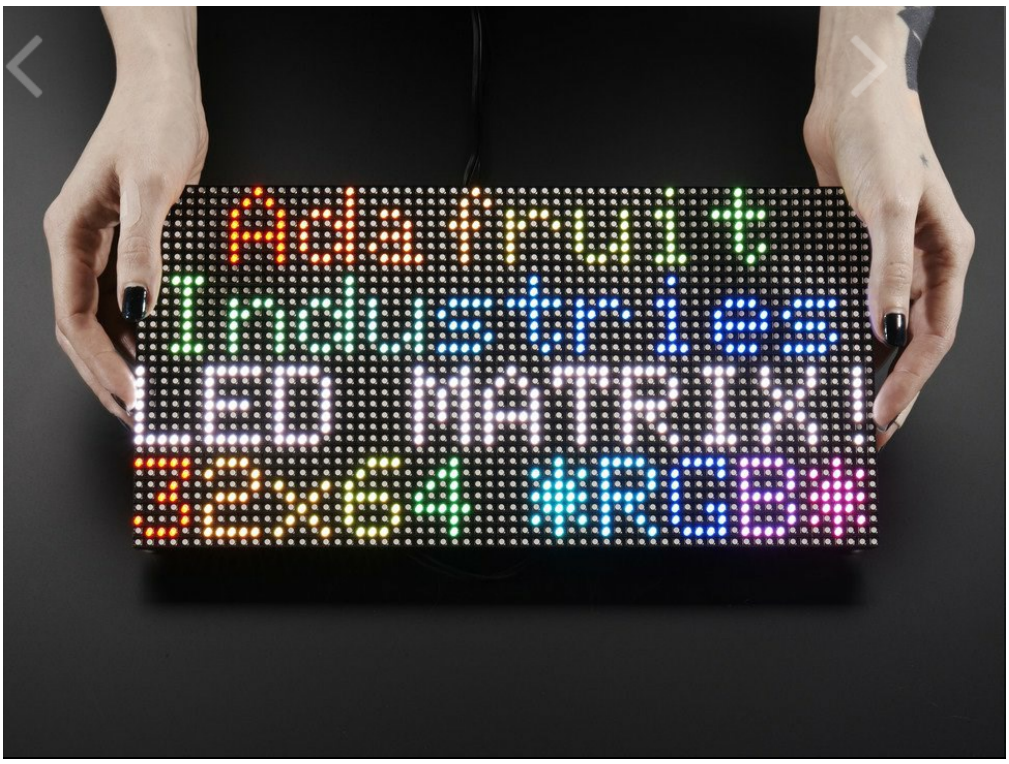

64x32 RGB LED Matrix - 5mm pitch

PRODUCT ID: 2277

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DESCRIPTION

Bring a little bit of Times Square into your home with this sweet 64x32 square RGB LED matrix panel. These panels are normally used to make video walls, here in New York we see them on the sides of busses and bus stops, to display animations or short video clips. We thought they looked really cool so we picked up a few boxes of them from a factory.

This version is the 5mm pitch 64x32 RGB LED Matrix. Please note you cannot use an Arduino UNO to drive this size, its way too big! Use an Arduino Mega, Raspberry Pi, BBB or other device that can handle displaying to RGB matricies and has plenty of RAM.

This is a a lot like our 6mm Grid 32x32 RGB LED matrix panel, but it's about twice as wide and looks really good from far way. If you are looking for other pitches of 64x32 matrix, check out our 3mm pitch, 4mm pitch, or 6mm pitch 64x32 RGB LED Matrices.

This matrix has 2048 bright RGB LEDs arranged in a 64x32 grid on the front. On the back there are two IDC connectors (one input, one output: in theory you can chain these together) and 12 16-bit latches that allow you to drive the display with a 1:16 scan rate.

These displays are technically 'chainable' - connect one output to the next input - but our Arduino example code does not support this (yet).

These panels require 13 digital pins (6 bit data, 7 bit control) and a good 5V supply, up to 4A per panel. We suggest our 4A regulated 5V adapter and then connecting a 2.1mm jack. Please check out our tutorial for more details!

Comes with:

- A single 64x32 RGB panel,
- An IDC cable
- A plug in power cable
- We also include 4 mounting screws and mini-magnets (it appears these are often mounted on a magnetic base).

Keep in mind that these displays are designed to be driven by FPGAs or other high speed processors: they do not have built in PWM control of any kind. Instead, you're supposed to redraw the screen over and over to 'manually' PWM the whole thing. On a 16 MHz Arduino Mega, we managed to squeeze 12-bit color (4096 colors) with 40% CPU usage but this display would really shine if driven by any FPGA, CPLD, Propeller, XMOS or other high speed multi-core controller. The good news is that the display is pre-white balanced with nice uniformity so if you turn on all the LEDs it's not a particularly tinted white.

Of course, we wouldn't leave you with a datasheet and a "good luck!" We have a full wiring diagrams and working Arduino library code with examples from drawing pixels, lines, rectangles, circles and text. You'll get your color blasting within the hour! On an Arduino, you'll need 16 digital pins, and about 3200 bytes of RAM to buffer the 12-bit color image.

Note:

- The back of the matrix will either be green or black
- This product may come with one or two power connections
- There may be a short coupling data cable installed in the center

Note: Shipping weight reflects UPS' new dimensional weight regulations.

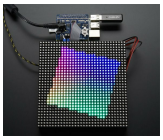
TECHNICAL DETAILS

- Datasheet
- Dimensions: 318mm x 158mm x 15mm / 12.5” x 6.2” x 0.6”
- Panel weight with IDC cables and power cables: 453g
- 5V regulated power input @ ~4A (with all LEDs on)
- 5V logic
- 1/16 scan rate
- Indoor display, 160 degree visibility
- Displays are 'chainable' - connect one output to the next input - but our Arduino example code does not support this yet

RoHS

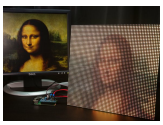
LEARN

32x16 and 32x32 RGB LED Matrix
Hundreds of pixels of eye-blasting LED glory!



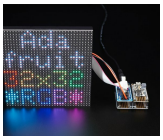
Adafruit RGB Matrix + Real Time Clock HAT for Raspberry Pi
DIY your very own Times Square sign

NextBus transit clock for Raspberry Pi
Should I stay or should I go now?



Raspberry Pi LED Matrix Display
Show the Pi's video output on a large RGB LED matrix

display!



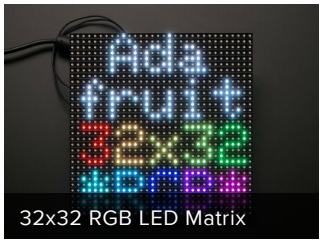
Adafruit RGB Matrix FeatherWing

Blast those pixels!

MAY WE ALSO SUGGEST...

16x24 Red LED Matrix Panel

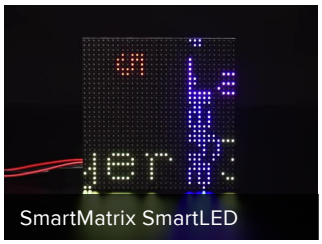
64x32 RGB LED Matrix -



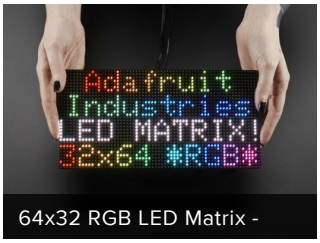
32x32 RGB LED Matrix

Adafruit NeoPixel NeoMatrix

64x32 RGB LED Matrix -



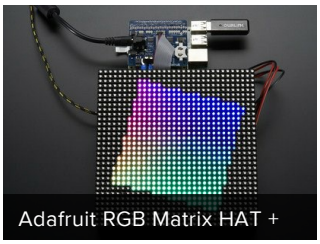
SmartMatrix SmartLED



64x32 RGB LED Matrix -

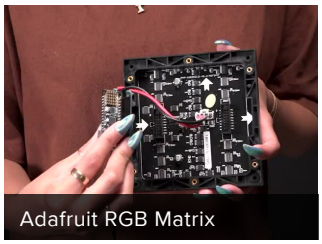
64x32 Flexible RGB LED

Flexible 8x8 NeoPixel RGB



Adafruit RGB Matrix HAT +

64x32 Flexible RGB LED



Adafruit RGB Matrix

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"In considering any new subject, there is frequently a tendency, first, to overrate what we find to be already interesting or remarkable; and, secondly, by a sort of natural reaction, to undervalue the true state of the case, when we do discover that our notions have surpassed those that were really tenable" - Ada Lovelace