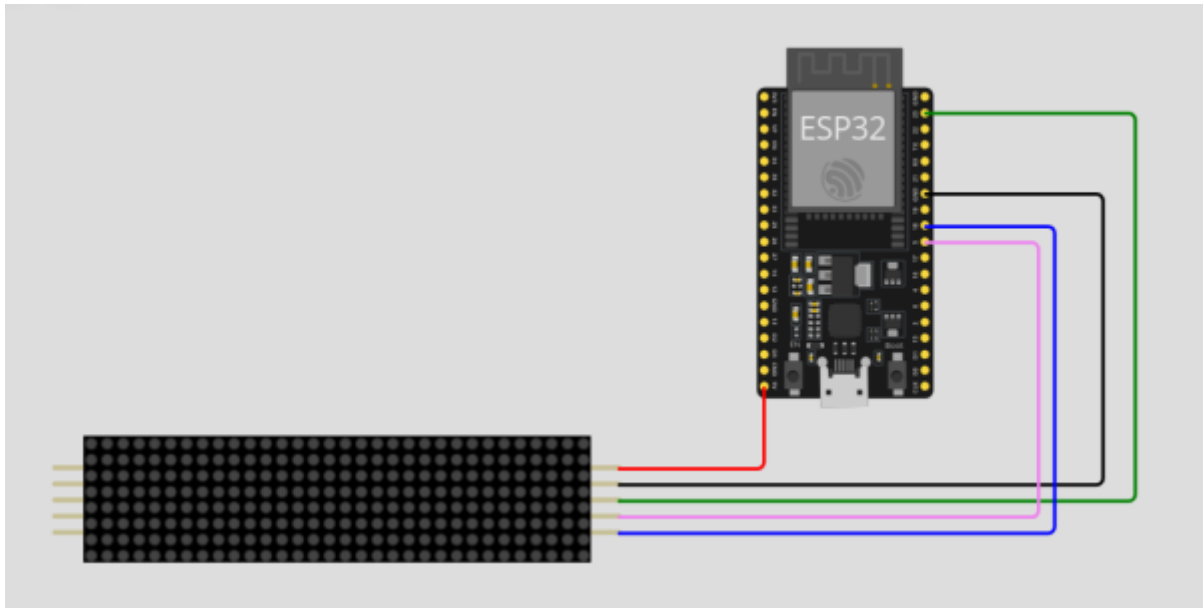


ESP32 Max7219 horloge



[horloge002.ino](#)

```
// makerguides.com: synchronizing ESP32 time with SNTP server

#include "WiFi.h"
#include "esp_sntp.h"

#include <MD_Parola.h>
#include <MD_MAX72xx.h>
#include <SPI.h>

#define HARDWARE_TYPE MD_MAX72XX::FC16_HW

#define MAX_DEVICES 4
#define CLK_PIN 18
#define DATA_PIN 23
#define CS_PIN 5
MD_Parola Display = MD_Parola(HARDWARE_TYPE, DATA_PIN, CLK_PIN, CS_PIN,
MAX_DEVICES);

const char* ssid = "castellab";
const char* password = "Castel37110$";

// https://github.com/nayarsystems/posix_tz_db/blob/master/zones.csv

const char *timezone = "CET-1CEST,M3.5.0,M10.5.0/3";//PARIS
```

```
String Time, heure, minute;
String Formatted_date;

void initWiFi() {
  WiFi.begin(ssid, password);
  while (WiFi.status() != WL_CONNECTED) {
    delay(1000);
    Serial.println("Attente connection wifi....");
  }
}

void initSNTP() {
  sntp_set_sync_interval(60 * 60 * 1000UL); // 1 h
  esp_sntp_setoperatingmode(ESP_SNTP_OPMODE_POLL);
  esp_sntp_setservername(0, "pool.ntp.org");
  esp_sntp_init();
  setenv("TZ", timezone, 1);
  tzset();
}

void wait4SNTP() {

  Serial.println("String Time, hour, minute;String
Formatted_date;synchronizing...");
  while (sntp_get_sync_status() != SNTP_SYNC_STATUS_COMPLETED) {
    delay(100);
  }
}

void obtainTime() {
  // https://cplusplus.com/reference/ctime/tm/
  char buff[24];
  struct tm t;
  getLocalTime(&t);
  sprintf(buff, "%02d:%02d", t.tm_hour, t.tm_min);
  Serial.println("Heure, Minutes");
  Serial.println(buff);
  Serial.print(t.tm_hour, t.tm_min);
  heure = t.tm_hour;
  minute = t.tm_min;
  Time = heure + ":" + minute;
  Serial.println(Time);
  Display.setTextAlignment(PA_CENTER);
  Display.print(Time);
}
```

```
void setup()
{
  Serial.begin(115200);
  initWiFi();
  initSNTP();
  wait4SNTP();

  Display.begin();
  Display.setIntensity(0);
  Display.displayClear();
}

void loop()
{
  obtainTime();
  delay(1000);
}
```

horloge001.ino

```
#include <WiFi.h>
#include <NTPClient.h>
#include <WiFiUdp.h>
#include <MD_Parola.h>
#include <MD_MAX72xx.h>
#include <SPI.h>

#define HARDWARE_TYPE MD_MAX72XX::FC16_HW

#define MAX_DEVICES 4
#define CLK_PIN 18
#define DATA_PIN 23
#define CS_PIN 5
MD_Parola Display = MD_Parola(HARDWARE_TYPE, DATA_PIN, CLK_PIN, CS_PIN,
MAX_DEVICES);

WiFiUDP ntpUDP;
NTPClient timeClient(ntpUDP);

const char* ssid = "-----"; // ssid et mdp à Valider
const char* password = "-----";

String Time, hour, minute;
String Formatted_date;
long currentMillis = 0;
long previousMillis = 0;
int interval = 1000;
```

```
void setup() {
  Serial.begin(115200);
  WiFi.begin(ssid, password);
  while (WiFi.status() != WL_CONNECTED) {
    delay(500);
    Serial.print("Connection.");
  }
  Serial.println("");
  Serial.println("WiFi connecter.");

  timeClient.begin();
  timeClient.setTimeOffset(7200); // 7200 = 2*60*60 pour le decalage gmt
  de +2H en Ete ....

  Display.begin();
  Display.setIntensity(0);
  Display.displayClear();
}

void loop()
{
  obtainTime();
}

void obtainTime() {
  while(!timeClient.update()) {
    timeClient.forceUpdate();
  }

  currentMillis = millis();

  if (currentMillis - previousMillis > interval) {
previousMillis = millis();

Formatted_date = timeClient.getFormattedDate();
Serial.println(Formatted_date);

hour = Formatted_date.substring(11, 13);
minute = Formatted_date.substring(14, 16);

Time = hour + ":" + minute;
Serial.println(Time);
Display.setTextAlignment(PA_CENTER);
Display.print(Time);
}
```

}

Librairies à installer dans l'IDE arduino

NTP client

ntpclient-master.zip

MD parola

“MD_Parola” à installer dans l'IDE arduino : Parola est un écran de texte de défilement modulaire utilisant les contrôleurs d'affichage à matrice LED MAX7219 ou MAX7221 à l'aide d'Arduino

md_parola-main.zip

Max7219

“MAX7219” à installer dans l'IDE arduino : [Max7219 sur Github EN](#)

max7219-1.0.0.zip

Fichier STL pour le boitier

case_max7219_v2_-_3201077.zip

low-cost-youtube-subscriber-display-sits-on-a-monitor-no-soldering-required20190523-29316-rqmtr0.zip

led-matrix-bar-weather-station-v120230509-86048-k1fv6d.zip

From:

<https://chanterie37.fr/fablab37110/> - Castel'Lab le Fablab MJC de Château-Renault

Permanent link:

<https://chanterie37.fr/fablab37110/doku.php?id=start:esp32:max7219:horloge&rev=1787410967>

Last update: **2026/08/22 17:02**

