

In this document, I will describe the configuration in order to have the panel working with Jynx and Arduino Uno. Online effects change.

My panel has 600 leds. As it is based on the GS1903 chip, each IC controls 3 leds. So in that sense I have 30 leds on each line (X-axis) but only 10 channels per line. As I have 20 lines (Y-axis), for the software, the panel will be composed by 200 leds (10x20).

The very first think to do is to compile and transfer the following code to your Arduino Uno (change the NUM_LEDS to the number of leds on your matrix. Data pin is on pin 5 of arduino):

```
#include "FastLED.h"

#define NUM_LEDS 200

const int dataline = 5;

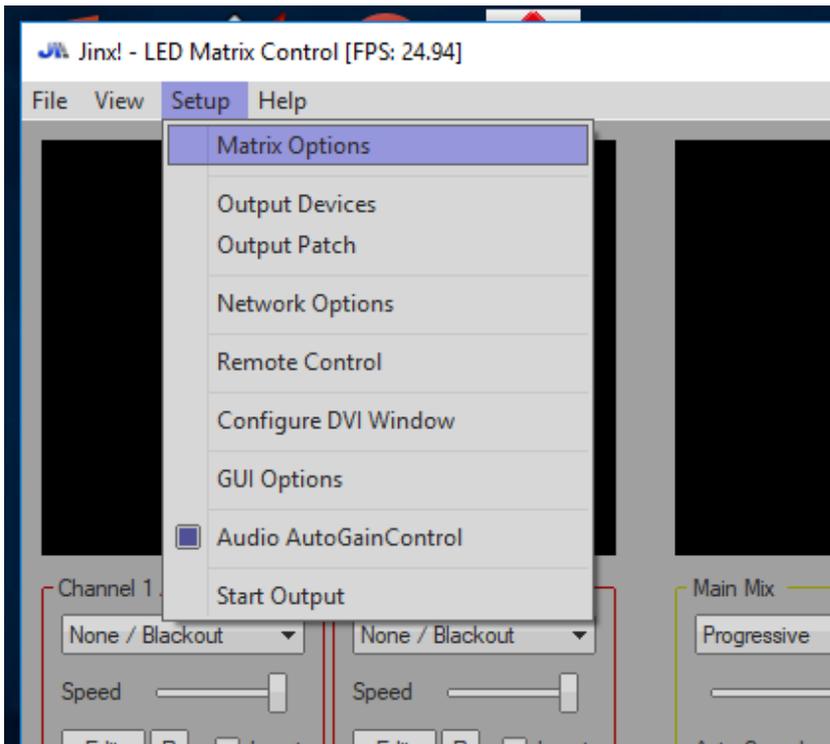
CRGB leds[NUM_LEDS];

void setup() {
  Serial.begin(1000000);
  LEADS.addLeds<WS2812B, dataline>(leds, NUM_LEDS);
  pinMode(13, OUTPUT);
  digitalWrite(13, LOW);
}

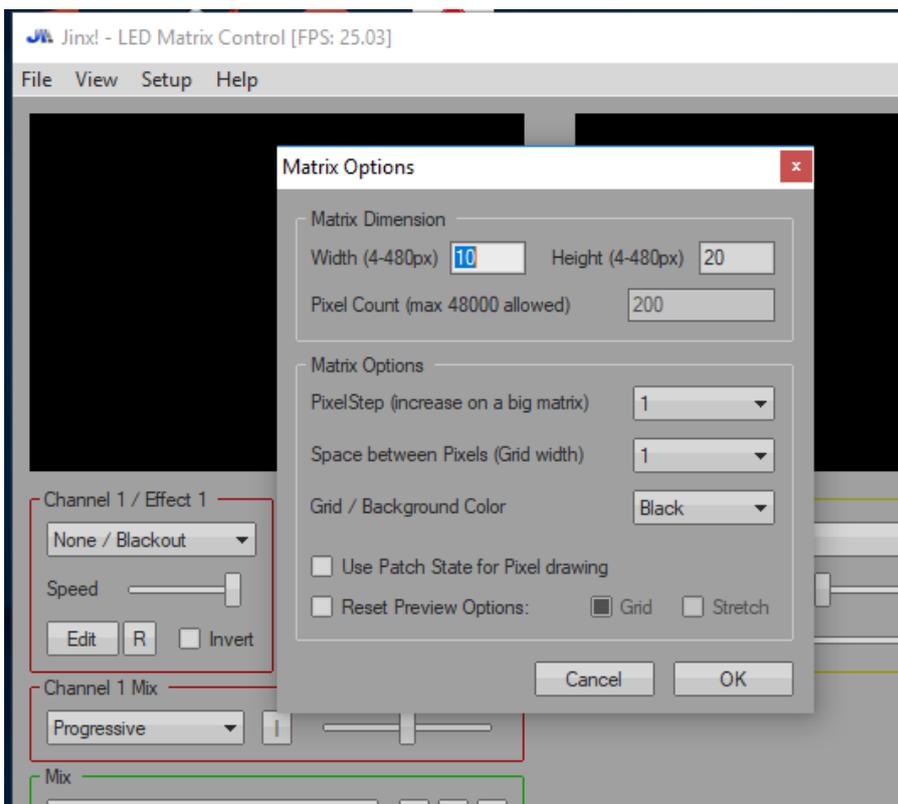
int serialGlediator() {
  while (!Serial.available()) {}
  return Serial.read();
}

void loop() {
  while (serialGlediator() != 1) {}
  digitalWrite(13, HIGH);
  for (int i=0; i < NUM_LEDS; i++) {
    leds[i].r = serialGlediator();
    leds[i].g = serialGlediator();
    leds[i].b = serialGlediator();
  }
  FastLED.show();
  digitalWrite(13, LOW);
}
```

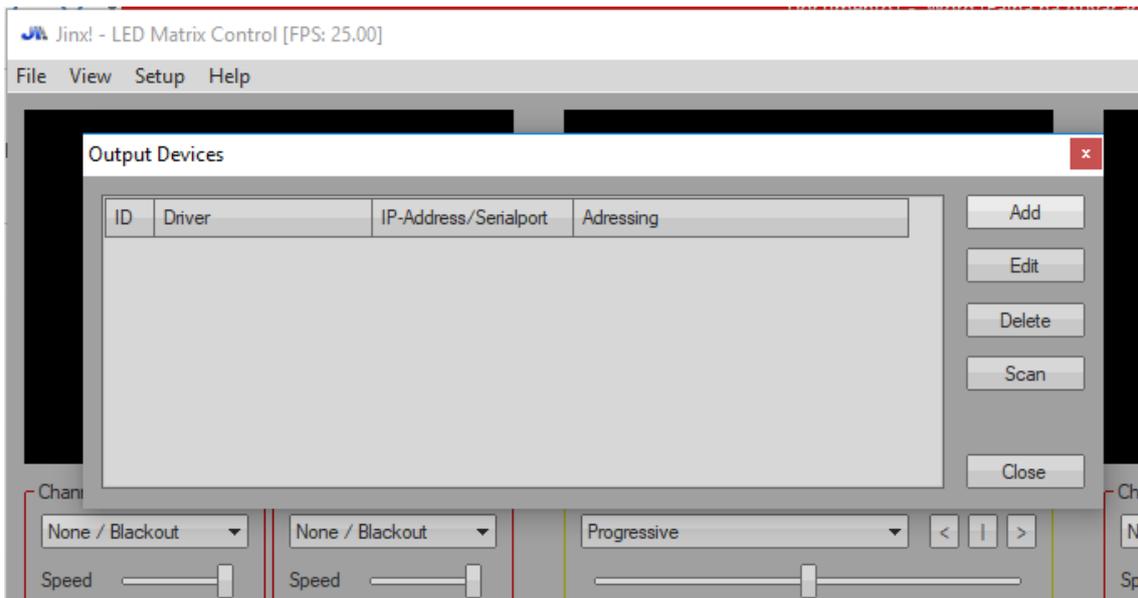
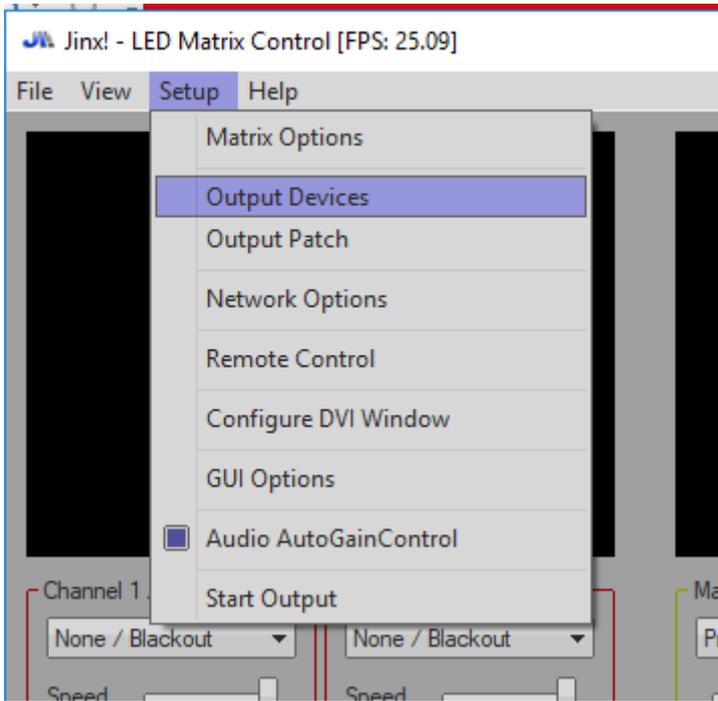
Now open the Jynx, and set up your matrix



Mine is 10 by 20 so it will look like this:

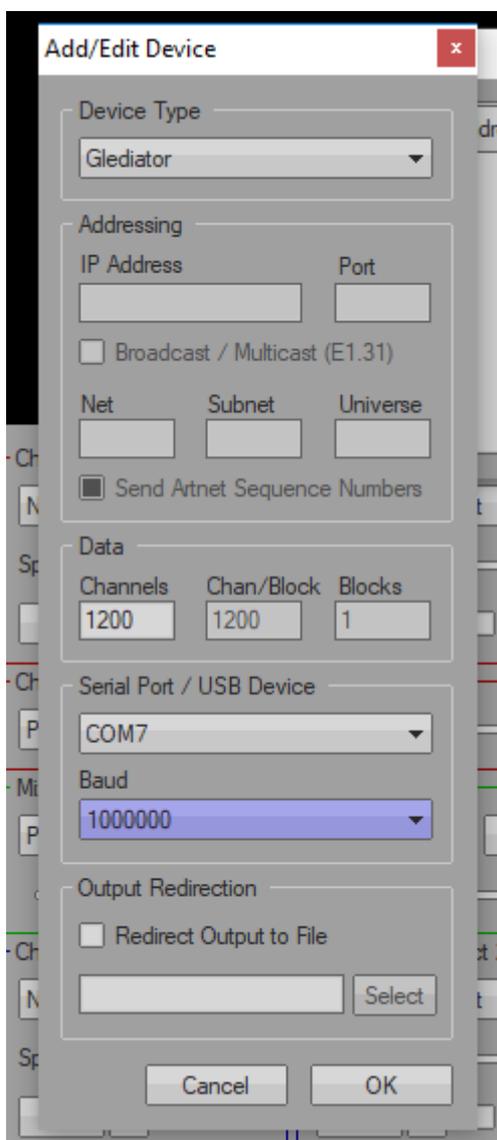


The next step is to configure the output device. You need to know the port of your Arduino Uno (mine is COM7):

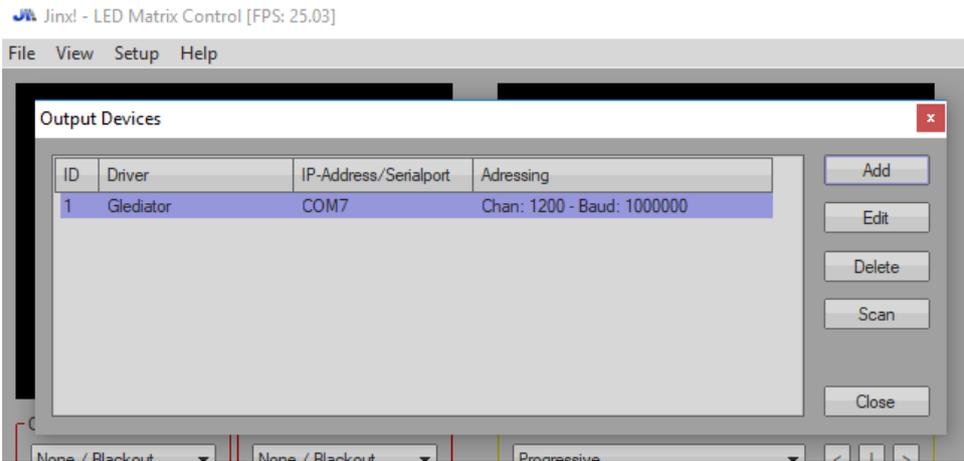


Click on Add

Here is the trick stuff. The first time I have used, I have left the number of channels in 600. As a result, the last 2 lines of my panel were flickering. It took me a while to discover that, but I got it at the end. Therefore, I suggest putting at least 10 or 20 percent more channels than your matrix has. The number of channels is theoretically calculated by the number of leds times 3 (RGB).

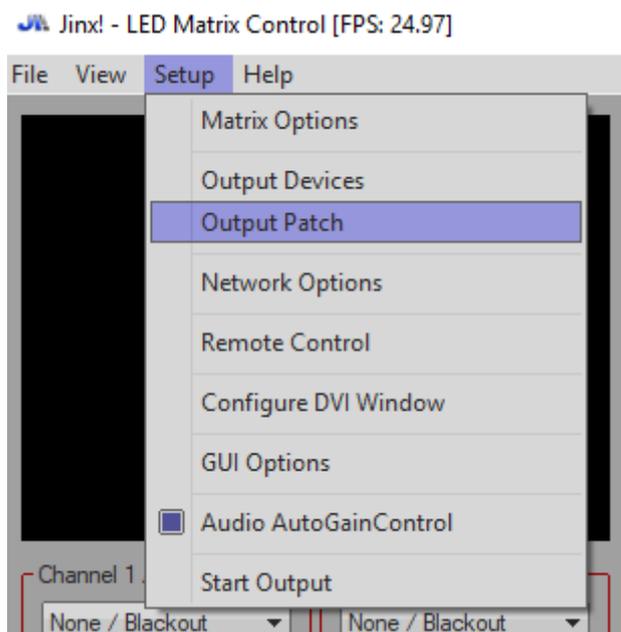


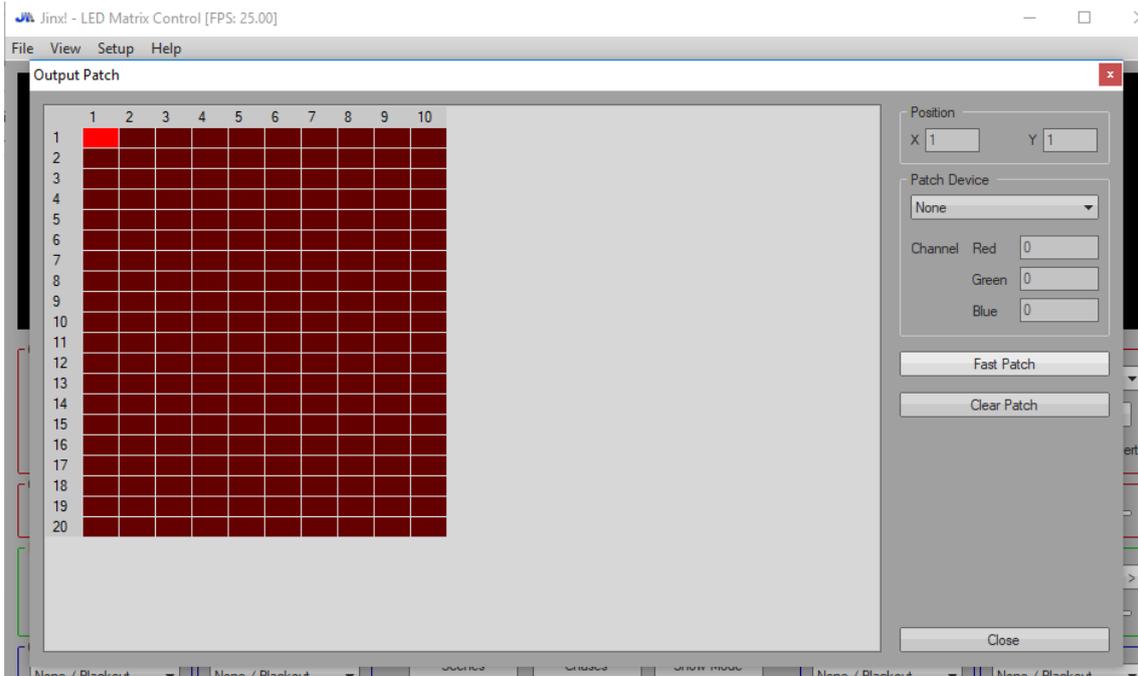
Click on OK



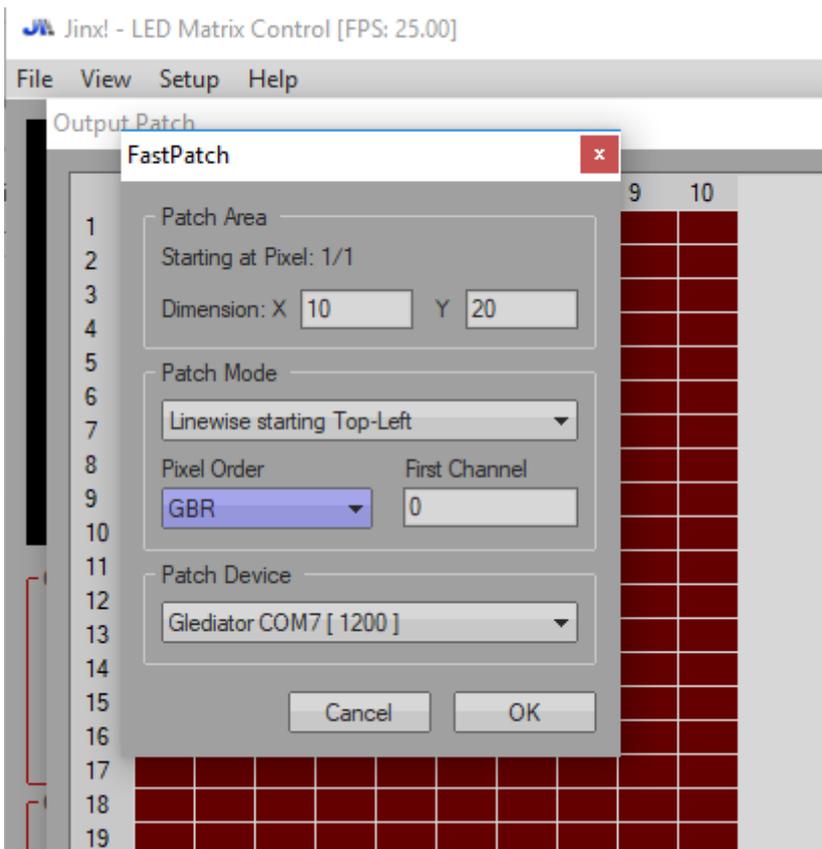
Click on close.

Now we are prepared to set up the Output Patch. On the Output Patch we inform to the software where to send the information to. It is a way to say where the channels start and end on the panel.

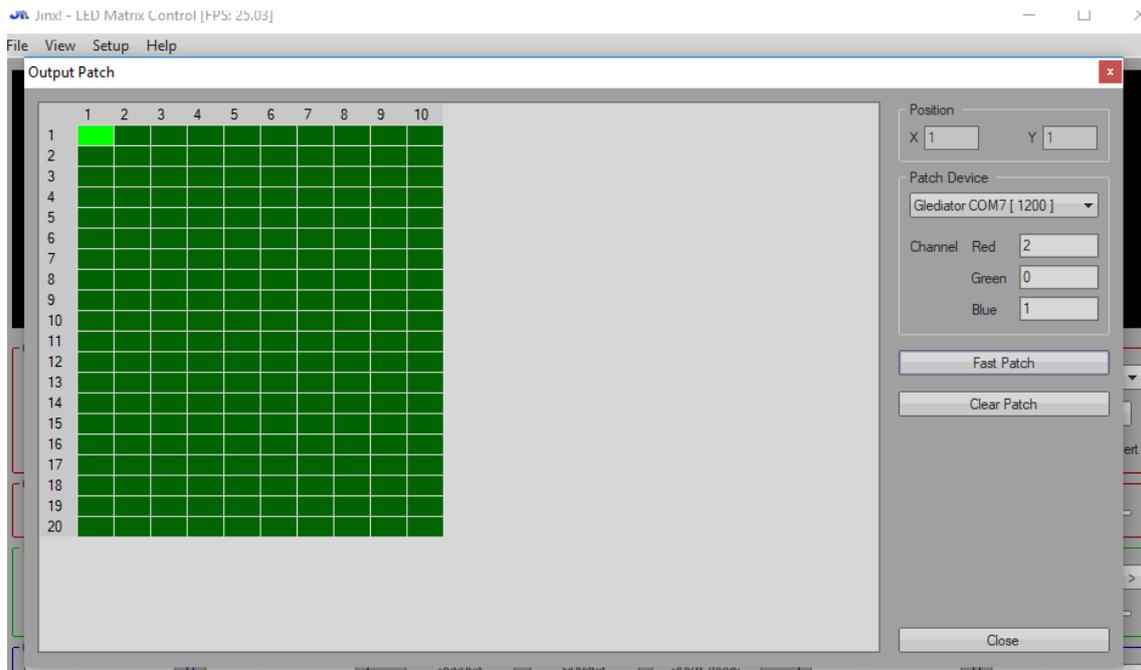




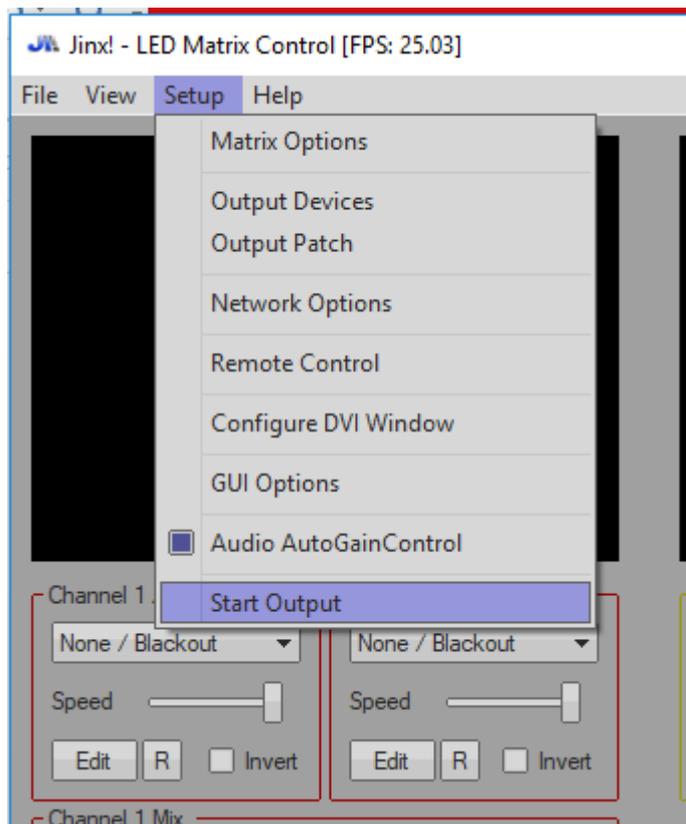
As you can see, I have a 10 x 20 panel as informed on Matix Options. If you have a bigger matrix and want to use more than one Arduino, you have to set up the parts of the whole panel for each Arduino. In my case it is only one Arduino, so click on Fast Patch.



You have then to inform the dimensions, the patch mode, the pixel order and the patch device. Click on OK. Once it is done, the panel will turn green on the software. If you do not know your pixel order, once it is all working, try the basic colors (RGB) and see if they match your selection. If not, try a different pixel order until you get it right. Mine is BRG.



Close this window, turn on your led panel and Start the Output



At this point the leds on Arduino Uno will start to flash and you led panel will get black.

Choose the effect of you preference and enjoy it.