Download applications

The applications can be downloaded from the Google Drive folder linked on the Github page. Go to the folder corresponding to your operating system:

Two applications will need to be installed:

- UPLPlayer should be installed on the computer connected to the UPL96ETL

- UPLScan should be copied to each USB drive that you intend to connect to the UPL96ETL. Use of the Windows or OSX version will depend on which computer is used to scan the drives.
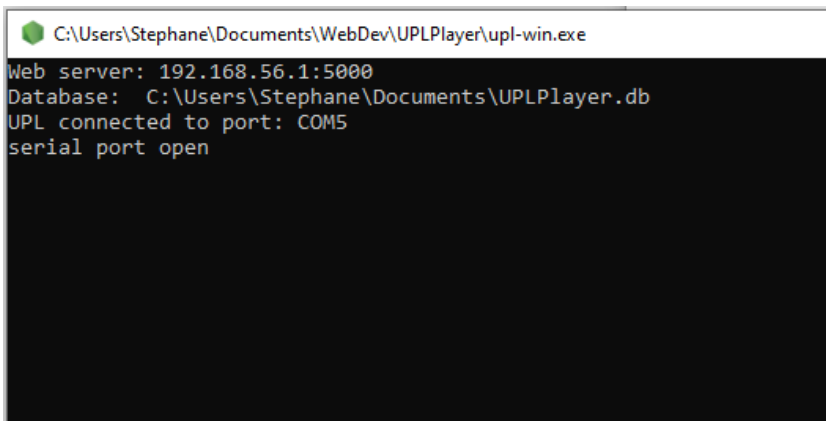
UPLPlayer app

The app must be installed on a Windows PC or Mac connected to the UPL96ETL.

- Download the file **UPLPlayer-win.zip** or **UPLPlayer-OSX.zip** from the Google Drive folder above

- Open the zip file and extract the **UPLPlayer** folder to your PC. This may take a few minutes.

- Run the application **UPLPlayer.exe (Windows) or UPLPlayer (OSX)** from within the folder (the application will not run if copied to another location than the UPLPLayer folder).

The app creates a web server on your local network. You may need to authorize access to port 5000 in your firewall software. With the Windows firewall, a pop-up will automatically be shown when you first run the app. This will not be required if you plan on scanning and browsing the app's web page from the same computer. Otherwise, the computer on which you install the UPLPlayer app should be assigned a fixed IP address on your home network.

The following information should then be displayed in the application's window/terminal:

- **Web server IP address and port**. Take note of the IP address, as it will be needed to connect to the application's web page and to scan USB drives
- **Database**: the database stores the folders and albums contained in each USB drive. It is located in your Windows user "Documents" folder.
- **UPL port**: this is the computer port to which the UPL96ETL is connected. On Windows, the driver must be installed prior to running the UPLPlayer.exe application - refer to the installation instruction provided on ECDesign's web site.
- **Serial port status**: indicates that the application has successfully established a connection to the UPL96ETL
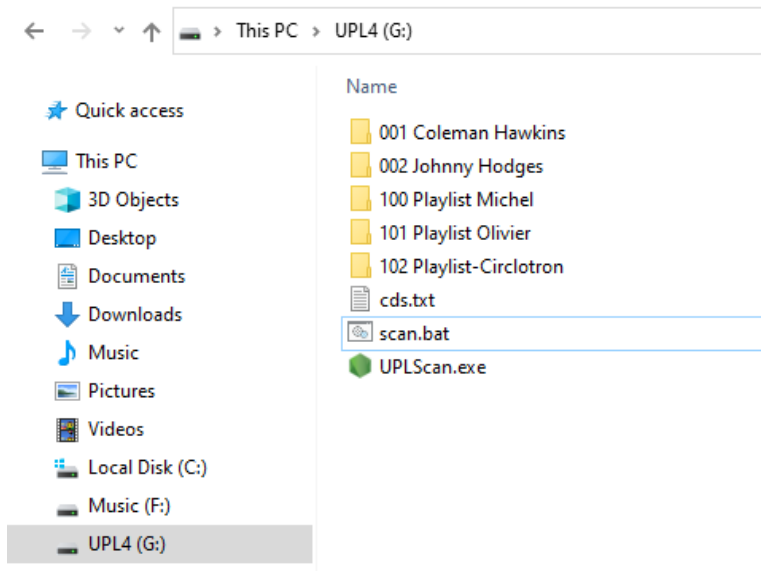
```
C:\Users\Stephane\Documents\WebDev\UPLPlayer\upl-win.exe
Web server: 192.168.56.1:5000
Database:  C:\Users\Stephane\Documents\UPLPlayer.db
UPL connected to port: COM5
serial port open
```

If the application is run without the UPL96ETL connected to the computer, the port and status will not be displayed. Once the UPL96ETL is connected, the port and status will only be displayed after the application is accessed from its web page.
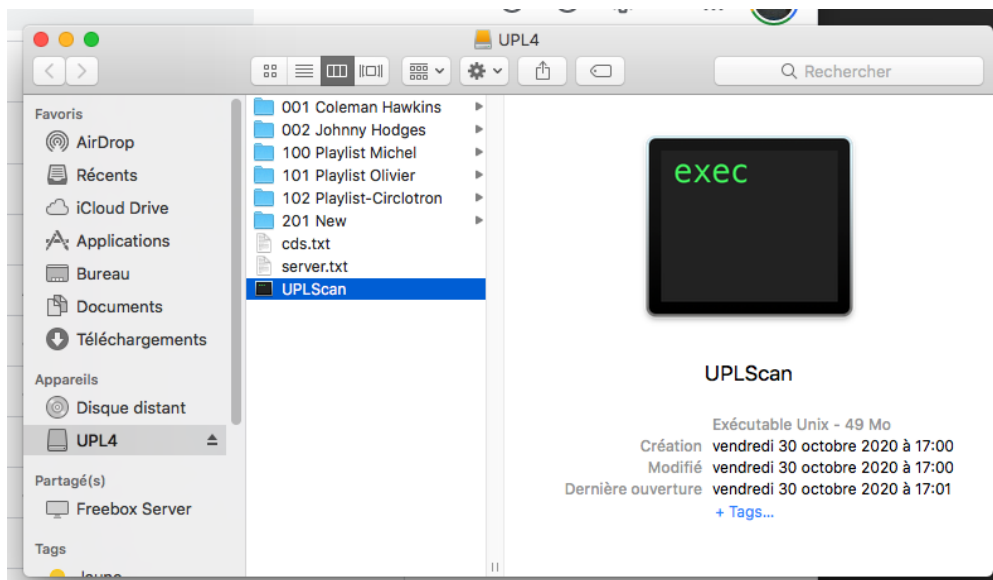
UPLScan app

Download the file **UPLScan.exe (Windows)** or **UPLScan (OSX)** from the Google Drive folder and copy it to the **root folder of each USB drive** to be used with the UPL96ETL:
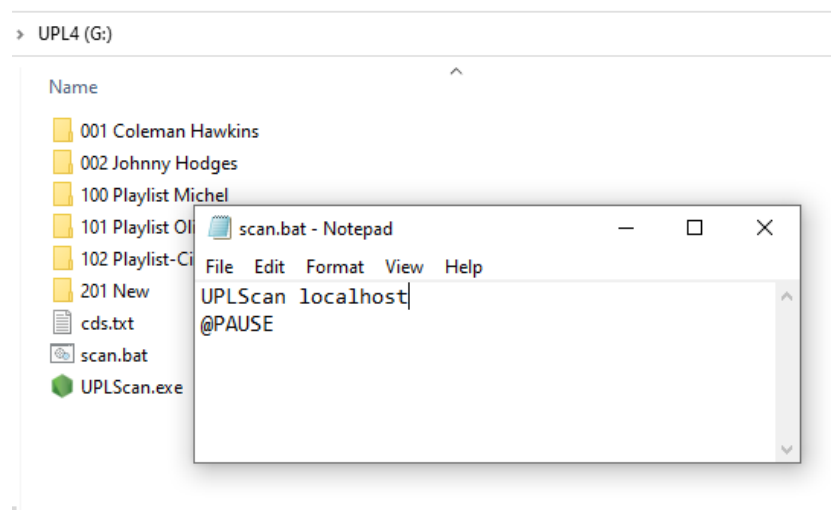
On **Windows**:

On **OSX**:

Note: **USB drives must be labeled. Only the first 4 digits of the drive's label are used by the UPL96ETL, but the full name is stored in the application's database.**

Setting up the UPLScan app on a Windows computer

Download the file "scan.bat" from the Google Drive folder and place it on the root of the USB drive alongside the UPLScan app.

No further settings are required if the USB drives are scanned on the computer that is connected to the UPL96ETL.

If the USB drives are scanned on a different computer from the one running the UPLPlayer app, then right-click on the file "scan.bat" and select the menu option "Edit" to edit the file. In the first line, replace "localhost" by the **IP address of the UPLPlayer** (see above).

Save the content and double-click on the file scan.bat to run it.

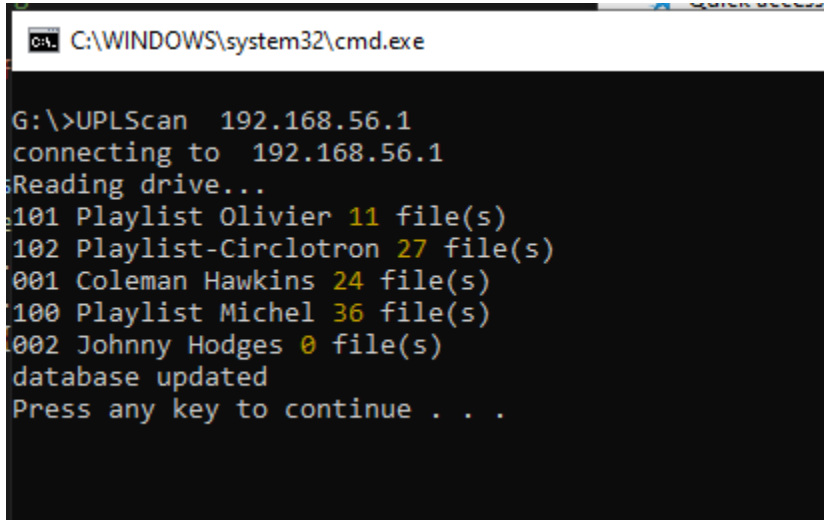Setting up the UPLScan app on an Apple (OSX) computer

Download the file "server.txt" from the Google Drive folder and place it on the root of the USB drive alongside the UPLScan app.

If the USB drives are scanned on a different computer from the one running the UPLPlayer app, then right-click on the file "server.txt" and select the menu option "Edit" to edit the file. In the first line, replace "localhost" by the **IP address of the UPLPlayer** (see above).

Running UPLScan

Scan progress is displayed in the app's terminal:

- Connection to the UPLPlayer server
- List folders contained in the drive (001 to 999) and the number of wav and cue files
- Database update


```
C:\WINDOWS\system32\cmd.exe

G:\>UPLScan  192.168.56.1
connecting to  192.168.56.1
Reading drive...
101 Playlist Olivier 11 file(s)
102 Playlist-Circlotron 27 file(s)
001 Coleman Hawkins 24 file(s)
100 Playlist Michel 36 file(s)
002 Johnny Hodges 0 file(s)
database updated
Press any key to continue . . .
```

The program will scan the content of each folder numbered 001 to 999:

- Wave files not associated with a cue sheet (multi-track albums) should be numbered from 01 to 99. The files will not be automatically be numbered during the scan in order to preserve each album's original track order

- Wave files associated with a cue sheet (single-track albums) will automatically be numbered from 01 to 99 in alphabetical order. The corresponding cue sheet will also be numbered from 01 to 99 with an additional prefix ("__"). **These files should therefore initially be copied to the drive's folders without any numbering.**

The following error messages may be displayed if the files scanned contain errors:
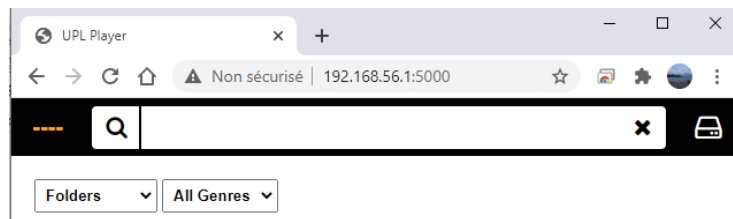
- WAV file has an invalid format. In this case, it is suggested that the wav file be "converted" (to wav) using another software (ex: dbPowerAmp, Foobar…).
- Error if the duration of a track is greater than 9999 seconds (roughly 2 hours and 45 min)

The scan program will also create a file "cds.txt" at the root of the drive. This file is needed for the UPL96ETL's operation and should not be edited or removed.

UPLPlayer Web Page

If you are using the same computer to connect to the UPL96ETL and to browse your music collection, then open a browser and go to the url: localhost:5000.

Otherwise, from any other computer or mobile device (phone, tablet) on your home network, open a browser and type in the address of the UPLPlayer web server (see above):

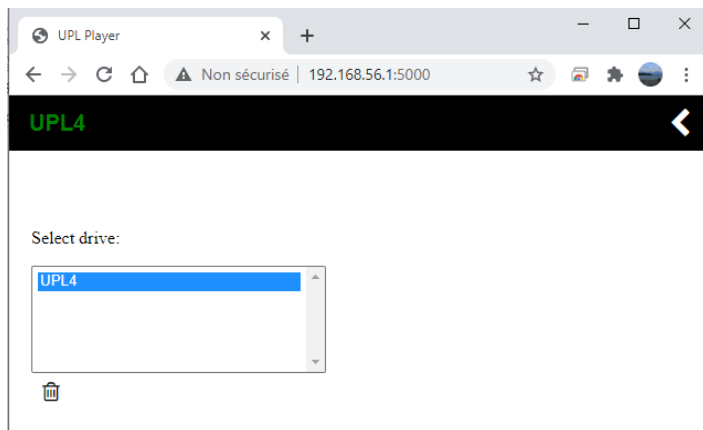The **connection status** of the UPL96ETL is displayed at the top-left of the web page.

If no USB drive is connected to the UPL96ETL, the label will contain "----". Otherwise it will display the USB drive's label (ex: UPL0)

The label's color indicates the connection status to the UPL96ETL:

-   **Red** = the UPL96ETL is not connected to the computer on which the UPLPlayer app is running
-   **Orange** = the UPL96ETL is connected but a USB Drive is not plugged in to its front port
-   **Green** = the UPL96ETL is connected and a USB Drive has been detected

The status should be automatically updated when connecting the UPL96ETL or a USB drive. If not, **click on the status label to update the connection status**. If no connection can be established, try unplugging and re-plugging the USB cable connecting your PC to the UPL96ETL and refreshing the web page.

The **list of USB drives** can be accessed by clicking on the "drive" icon at the top-right. It will then display the following page:

If no drives have been scanned, the list will be empty. Otherwise select the drive to play and click on the arrow icon at the top-right of the web page to return to the previous page. The selected drive will be memorized in the browser's local storage and will automatically be displayed next time the web page is opened on the same device (PC, phone, tablet…).

The trashcan icon can be used to delete a USB drive from the database.

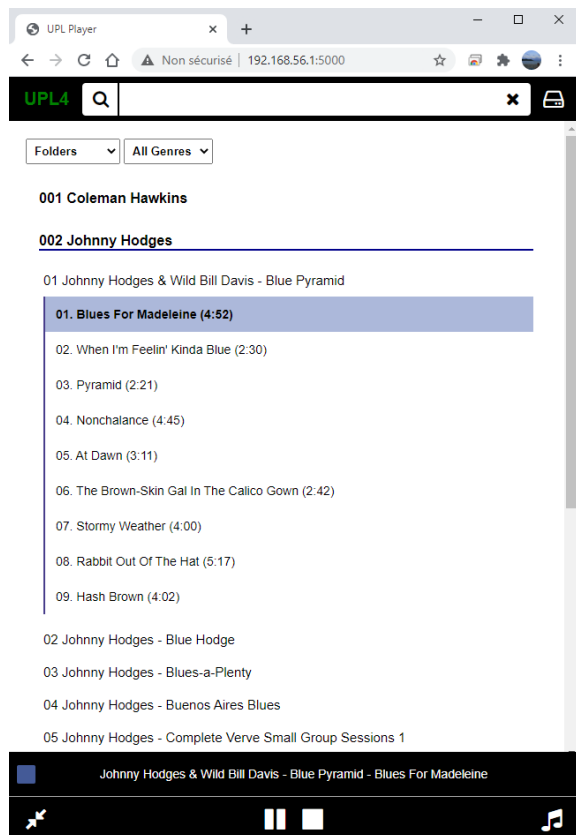Once a drive has been selected, its contents will be displayed on the main web page:

- Folders are listed in bold, with their 3-digit prefix (001, 022…)
- Albums are listed with their 2-digit prefix (01, 02…)
- Tracks are listed with their 2-digit prefix (01, 02…) and duration

Click on a folder or album to view its content. Click on a track to start playback. Clicking again on a selected track will pause playback. The play and stop icons at the bottom center of the page can also be used to control playback.

Playback will automatically continue to the next track.

A clickable progress bar indicates the track currently playing.

The icon at the bottom-left is used to collapse all folders. The icon at the bottom-right will scroll the page to the currently playing track.

The "**Folders**" drop-down menu at the top of the web page can be used to display all cue-sheets in alphabetical order.

The "**Genres**" drop-down menu can be used to filter albums by Genre – this will only filter albums with cue-sheets.

The search bar can be used to search album titles.