel strips:

- Click on the Add Device button (+), select Mackie Control, and set the input and output ports to 'not connected'.
- Click Apply.
- Repeat this for up to 4 devices in total (32 MIDI strips)
- Assign the input and output MIDI ports of each device to the DAW Control MIDI ports as follows:

8 MIDI Strips		16 MIDI Strips		24 MIDI Strips		32 MIDI Strips	
Mackie Control	DAW Control MIDI 1	Mackie Control	DAW Control MIDI 2	Mackie Control	DAW Control MIDI 3	Mackie Control	DAW Control MIDI 4
-	-	Mackie Control 2	DAW Control MIDI 1	Mackie Control 2	DAW Control MIDI 2	Mackie Control 2	DAW Control MIDI 3
-	-	-	-	Mackie Control 3	DAW Control MIDI 1	Mackie Control 3	DAW Control MIDI 2
-	-	-	-	-	-	Mackie Control 4	DAW Control MIDI 1

## Cockos Reaper

- Select the Mackie Control protocol in MIDI Control preferences and launch Reaper.
- Open the Options / Preferences window and click on MIDI Devices from the left-hand list.
- To avoid message conflicts, make sure that all DAW Control MIDI Input and Output ports are disabled. If needed, right-click on a port to change its status.
- Select Control Surfaces from the left-hand list and create a Mackie Control device for each block of 8 MIDI strips present on the mixer, then assign each to the corresponding MIDI ports.

The following example assumes 16 MIDI strips are used:

- Click the Add button, select Mackie Control Universal surface mode and DAW Control MIDI 1 as the Input and Output port, set Surface Offset to 0, and adjust the size tweak to 8, then click OK.
- Click the Add button again, then select Mackie Control Extender surface mode, DAW Control MIDI 2 as the Input and Output port, set Surface Offset to 8 and adjust the size tweak to 8, then click OK.

Size tweak is always 8 with offsets set to: Surface#1 = 0, Surface#2 = 8, Surface#3= 16, Surface#4 = 24.

- Click OK to close the window.

## Ableton Live

- Select the Mackie Control protocol in MIDI Control preferences and launch Live.



2. Open the Live / Preferences window and navigate to the MIDI / Sync tab.
3. Select MackieControl in the Control Surface #1 dropdown box and set DAW Control MIDI 1 as the Input and Output port.
4. For each subsequent block of 8 MIDI strips present on the mixer, create a Mackie Control Extender device and assign it to the corresponding MIDI port.

The following example assumes 16 MIDI strips are used:

1. Select MackieControlXT in the Control Surface #2 dropdown box and set DAW Control MIDI 2 as the Input and Output port.
5. Close the window.

## Apple Logic

1. Select the Mackie Control protocol in MIDI Control preferences and launch Logic.
2. Open the Logic Pro / Preferences / Control Surfaces / Setup window.
3. Create a Mackie Control device and assign it to the first virtual MIDI port:
  - Click New / Install, scroll down, select Mackie Designs – Mackie Control – Logic Control, and click Add.
  - Close the window and click the picture labeled Mackie Control.
  - Select DAW Control MIDI 1 as the Output and Input Port.
4. For each following block of 8 MIDI strips available on the mixer:
  - Click New / Install again and select Mackie Designs – Mackie Control Extender – Logic Control. Click OK when prompted. Close the window and click the picture of the new device (labeled Mackie Control Extender,
  - Mackie Control Extender #2 or Mackie Control Extender #3)
  - Select DAW Control MIDI 2, DAW Control MIDI 3, or DAW Control MIDI 4 respectively as the Output and Input Port, for a maximum of 4 devices on screen, each connected to its pair of virtual MIDI ports.
  - Click and drag up/down to adjust the Fader Bank Offset for each extender so the first extender is offset by 8 faders, the second by 16 faders, and the third by 24 faders.
5. Check settings match the following table:

Mixer MIDI Strips	Logic Control Surface	Output Port	Input Port	Fader Bank Offset
1-8	Mackie Control	DAW Control MIDI 1	DAW Control MIDI 1	0
9-16	Mackie Control Extender	DAW Control MIDI 2	DAW Control MIDI 2	8
17-24	Mackie Control Extender #2	DAW Control MIDI 3	DAW Control MIDI 3	16
25-32	Mackie Control Extender #3	DAW Control MIDI 4	DAW Control MIDI 4	24

6. Close the Setup window.
7. Save your project to store the settings.

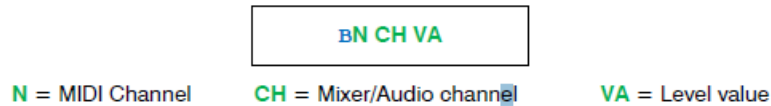
## CC Translator protocols

'CC Translator' protocol options allow the use of standard Control Change (CC) messages for mixer fader control and Note On/Off messages for mixer mute control via the virtual MIDI ports. This makes for easy automation of mixer audio channels from a DAW, show control application or other software. The following messages can be used with dLive (firmware V1.7 or higher), Avantis (firmware V1.1 or higher), SQ (firmware V1.4 or higher), Qu (firmware V1.9 or higher), and CQ (firmware V1.2 or higher) Hexadecimal values are shown, a decimal to hexadecimal table can be found at the end of this document.



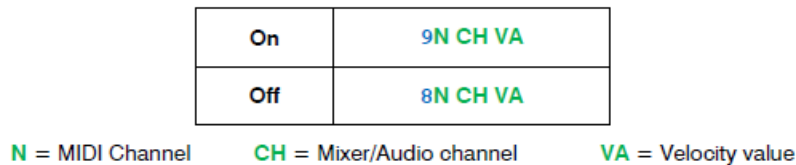
## Fader Control

Send Control Change messages to control levels of Inputs, Mix masters, FX sends, FX returns, and DCAs



## Mute Control

Send Note On/Off messages to mute Inputs, Mix masters, FX sends, FX returns, DCA, and Mute Groups



dLive/Avantis CC translators use only Note On messages for mute control.

## drive

The dLive CC translator option uses separate Faders and Mutes virtual MIDI ports and the selected MIDI channel assignment on the desk for control of all channels, by the dLive MIDI protocol. All fader control uses the CC Translator Faders port and all mute control uses the CC Translator Mutes port.

N = Base MIDI Channel assigned to the mixer (lowest channel of the range).

Mute On is  $\geq 40$  velocity, and Mute off is  $\leq 3F$  velocity.

dLive CC translator uses only Note On messages for mute control.

drive channel assignments for fader and mute controls are as follows:

Inputs 1 to 128	<b>N</b> = <b>N</b>	<b>CH</b> = <b>00</b> to <b>7F</b>
Mono Groups 1 to 62	<b>N</b> = <b>N</b> + 1	<b>CH</b> = <b>00</b> to <b>3D</b>
Stereo Groups 1 to 31	<b>N</b> = <b>N</b> + 1	<b>CH</b> = <b>40</b> to <b>5E</b>
Mono Aux 1 to 62	<b>N</b> = <b>N</b> + 2	<b>CH</b> = <b>00</b> to <b>3D</b>
Stereo Aux 1 to 31	<b>N</b> = <b>N</b> + 2	<b>CH</b> = <b>40</b> to <b>5E</b>
Mono Matrix 1 to 62	<b>N</b> = <b>N</b> + 3	<b>CH</b> = <b>00</b> to <b>3D</b>
Stereo Matrix 1 to 31	<b>N</b> = <b>N</b> + 3	<b>CH</b> = <b>40</b> to <b>5E</b>
Mono FX Send 1 to 16	<b>N</b> = <b>N</b> + 4	<b>CH</b> = <b>00</b> to <b>0F</b>
Stereo FX Send 1 to 16	<b>N</b> = <b>N</b> + 4	<b>CH</b> = <b>10</b> to <b>1F</b>
FX Return 1 to 16	<b>N</b> = <b>N</b> + 4	<b>CH</b> = <b>20</b> to <b>2F</b>
Mains 1 to 6	<b>N</b> = <b>N</b> + 4	<b>CH</b> = <b>30</b> to <b>35</b>
DCA 1 to 24	<b>N</b> = <b>N</b> + 4	<b>CH</b> = <b>36</b> to <b>4D</b>
Mute Group 1 to 8	<b>N</b> = <b>N</b> + 4	<b>CH</b> = <b>4E</b> to <b>55</b>

The above assignments can also be found in the drive MIDI Protocol document, available from [www.allen-heath.com](http://www.allen-heath.com)

## Avantis

The Avantis CC translator option uses separate Faders and Mutes virtual MIDI ports and the selected MIDI channel assignment on the desk for control of all channels, by the Avantis MIDI protocol. All fader control uses the CC Translator Faders port and all mute control uses the CC Translator Mutes port.

N = Base MIDI Channel assigned to the mixer (lowest channel of the range).

Mute On is  $\geq 40$  velocity, and Mute off is  $\leq 3F$  velocity.

**Avantis** CC translator uses only Note On messages for mute control.

Avantis channel assignments for fader and mute controls are as follows:

Inputs 1 to 64	$N = N$	$CH = 00 \text{ to } 3F$
Mono Groups 1 to 40	$N = N + 1$	$CH = 00 \text{ to } 27$
Stereo Groups 1 to 20	$N = N + 1$	$CH = 40 \text{ to } 53$
Mono Aux 1 to 40	$N = N + 2$	$CH = 00 \text{ to } 27$
Stereo Aux 1 to 20	$N = N + 2$	$CH = 40 \text{ to } 53$
Mono Matrix 1 to 40	$N = N + 3$	$CH = 00 \text{ to } 27$
Stereo Matrix 1 to 20	$N = N + 3$	$CH = 40 \text{ to } 53$
Mono FX Send 1 to 12	$N = N + 4$	$CH = 00 \text{ to } 0B$
Stereo FX Send 1 to 12	$N = N + 4$	$CH = 10 \text{ to } 1B$
FX Return 1 to 12	$N = N + 4$	$CH = 20 \text{ to } 2B$
Mains 1 to 3	$N = N + 4$	$CH = 30 \text{ to } 32$
DCA 1 to 16	$N = N + 4$	$CH = 36 \text{ to } 45$
Mute Group 1 to 8	$N = N + 4$	$CH = 46 \text{ to } 4D$

The above assignments can also be found in the Avantis MIDI Protocol document, available from [www.allen-heath.com](http://www.allen-heath.com)

## SQ

The SQ CC translator creates an Input and Output virtual MIDI port – fader control of input channels (CH1-48, Group & FX return) use the CC Translator Inputs port and output channels (LR, Aux, FX Send, MTX & DCA group) use the CC Translator Outputs port. Mute control for all input and output channels (CH1-48, Group, FX Return, LR, Aux FX Send, MTX, DCA & Mute Group) is available via both Input and Output ports.

$N$  = MIDI Channel of the SQ (not the MIDI DAW Control channel)

Mute on uses a Note On message with 01 velocities, and Mute off uses a Note Off message with 00 velocities.

SQ channel assignments are as follows:

	Port	Fader Control	Mute Control
Inputs 1 to 48	CC Translator Inputs	$CH = 00 \text{ to } 2F$	$CH = 00 \text{ to } 2F$
Groups 1 to 12	CC Translator Inputs	$CH = 30 \text{ to } 3B$	$CH = 30 \text{ to } 3B$
FX Return 1 to 8	CC Translator Inputs	$CH = 3C \text{ to } 43$	$CH = 3C \text{ to } 43$
LR	CC Translator Outputs	$CH = 00$	$CH = 44$
Aux 1 to 12	CC Translator Outputs	$CH = 01 \text{ to } 0C$	$CH = 45 \text{ to } 50$
FX Send 1 to 4	CC Translator Outputs	$CH = 0D \text{ to } 10$	$CH = 51 \text{ to } 54$
MTX 1 to 3	CC Translator Outputs	$CH = 11 \text{ to } 13$	$CH = 55 \text{ to } 57$
DCA 1 to 8	CC Translator Outputs	$CH = 20 \text{ to } 27$	$CH = 58 \text{ to } 5F^*$
Mute Group 1 to 8	CC Translator Outputs	-	$CH = 60 \text{ to } 67^*$

The above assignments can also be found in the SQ MIDI Protocol, available from [www.allen-heath.com](http://www.allen-heath.com). \*Note that DCA and Mute Group assignments with CC translator differ from the SQ MIDI protocol

## Qu

The Qu CC translator uses separate Inputs and Outputs virtual MIDI ports – control of input channels (CH1- 32, ST & FX Return) use the CC Translator Inputs port and output channels (FX Send, Mix, LR, Group, MTX, DCA & Mute Group) use the CC Translator Outputs port.

$N$  = MIDI Channel of the Qu (not the MIDI DAW Control channel)

Mute on uses a Note On message with  $\geq 40$  velocity, and Mute off uses a Note On message with  $\leq 3F$  velocity.

Qu channel assignments for fader and mute controls are as follows:

Inputs	Qu	Hex (CH)	Qu	Hex (CH)
	1	00	21	14
	2	01	22	15
	3	02	23	16
	4	03	24	17
	5	04	25	18
	6	05	26	19
	7	06	27	1A
	8	07	28	1B
	9	08	29	1C
	10	09	30	1D
	11	0A	31	1E
	12	0B	32	1F
	13	0C	ST1	20
	14	0D	ST2	21
	15	0E	ST3	22
	16	0F	FX1 Ret	23
	17	10	FX2 Ret	24
	18	11	FX3 Ret	25
	19	12	FX4 Ret	26
	20	13		

Outputs	Qu	Hex (CH)
	FX1 Send	00
	FX2 Send	01
	FX3 Send	02
	FX4 Send	03
	Mix 1	04
	Mix 2	05
	Mix 3	06
	Mix 4	07
	Mix 5-6	08
	Mix 7-8	09
	Mix 9-10	0A
	LR	0B
	Group 1-2	0C
	Group 3-4	0D
	Group 5-6	0E
	Group 7-8	0F
	MTX 1-2	10
	MTX 3-4	11

Control	Qu	Hex (CH)
	DCA 1	12
	DCA 2	13
	DCA 3	14
	DCA 4	15
	Mute Grp 1	16
	Mute Grp 2	17
	Mute Grp 3	18
	Mute Grp 4	19

## CQ

The CQ CC translator creates an Input and Output virtual MIDI port – fader control of input channels (CH1-16, Stereo Inputs & FX return) use the CC Translator Inputs port and output channels (LR, Outputs, overall Send to FX & DCA's) use the CC Translator Outputs port. Mute control for all input and output channels (CH1-16, Stereo Inputs, FX, LR, Outputs, & DCAs) is available via both Input and Output ports.

N = MIDI Channel of the CQ, which is fixed to channel 1 (so N is always 0)

Mute on uses a Note On message with 01 velocity, and Mute off uses a Note Off message with 00 velocity.

CQ channel assignments are as follows:

	Port	Fader Control	Mute Control
Inputs 1 to 16	CC Translator Inputs	CH = 00 to 0F	CH = 00 to 0F
Stereo Inputs (ST1/ST2/USB/BT)	CC Translator Inputs	CH = 18/1A/1C/1E	CH = 18/1A/1C/1E
FX 1 to 4	CC Translator Inputs	CH = 3C to 3F	CH = 51 to 54
Main LR	CC Translator Outputs	CH = 00	CH = 44
Outs 1 to 6	CC Translator Outputs	CH = 01 to 06	CH = 45 to 4A
Overall Send to FX 1 to 4	CC Translator Outputs	CH = 0D to 10	CH = 51 to 54
DCA 1 to 4	CC Translator Outputs	CH = 20 to 23	CH = 58 to 5B
Mute Group 1 to 4	CC Translator Outputs	-	CH = 60 to 63

## CC Translator message examples

COMMAND	MESSAGE	PORT
<b>dLive</b> Examples with mixer MIDI channels set 12-16		
Channel 102 fader to -Inf dB	<b>BB 65 00</b>	CC Translator Faders
Mono FX Send 10 mute off	<b>9F 09 3F</b>	CC Translator Mutes
<b>Avantis</b> Examples with mixer MIDI channels set 3-7		
Channel 63 fader to 0 dB	<b>B2 3E 6B</b>	CC Translator Faders
Mono Matrix 3 mute on	<b>96 02 7F</b>	CC Translator Mutes
<b>SQ</b> Examples with mixer MIDI channel set to 4		
Aux 1 fader to -40 dB	<b>B3 01 50</b>	CC Translator Outputs
Channel 32 mute off	<b>83 1F 00</b>	CC Translator Inputs/Outputs
<b>Qu</b> Examples with mixer MIDI channel set to 1		
Channel 1 fader to 0 dB	<b>B0 00 62</b>	CC Translator Inputs
Main LR mute on	<b>90 0B 7F</b>	CC Translator Outputs
<b>CQ</b> Examples (mixer always uses MIDI channel 1)		
Channel 11 fader to -20 dB	<b>B0 0B 2E</b>	CC Translator Inputs
Output 3 mute off	<b>80 47 00</b>	CC Translator Inputs/Outputs

## Decimal to Hexadecimal Conversion

DEC	HEX	DEC	HEX	DEC	HEX	DEC	HEX	DEC	HEX	DEC	HEX	DEC	HEX	DEC	HEX	DEC	HEX
0	0	16	10	32	20	48	30	64	40	80	50	96	60	112	70	128	80
1	1	17	11	33	21	49	31	65	41	81	51	97	61	113	71	129	81
2	2	18	12	34	22	50	32	66	42	82	52	98	62	114	72	130	82
3	3	19	13	35	23	51	33	67	43	83	53	99	63	115	73	131	83
4	4	20	14	36	24	52	34	68	44	84	54	100	64	116	74	132	84
5	5	21	15	37	25	53	35	69	45	85	55	101	65	117	75	133	85
6	6	22	16	38	26	54	36	70	46	86	56	102	66	118	76	134	86
7	7	23	17	39	27	55	37	71	47	87	57	103	67	119	77	135	87
8	8	24	18	40	28	56	38	72	48	88	58	104	68	120	78	136	88
9	9	25	19	41	29	57	39	73	49	89	59	105	69	121	79	137	89
10	A	26	1A	42	2A	58	3A	74	4A	90	5A	106	6A	122	7A	138	90
11	B	27	1B	43	2B	59	3B	75	4B	91	5B	107	6B	123	7B	139	91
12	C	28	1C	44	2C	60	3C	76	4C	92	5C	108	6C	124	7C	140	92
13	D	29	1D	45	2D	61	3D	77	4D	93	5D	109	6D	125	7D	141	93
14	E	30	1E	46	2E	62	3E	78	4E	94	5E	110	6E	126	7E	142	94
15	F	31	1F	47	2F	63	3F	79	4F	95	5F	111	6F	127	7F	143	95

## Frequently Asked Questions

### Q: Which mixers are compatible with Allen & Heath MIDI Control?

A: Compatible mixers can send and respond to MIDI messages as detailed in the MIDI Protocol specification documents available for download from [www.allen-heath.com](http://www.allen-heath.com).

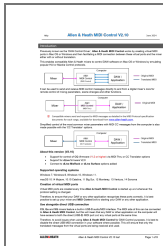
### Q: How do I ensure proper functionality when using virtual MIDI ports?

A: Set up your mixer and MIDI Control before starting any DAW or application to ensure correct recognition of the virtual ports.

### Q: What should I do if my mixer has a built-in USB-B audio/MIDI interface ?

A: Disable the direct USB MIDI connection in your software to prevent conflicts with virtual ports when using Allen & Heath MIDI Control for DAW purposes.

## Documents / Resources



[ALLEN AND HEATH MIDI Control](#) [pdf] User Guide  
MIDI Control, Control

## References

- [& Allen & Heath - Heard Everywhere](#)
- [& Allen & Heath - Heard Everywhere](#)
- [User Manual](#)

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