Using the HD Express with Media Composer

OVERVIEW
The MOTU Open I/O plug-in allows you to use MOTU’s HD Express PCI video interfaces with Media Composer 6 or later.

This document explains how to install the plug-in and use the HD Express with your Media Composer system.

INSTALLATION
The Open I/O Plug-in is included in the latest complete software installer for the HD Express, which can be downloaded from motu.com/video-download. Simply run the installer and follow the on-screen directions.

SETUP
Once you have run the installer, connect the HD Express as explained in the HD Express manual. Run the MOTU Video Setup application to ensure that the software can successfully communicate with the hardware. Refer to the troubleshooting section of the manual, if needed.

USING MOTU VIDEO SETUP WITH MEDIA COMPOSER
The MOTU Video Setup application allows you to control HD Express settings, and it can also provide useful troubleshooting information. Some of the controls in MOTU Video Setup have no effect when using Media Composer. (They are provided for other video editing applications.) This guide makes note of such controls.

You can open MOTU Video Setup from Media Composer in a number of ways:
- Choose Hardware Setup from the Tools menu.
- Click the Hardware Setup button in the Capture Tool or in the Hardware tab of Audio Project Settings.
- Double-click Video Input or Video Output in the Settings tab of the Project window.
- Click the Monitor Volume button in the Timeline window.

Figure 1: MOTU Video Setup.
VIDEO FORMAT AND INPUT SOURCE

Use the Input Source menu (Figure 1) to choose the video input from which to capture. This input can also be used as timing reference for playback by setting Playback Clock Source to Input Source.

While Media Composer is running, the Video Format menu shows the current video format. It can also be used to choose between progressive (1080p) and progressive segmented frame (1080PsF) formats. Any other format changes must be made from within Media Composer (by opening a new project, or with the Project Type menu in the Format tab of the Project window).

STATUS AND TROUBLESHOOTING

The status area at the top of the window (Figure 1) provides helpful troubleshooting information. If video playback or capture isn’t working, the status area will often tell you why. Media Composer will switch to playback mode when any window other than the Capture Tool is in front. If previewing for capture isn’t working, open MOTU Video Setup, move the window if necessary so that it will not be covered by the Capture Tool, and then bring the Capture Tool to the front. This will allow you to see any diagnostic messages in the MOTU Video Setup window while in capture mode.

The Genlock indicator in the lower right of the MOTU Video Setup window and the Input Status in the lower left (Figure 1) are also useful for troubleshooting problems with connections and configuration.

Troubleshooting tips:

- Unless there is a video signal coming into the selected Input Source, the Playback Clock Source must be set to Internal.
- For 1080p Project Types, make sure to use the Video Format menu to choose 1080p or 1080PsF as appropriate.

SETUP PAGE

The Default Mode control (Figure 1) determines whether the HD Express will be in Capture or Playback mode when not in use by any video application. It has no effect while using Media Composer.

The Capture Clock Source and Playback Clock Source menus (Figure 1) are used to set the timing reference used for video capture and playback. See the manual for details.

See the manual for information about the other settings on the Setup page.

AUDIO PAGE

Do not use the Sample Rate menu in the Audio page (Figure 2) to change the sample rate when using Media Composer. The sample rate should only be changed by using the Sample Rate menu in the Main tab of Media Composer’s Audio Project Settings.

(For Mac only) The Downmix to Output 1-2 on Capture button has no effect when using Media Composer.

AUDIO OUTPUTS

Use the buttons in the Outputs section (Figure 2) to assign each set of audio outputs to outputs 1 through 8 or outputs 9 through 16, or set a bank to Off to disable it. If any bank is assigned to outputs 9-16, you will see 16 outputs available in Media Composer; otherwise, only 8 outputs will be available.

AUDIO INPUTS

All twelve of the audio inputs of the HD Express are always available in Media Composer, as follows:

<table>
<thead>
<tr>
<th>Inputs</th>
<th>Format</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-2</td>
<td>Analog</td>
</tr>
<tr>
<td>3-10</td>
<td>HDMI</td>
</tr>
<tr>
<td>11-12</td>
<td>S/PDIF</td>
</tr>
</tbody>
</table>

You can only capture audio from HDMI (inputs 3-10) when the video Input Source is set to HDMI.