

# SONY



Simulated onscreen images

**PVM-X3200, PVM-X2400, PVM-X1800**

# Extend the capabilities of your Sony PVM-X Series monitors

**Your PVM monitor upgrade is here and waiting.**

We are pleased to announce a V3.01 firmware upgrade for our PVM-X Series Professional 4K/HDR monitors. The version V3.01 release offers a number of new features and improvements to increase the monitors' flexibility and relevance in today's demanding production environments.

**The new firmware, available now, can be downloaded here:**

- [PVM-X3200 V3.01 firmware](#)
- [PVM-X2400 V3.01 firmware](#)
- [PVM-X1800 V3.01 firmware](#)

[pro.sony/pvmx](https://pro.sony/pvmx)

# New Features

## Color Gamut Scope

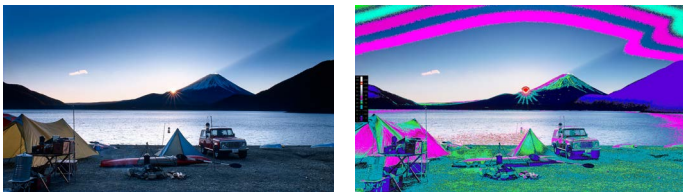
V3.01 firmware adds a Color Gamut Scope to the array of measurement tools already available with the PVM-X monitors. This unique feature enables you to view your image's color gamut within the CIE 1931 chromaticity diagram so you can ensure that your content falls into the color space of your intended distribution format (Rec 709, P3, BT2020). As with the other scopes available with the PVM-X monitors, all updates are displayed in real-time.



Images are simulated

## False Color

Using a flexible color-coded display, the new False Color feature overlays exposure settings directly onto the monitor image, enabling you to verify exposure within the context of the material being shot. Color scales can be customized to match the false color palettes used by major camera manufacturers.



Original

False Color ON

Images are simulated

## Focus Assist

The Focus Assist feature quickly verifies focus by highlighting the edges of in-focus objects in the frame. Display options include a white or red focus outline over a black & white or regular color background.



White focus outline/normal picture

Red focus outline/B&W

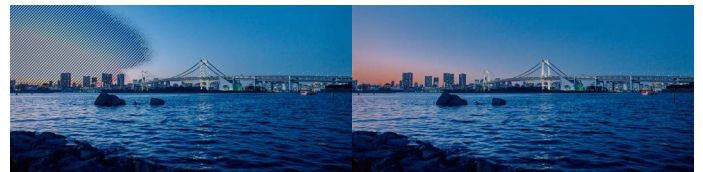
Images are simulated

## Black Detail Roll-off Mode

A new display option has been added to the Black Detail Mode feature (BDM) used when working in low-light environments. BDM drops the overall monitor luminance levels to more easily see into dark areas for detail and exposure verification. The current display options for BDM mode are "zebra" and "clipping."

- Zebra mode indicates the areas affected by the luminance drop by imposing a zebra pattern onto affected areas.
- Clipping mode simply clips the colors in the areas outside of the BDM luminance range.
- Roll-off mode provides a less jarring display option representing the affected areas with roll-off instead of a hard clip.

As you would expect, the brightness accuracy in those areas approaching the BDM upper limit is not guaranteed in this display mode.



BDM w/ zebra display

BDM w/ black detail roll off

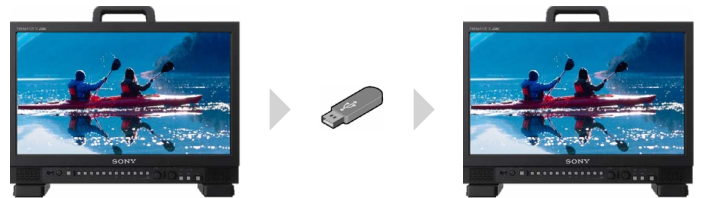


BDM w/ clipping

Images are simulated

## Setting Copy

Setting Copy enables you to copy monitor set-up parameters via USB memory from one monitor to another. This helps speed up the initial monitor setup by using the settings created on one monitor to configure the other PVM-X monitors in your workflow. You can even copy settings between different PVM-X models: setting parameters for the PVM-X3200, -X2400, and -X1800 are interchangeable.



## Auto White Adjustment Software

As of V3.01 firmware, you can utilize Sony's Auto White Adjustment Software (V1.7) to calibrate your PVM-X monitors' white balance and luminance. Sony's Auto White Adjustment Software\* is free of charge and can be downloaded [here](#).

\*The software runs on Windows 8.1 Pro Update (64-bit version) and Windows 10 Pro (64-bit version, Version1909 or later). You will also need a monitor probe and a Windows OS laptop to complete white balance calibrations.



## New Features (cont.)

### Other Improvements

To help maintain the integrity of the PVM-X display panel, a Screen Saver has been added that drops the monitor's luminance levels after a set period of idle time. You can select the interval of idleness from 30, 10, and 2 minutes. You can also turn the screen saver off. An LED status indicator blinks amber to indicate that the screen saver is engaged. Additionally, the menu response time has been improved, and scopes will now remain on during menu operations.

## Limited Time Opportunity

### Try Out Our Optional PVML-HSX1 Conversion License

The PVM-X Version V3.01 firmware update includes a free trial of our optional PVML-HSX1 Conversion License. The PVML-HSX1 license features are activated for a trial period of 240 hours once V3.01 firmware is installed on your monitor\*.

The trial timing is linked to the monitor's internal clock and will start counting down when the monitor is powered up after the V3.01 installation is completed.

Once the monitor has logged 240 hours from the start of V3.01 installation, the trial license will expire and the features will no longer be available for use. A prompt will appear approximately 20 hours prior to the expiration, letting you know that the trial time is coming to an end.

For new monitors purchased with V3.01 firmware pre-installed, the trial license will be activated when the new monitor is powered up. The same trial license operating conditions (as above) apply to newly purchased PVM-X monitors.

If you would like to retain the features offered with the license after the trial expires, you can purchase a license key to reactive them. Any settings you may have saved when using the trial license will remain available once the permanent license is installed. The purchased license key is entered into the monitor's on-screen menu and the conversion features are automatically re-activated. No additional hardware is required. Once the license key is installed, the PVML-HSX1 license is permanent and cannot be transferred to another monitor.

## PVML-HSX1 License Features

### HDR to SDR Conversion

- Internal HDR-SDR auto conversion via ten monitor presets. The preset parameters can be customized to accommodate different content and saved. This conversion is static, based on the preset parameters, and does not automatically adapt to changing content.
- HDR-SDR conversion via LUT (customer must provide the conversion LUT\*\*). This conversion is static, based on the loaded LUT, and does not change with changing content.
- Internal, dynamic, HDR-SDR conversion using Sony's SR Live workflow. The PVML-HSX1 license supports Sony's SR Live workflows by which select Sony studio cameras and camcorders send metadata embedded in the cameras' SDI output to the monitor. This SR Live Metadata is derived from 26 parameter settings in the camera head and CCU and changes dynamically as the camera settings change. The PVM-X monitor reads the embedded metadata and intelligently converts the incoming signal, dynamically adapting the conversion process as the metadata changes. This results in a reconstructed SDR signal equivalent to the one output by the camera's CCU. We refer to this conversion as "dynamic" as it's fully in sync with camera operators' creative decisions and camera adjustments during the production.

### Signal Conversion

- 4K-HD down convert.
- 1080p to 1080i raster conversion.
- Quad Split 4K input via 4 x SDI to 12G, single SDI output via Enhanced Monitor Output (EMO).

### Processed Signal Output via the Enhanced Monitor Output (EMO)

- Baked-in LUT output.
- Output of any internally processed signal.

\*The time will count down whether or not you are using the license.

\*\*Conversion via LUT is a standard feature with the PVM-X series monitors. However, the conversion license is required to output the LUT-processed signal from the monitor.