

CaIMAN **Setup Guide**

DVDO AVLab TPG

Test Pattern Generator

Rev. 1.2

Introduction

The DVDO AVLab Test Pattern Generator can be automatically controlled by CalMAN Display Calibration Software for flat panel and projection display measurement and calibration.

CalMAN Required Version

- 5.2.3, or newer

CalMAN Recommended Workflows

- All available measurement and calibration workflows.

DVDO TPG Required Firmware

- CP9612RS1_20140307.sii or newer

DVDO TPG Control Connection

- USB (micro USB connector)
- USB device driver is on the included USB flash drive

CalMAN Connection Procedure

1. Connect the DVDO TPG directly to a host computer with a USB micro to USB standard A connector.
2. On the CalMAN Source Settings tab, click "Find Source," then select "DVDO – AVLab TPG (RS-232 @115200)."
3. Click *Connect* on the *Source Connect* dialog.

CalMAN Source Settings Tab

The *Window Size* selection on the CalMAN *Source Settings* tab allows you to select the type of test pattern provided for color meter measurements, as controlled by CalMAN software. The following *Window Size* selections are available for the DVDO TPG:

- Window 2%
- Window 5%
- Window 10%
- Window 18% (default)
- Window 25%
- Window 50%
- Full 100%

(NOTE: For CRT, Plasma, and OLED displays, use the smallest window size that fills the measurement area of your color meter.)

Appendix A – DVDO TPG Test Patterns

The DVDO TPG test pattern generator provides full field or window pattern, as requested by CalMAN for display measurement and calibration.

The DVDO TPG also provides specialty test patterns for visual display performance testing or for optimizing the adjustment of display Picture controls (contrast, brightness, etc.).

When CalMAN is connected to the DVDO TPG, the following test patterns are available from CalMAN's specialty pattern icon:

Brightness	Vertical Lines
Contrast	Horizontal Lines
Gradient Grayscale	Judder
Full White	Colorbars 75%
Full Black	Colorbars 100%
Color	Gray Ramp
Tint	Coarse Cross Hatch
ANSI Checkerboard	Fine Cross Hatch
Sharpness	Focus
Color Bars	Half Black / White
Frame / Geometry	Half 7 Colorbars 75%
Brightness / Contrast	Half 7 Colorbars 100%
ISF Brightness	Half 8 Colorbars 75%
ISF Contrast	Half 8 Colorbars 100%
Checkerboard	

Appendix B – DVDO TPG Specifications

These specifications are provided by AV Lab.

<http://dvdo.com/product/dvdo-avlab-tpg/>

VIDEO SIGNALS

Video Format Output

VGA, SVGA, XGA, SXGA, 480i, 480p, 576i, 576p, 720p50, 720p60, 1080i50, 1080i60, 1080p24, 1080p25, 1080p50, 1080p60, 4K24(3840), 4K24(4096), 4K25(3840), 4K30(3840), 4K50(3840) 4:2:0, 4K60(3840) 4:2:0

Standard specification

HDMI

Color Space

Limited range YCbCr (BT.601 and BT.709), Full range RGB

Bit Depth

8, 10, 12

Patterns

85+ built in: Colors, PLUGE, Sharp, Focus, Bars, Ramp, Multiburst, Moving frame rate, etc.

Firmware Upgrade

Simple field upgrade via USB for features and pattern loading

INTERFACE / PORT

Side Panel

- 1 x HDMI/MHL Input
- 1 x USB 2.0 Control and Power
- 1 x DC input (1.7x4mm) 5V@3A
- 1 x HDMI output
- 1 x 1.8" stereo mini jack IR receive dongle
- 1 x Direct IR receive
- 1 x S/PDIF optical audio out
- 3 x control buttons (Patterns, Resolution, F/W Update)

MEASUREMENTS

Product Dimensions

(L x W x H) 80 x 63 x 20 mm (3.1 x 2.5 x 0.8 inches)

Product Weight

6.2 ounces

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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