

Using MultiProfiler to create a print emulation preset from an ICC profile

# NEC MultiSync® P & PA Series: ICC Profile Emulation

## About MultiSync Professional Displays

NEC MultiSync PA & P Series professional displays include a number of industry-leading technologies designed to improve color-critical workflow for photography and video professionals. The internal 3D Lookup Table (LUT) is a cutting-edge technology that enables accurate representation of complex color spaces. In addition, NEC professional displays feature five customizable picture mode presets. These presets can offer a quick look at an alternate display configuration without changing the video source. The presets can be highly customized, including emulation of devices like printers and other displays.

## About ICC Profile Emulation

MultiProfiler uses industry standard ICC (International Color Consortium) color profiles to emulate the output of a particular device. ICC profiles contain data representing the color characteristics of a device, such as a printer, film, or display. MultiProfiler uses this information to create an internal 3D LUT to emulate the selected device, and this is saved to a preset in the display. While this preset is not quite as accurate as a soft proof in professional photo or video editing software, it does provide quick access to an preview of the ICC profile.

The ability of a display to properly emulate an ICC profile depends highly on the color gamut of the display. Wide color gamut displays like the MultiSync PA Series can more accurately display colors in devices that have a wider color gamut, such as many inkjet printers.

## System Requirements

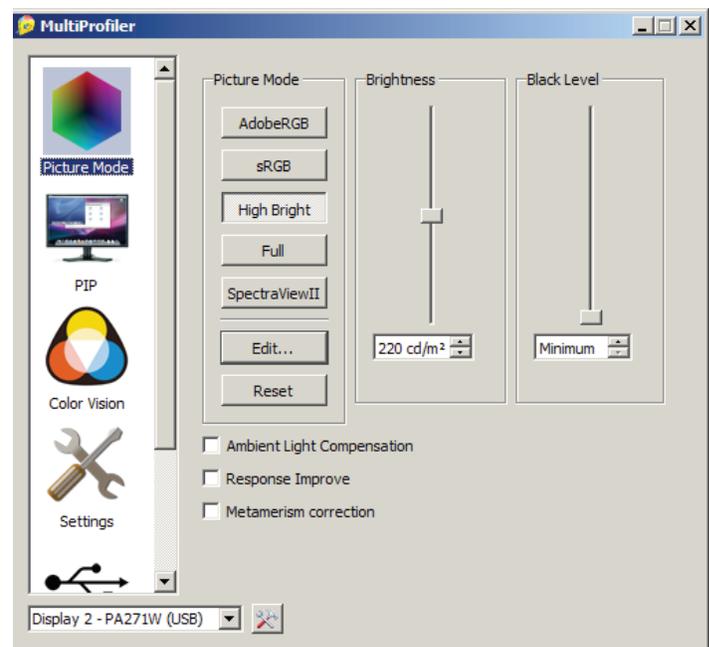
In order to load the ICC profile into a display preset, you will need the free MultiProfiler application, available from [www.necdisplay.com/MultiProfiler](http://www.necdisplay.com/MultiProfiler). You will also need to locate the ICC profile file that you want to load into a preset.

In addition, installing the free Adobe Color Management Module (CMM) from [www.adobe.com](http://www.adobe.com) is highly recommended for optimal color matching performance.

There are two methods for loading an ICC profile: using the Color Configuration Wizard offers more control and is designed for users with color management experience, while using the Quick Print Emulation function reduces the steps required and is ideal for users new to color management.

## Advanced: Using the Color Configuration Wizard

Start MultiProfiler and select the Picture Mode panel from the left side navigation. The display's five presets are listed on the right side of the application in the Picture Mode section. Each of these can be individually customized.



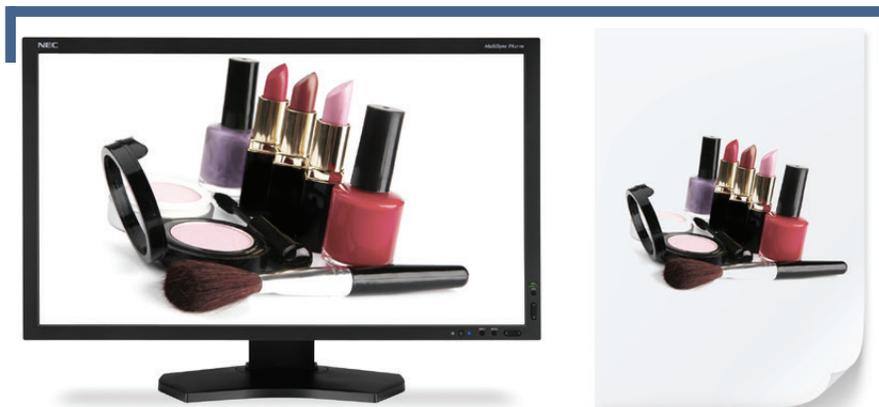
1. Select the Picture Mode that you would like to customize by clicking its button. The display may flash momentarily while the Picture Mode is applied.
2. Once the image has stabilized, click the edit button and select "Using Wizard"
3. A new dialog will appear to walk you through the process of creating a preset. Select the Custom option and click Next.
4. On the next page, select the Print Emulation (Print Preview) option and click Next.

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## NEC MultiSync® P & PA Series: ICC Profile Emulation



*Using the Full color space*



*Using a Print Preview with ICC profile*

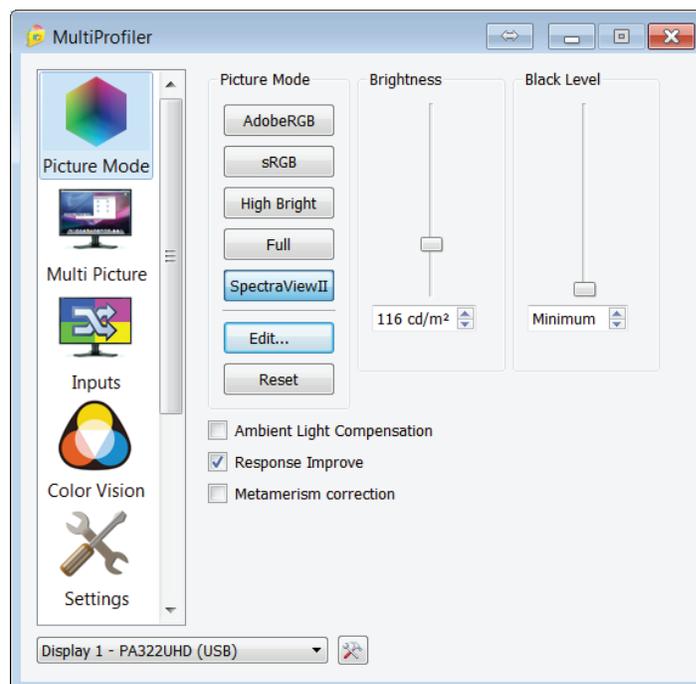
### Using the Color Configuration Wizard (Continued)

5. Choose the ICC profile to load, either by selecting it from the list of ICC profiles installed on the system or use the “Add from other location” button. to browse for the file. Once you have selected the ICC profile, click Next.
6. Choose the rendering intent that the display should use. If you are unfamiliar with these settings, the default options are usually sufficient. Click Next.
7. Choose a white point for the preset. The monitor’s native white point is near 6500K (D65), but you should select the option that best matches the white color that you will be comparing with. Click Next.
8. Choose a memory location to store the completed settings in. You can use any of the five locations, but note that location “Custom 3” is typically used by SpectraView and will be overwritten if you use SpectraView software to calibrate your display. Name your memory location; we recommend using the name of the ICC profile that you have selected in step 6. Click Next.
9. The display update process will take less than a minute and the display will flash as the settings are updated. Once the updates are complete, select a brightness and black level to use and click Next to finish the process.

### Basic: Using Quick Print Emulation

1. Select the preset that you would like to use as the basis for the emulated color space. Typically something like AdobeRGB is used. NOTE: If you have SpectraView<sub>II</sub>, you cannot use the “SpectraView<sub>II</sub>” preset.
2. Select Edit... and then Quick Print Emulation
3. Click Next and then select a printer profile either by selecting it from the list of ICC profiles installed on the system or use the “Add from other location...” button to browse for the file. Once you have selected the ICC profile, click Next.

4. Choose the rendering intent that the display should use. If you are unfamiliar with these settings, the default options are usually sufficient. Click Next.
5. Select a preset to replace and choose a name for the preset. NOTE: if you have SpectraView<sub>II</sub>, the SpectraView<sub>II</sub> preset is not recommended as it will be overwritten at your next calibration.
6. Confirm the settings and select Finish.  
The name of the Picture Mode selected at the start now reflects the name chosen in step 8. This preset is also available in the Picture Mode hotkeys on the right of your display (landscape orientation) or on the left of the display (portrait orientation). More information on this feature is available in the MultiProfiler User’s Guide.



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