

VIEWPixx /EEG™

*Designed for neurophysiology, cognition,
and psychophysics research*



OVERVIEW

The VIEWPixx /EEG is an affordable high quality display which has been optimized specifically for triggering external data acquisition systems to precisely timed visual stimuli. The VIEWPixx /EEG features LCD glass with the fastest possible pixel response, and a panel controller which has been custom designed for neurophysiology, cognition, and psychophysics research. Our innovative scanning LED backlight design eliminates ghosting, and has superior display uniformity. In addition the VIEWPixx /EEG includes 24 TTL output triggers for synchronizing external data acquisition systems such as EEG and eye trackers with microsecond precision. The triggers can also be used to initiate external stimulators such as TMS. The levels of the 24 TTL outputs are controlled by the 8-bit RGB components of the display's top-left pixel. This strategy is simple to program with any stimulus generation software, and guarantees perfect synchronization between video and external hardware.

FEATURES

- 8-BIT RGB INTENSITY
- 1920 x 1080 DISPLAY RESOLUTION AT 120 Hz
- DETERMINISTIC TIMING BETWEEN RECEPTION OF VIDEO SIGNAL AND UPDATE OF DISPLAY PIXELS
- SCANNING LED BACKLIGHT WITH DIRECT LED ARRAY
- 24 TTL TRIGGER OUTPUTS
- DIGITAL OUTPUTS FEATURE MICROSECOND SYNCHRONIZATION TO VIDEO REFRESH
- PIXEL RISE AND FALL TIME SYMMETRY

******Plug and play monitor, no configuration required******

VIEWPixx /EEG SPECIFICATIONS

LCD SPECIFICATIONS

- Display resolution: 1920(H) x 1080(V) pixels
- 23.6 inch display size (diagonal)
- Pixel arrangement: RGB (Red dot, Green dot, Blue dot) vertical strip
- TFT LCD
- Contrast ratio: Typical 1000:1
- Viewing angle: 170° (Horizontal), 160° (Vertical)
- Polarizer surface: Antiglare
- 100Hz to 120Hz refresh rate with zero latency stimulus presentation
- 60Hz to 100Hz refresh rate with internal frame buffering

PIXEL SPECIFICATIONS

- Pixel rise and fall time symmetry
- Grey-to-Grey response time : 1ms typical
- 8 bits of resolution on each of the RGB channels
- Pixel pitch: 0.2715(H) x 0.2715(V) mm

BACKLIGHT SPECIFICATIONS

- Luminance: 100 cd/m²
- Scanning LED backlight
- Full array of white LEDs
- Display luminance uniformity: 95% over 95% of display area
- Display color uniformity: 90% over 95% of display area

VIDEO PROCESSING

- Video input: 1920 x 1080 pixels, 60 to 120 Hz, 24 bits (Dual link DVI)
- Deterministic timing between reception of video signal and update of display pixels
- Completely bypass all image processing “enhancements” prevalent in standard consumer LCD panels

DIGITAL OUTPUT

- Number of digital outputs: 24 on db-25 connector
- Controlled by the first pixel (8bit Red, 8bit Green and 8bit Blue)
- Output drive stage: 5V through 25Ω series resistor
- Maximum output current:
Source: 15mA
Sink: 12mA

POWER

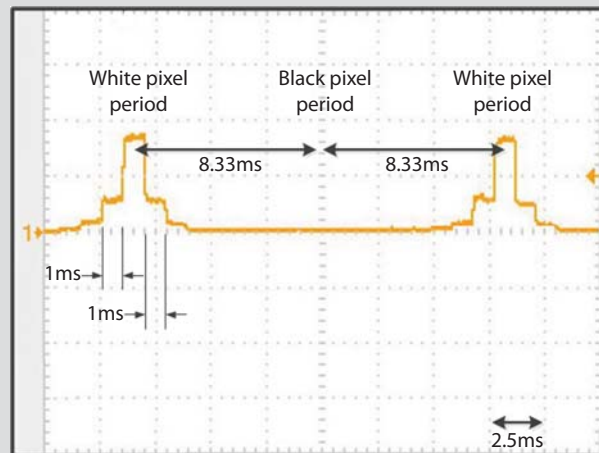
- Power consumption: 100W
- Input voltage: 12Vdc – 8.33A
- International AC adaptor input: 90Vac – 264Vac (47Hz – 63Hz)

VIEWPixx STAND

- Mounting standards: VESA MIS-D/E, MIS-F
- Hole pattern: 100 x 100mm & 75 x 75mm

Lift	Tilt	Pan	Rotation	VESA
5" / 13 cm	30°	Base 360°	90° P/L	MIS-D/E / MIS-F

PIXEL RESPONSE TIME INFORMATION 120Hz ALTERNATING WHITE BLACK



ORDERING INFORMATION

DESCRIPTION: VIEWPixx /EEG
P/N: VPX-VPX-2006A

VPixx Technologies Inc.

1494 Montarville suite 206
Saint-Bruno, QC
Canada, J3V 3T5

TEL/FAX: (514) 328-7499
EMAIL: sales@vpixx.com

