SpectraCal

CM CalMAN
Setup Guide

Panasonic

VT30/DT30/D30, VT50/WT50 (US/NA models)

Rev. 1.1

PORTRAIT
DISPLAYS

Introduction

CalMAN automatically calibrates the Panasonic VT30/DT30/D30/VT50/WT50 US/NA model display's two point grayscale controls, and, on VT models only, 10 point grayscale controls and CMS color gamut controls.

The display's two custom picture modes, ISF Day and ISF Night, can each be calibrated with individual picture menu adjustments, grayscale adjustments, and CMS adjustments (VT models only).

CalMAN Recommended Workflows

DT30/D30/WT50

- HT Basic or SI Basic workflow to optimize Picture controls and calibrate two point grayscale RGB balance controls.

VT30/VT50

- HT Advanced or SI Advanced workflow to optimize Picture controls and calibrate 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 window size available from your test pattern source. Under Window Size, on the Source Settings panel, select the smallest window size that works with your color meter.

Panasonic Required Firmware

- VT30 – 2.220
- VT50 – 1.170

Panasonic Control Connection

VT30/DT30/D30

- 3.5mm jack to DB9 female adapter, plus
- DB9 female to DB9 female straight through RS-232 cable (pin2 to pin2, pin3 to pin3)

VT50/WT50

- Ethernet straight through (standard) cable for direct connection, or
- Wireless (Wi-Fi) connection

Panasonic Setup Process

To connect the calibration computer to a VT30/DT30/D30 with a serial cable:

1. Connect a 3.5mm jack to DB9 female adapter and a DB9 female to DB9 female straight through RS-232 cable between the display and the CalMAN computer (if necessary, use a USB to serial adapter).

To connect the calibration computer to a VT30/DT30/D30/VT50/WT50 with a direct Ethernet cable:

1. Connect both the display and the CalMAN computer to a DHCP capable network router with straight through Ethernet cables.
2. In the Panasonic Setup menu, select "Network Settings."
3. Under "Network Connection," select "Ethernet cable."
4. Under "IP address/DNS settings," set "IP Setting Mode" to "Automatic."
5. Under "IP address/DNS settings," record the display's IP address.

To connect the calibration computer to a VT30/DT30/D30/VT50/WT50 through a wireless (Wi-Fi) network (VT30/DT30/D30 requires supplied Wi-Fi dongle):

1. Connect the CalMAN computer to the same wireless network to which the display is connected (may require a security password).
2. In the Panasonic Setup menu, select "Network Settings."
3. Under "Network Connection," select "Wireless (Wi-Fi)."
4. Under "IP address/DNS settings," set "IP Setting Mode" to "Automatic."

5. Under "IP address/DNS settings," record the display's IP address.

CalMAN Connection Procedure

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

6. On the Panasonic display, open the "Picture" menu.

    a. Select the "Custom" Picture Mode.

    b. Highlight the "Pro Settings" menu item.

    c. Press and hold the RED key on the Panasonic remote for 4+ seconds until 'Waiting for Connection' is shown on the display.

7. In CalMAN, under *Find Display*, select "Panasonic – VT30/DT/D VT50/WT (US/NA Models)."

Serial Connection

    a. Under *Connection Method*, select *COMM*.

    b. Under *Serial Connection*, select the com port connected to the display.

    c. Click *Connect* on the display connect panel.

Ethernet Connection

    a. Under *Connection Method*, select *Socket*.

    b. Under *Socket Connection*, enter the IP Address you previously recorded.

    c. Click *Connect* on the display connect panel.

8. In CalMAN, on the *Display Control* panel.

    a. Under *Display Mode Selection*, select *ISF Day* or *ISF Night*.

    b. Under *Active Grayscale Points*, select 2 points or select 10 points (VT models only).

Panasonic DDC Picture Control

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 open the CalMAN DDC panel to make those adjustments from the CalMAN screen.

Panasonic Display Calibration

- **AV Mode** – Select CUSTOM to enable the Pro Settings for calibration.

- **Color Temp** – Select WARM 1 or WARM 2 for color temperature closest to the D65 target.

- **Color Mgmt.** – Select OFF.

- **C.A.T.S.** – Select OFF.

- **Pro Settings/Gamma** – Select 2.2 or 2.4 to test for best performance to selected target.

- **Pro Settings/Panel Brightness (backlight)** – Select HIGH, MID or LOW to set desired luminance level.

- **Pro Settings/AGC (auto brightness)** – Select 0 to disable auto brightness for accurate calibration.

- **White Balance** – If you will be adjusting the White Balance multipoint controls (under More Detailed Adjustment), first adjust the display's Gain and Cutoff controls to get the white balance tracking close to target. Adjust the Gain controls at 70% or 80% and adjust the Cutoff controls at 20% or 30%.

CalMAN AutoCal™

Prior to CalMAN Grayscale AutoCal, set the display's Brightness and Contrast controls to 50 and 100, respectively.

After AutoCal is complete, optimize the Brightness and Contrast controls for the viewing conditions.

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.

Contact Us

Submit a Technical Support Request:

http://calman.spectracal.com/techsupport.html

spectracal.com

sales@spectracal.com

+1-925-227-2700

Portrait Displays, Inc.

6663 Owens Drive

Pleasanton, CA 94588 USA

portrait.com