



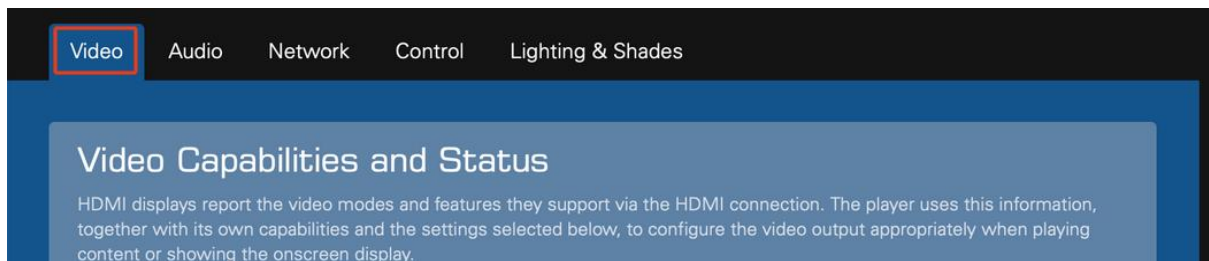
madVR Envy

Kaleidescape Setup Guide

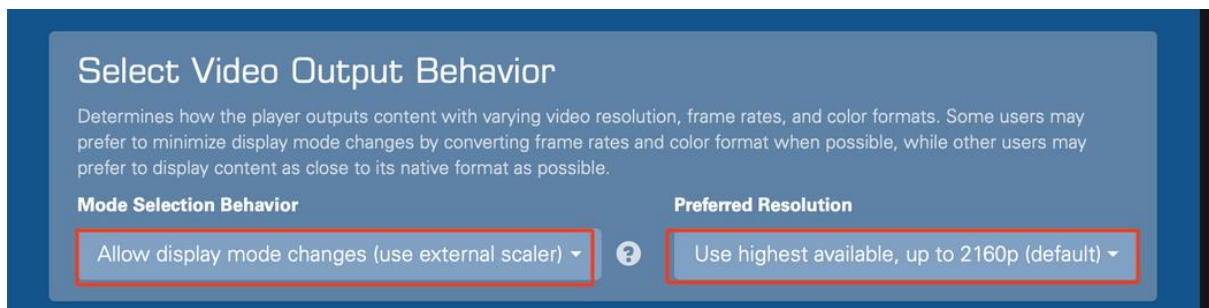
Kaleidescape Setup with the Envy

Please follow these instructions to setup the Kaleidescape for ideal playback with the madVR Envy.

1. Use a web browser to access the Kaleidescape advanced settings, as these settings are not accessible using the Kaleidescape remote control. If you do not know the IP address of the Kaleidescape, you can get that from the Kaleidescape on-screen options.
2. Click on the “Video” tab in the header of the Kaleidescape advanced options page in your browser.



3. Under “Select Video Behavior”, select choose "**Allow display mode changes (use external scaler)**" and "**Use highest available, up to 2160p (default)**".

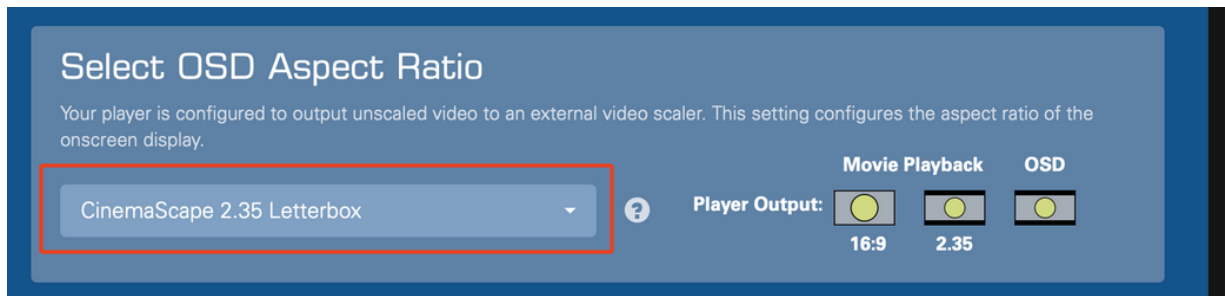


The “Allow display mode changes” option ensures the Kaleidescape outputs the original resolution and framerate of the movie. Otherwise, it will output movies at 60p instead of 24p, which makes HDMI switching faster (and why it is often set up this way), but at the expense of video playback quality. See Appendix A for more information.

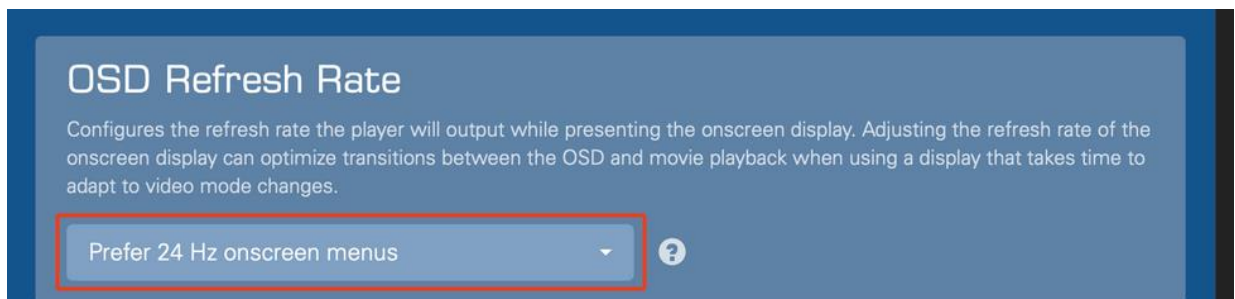
This setting also ensures that the native aspect ratio of the movie is used. Otherwise, scoped movies will be played back as 21:9 (2.33:1 or 2.35:1), instead of 2.40 or whatever the actual aspect ratio is, which impacts the Envy’s auto-aspect ratio detection and black bar management.

The **“Use highest available”** Preferred Resolution setting ensures that the Kaleidescape will not downscale any resolution (for instance, so that 4K is output as 4K and not 1080p).

- Under **“Select OSD Aspect Ratio”**, choose **“CinemaScope 2.35 Letterbox”**, if you have a **scope screen** with an aspect ratio (screen width divided by height) of 2.35 or higher. This setting (when used with the **“HDMI Content Type Metadata”** in Step 7 and **“Detect Kaleidescape Menus”** in Step 9) will make use of your full screen to show the Kaleidescape Cover Art, Movie List and other Kaleidescape menus. If your screen has an aspect ratio less than 2.35, such as 16:9, chose the **“16:9 (default)”** option instead.



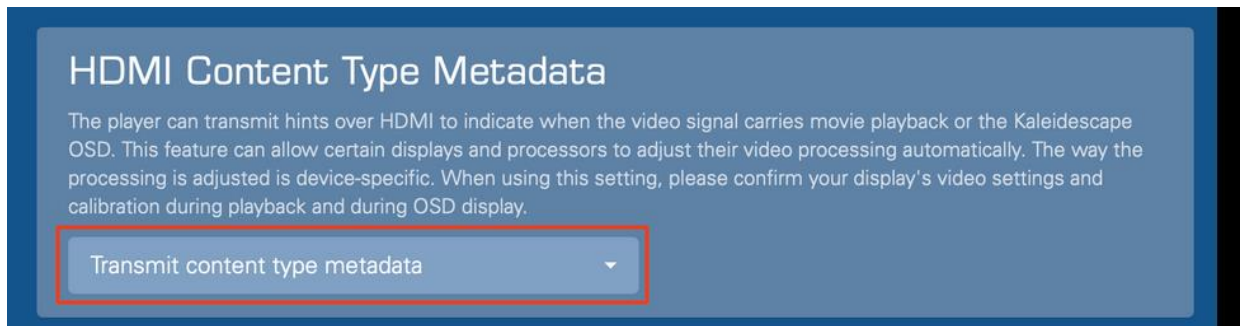
- Under **“OSD Refresh Rate”**, choose **“Prefer 24 Hz onscreen menus”**. This setting is critical for the fastest HDMI switching time when starting and stopping movies (as the Kaleidescape switches between its menus and the movie). Note that in doing this, the animations within the Kaleidescape menus will not be as smooth, but many people find the much faster HDMI switching times to be a worthwhile tradeoff. See Appendix A for more information.



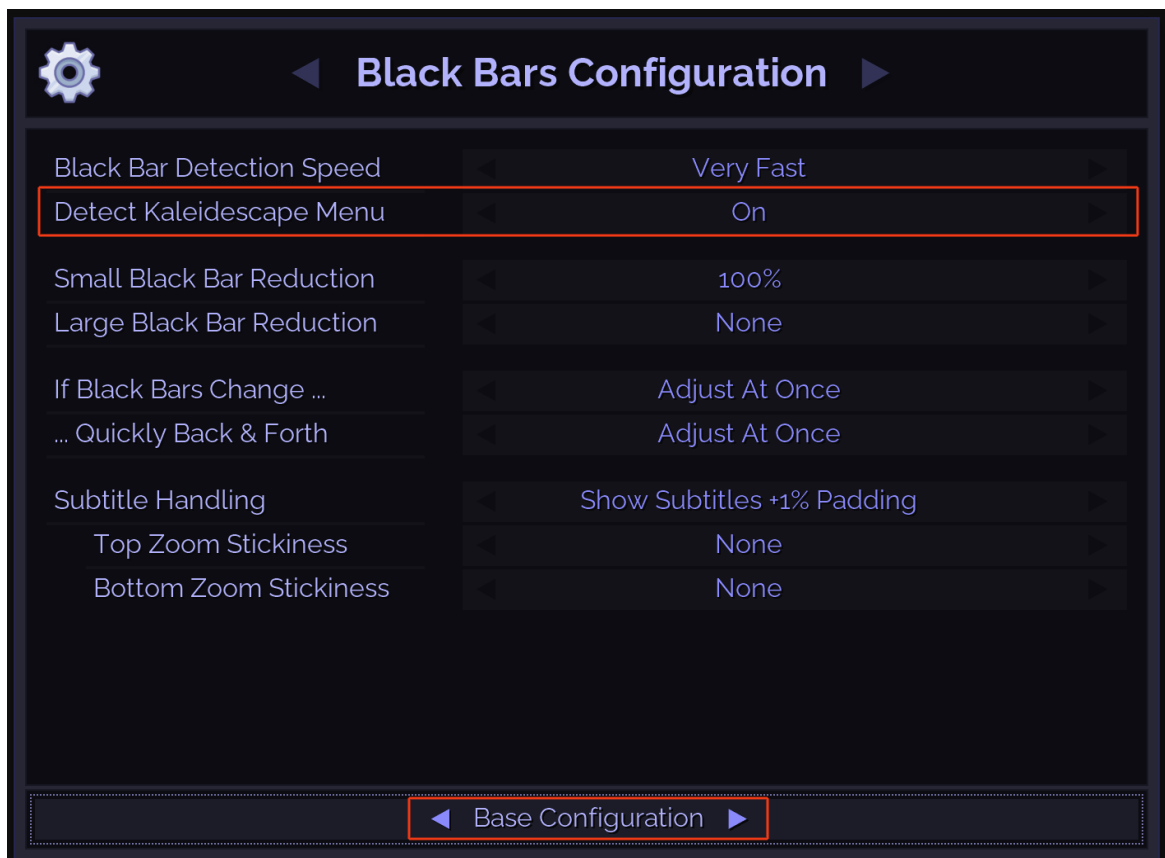
- Under **“4K Ultra HD Support”**, please keep this option at the default **“Automatic (default)”**.

[Continue to Step 7]

- Under “HDMI Content Type Metadata”, select “Transmit content type metadata”.



- Press OK to apply the settings.
- Open the Envy “**Black Bar Configuration**” menu (press the menu button on the Envy remote, then press the right arrow 3 times). Highlight “Active Configuration” at the bottom of the menu. Press right arrow one time, so that it changes to “**Base Configuration**”. Then change the “**Detect Kaleidescape Menu**” to **On** and exit the menu. This completes the Kaleidescape setup.



10. If you are using a scope screen and have not previously set up the **Screen Boundaries** option in your Envy, you must in order for Envy to show the Kaleidescape menus at full screen. To do so, go to the Envy **"Screen Configuration"** menu and under **"Screen Boundaries"**, choose **"Run Assistant"**. Note that if you are using 5K output from the Envy, with a 2.37 aspect ratio screen, then the correct setting is None for Screen Boundaries. In this case Envy knows you have a 2.37 screen, even with Screen Boundaries set to None, since 5K resolution is natively 2.37.

This completes the Kaleidescape setup.

Appendix A – Understanding Kaleidescape and Framerates

Kaleidescape players are often set up to output movies at 60p instead of 24p. This is because its movie selection screen only uses 60p, so it avoids the longer HDMI handshakes when movie playback is started 24p, and when stopped.

Almost all movies with few exceptions (Gemini Man, Billy Lynn's Long Halftime Walk, a few others) are mastered at 23.976 frames per second (24p) and meant to be watched this way. In some cases, a CE device (e.g., the Kaleidescape) may be set to output 24p content at a frame rate of 59.94 fps (60p).

This means that each video frame needs to be repeated, some frames twice, some frames three times, and this uneven pattern (called "3:2 pulldown") causes a slightly distracting motion jerkiness. Not everyone may notice this, but now that we mentioned it, you very well may. Since the Kaleidescape movie selection screen is always output at 60p, setting the Kaleidescape to output movies also at 60p means you can start and stop movie playback much faster. That is because when switching between 60p and 24p, a (slow) HDMI handshake is required.

So, in the case of your Kaleidescape, by outputting movies at 60p you get faster HDMI handshakes, but with motion artifacts some people find distracting, and you are also not watching the movie as the director intended. Therefore, for the best cinematic experience, we recommend that the Kaleidescape be set to output the native frame rate for the movie (24p).

This is done by selecting the option "**Allow display mode changes (use external scaler)**", as covered in the #3 of this document. Further, since movies will now be output at 24p, you can get much faster HDMI switching by making the Kaleidescape menus (Cover Art view, Movie List Viewer, Settings, etc) also run at 24p. This is achieved by setting the "**Prefer 24 Hz onscreen menus**" option, as covered in Step #5 in this document.

Note that one small downside of forcing the Kaleidescape menus to 24p is that the animations in the menu, such as the shuffling of Covert Art posters, will not be as silky-smooth as before. As discussed elsewhere in this document, most people prefer to use 24p anyway, due to the much faster HDMI switching times. However, if you prefer the silky-smooth animation over the faster switching times, it is fine to not use the "Prefer 24 Hz onscreen menus" option. However, it is still recommended either way to use the "Allow Display mode changes" for reasons discussed above.