

Managing Putty sessions and uploads

Sessions

Putty is the program that communicates between the Arduino and your PC.

In this document 'Arduino' means:

- Arduino UNO, Nano or MEGA module
- DCCNext
- LocoNext

Communication with Putty is always via a Windows COM-port.

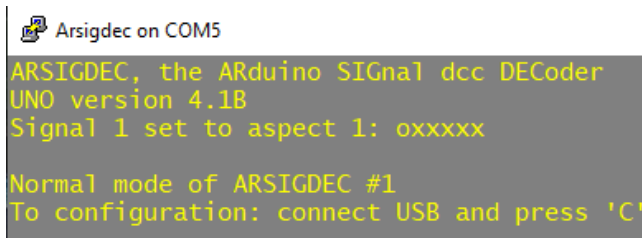
If an Arduino is connected to an USB port Windows assigns automatically a COM-port to it.

Mostly the same COM-port is assigned to the same USB-port.

Via this COM-port you upload a program to the Arduino or communicates with a program already loaded on the Arduino. Putty uses so called *sessions* to configure the communication for a specific COM-port.

The configuration for a specific session is stored in the Windows registry.

Putty communication is always started with a specific session. Putty creates a connection between the COM-port specified in that session and the Arduino. The Window header of Putty shows the name of the session. The program loaded on the Arduino starts running.



With the Arcomora management tool you can upload and create sessions for multiple Arduino's.

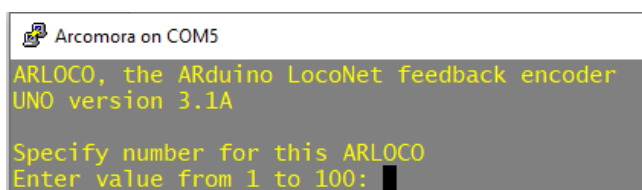
You can use:

- A single session for all Arcomora modules.

Use always the same USB-port, to be sure that the COM-port does not change.

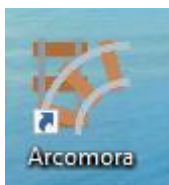
Name the session e.g. Arcomora

- A separate session for each module.
Multiple sessions may share the same COM-port.



Please Note: Putty will ALWAYS start the program on the Arduino that is connected to the COM-port specified in the session! That means that e.g. if you start a session named ArLoco with COM-port 5 and COM5 is connected to an Arduino with Mardec then Mardec will start and not ArLoco.

Uploading software



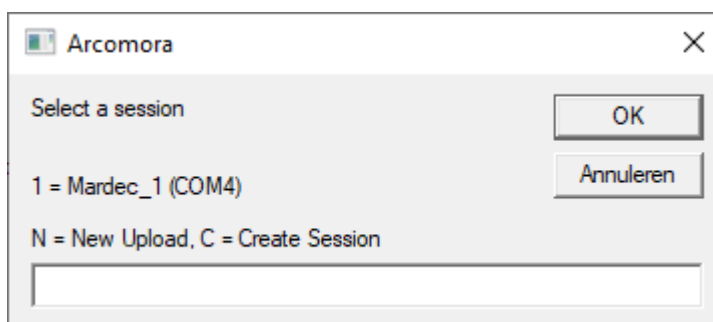
After installing the Arcomora software click on the Arcomora shortcut on the desktop.

If you have previously installed Arcomora software a list of existing sessions is showed.

You can type the number to start Putty.

You can also type 'N' for uploading a program to an Arduino.

With a 'C' you can create a new session for a pre-installed processor



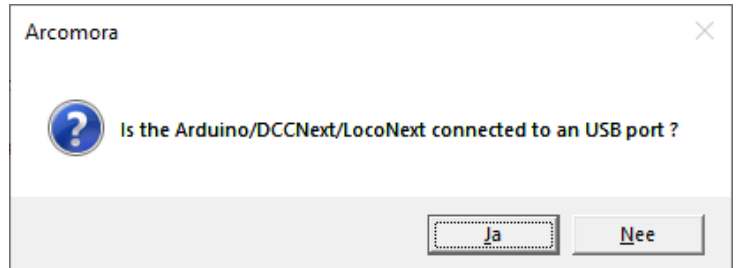
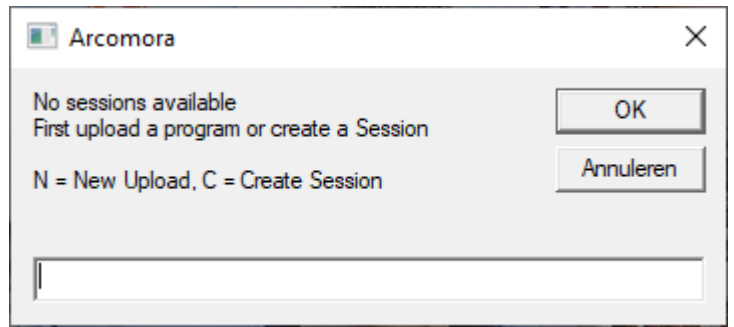
If this is a new installation then the following message appears:

Type 'N' to start uploading an Arcomora programme to your first Arduino.

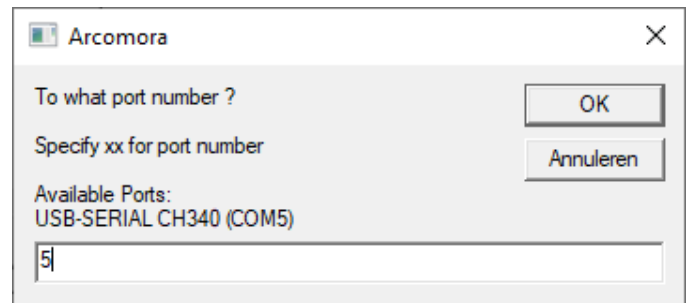
Type 'C' to create a session if you have a processor that already has a programme on it.

See further under 'Managing sessions'

Now connect your Arduino to an USB port.
Or connect a DCCNext or LocoNext with the USB-CH340 interface to an USB port.
Click 'Yes' to continue.

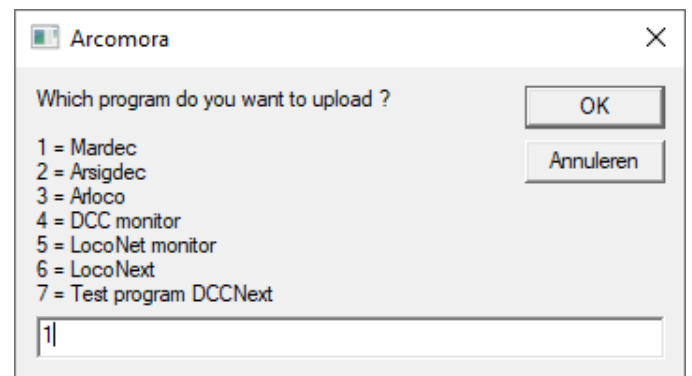


A list of available COM-ports is shown.
Type the number of the correct COM-port and click 'OK'.

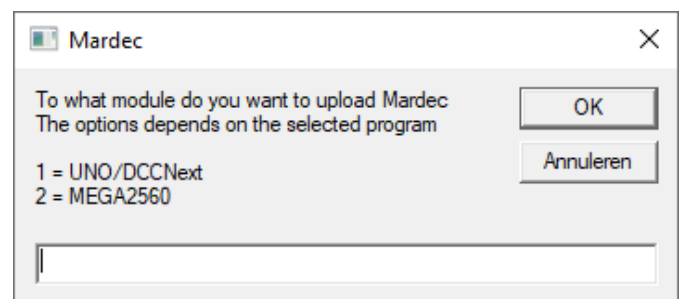


Now you can select which program you want to upload.

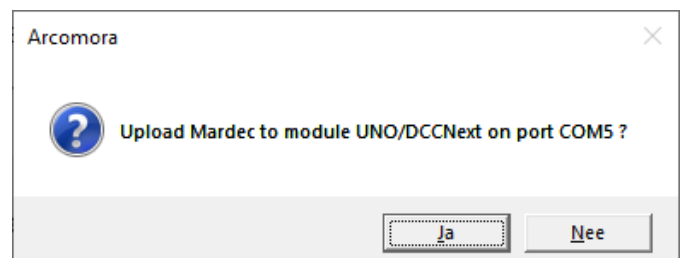
Type the number of required program and click 'OK'



Select the connected device and click 'OK'.
Not all programs can be uploaded to all possible devices. Therefore you see only relevant devices



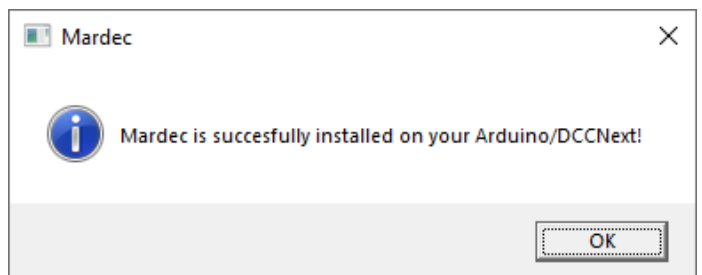
Now confirm you want to upload the chosen program.



Now the program is uploaded to the Arduino, DCCNext or LocoNext

```
C:\WINDOWS\system32\cmd.exe
Now uploading Mardec to port COM5 on Arduino UNO
avrdude.exe: AVR device initialized and ready to accept instructions
Reading | ##### | 100% -0.00s
avrdude.exe: Device signature = 0x1e950f (probably m328p)
avrdude.exe: reading input file ".\Mardec.hex"
avrdude.exe: input file .\Mardec.hex auto detected as Intel Hex
avrdude.exe: writing flash (32178 bytes):
Writing | ##### | 100% 5.94s
avrdude.exe: 32178 bytes of flash written
avrdude.exe: verifying flash memory against .\Mardec.hex:
avrdude.exe: load data flash data from input file .\Mardec.hex:
avrdude.exe: input file .\Mardec.hex auto detected as Intel Hex
avrdude.exe: input file .\Mardec.hex contains 32178 bytes
avrdude.exe: reading on-chip flash data:
Reading | ##### | 24% 1.11s
```

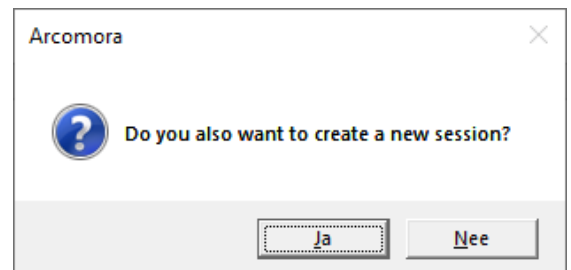
When finished the following message appears:



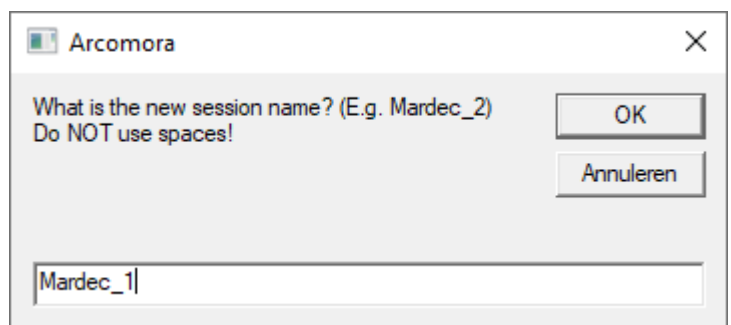
The next step is to create a session for this upload.

If you uploaded to an existing session then you don't need to create a new session

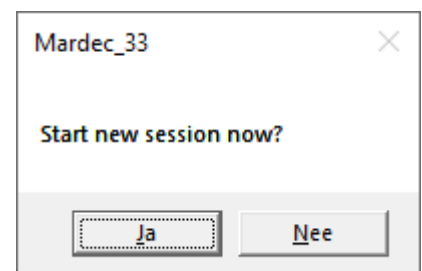
After the first upload, this question is skipped and directly asked for a session name.



Enter a name for this session and click 'OK'
Do NOT use space characters.



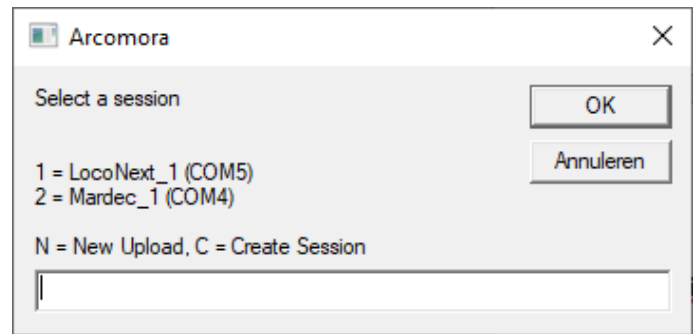
Start the session if you want to.



Managing sessions

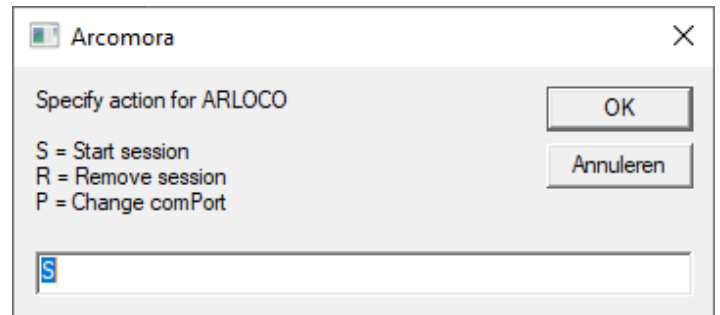
Start the Arcomora shortcut. A list of available sessions is showed.

Type the number of the session and click 'OK'.

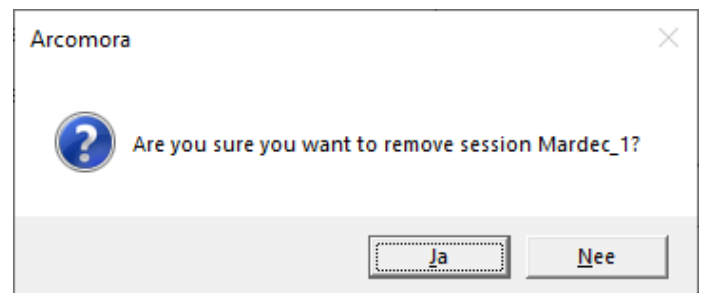


Type 'S' or <enter> to start Putty with the selected session.

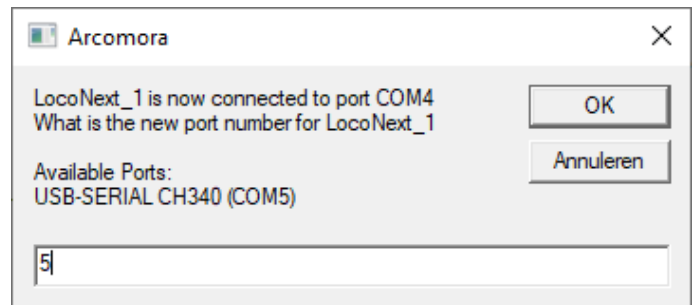
This is the default.



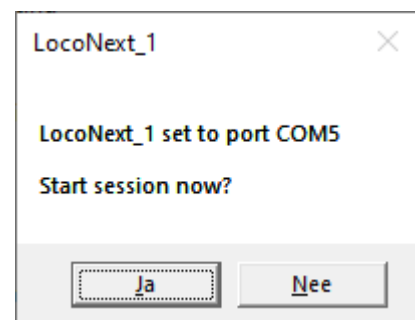
Type 'R' to remove the selected session.



Type 'P' to change the COM-port for the selected session.



If desired, start the session on the modified COM port



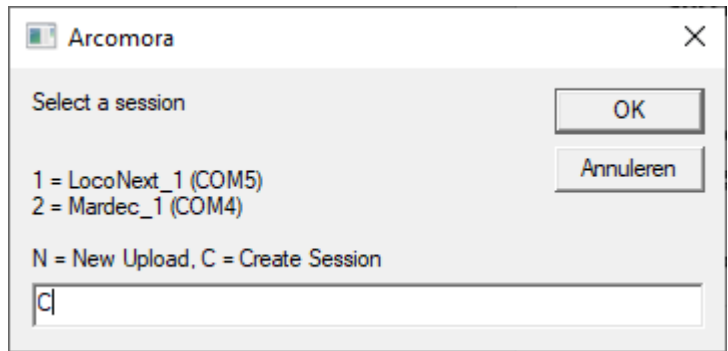
Create sessions

Arcomora supplies the processors with a pre-installed program.

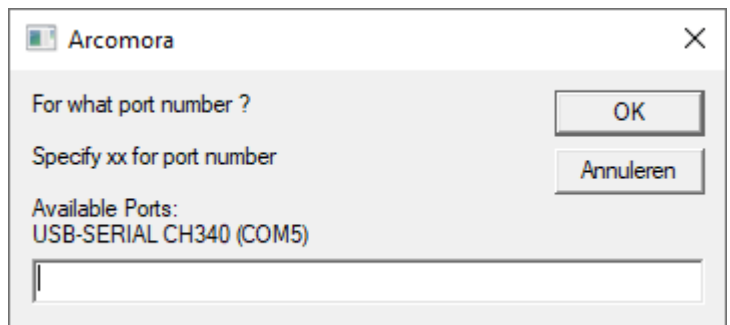
By default, this is the DCC test program. If desired, they can be delivered with a program of your choice (€2,-).

The LocoNext comes standard with the LocoNext program already installed.

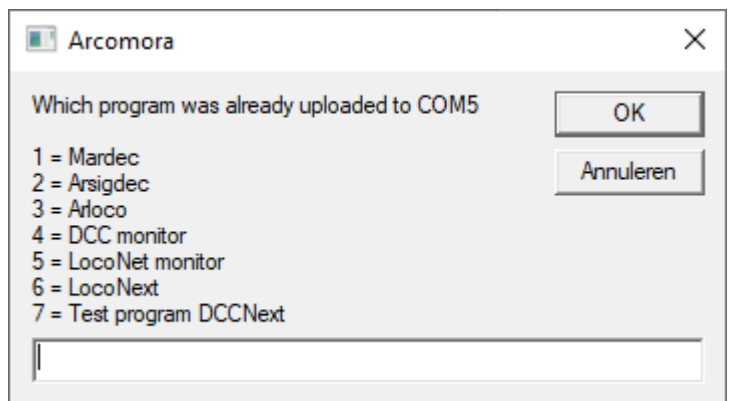
With the 'C' command a session can be created.



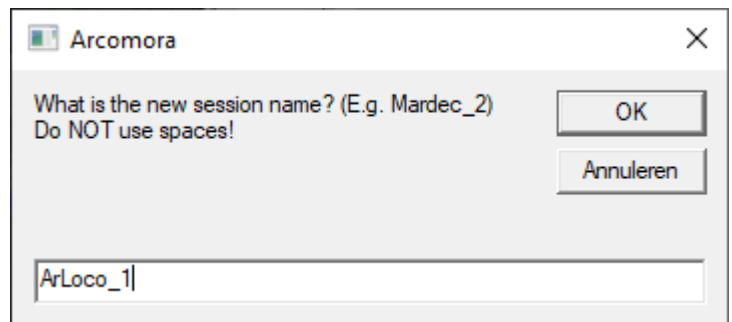
Enter the port number for this session



Choose the program that is already pre-installed.



Give the session a name.



If desired, start the new session.

