

Connecting & Writing to an E Ink Panel

Using the Digital View driver and a Raspberry Pi

Digital View, Jan 2022 www.digitalview.com

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You Will Need... For the display system

- E Ink panel, shown using ED133UT3
- Digital View driver board, shown using EPM-050
- Raspberry Pi, shown using Zero 2W
- Power supply to Pi (micro USB)
- Micro USB cable











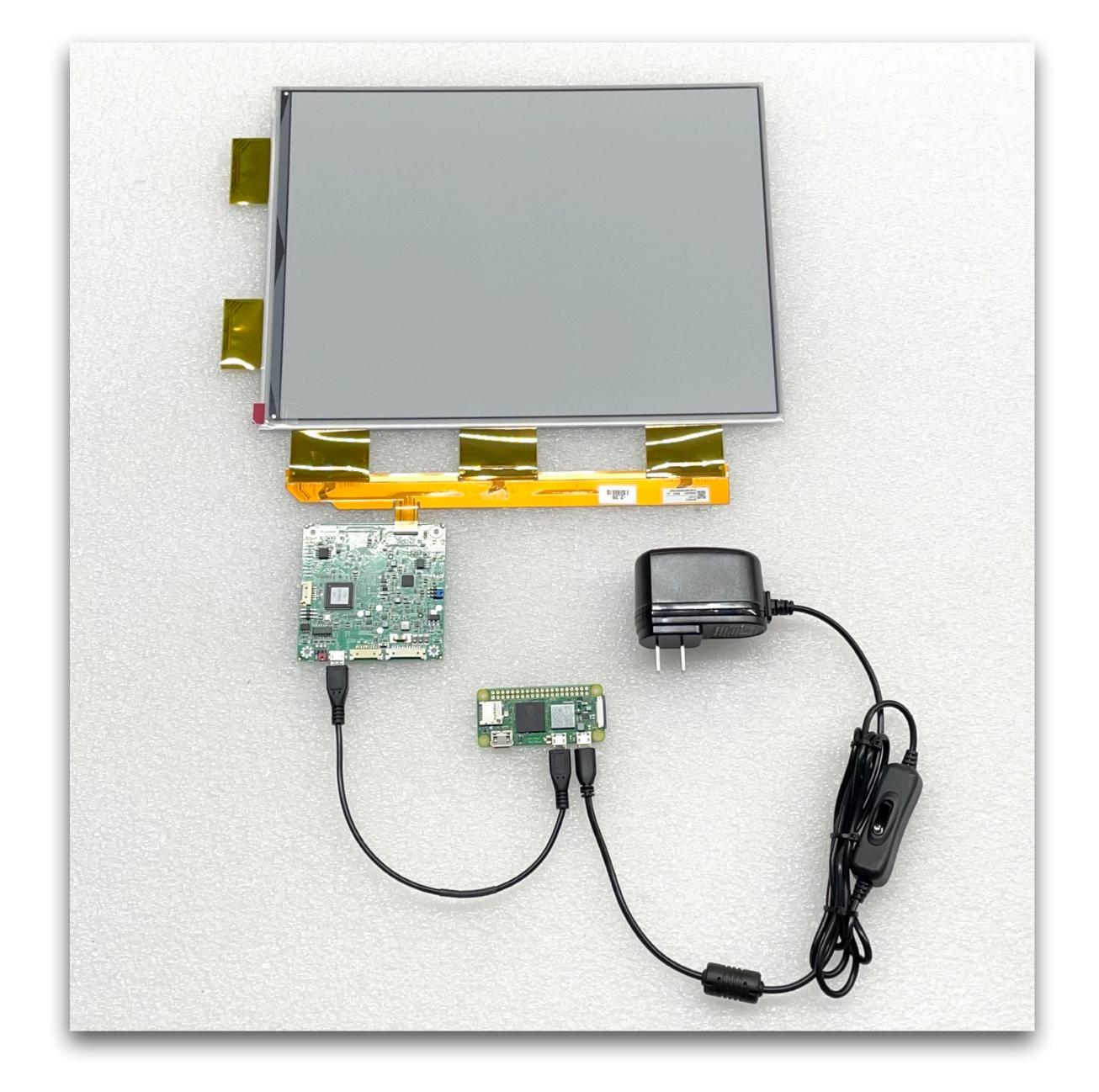


NOTE: For the purposes of this guide we are using a 13.3" panel and the Digital View EPM-050, the process is similar for other panels. Alternatives to the Raspberry Pi are also suitable. For example Linux or Android. See the programming Guide on the DV website for the protocol.

^{*} Suitably updated & configured, see Setting up EPM-050.

Connected Wi-Fi Update

This shows a minimal display system using a Raspberry Pi Zero 2W. Content update with this arrangement would be by Wi-Fi*





^{*} There are various methods for setting up Wi-Fi on a Raspberry Pi, we will be offering a simple USB based solution in the near future but at this time the easiest way is to setup the Pi before connecting to the E Ink display.

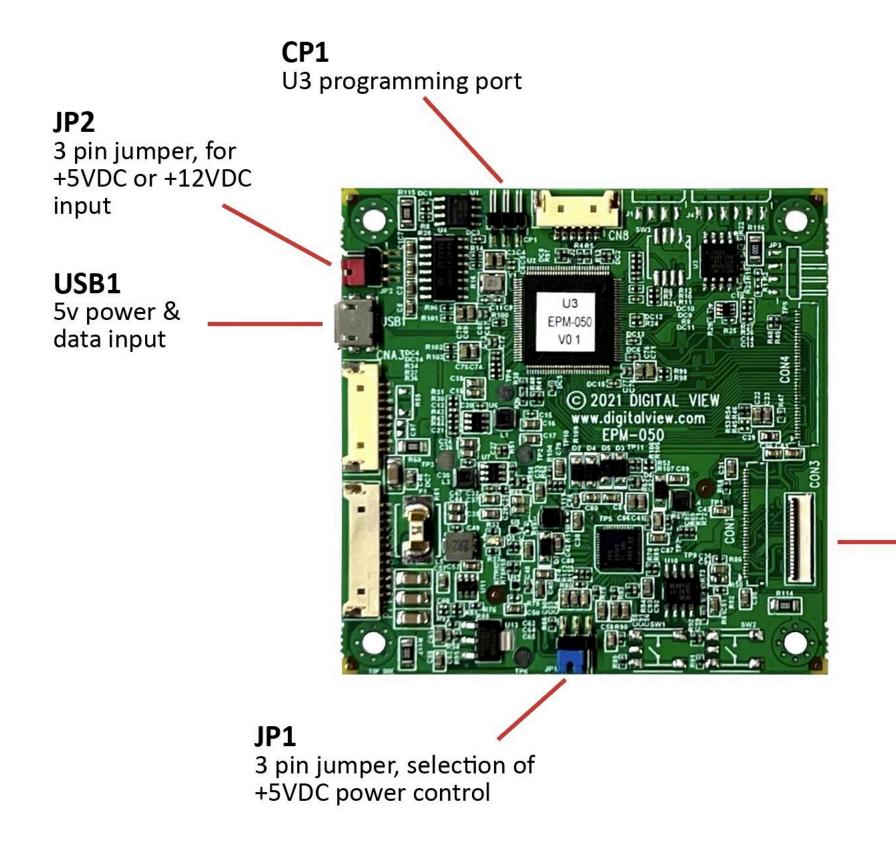
Connected (2) With USB memory stick

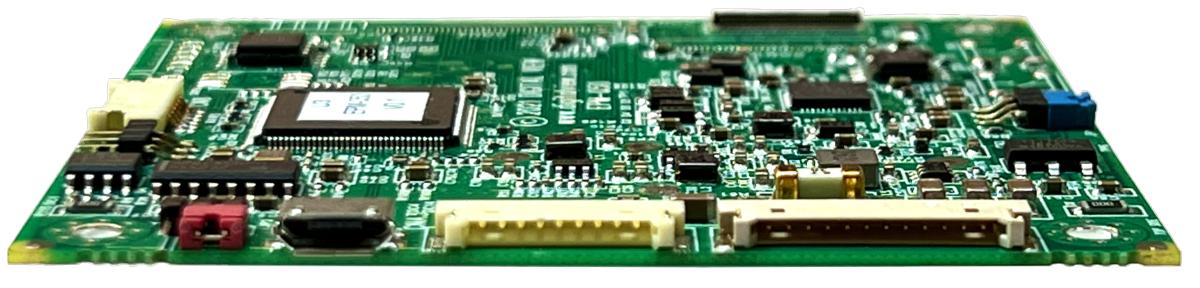
This system is also using a Raspberry Pi Zero 2W with the addition of a USB hub to enable content update from a USB memory stick





EPM-050





Micro USB

The EPM-050 is designed for E Ink 13.3" monochrome and Kaleido color panels; and is only 4mm thick



Panel Connector



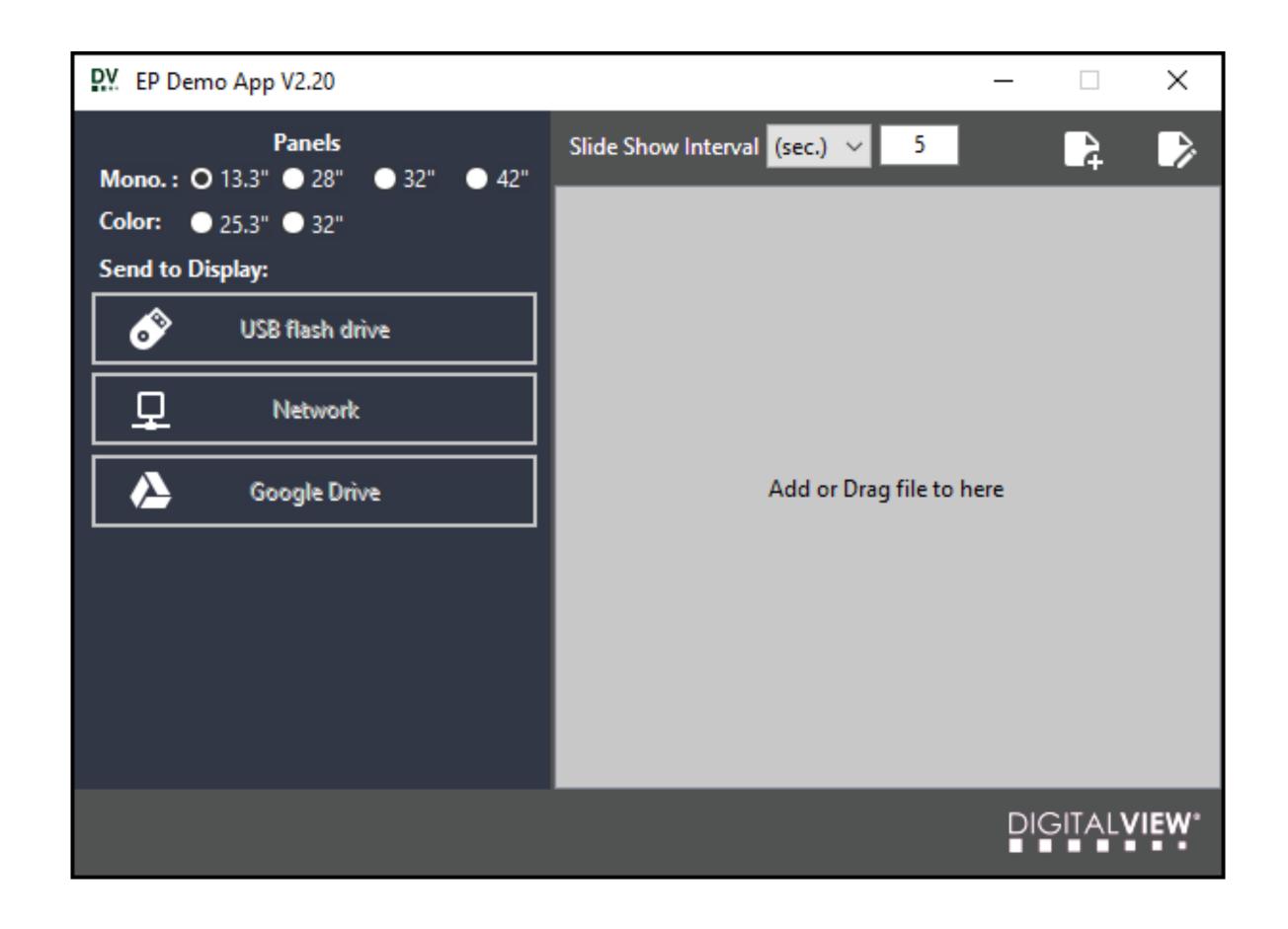
*The EPM-050 web page is: https://www.digitalview.com/controllers/ epm-050-eink-interface.html. For other E Ink panel sizes details are available on the website at: https://www.digitalview.com/epaper/epaper- solutions-e-ink.html

CON3

To Update Images...

You also need

- Windows PC / Laptop with:
 - USB memory stick; or
 - Wi-Fi; or
 - Google Drive & wi-fi
- Digital View EP Demo App*

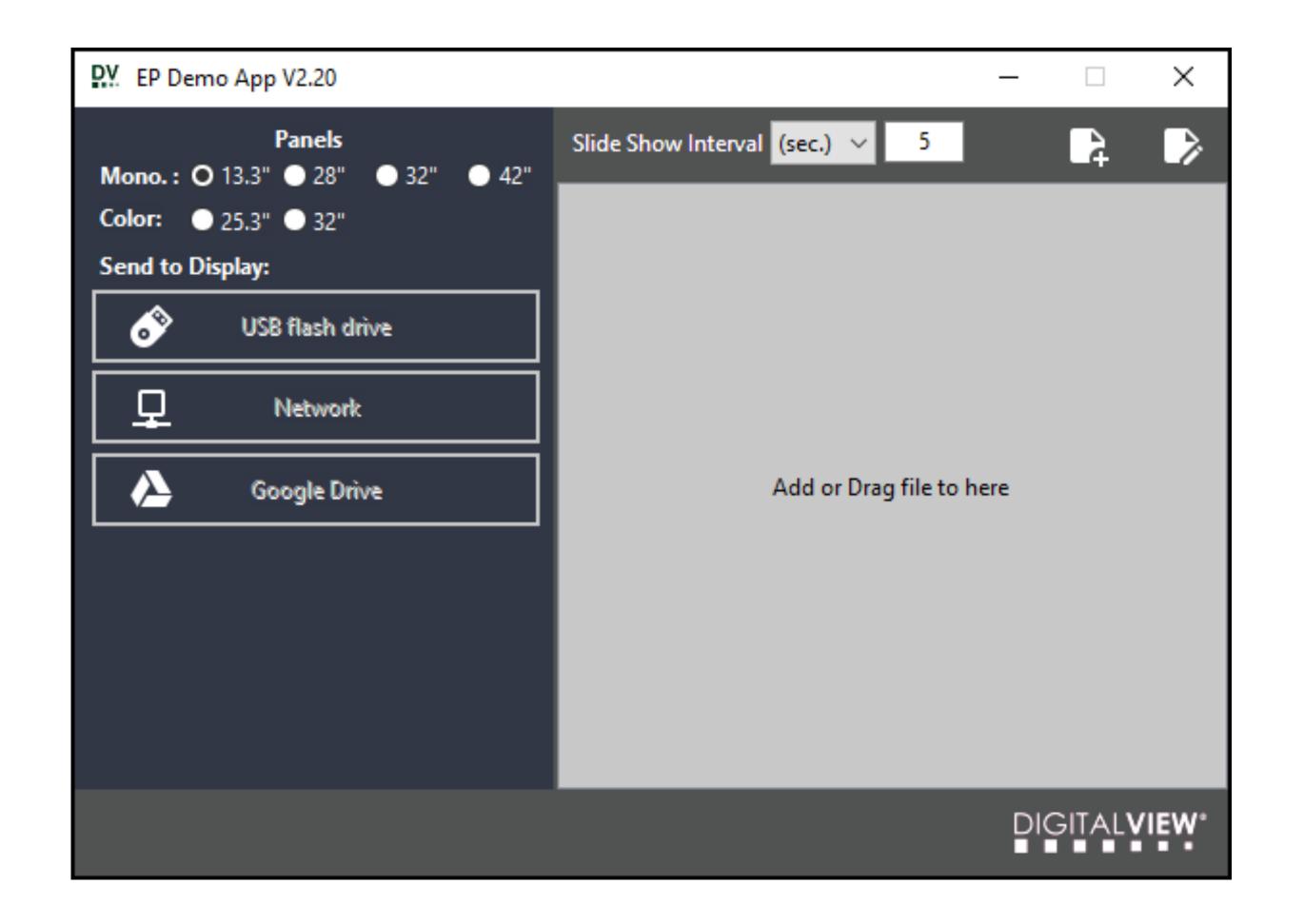




Digital View EP Demo App

Windows compatible

- Monochrome: 13.3" 28" 32" 42"
- Color: 25.3" 32"
- Update via:
 - USB
 - Network / Wi-Fi
 - Google Drive
- Content Creator
- Playlist
- Slide show interval for playlist
- Landscape / Portrait correction
- JPEG or BMP images
- Custom versions for tiled panels



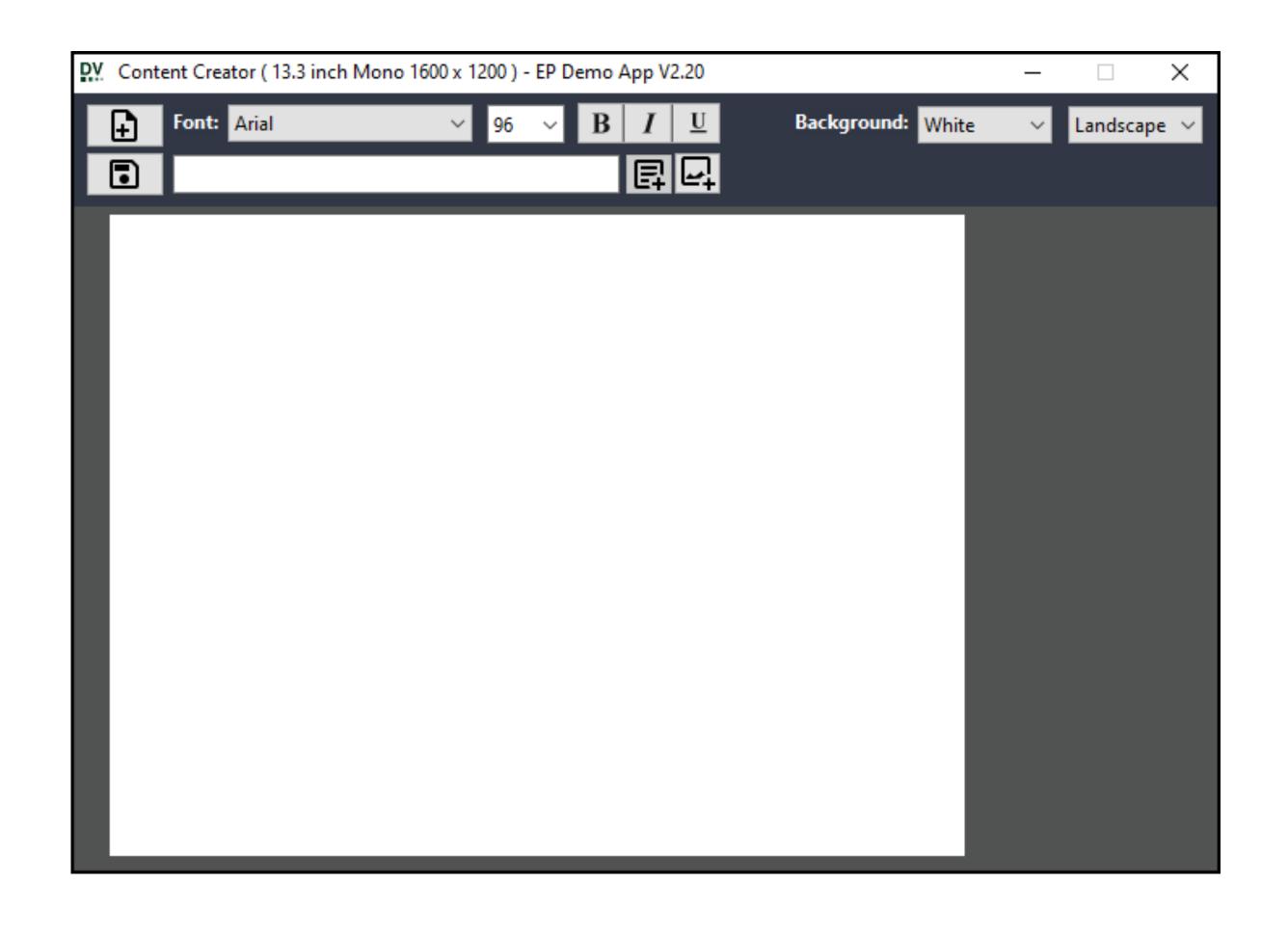


EP Demo App - Content Creator*

Windows compatible

- Monochrome: 13.3" 28" 32" 42"
- Color: 25.3" 32"
- Background & auto text color
- Text formatting
- Add image with scaling & position
- Landscape / Portrait
- Auto add to playlist

^{*} The Content Creator is part of the EP Demo App



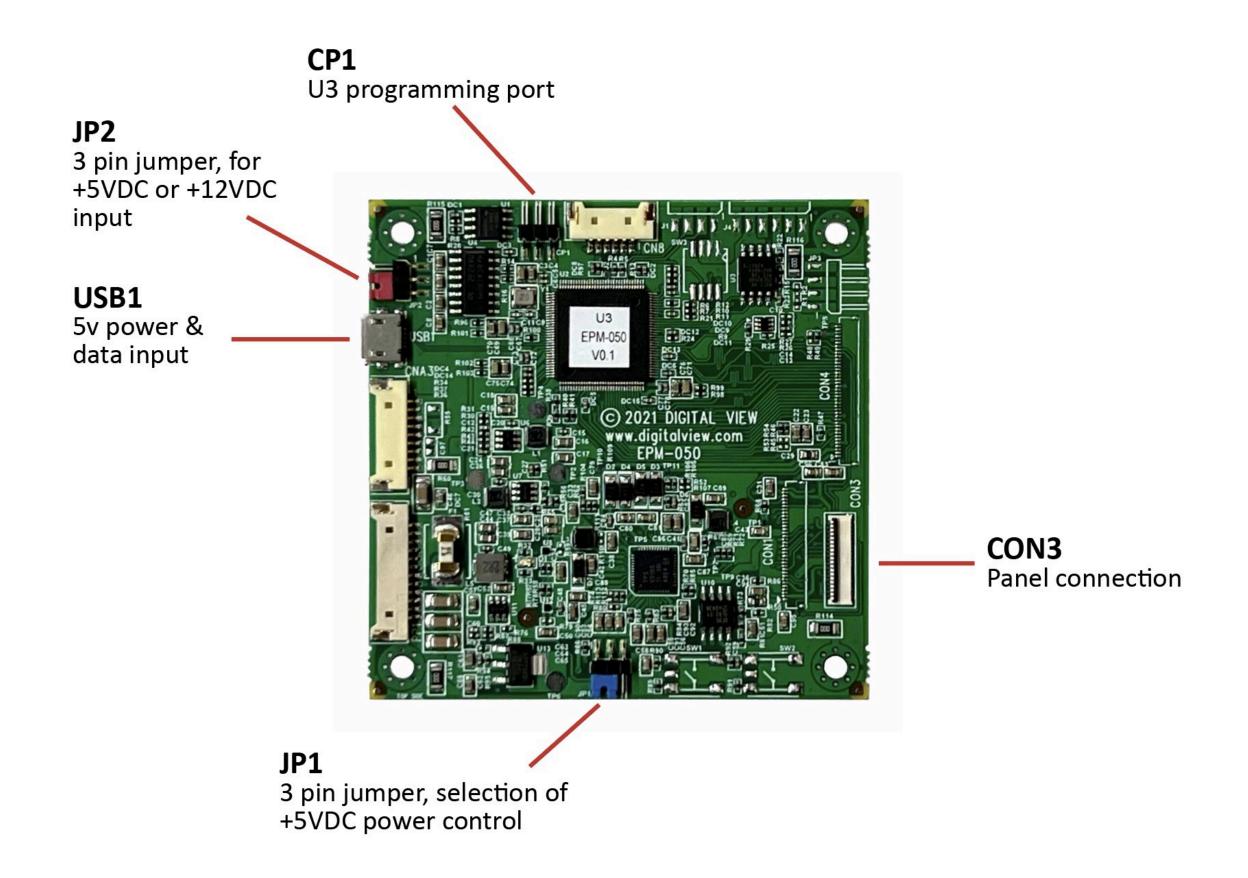


*Setting up EPM-050 Via CP1 programming port

- Update firmware
- Set VCOM value
- Update waveform

Currently done using the E Ink Windows application. DV is developing a dedicated app to enable this.

The E Ink panel and EPM-050 may already be paired. This procedure is only required it the parts were acquired separately or it is not confirmed that their are paired.





Furthermore

Digital View also provides...

- Driver board for all panel sizes from 13.3" to 42": EPM-100, EPM-10028L, EPM-050
- In development: Low power media player solutions for E Ink
- Software: EP Demo App, Conversa CMS, and 3rd party application specific CMS systems
- Demo & evaluation kits, open frame, demo displays, enclosure design
- Outdoor Master final assembly & setup
- Glass handling equipment
- Glass or acrylic bonding services
- Protective film, replaceable, anti-glare, UV protection
- Custom mechanical & electronics engineering
- Power solutions such as solar





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For more information contact us via: www.digitalview.com or call

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