```cpp
// Neopixel
#include <Adafruit_NeoPixel.h>

// ESP32
#include <ESP8266WiFi.h>
#include <WiFiClient.h>
#include <ESP8266WebServer.h>
#include <ESP8266mDNS.h>

// configuration de la box
const char *ssid = "nom_de_la_box";
const char *password = "mot_de_passe";

// adresse IP fixe
IPAddress ip(192, 168, 1, xxx); //set static ip
IPAddress gateway(192, 168, 1, 1); //set getteway
IPAddress subnet(255, 255, 255, 0);//set subnet
ESP8266WebServer server ( 80 );

// Neopixel Config – choix des sorties
#define Sortie_1 4
#define Sortie_2 5

// nombre de LEDs
#define NUMPIXELS 195

int brightness = 150;
Adafruit_NeoPixel strip1 = Adafruit_NeoPixel(NUMPIXELS, Sortie_1,
NEO_RGB + NEO_KHZ800);
Adafruit_NeoPixel strip2 = Adafruit_NeoPixel(NUMPIXELS, Sortie_2,
NEO_RGB + NEO_KHZ800);

const int led = 13;

void setup ( void ) {

  // allumage au démarrage
  for (int i = 0; i < NUMPIXELS; i++) {
    strip1.setPixelColor(i, strip1.Color( 255, 255, 255 ) );
    strip2.setPixelColor(i, strip2.Color( 255, 255, 255 ) );
  }

  // init
  strip1.show();
  strip2.show();

  Serial.begin ( 115200 );

  // #############
  // NeoPixel start
  Serial.println();
  strip1.setBrightness(brightness);
  strip1.begin();
  strip1.show();
```

```arduino
    strip2.setBrightness(brightness);
    strip2.begin();
    strip2.show();
    delay(50);
    Serial.println("NeoPixel started");

    // #########
    // Webserver
    pinMode ( led, OUTPUT );
    digitalWrite ( led, 0 );

    WiFi.config(ip, gateway, subnet);
    WiFi.begin ( ssid, password );
    Serial.println ( "" );

    // on attend la connection
    while ( WiFi.status() != WL_CONNECTED ) {
      delay ( 500 );
      Serial.print ( "." );
    }

    Serial.println ( "" );
    Serial.print ( "Connected to " );
    Serial.println ( ssid );
    Serial.print ( "IP address: " );
    Serial.println ( WiFi.localIP() );

    if ( MDNS.begin ( "esp8266" ) ) {
      Serial.println ( "MDNS responder started" );
    }

    // what to do with requests
    server.on ( "/", handleRoot );
    server.onNotFound ( handleNotFound );
    server.begin();

    Serial.println ( "HTTP server started" );
}

void loop ( void ) {
  // waiting fo a client
  server.handleClient();
}


void handleRoot() {
  Serial.println("Client connected");
  digitalWrite ( led, 1 );

  // data from the colorpicker (e.g. #FF00FF)
  String color = server.arg("c");
  Serial.println("Color: " + color);
  // setting the color to the strip
  setNeoColor(color);
```

```cpp
    // building a website
    char temp[5000];
    int sec = millis() / 1000;
    int min = sec / 60;
    int hr = min / 60;
    char clr [7];
    color.toCharArray(clr, 7);
    snprintf ( temp, 5000,

            "<!DOCTYPE html>\n<html>\n\
  <head>\n\
    <title>eclairage bureau</title>\n\
    <style>\
      body { background-color: #cccccc; font-family: Arial; Color:
#008; }\
    </style>\n\
    <meta name=\"viewport\" content=\"width=device-width,
height=device-height, initial-scale=1.0, user-scalable=0, minimum-
scale=1.0, maximum-scale=1.0\" />\n\
  </head>\n\
  <body>\n\
    <h1>choisissez votre couleur</h1>\n\
    <p>Uptime: %02d:%02d:%02d</p>\n\
    \n\
    <form action=\"\" name=\"pick\" method=\"post\">\n\
    <input type=\"color\" name=\"c\" value=\"%02d\"
onchange=\"document.forms['pick'].submit();\" />\n\
     <span onclick=\"document.forms['pick'].submit();\"
style=\"font-size:16pt;\"> CHANGE </span>\n\
    </form>\n\
    \n\
        \n\
    <form action=\"\" name=\"pick\" method=\"post\">\n\
    <input type=\"color\" name=\"c\" value=\"%02d\"
onchange=\"document.forms['pick'].submit();\" />\n\
     <span onclick=\"document.forms['RGB: 0 0 0']\"
style=\"font-size:16pt;\"> OFF </span>\n\
    </form>\n\
    \n\
  </body>\
</html>",

            hr, min % 60, sec % 60, clr
        );
    server.send ( 200, "text/html", temp );
    digitalWrite ( led, 0 );
}

void handleNotFound() {
  digitalWrite ( led, 1 );
  String message = "File Not Found\n\n";
  message += "URI: ";
  message += server.uri();
```

```cpp
  message += "\nMethod: ";
  message += ( server.method() == HTTP_GET ) ? "GET" : "POST";
  message += "\nArguments: ";
  message += server.args();
  message += "\n";

  for ( uint8_t i = 0; i < server.args(); i++ ) {
    message += " " + server.argName ( i ) + ": " + server.arg ( i )
+ "\n";
  }

  server.send ( 404, "text/plain", message );
  digitalWrite ( led, 0 );
}




void setNeoColor(String value) {
  Serial.print("Setting Neopixel...");
  // converting Hex to Int
  int number = (int) strtol( &value[1], NULL, 16);

  // splitting into three parts
  int r = number >> 16;
  int g = number >> 8 & 0xFF;
  int b = number & 0xFF;

  // DEBUG
  Serial.print("RGB: ");
  Serial.print(r, DEC);
  Serial.print(" ");
  Serial.print(g, DEC);
  Serial.print(" ");
  Serial.print(b, DEC);
  Serial.println(" ");

  // setting whole strip to the given color
  for (int i = 0; i < NUMPIXELS; i++) {
    strip1.setPixelColor(i, strip1.Color( g, r, b ) );

    strip2.setPixelColor(i, strip2.Color( g, r, b ) );
  }
  // init
  strip1.show();

  strip2.show();
  Serial.println("on.");
}
```