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#include <Adafruit_NeoPixel.h>

#ifdef __AVR__
  #include <avr/power.h>
#endif

#define PIN 5

// Parameter 1 = number of pixels in strip
// Parameter 2 = Arduino pin number (most are valid)
// Parameter 3 = pixel type flags, add together as needed:
Adafruit_NeoPixel strip = Adafruit_NeoPixel(144, PIN, NEO_GRB + NEO_KHZ800);

void setup() {
  strip.begin();
  strip.show(); // Initialize all pixels to 'off'
}

void loop() {
  // Some example procedures showing how to display to the pixels:
  colorWipe(strip.Color(255, 0, 0), 144); // green
  colorWipe(strip.Color(0, 255, 0), 144); // red
  // colorWipe(strip.Color(0, 0, 255),144); // Blue
  // (strip.Color(127, 127, 127), 50); // White
  // (strip.Color(255, 255, 255), 50); // Bright White
}

// Fill the dots one after the other with a color
void colorWipe(uint32_t c, uint8_t wait)
{
  int j=0;
  {
    while (j<= 11)
    {
      int i=0;
      j=j+1;
      while (i< 12)
      {
        strip.show();

        //turn off pixel behind current hour value
        strip.setPixelColor((j-1),0,0,0);

        //turn hour pixel yellow
        strip.setPixelColor(j,255,127,0);//yellow-green
      }
    }
  }
}

```

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//turn minute pixel to --
if ((i==0)&&(j!=11))strip.setPixelColor(11,0,0,0);//off
strip.setPixelColor(i, 127,127,127);//white
//turn off pixel behind minute value
if (j<=11) strip.setPixelColor((i-1),0,0,0);
if (i==12) strip.setPixelColor(i,0,0,0);

// for 12:00am and pm
if (j==12) strip.setPixelColor(i,255,127,0);//yellow
if ((j==12)&&(i>1))strip.setPixelColor((i-1),0,0,0);//off
if ((j==12)&&(i>0))strip.setPixelColor(i,127,127,127);//white
//if mins equals hours then turn that pixel blue
if(i==j) strip.setPixelColor(j,0,0,255);
//as the minutes advance to the next pixel color the hour green
if((i-1)==j) strip.setPixelColor(j,255,0,0);
int k=1;
pinMode(2,INPUT);
if (digitalRead(2)==LOW)(k=100);//fast advance unlatched
if (digitalRead(2)==HIGH)(k=1);//fast advance latched
int l=1;
//adjust clock by changing 495 in quotient
while (l<= 495)
{
delay(k*6);
l=l+1;}
delay (k*6);
i=i+1;
}}}}

```

//Hints - always click on the com port under tools (even though it is selected) before you upload.

//the signal wire is hooked to pin 5 and-- the clock advance push button hooked to +5v on arduino

//and other leg hooked to arduino pin 2 this also needs to have a 330 ohm resistor between pin 2 and ground.

//hook the ground of both the arduino and the 5v power supply together. The 5volt is used to power the WS2811

//the 9v power supply is used to power the arduino

// the highest delay command value allowed is 9999 which is aprox 10 secs.