

Panasonic

VT60/WT60/DT60 (NZ/Asia)

VT60/ZT60/WT60/DT60, WT600 (US/Canada)
VT60/ZT60/GT60/WT60/DT60/FT60, VT65, WT600 (EU)

Rev. 1.1



Introduction

CalMAN automatically calibrates the display's two point grayscale controls, the 10 point grayscale controls, and CMS color gamut controls for all the Panasonic models listed above.

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.

CalMAN Recommended 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.)

Recommended Test Patterns

Plasma displays exhibit power supply luminance limiting with high brightness, high APL test patterns. This can cause incorrect luminance measurements. To avoid this situation with plasma displays, use test patterns with the smallest useable window size available from your test pattern source. Under Window Size, on the CalMAN Source Settings panel, select the smallest window size that provides a large enough target for your color meter.

Panasonic Required Firmware

All firmware versions supported

Panasonic Control Connection

• Wireless (Wi-Fi) connection

<u>Note</u>: The Panasonic models listed above support only wireless calibration control, not through the display's Ethernet connector.

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 calibration computer to a display listed above, through a wireless (Wi-Fi) 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 Wi-Fi routers.
- 6. In the list of available Wi-Fi 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 ZT60/VT/WT/DT WT600 (US/Canada Models) etc. (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."



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 Rec. 709 for HD calibration.
- Picture/Advanced/Gamma Select 2.2 or 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 these three CalMAN workflow steps, in this order:

- 1. Grayscale 2pt
- 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.



About / Contact

About Portrait Displays

Portrait Displays, Inc., since 1993, is a leading application software provider (ASP) for PC, smartphone, and tablet displays. The Portrait Displays team now includes **SpectraCal**, the world's leading provider of video display calibration software. The combined companies offer value-added, feature-rich solutions to both OEM display manufacturers and end users seeking improved accuracy and manageability of their displays.

Portrait Displays, an Intel Capital Portfolio company, is a private corporation with headquarters in Pleasanton, California, USA with representatives in Europe, Taiwan, China, Japan, and Korea.

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