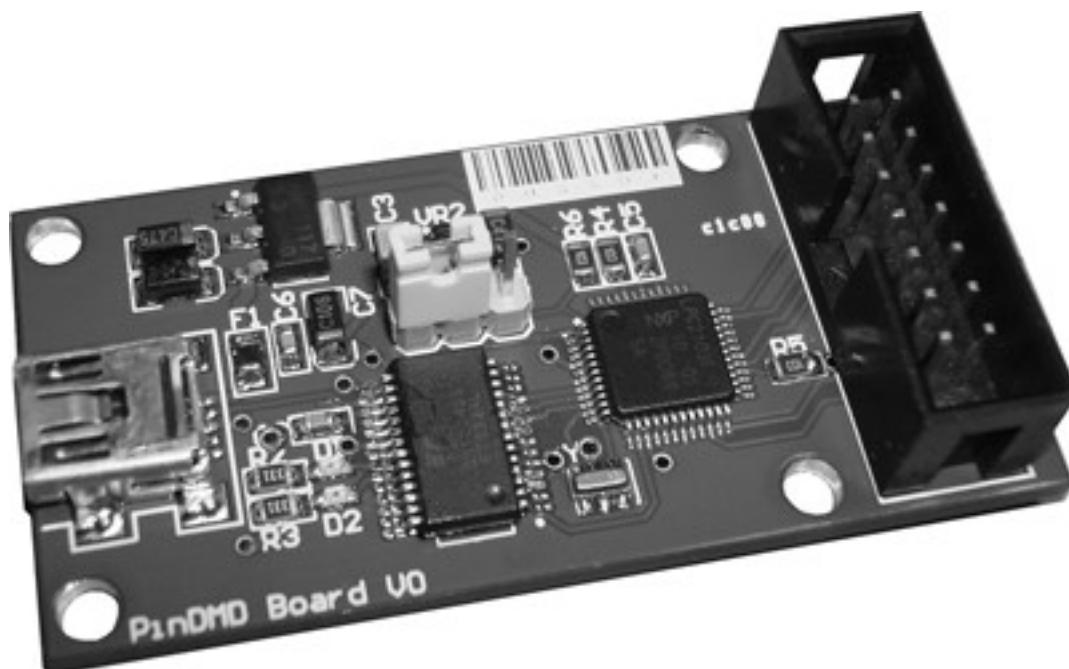


pinDMD V1 Installation Guide



WHAT'S INCLUDED

| | |
|----------------------------|----|
| pinDMD Board | x1 |
| 14-way IDC Interface Cable | x1 |

COMPATIBLE PINBALL DOT MATRIX DISPLAYS

Vishay Plasma Range

APD-128G032
APD-128G032A
APD-192G064-1

Vishay LED Range

LEE-128G032
LEE-128G032-1
LEE-128G032A
LEE-128G032B

Pin-LED

20002

X-PIN

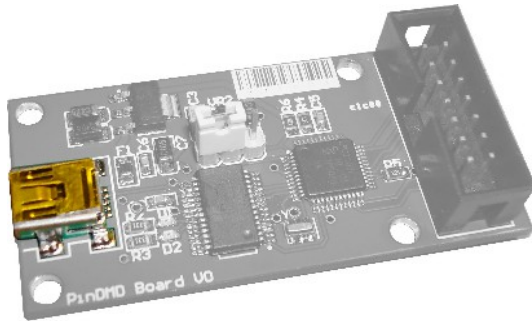
XP-DMD4096

Note: Other direct-replacement pinball Dot Matrix Displays (ie. Cherry) should work as well but have not been tested!

Warning: The MINI-B USB connector is quite fragile with not much support. Placing too much pressure on this connector may lead to broken solder joints.

Warning: Make sure the pinDMD board is placed in a well ventilated area. To much heat can cause the pinDMD to under-perform resulting in corrupt frame data / render problems.

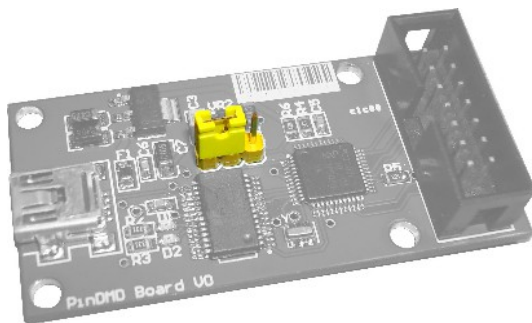
DEVICE OVERVIEW



Mini USB B Connector

Interfaces pinDMD with host computer and also supplies power to the pinDMD.

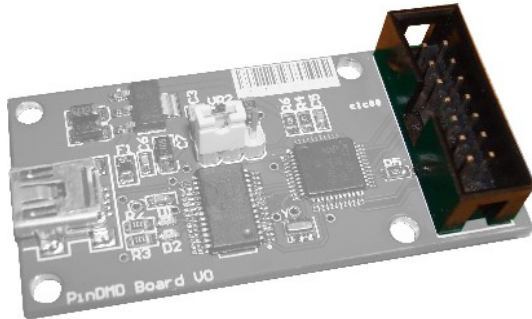
Note: Bad quality USB cables can cause corrupted frame data!



Firmware update Jumper

Used to update the pinDMD's firmware.

Default position: LEFT as shown here.



Dot Matrix Display Header

Plug one end of the 14-way IDC connector into this header and the other end into the dot matrix display's 14-way IDC header.

INSTALLATION

THIS WARNING ONLY APPLIES TO THE PINLED 20002 AND XPIN BOARDS, NOT THE VISHAY BOARDS.

Note: Make sure the Dot Matrix Display has power before the pinDMD board is powered. The pinDMD can be damaged if connected to a unpowered dot matrix display.

An ideal setup would be where the Dot Matrix Display is connected to the same power source as the computer which is controlling the pinDMD. In this situation the Dot Matrix Display will be powered straight away and the pinDMD soon after (once the computer boots and enables its USB ports). Running your 5v Dot Matrix Display using your pc psu is also a perfect solution.

Some computers will keep the USB ports powered even when the pc is switched off. It is recommended this option is disabled to prevent possible damage to the pinDMD board from being connected to a unpowered Dot Matrix Display.

Connect the pinDMD board to your computer using a USB-A to Mini USB-B cable.

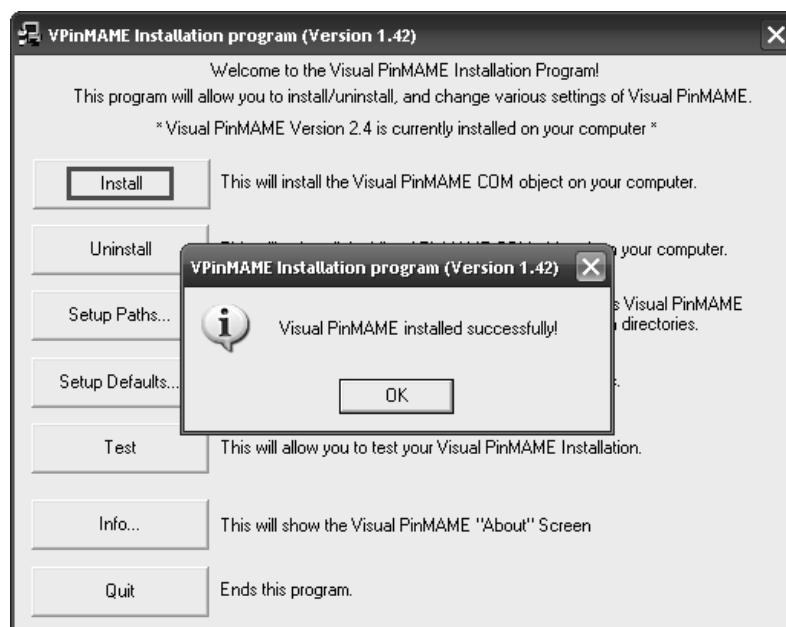
If the usb drivers are not automatically installed please follow this FTDI driver install guide <http://www.ftdichip.com/Support/Documents/InstallGuides.htm>

Download the custom [VpinMAME.dll](#)

Replace your current VpinMAME.dll with this version

It is recommended to rename your old file in case you want to revert to it.

Run the VisualPinMAME SETUP.exe installer and click *Install* this will install the custom VpinMAME.dll



All pinball tables can be loaded and run as usual.

TWEAKING THE PINDMD

If you experience dim pixels slightly flickering on certain animations. This might be due to the USB transfer speed being slightly to fast. It can be set to a slower speed by making a small adjustment to the boards FTDI eeprom.

Download FT_PROG from http://www.ftdichip.com/Support/Utilities/FT_Prog%20v2.6.8.zip

Download the new xml Template from <http://www.pindmd.com/pinDMD1001.xml>

Warning: Make sure pinDMD is the only FTDI device plugged into your pc when running FT_Prog.

Do not change any other settings while using FT_Prog this can render the pinDMD unusable.

Note: The latest version of [VpinMAME.dll](#) will need to be installed for this tweak to work.

Run FT_Prog.exe

Click [File][Open Template]

Select the downloaded pinDMD1001.xml

Click the magnifying glass icon (Scan and Parse)

Right click on 'Device: 0' and click [Apply Template][Template: pinDMD1001.xml]

Click the lighting bolt icon (Program Devices)

Click Program (First confirm Serial Number is 'DMD1001 - Fixed')

Disconnect then reconnect the pinDMD to your USB

The pinDMD will now send the frame data at a slightly slower speed. If you wish to go back to the original speed. Open the pinDMD1001.xml in a text editor and change

<SerialNumber>DMD1001</SerialNumber> to <SerialNumber>DMD1000</SerialNumber>

and repeat the above process.

ACKNOWLEDGEMENTS

VpinMAME.dll is a custom build of PinMame

<http://www.pinmame.com/>

<http://sourceforge.net/projects/pinmame/develop/>

Custom pinDMD build can be downloaded from the following link.

<http://www.pindmd.com/pinmame.zip>

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THIS BOARD IS INTENDED FOR USE FOR DEMONSTRATION, OR EVALUATION PURPOSES ONLY AND IS NOT CONSIDERED BY PINDMD TO BE A FINISHED END-PRODUCT FIT FOR GENERAL CONSUMER USE. PERSONS HANDLING THE PRODUCT(S) MUST HAVE ELECTRONICS TRAINING AND OBSERVE GOOD ENGINEERING PRACTICE STANDARDS. AS SUCH, THE GOODS BEING PROVIDED ARE NOT INTENDED TO BE COMPLETE IN TERMS OF REQUIRED DESIGN-, MARKETING-, AND/OR MANUFACTURING-RELATED PROTECTIVE CONSIDERATIONS, INCLUDING PRODUCT SAFETY AND ENVIRONMENTAL MEASURES TYPICALLY FOUND IN END PRODUCTS THAT INCORPORATE SUCH SEMICONDUCTOR COMPONENTS OR CIRCUIT BOARDS. THIS BOARD DOES NOT FALL WITHIN THE SCOPE OF THE EUROPEAN UNION DIRECTIVES REGARDING ELECTROMAGNETIC COMPATIBILITY, RESTRICTED SUBSTANCES (ROHS), RECYCLING (WEEE), FCC, CE OR UL, AND THEREFORE MAY NOT MEET THE TECHNICAL REQUIREMENTS OF THESE DIRECTIVES OR OTHER RELATED DIRECTIVES.