

FAIRLIGHT USER COMPANION

October 2021

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Fairlight Audio Accelerator Installation

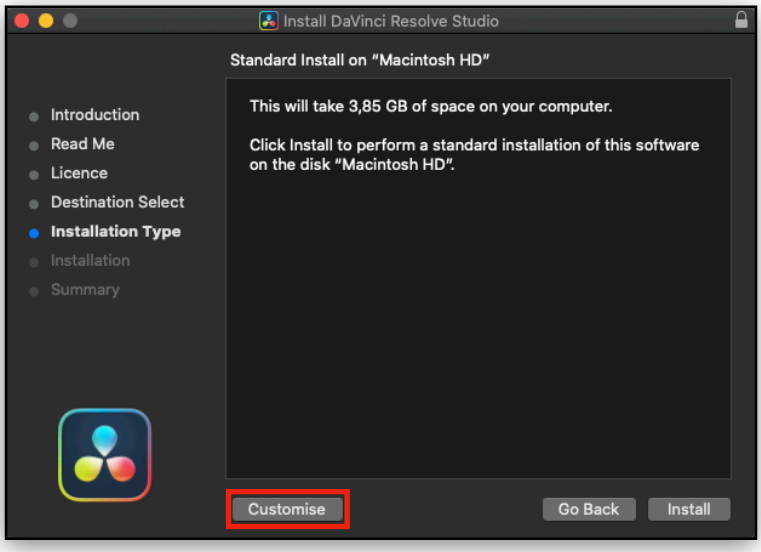
1. Insert the Fairlight Audio Accelerator card in to any available x8 PCIe slot in the host computer or an external PCIe Expansion Chassis.

   The Apple Mac Pro 2019 model provides eight PCIe expansion slots with three single wide slots.

   The Apple IO card is reserved for use in Slot 8 with either Slot 6 or Slot 7 available.

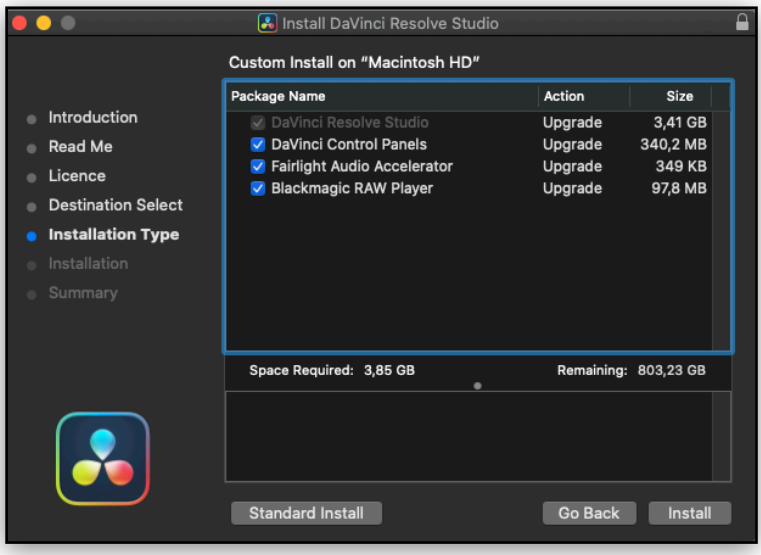


2. In the DaVinci Resolve Installer select the Customise button to perform a custom installation.

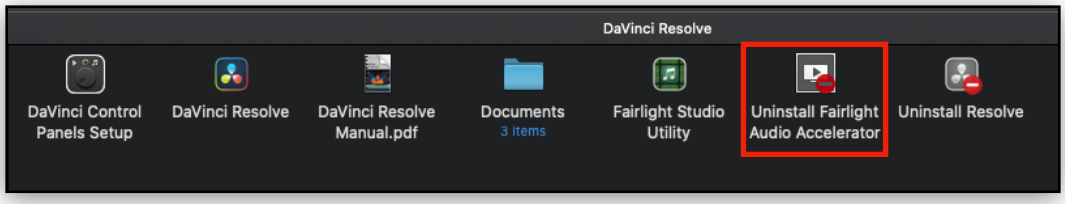


3. In the Custom Install window enable the Fairlight Audio Accelerator option.

   If a previous version of the Accelerator driver is present, the Action column will indicate "Upgrade".



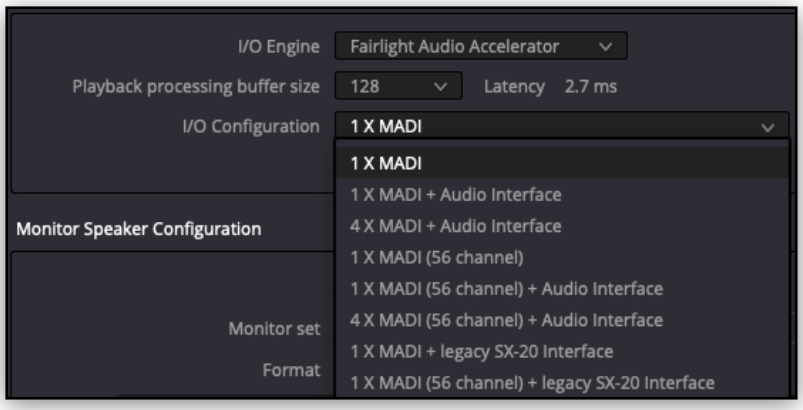
4. Once Installation is complete, the DaVinci Resolve folder in the Applications folder will contain an application to Uninstall Fairlight Audio Accelerator.



5. In DaVinci Resolve's Preferences select the System tab and in the Video and Audio I/O tab and expand the I/O Engine drop-down to enable the Fairlight Audio Accelerator.

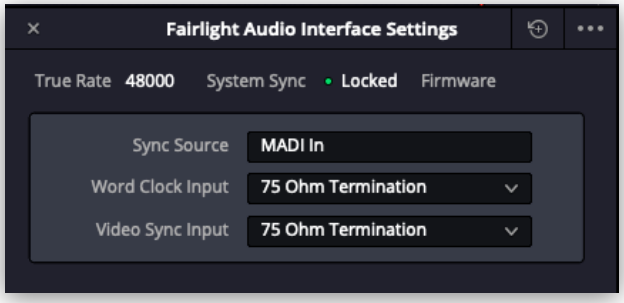


6. Expand the I/O Configuration drop-down menu and select the appropriate MADI option relevant to the paired hardware with the Fairlight Audio Accelerator, either third party MADI IO or Fairlight Audio Interface.



7. Make all the required connections between the Fairlight Audio Accelerator and the third party MADI Interface. The single MADI stream is arranged as an IN/OUT pair, with the upper BNC connector of each pair providing Outputs and the lower connector Inputs.

8. In the DaVinci Resolve application select the Fairlight menu's Audio Interface Settings to confirm System Sync.



IMPORTANT:

The DaVinci Resolve application's transport will not engage without the presence of a valid clock Master.

Fairlight Audio Accelerator Firmware Troubleshooting

1. If a firmware upgrade is available the DaVinci Resolve application will indicate a new version is available when launched. Follow the prompts to install the new firmware.

2. Once the firmware installation is complete, perform a hard system reset by removing power from the host computer in which the Fairlight Audio Accelerator has been inserted or removing external power from the PCIe Expansion Chassis.

3. Reboot the host computer.

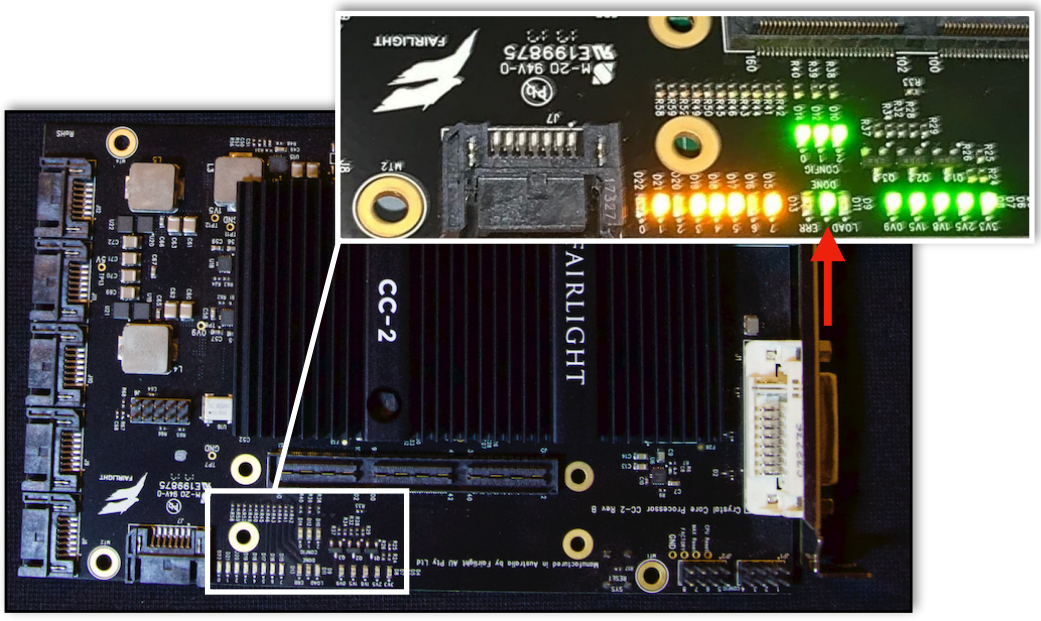
4. Start the DaVinci Resolve application.

   If the firmware installation has not completed successfully, DaVinci Resolve will indicate a “failed to initialise” error.



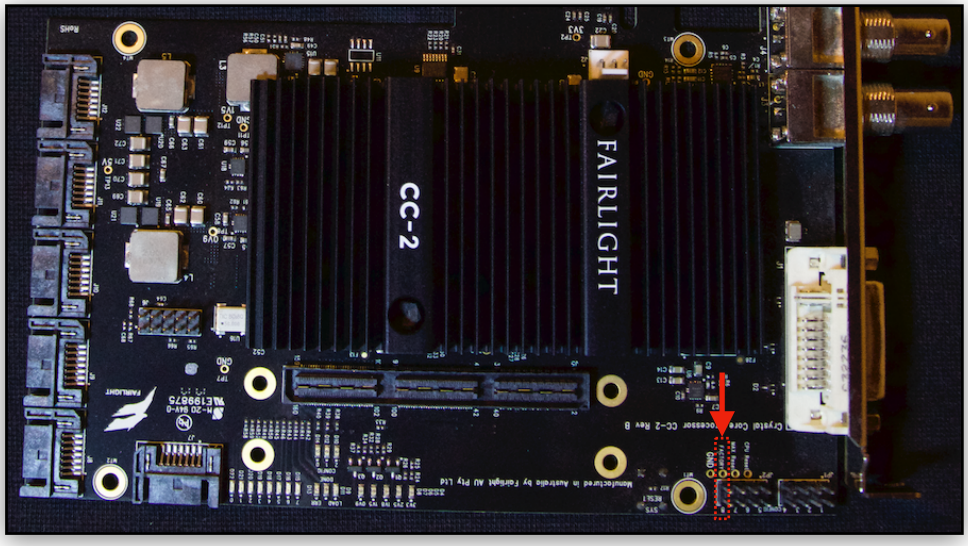
5. Open the host computer or PCIe Expansion Chassis and confirm that the indicator LEDs reflect as illustrated.

   If a Red “Done” LED is present then the firmware upgrade did not complete successfully.



6. Power the host computer or PCIe Expansion Chassis down and remove all power.

7. Place a jumper on the #8 pin marked “Factory”



8. Reboot the host computer and the “Done” LED will change to orange.
This indicates that the Fairlight Audio Accelerator card may now be reprogrammed.

9. Start the DaVinci Resolve application and a notification window will be presented to start the reprogramming procedure. The first stage will indicate an erase process is in progress, followed by indication of the “programming” procedure, and finally a verification progress indicator will be reflected.

11. Remove all power from host computer or the PCIe Expansion Chassis.

12. Remove the jumper from #8 pin marked “Factory”.

13. Reconnect power to the host computer or the PCIe Expansion Chassis.

14. Load the DaVinci Resolve application.

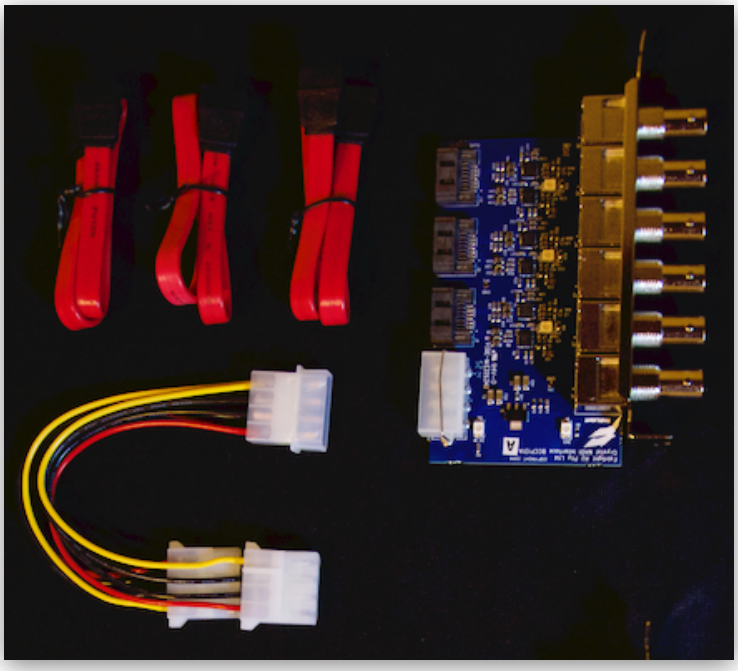
14. A notification window will be presented to start the firmware upgrade procedure.

15. If the firmware upgrade process has completed successfully, the DaVinci Resolve application will load without error.

Fairlight PCIe Audio MADI Upgrade Installation

Package Contents:

1x Power Cable (4 pin Molex connector)
3x 18 inch SATA cables
1x MADI Expansion card (6x BNC connectors for three MADI streams)



Installation Procedure:

1. Insert the PCIe Audio MADI Upgrade card in to any available PCIe slot.

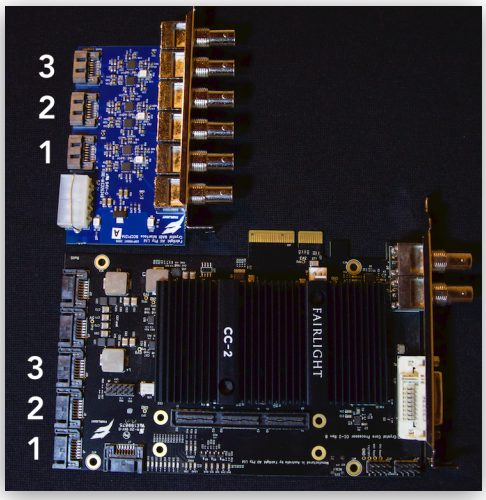
   The card does not connect directly to the Motherboard of the host computer and does not require installation of additional firmware.

2. Connect the supplied 4 pin Molex Power connector to the host computer's internal power.

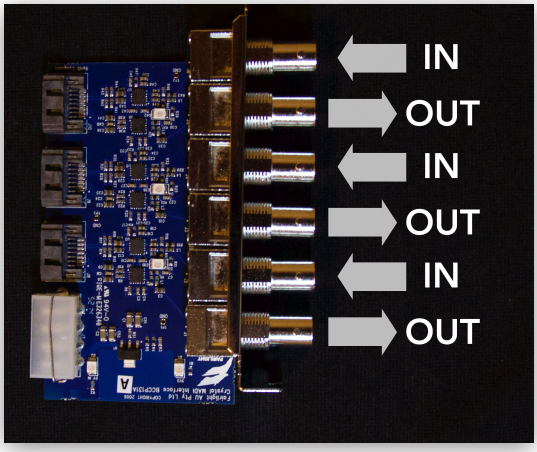
Mac Pro User Notice:

4 pin Molex to 10-pin Female PCI-E Y Molex IDE Power Cable Adapter is required for internal connection. This cable is not included.

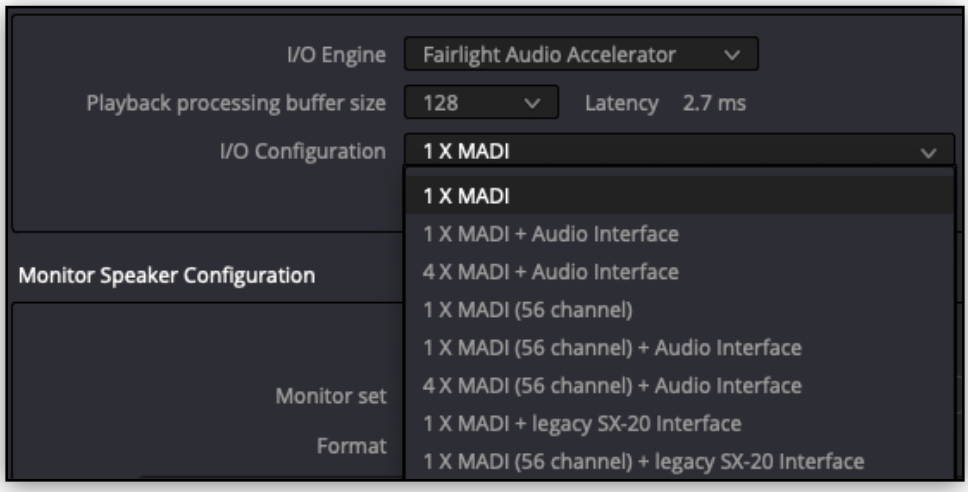
3. Connect the supplied SATA cables to matching ports as illustrated matching port number.



4. Connect the MADI Expansion card to the third party MADI audio device. The three MADI streams are arranged as IN/OUT pairs, with the upper BNC connector of each pair providing Outputs.



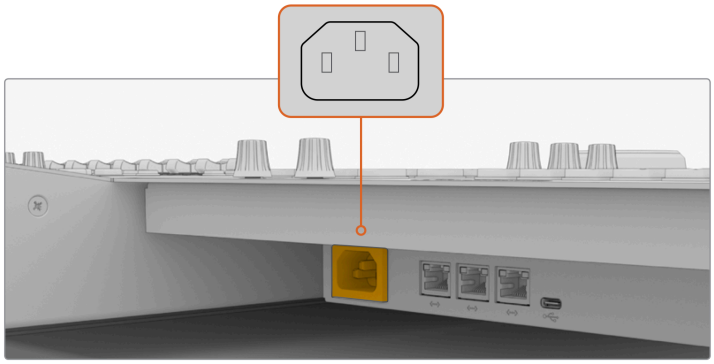
5. In Resolve's Preferences Expand the I/O Configuration drop-down menu and select the appropriate MADI option relevant to the paired hardware with the Fairlight Audio Accelerator, either third party MADI IO or Fairlight Audio Interface.



Configuring the Fairlight Desktop Audio Editor

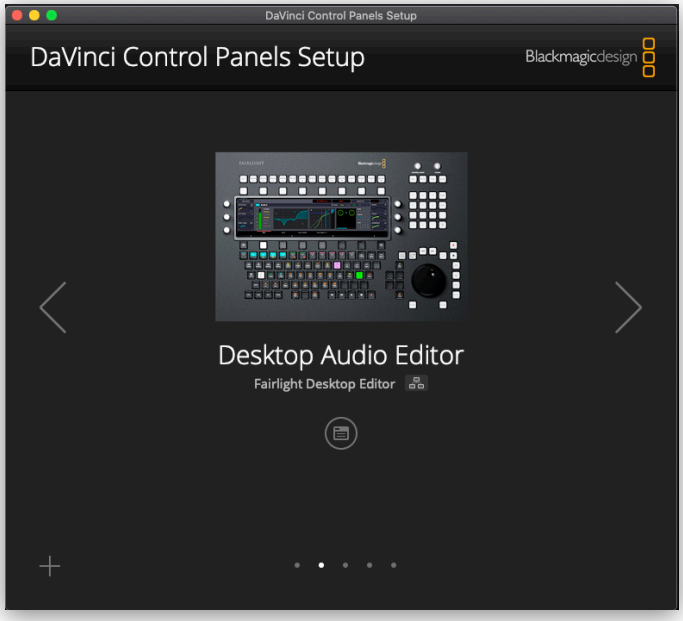
1. Perform a Custom Installation of DaVinci Resolve as outlined in Fairlight Audio Accelerator Installation section and ensure that the DaVinci Control Panels option is selected during installation.

2. Connect power to the Desktop Audio Editor using a standard IEC power cable.

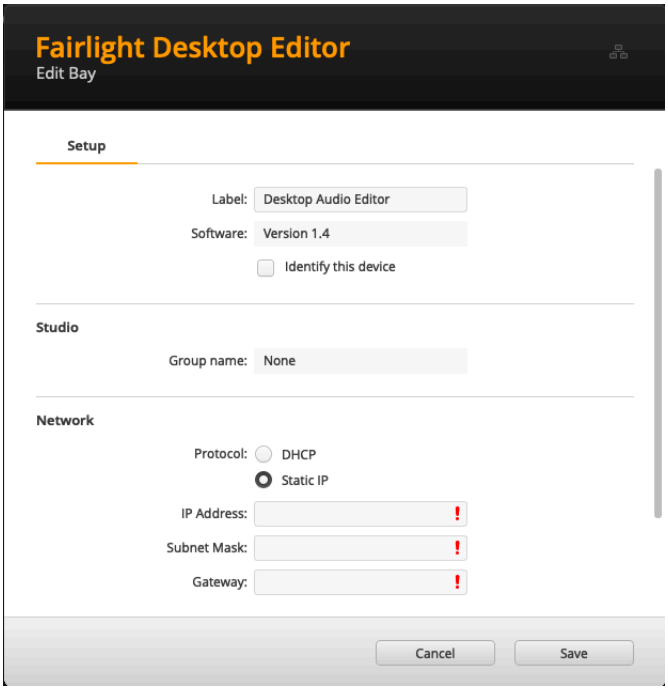


3. Connect the Desktop Audio Editor to the host computer via a USB-C cable.
This cable is not included.

4. Navigate to the DaVinci Resolve folder in the Application folder and open the DaVinci Control Panels Setup.



5 Click the Setup button to configure the panel settings.



IMPORTANT:

If new firmware is available the Setup window will provide an option to upgrade the panel firmware.

TIP:

In the Software field click the version number to reveal the build number.

6 Rename the Desktop Audio Editor Panel to the preferred labelling.

TIP:

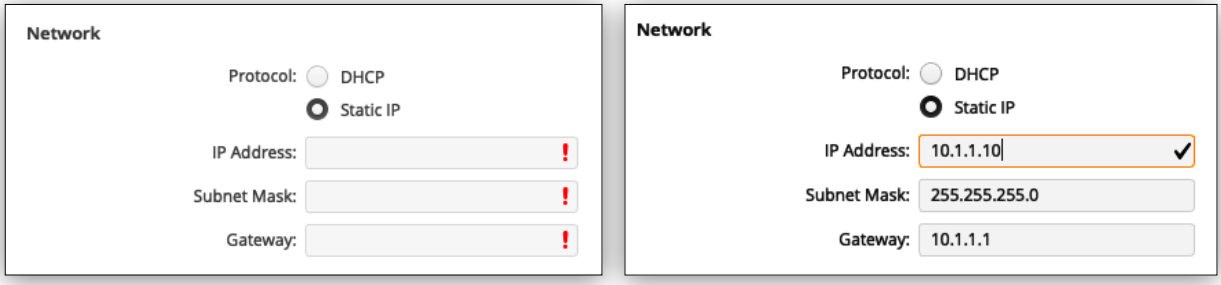
The Studio Group Name is not user editable in DaVinci Control Panels Setup. The Group Name is always defined in Fairlight Studio Utility.

7. The Identify this device checkbox highlights the Desktop Audio Editor panel's first row of picture keys in red. Picture keys will dim back to their default state after a few seconds.



8. Select the required Network Protocol using either DHCP or a Static IP.

9. If Static IP is preferred enter the custom IP address, Subnet Mask and Gateway.



TIP:

Each field will indicate a correct value with a check icon.

If the field contains an incorrect value a red exclamation icon will be displayed.

10. Scroll down within the Setup window to reveal the Desktop Audio Editor panel's picture key Display Brightness preference.



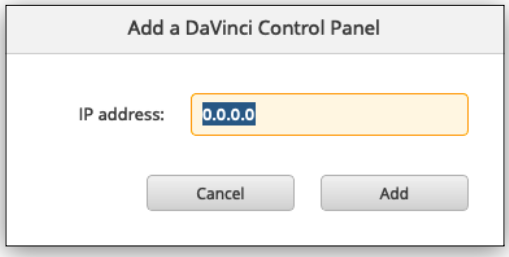
11. Close the DaVinci Control Panels Setup application

12. Connect the Desktop Audio Editor either directly to the host computer with a CAT6 Ethernet cable or via an Ethernet switch.

13. Launch the DaVinci Control Panels Setup and confirm that the panel is reflected.

14. If the Desktop Audio Editor is not reflected, click on the Plus icon in the bottom left hand corner of the DaVinci Control Panels Setup application window.

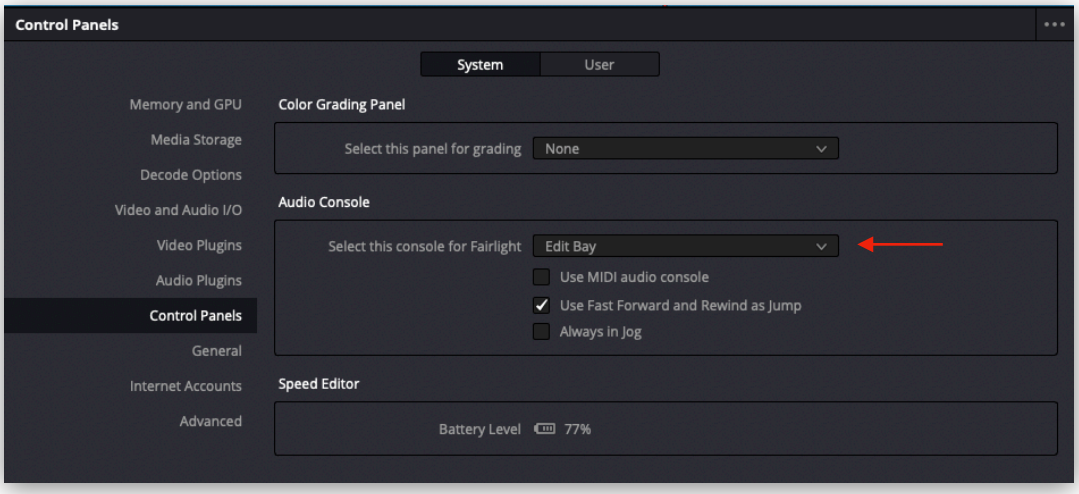
15. In the Add a DaVinci Control Panel enter the IP address of the Desktop Audio Editor panel.



16. Launch the DaVinci Resolve application

17. Open the DaVinci Resolve application's Preferences and in the System tab navigate to the Control Panels tab.

    Select the Desktop Audio Editor from the Select this console for Fairlight.



18. Select Save in the Preferences window.

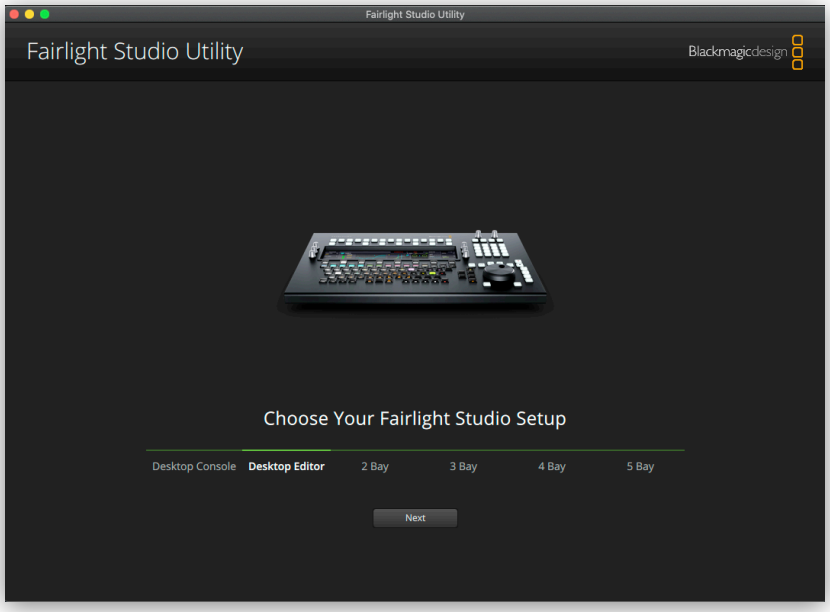
19. Restart the DaVinci Resolve application.

Expanding Desktop Audio Editor with a Fairlight Console

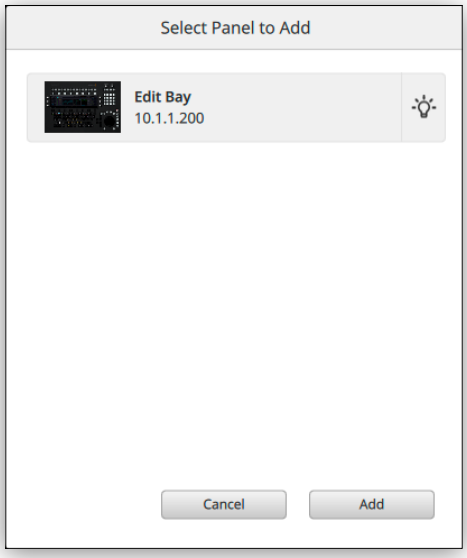
The Fairlight Desktop Audio Editor may also be expanded to form part of a larger Fairlight Console configuration.

This provides more advanced functionality and flexibility allowing two operator workflows to be possible.

1. Navigate to the DaVinci Resolve folder in the Application folder.
2. Open the Fairlight Studio Utility application.
3. Select the Desktop Audio Preset

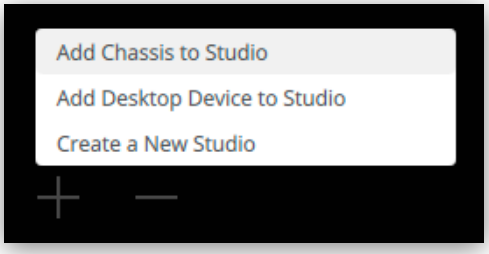


4. Select the Desktop Audio Editor panel. To identify the panel click the lightbulb icon.



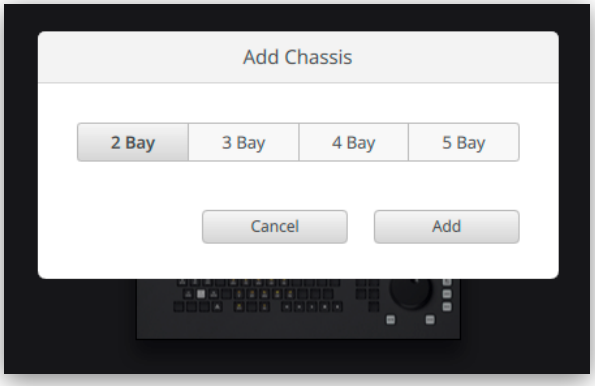
5. Click within the Untitled Studio field to rename the Studio with a custom label.

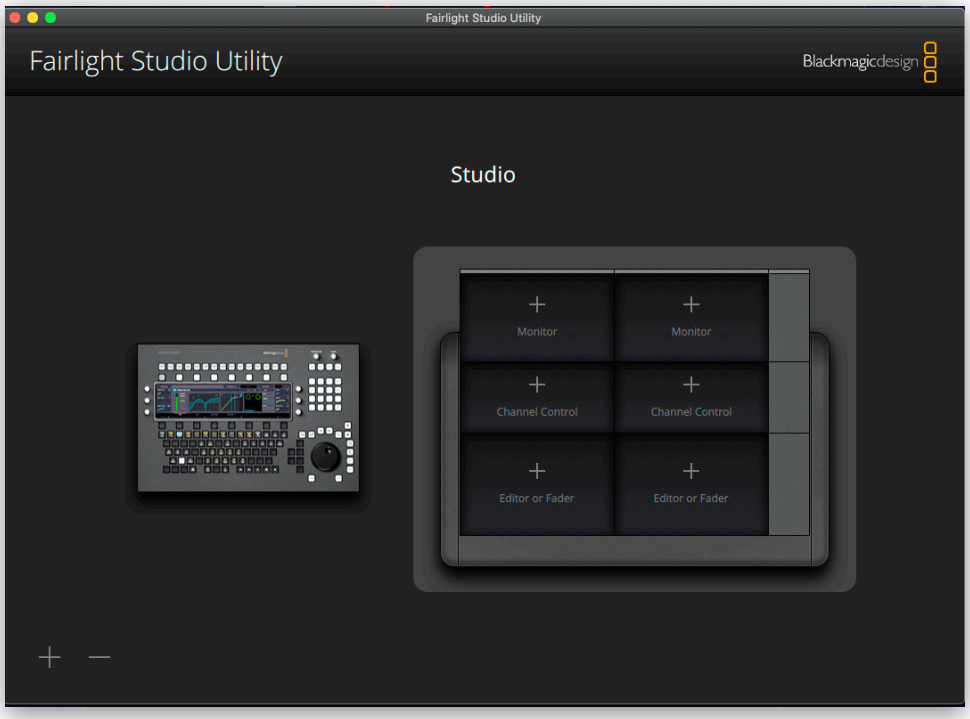
6. Click on the Plus icon in the bottom left hand corner of the window and select Add Chassis to Studio from the pop-up menu.



7. Select the Chassis configuration that corresponds with the available Fairlight Console panels.

   In this example, a 2 Bay configuration is required.

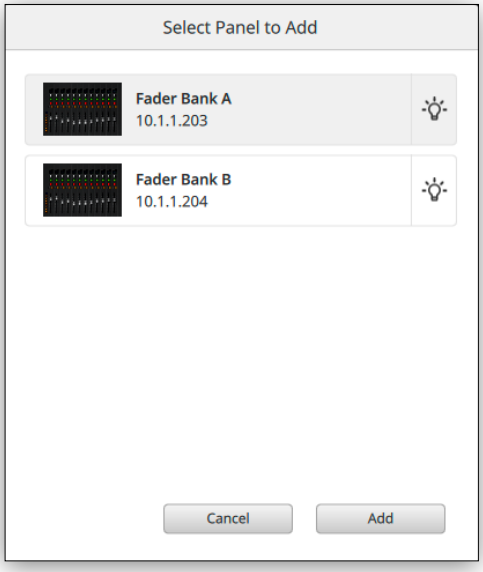




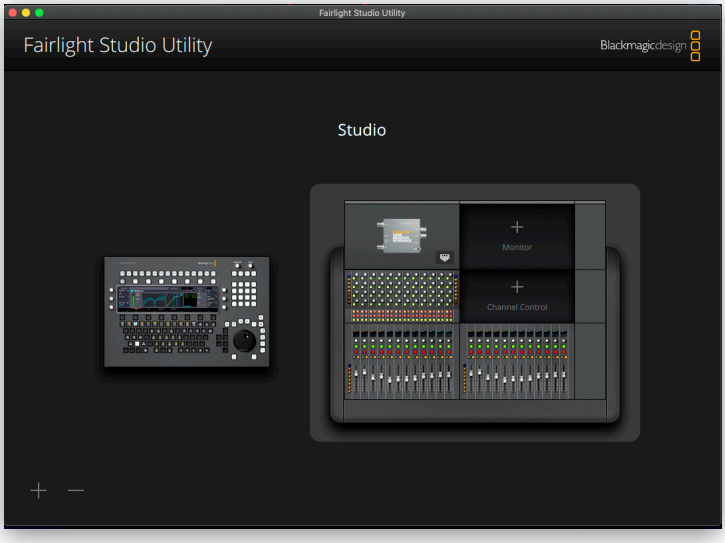
8. Hover the mouse over the Desktop Audio Editor box to reveal the Setup, Identify this device and Remove this device icons.



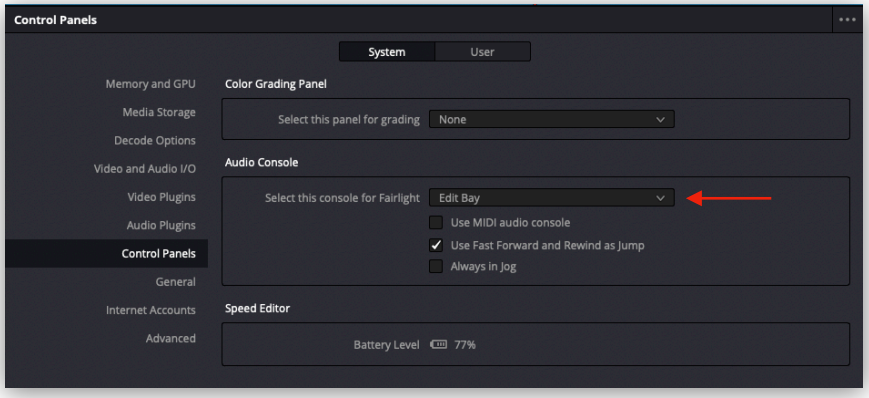
9. Depending on the bucket selected, add the appropriate Fairlight Console Channel Control or Console Channel Fader panel to the configuration.



10. Once complete verify the layout is in correct configuration by identifying each panel in sequence.



11 Open the DaVinci Resolve application's Preferences and in the System tab navigate to the Control Panels tab.

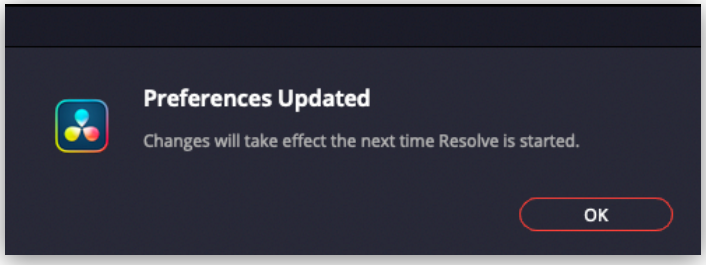


IMPORTANT:

The Select this console for Fairlight drop-down will reflect both the Desktop Audio Editor and the configured Studio configuration.

12 Select Save in the Preferences window.

13 Select OK in the pop-up window.



14 Restart the DaVinci Resolve application.

IMPORTANT:

Changes applied within the Fairlight Studio Utility will not be enabled across the Fairlight panels without resetting the DaVinci Resolve application's Preferences.

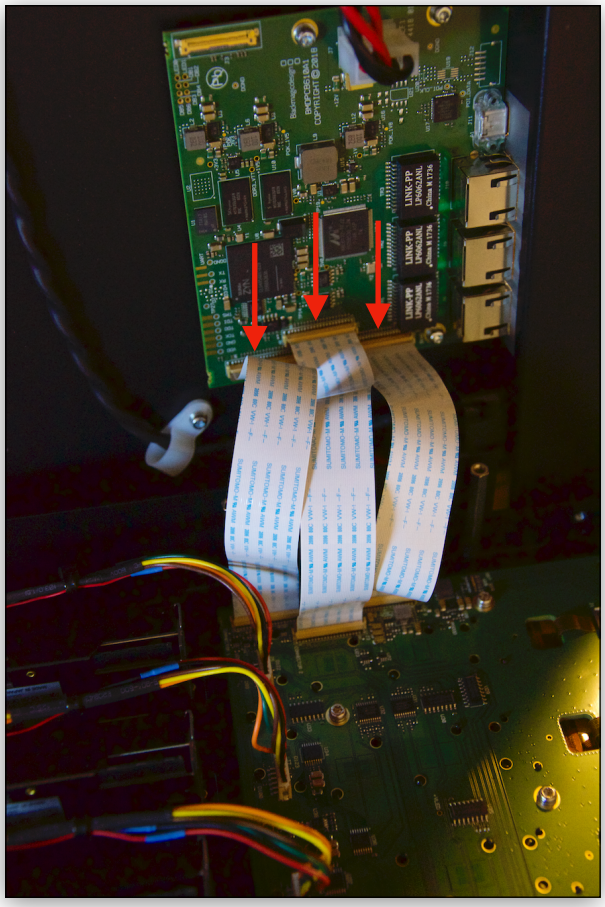
From the Select this console for Fairlight drop-down menu set the preference first to None and then reselect the Console configuration's title. Now select Save and restart the DaVinci Resolve application.

Fader replacement on Console Channel Fader

Tools Required:

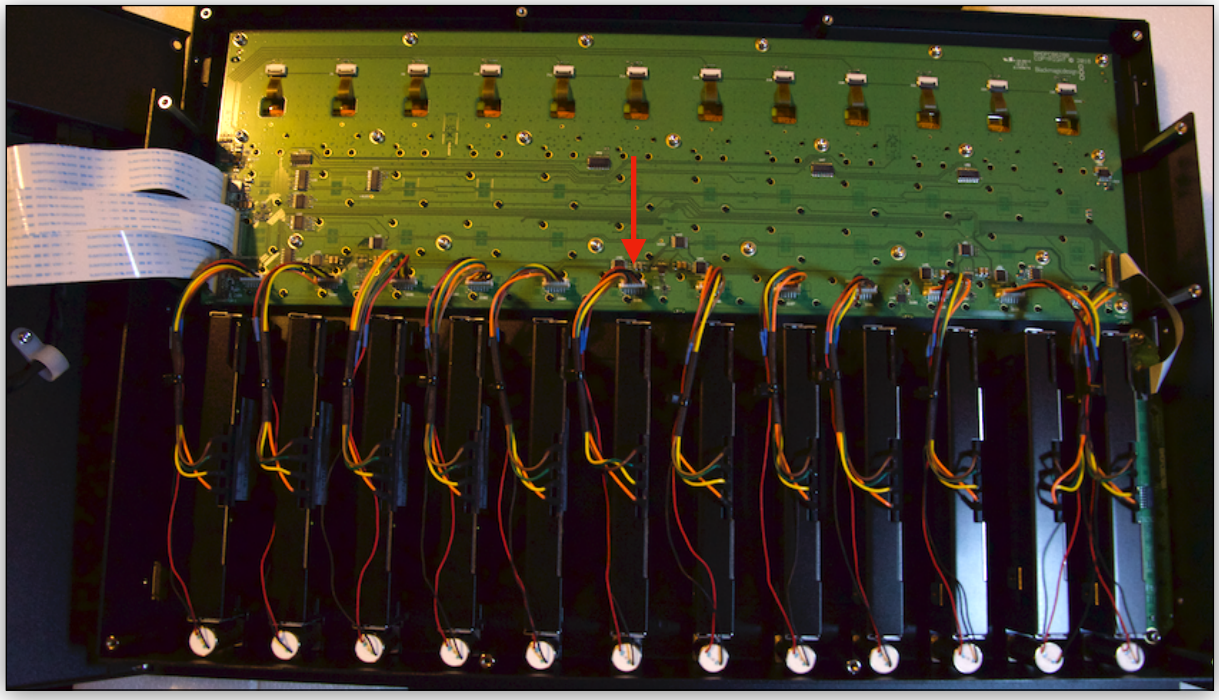
1x ESD-proof protective material
1x Phillips head screwdriver
1x Allen key

1. Remove the Channel Fader panel from the Console chassis.
2. Disconnect all power and Ethernet cabling from the Channel Fader panel.
3. Lay the Channel Fader panel face down on the ESD-proof protective material.
4. Remove all Phillips screws on the bottom of the Channel Fader panel.
5. Gently lift the panel's lid so as not to pull unnecessarily on the internal ribbon cabling.
6. Lean the panel lid against a sturdy vertical stand.
7. Gently loosen all three ribbon cables by opening the clamps on the panel lid.



8. Place the panel lid on ESD-proof protective material.

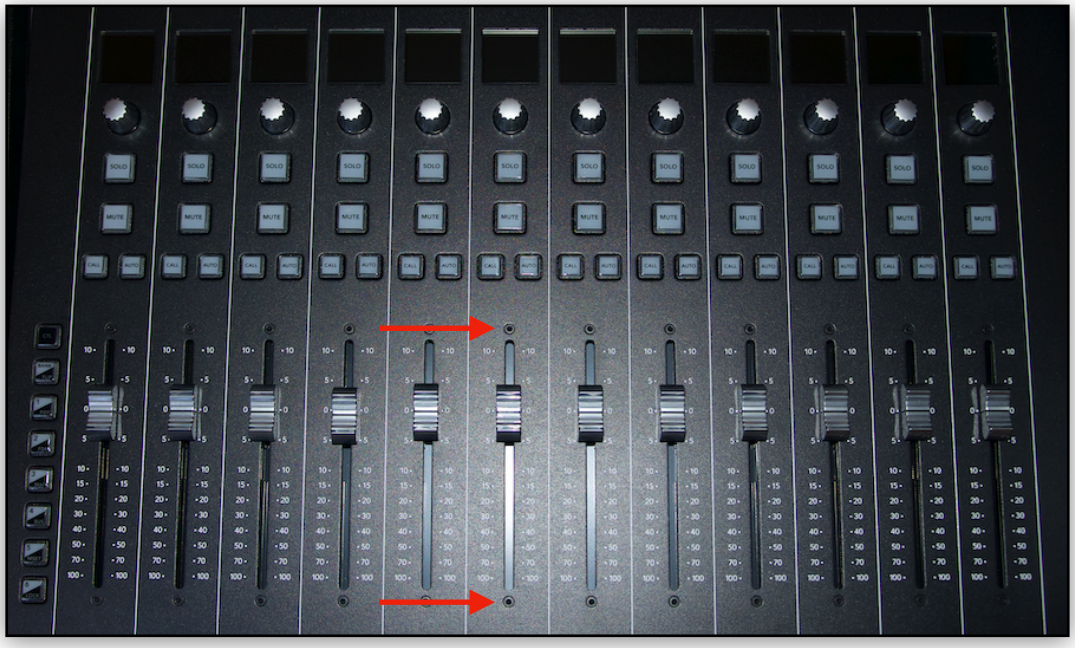
9. Disconnect the fader module's single molex connector.



10. Lift the Channel Fader panel over on to its side on to ESD-proof protective material.

11. Remove the fader cap.

12. Remove both front panel screws with the small Allen key while supporting the weight of the fader module.



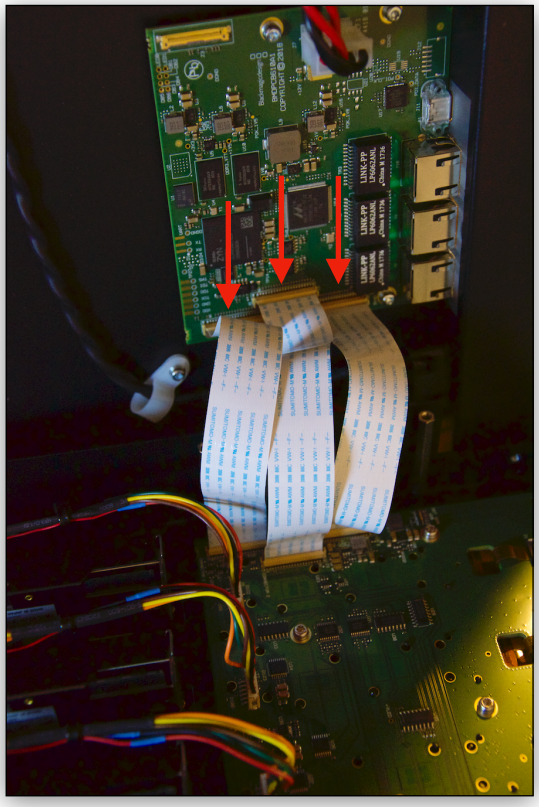
13. Position and support the new fader module in place.

14. Replace the two front panel screws.

15. Lay the Channel Fader panel face down on ESD-proof protective material.

16. Reconnect the fader module's single molex connector.

17. Reconnect the three ribbon cables and ensure all clamps are closed and that the cables are firmly in place.



18. Replace the panel lid and refasten all screws with the small Phillips screwdriver.

19. Place the Channel Fader panel back in to the Console chassis.

20. Reconnect all power and Ethernet cabling to the Channel Fader panel.

21. Restart the DaVinci Resolve application to allow recalibration of Channel Fader panel's faders.

22. Touch the fader on the replaced fader module and check that the channel's Call switch activates to confirm that the module's molex connector is firmly in place.

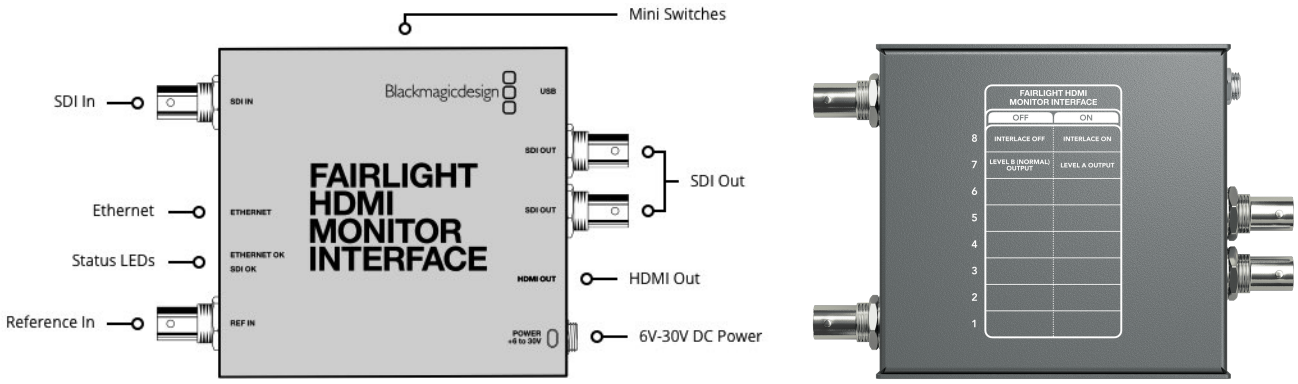
23. Press both the Solo and Mute keys and confirm that the OLED display is active to ensure that all three ribbon cables remain firmly in locked.

Fairlight HDMI Monitor Interface Configuration

Package Contents:

1x Fairlight HDMI Monitor Interface
1x Power cable
4x Power adaptors for various territories.

The Fairlight HDMI Monitor Interface converts the ethernet data from a Fairlight Console Channel Control to HDMI.



The HDMI Type A Interface supports various formats and the interface input can also be switched to SDI. The SDI output mirrors the HDMI output.

HDMI Monitor Interface Supported Formats

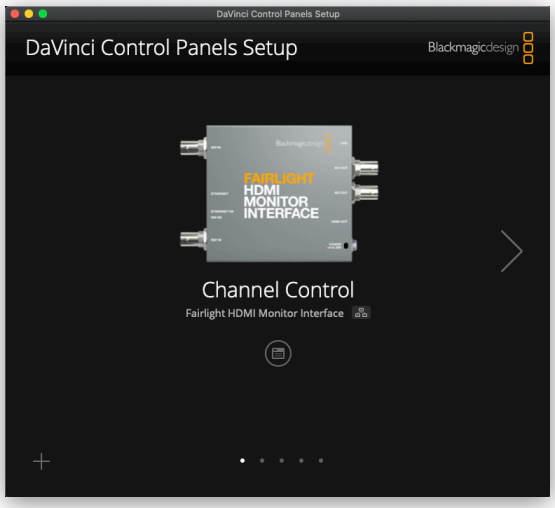
HDMI Type A	3G-SDI
1080p23.98	1080p23.98
1080p24	1080p24
1080p25	1080p25
1080p29.97	1080p29.97
1080p30	1080p30
1080p50	1080i50
	1080p50
1080p59.94	1080i59.94
	1080p59.94
1080p60	1080i60
	1080p60

SDI Compliance	SDI Video Sampling
SMPTE 259M	4:2:2
SMPTE 292M	
SMPTE 296M	**SDI Colour Precision**
SMPTE 424M–B	10 bit
SMPTE 425 Level A	
SMPTE 425 Level B	**Colour Space**
	YUV

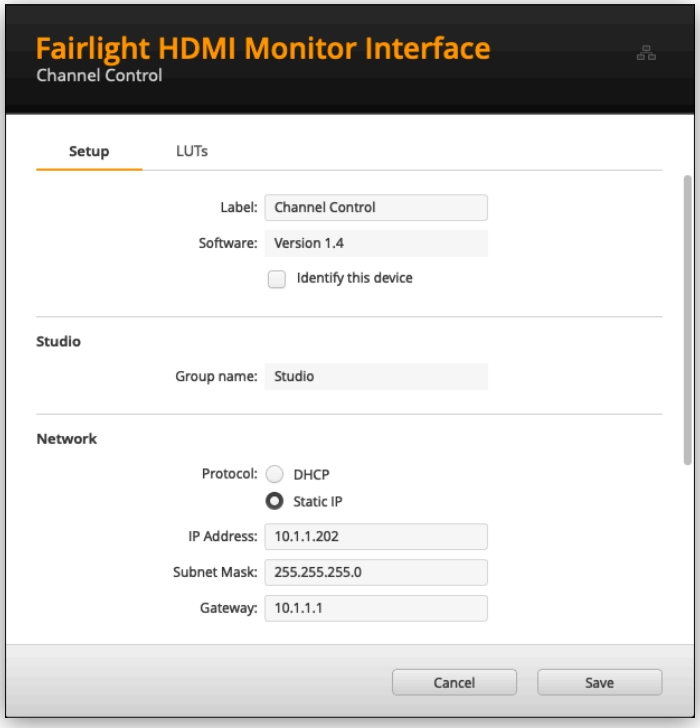
Installation Procedure:

1. Navigate to the DaVinci Resolve folder in the Application folder.

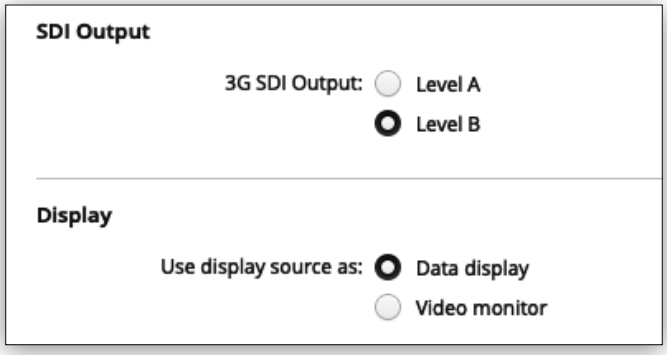
2. Open the Fairlight Studio Utility application.



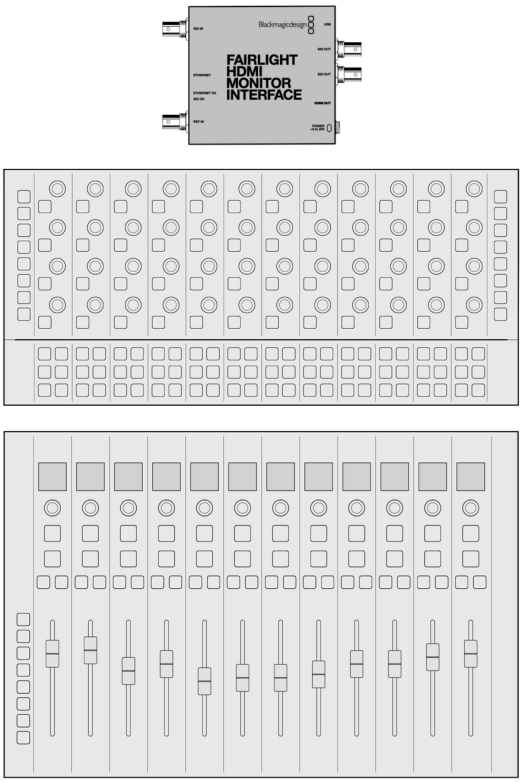
3. Click the Setup button to configure the Network settings following the same guidance outlined for the other Fairlight Console panels.



4 Configure the Display Source as either Data Display or a Video Monitor.



5 Connect the HDMI Monitor Interface to the appropriate Console Channel Control panel via Ethernet if configured as a Data Display.

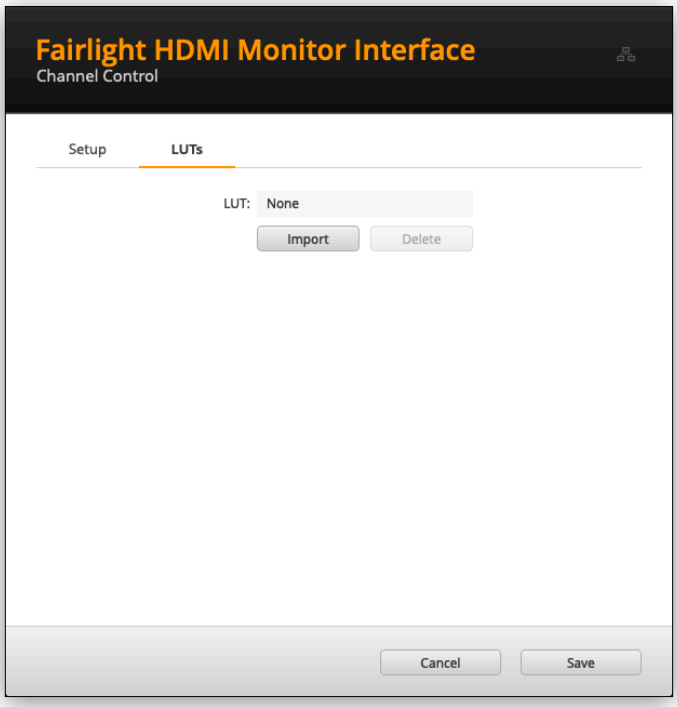


IMPORTANT:

Ensure that the Console Channel Control to which the HDMI Monitor is attached is connected to the correct Console Channel Fader panel in series to ensure the appropriate channel control data is displayed on the HDMI monitor.

6. Connect the HDMI Monitor Interface to a Decklink card via SDI if a Video Display is required.

7. To ensure correct colour reproduction import a preferred .cube LUT file for use with the HDMI Monitor Interface if configured as a Video Display.



8. Add the HDMI Monitor Interface to the Studio configuration in Fairlight Studio Utility.

