
Panasonic AS800/AX800/AX900 2014 Models CalMAN Setup Guide

For the Panasonic models listed above, CalMAN automatically calibrates the display's two point grayscale controls, the 10 point grayscale controls, and the CMS color gamut controls. Also, the display's two custom picture modes, Professional 1 (ISF Day) and Professional 2 (ISF Night), can each be calibrated with individual picture menu adjustments, grayscale adjustments, and CMS adjustments.

Recommended CalMAN Workflows:

- HT Advanced, SI Advanced, or ISF Calibration workflow to optimize Picture controls and calibrate two point and 10 point grayscale RGB balance controls and CMS color gamut controls.

Required Panasonic Firmware:

- All firmware versions supported

Panasonic Control Connection:

- Wireless or wired network connection

Panasonic Setup Process:

To enable the display's ISFccc Viewing Mode:

1. In the Panasonic *Setup* menu, select *Professional Mode (isfccc)*.
2. Select *On*.

To connect the CalMAN calibration computer to a display listed above, through a wireless (Wi-Fi) or wired (Ethernet) network:

1. In the Panasonic *Network* menu, select *Network Status*.
2. If a connection to a network router is indicated, select *Status Details*.
3. Under *Network Status Details*, note the *Network Name* to which the display is connected and note the display's *IP Address*.
4. If no network connection is indicated, in the Panasonic *Network* menu, select *Network Connection*.
5. Under *Network Connection*, select *Quick Setup*, and wait for the display to search for available routers (the router does not require an internet connection).
6. In the list of available routers, select the router to which you wish to connect the display (may require a security password).

7. Under *Network Status Details*, note the *Network Name* to which the display is connected and note the display's *IP Address*.
8. Exit the display's network setup.
9. Connect the CalMAN computer to the same wireless network to which the display is connected.

CalMAN Connection Procedure

To connect CalMAN to the Panasonic display and enable the ISFccc mode:

1. On the Panasonic display, open the *Picture* menu.
 - a. Under *Picture/Viewing Mode*, select *Professional 1* or *Professional 2*.
 - b. Under *Picture/Lock Settings*, select *PIN*.
 - c. Enter “i085” (the ‘i’ button is just below the Power button on the remote).
 - d. Under *Adjustment Lock*, select *Off*.
 - e. Arrow down to *isfccc Network* and press *OK* on the remote.
 - f. At this point, the display will read “Waiting for Connection.”
2. In CalMAN, under “Find Display,” select “Panasonic – AS800, AX800, AX900 (Ethernet).”
 - a. Under *Socket Connection*, enter the IP Address you previously recorded.
 - b. Click *Connect* on the display connect panel.
3. In CalMAN, on the *Display Control* panel, under *Display Mode Selection*, select “Pro 1 - ISF Day” or “Pro 2 - ISF Night.”

Meter Mode (Target Display Type)

AX800 and AX900 series - The Panasonic AX800 and AX900 series displays have a very wide color gamut, approaching that of the DCI/P3 specification. Select the ‘LCD (LED Blue Green DCI/P3 Gamut)’ Meter Mode for the AX800 and AX900 series.

AS800 series - The Panasonic AS800 series displays have a more conventional LCD color gamut. Select the ‘LCD (LED White)’ Meter Mode for the AS800 series.

Panasonic DDC Picture Controls:

Panasonic Picture controls are available within the CalMAN software, allowing you to make display adjustments in the software, rather than using the display's remote control. On those calibration workflow steps where you need to make a manual display adjustment (e.g. Brightness, Contrast, etc.), you can click the Open DDC Window button on the CalMAN Display Control tab, then select Display Control to make those adjustments from the CalMAN screen.

Panasonic Display Calibration:

- **Setup/Advanced (isfccc)** – Select ON to enable the Professional modes.
- **Picture/Viewing Mode** – Select PROFESSIONAL 1 or PROFESSIONAL 2.

- **Picture/Color Balance** – Select WARM 1 for color temperature closest to the D65 target.
- **Picture/Color Gamut** – Select ‘sRGB’ for web calibration ‘HD Rec. 709’ for HD calibration; or for the AX800 and AX900 series, select ‘Adobe RGB’ for digital photography, or ‘D-Cinema v1.2’ for film emulation.
- **Picture/Advanced/Gamma** – Select 2.4 to test for best performance to selected target.
- **Picture/Advanced/White Balance** – adjust the display’s Gain and Cutoff controls to get the white balance tracking close to target before adjusting the White Balance multipoint controls. This can be done manually, or with AutoCal on the “Grayscale – 2 pt” step in the CalMAN Advanced or ISF Calibration workflow.

CalMAN AutoCal™:

- To calibrate grayscale tracking and CMS on these displays, it is best to perform AutoCal on each of these three CalMAN workflow steps, in this order:
 1. Grayscale – 2pt
 2. Grayscale/Gamma
 3. CMS Calibration
- After AutoCal is complete, optimize the display’s Brightness control for the local viewing conditions.

CalMAN Disconnect Procedure

To disconnect CalMAN from the Panasonic display:

- On the CalMAN Display Control tab, click Disconnect.