Firmware Update Procedure

Airence / Airlite



VERSION 2.0



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Introduction

Every now and then new firmware versions will be released to provide the device with new features or solved bug fixes. In order to be able to update the current firmware the bootloader mode must be entered. A specific powering procedure in combination with pressing a button is required to enter bootloader mode (explained in next chapter in more detail). When powering up the mixer in an ordinary way it will enter the normal operation mode and is ready for use.

Install Firmware Updatetool

Firmware Updatetool is available which is required to perform the firmware update. You can download the installer from the D&R Wiki (<u>http://www.d-r.nl/wiki/dokuwiki/doku.php?id=software</u>)

Double click on the setup file. The welcome screen of the installer should appear.

- Press Next to continue.

| 📳 Setup - D&R Firmware Upd | latetool |
|----------------------------|---|
| | Welcome to the D&R Firmware Updatetool Setup Wizard |
| | This will install D&R Firmware Updatetool version 2.00 on your computer. |
| | It is recommended that you close all other applications before continuing, |
| | Click Next to continue, or Cancel to exit Setup. |
| | Next > Cancel |

Select a destination location for the update tool to be installed into and click Next.



- Select a start menu folder and click Next.

| 13 Setup - D&R Firmware Updatetool |
|--|
| Select Start Menu Folder Where should Setup place the program's shortcuts? |
| Setup will create the program's shortcuts in the following Start Menu folder. |
| To continue, click Next. If you would like to select a different folder, click Browse. |
| D&R Electronica Browse |
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| |
| < Back Next > Cancel |

Enable the 'Create a desktop icon' for a shortcut on the desktop and click Next.



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If you agree with the configuration click *Install* to begin installation.

| 🐻 Setup - D&R Firmware Updatetool | |
|---|---------|
| Ready to Install Setup is now ready to begin installing D&R Firmware Updatetool on your computer. | |
| Click Install to continue with the installation, or click Back if you want to re- change any settings. | view or |
| Destination location: C:\Program Files (x86)\D&R Firmware Updatetool | * |
| Start Menu folder: D&R Electronica | |
| Additional tasks: Additional icons: Create a desktop icon | |
| 4 | |
| < Back Install | Cancel |

- Setup copies files to the destination install folder. Click *Finish* to complete the installation.

| 📳 Setup - D&R Firmware Upda | itetool |
|-----------------------------|---|
| | Completing the D&R Firmware Updatetool Setup Wizard Setup has finished installing D&R Firmware Updatetool on your computer. The application may be launched by selecting the installed icons. Click Finish to exit Setup. Icidk Finish to exit Setup. |
| | Finish |

Update Procedure Airence

Preparation

Before you can start with the update procedure the following precautions must be taken:

- 1. Connect a USB cable between the Airence and the PC
- 2. Download and install Firmware Updatetool: <u>http://www.d-r.nl/wiki/doku.wiki/doku.php?id=software</u>
- 3. Download the latest firmware: <u>http://www.d-r.nl/wiki/dokuwiki/doku.php?id=software</u>
- 4. Startup the Airence in bootloader mode (see next chapter).

Enter Bootloader mode

To enter the bootloader mode a special startup sequence should be followed:

- 1. Disconnect power
- 2. Push and hold down the rotary encoder switch (located on the control section)
- 3. Connect power
- 4. Release the encoder switch

Install USB bootloader drivers

When the Airence enters the bootloader mode it will probably sign up as an *'unknown device'* in the device manager from Windows. To determine if this unknown device is the Airence in bootloader mode, right-click on the device and select properties. On the *Details* tab select *Hardware-id's* from the properties selection box and verify the VID and PID of the device. VID (Vendor ID): **03EB**

2FE4

VID (Vendor ID): PID (Product ID):

| 🚔 Apparaatbeheer – 🗆 🗙 | Eigenschappen van Onbekend apparaat |
|---|---|
| Actie Beeld Help Image: Second Se | Algemeen Stuurprogramma Details Gebeurtenissen Algemeen Stuurprogramma Details Gebeurtenissen Image: Details Gebeurtenissen Bigenschap: Hardware-id's Waarde: USB\VID_03EB&PID_2FE4&REV_0004 USB\VID_03EB&PID_2FE4 |

To install the drivers right-click on the device and select update drivers. The drivers can be found in a subdirectory '*usb*' of the Firmware Updatetool installation folder. For example:

C:\Program Files (x86)\D&R Firmware Updatetool\usb



If the installation of the drivers was succesfully you should be able to see a screen similar like below:

| | × |
|--|---------|
| 📀 📱 Stuurprogramma bijwerken - ATxmega32A4U | |
| Het stuurprogramma is bijgewerkt | |
| Het stuurprogramma voor dit apparaat is geïnstalleerd: | |
| ATxmega32A4U | |
| | |
| | |
| | |
| | |
| | |
| | Sluiten |
| | |

In the device manager the unknown device is correctly installed and now shown as : Atmel USB Devices -> ATxmega32A4U

The ATxmega32A4U device indicates the Airence is in bootloader mode.



Flash firmware into device



- 1. Startup the *D&R Firmware Updatetool* application.
- 2. Select D&R Airence device from the drop down menu.
- 3. Select the firmware file (*.hex).
- 4. Press the UPDATE button.

The progress bar gives an indication of the status of the update procedure. When the update is successfully performed the Airence automatically leaves the bootloader mode and reboots with the new firmware in normal operation mode. The following message should appear:

| * | Info × | |
|---|--|--|
| 1 | Firmware succesfully updated! <airence_firmware_v1_4.hex></airence_firmware_v1_4.hex> | |
| | ОК | |

Update Procedure Airlite

Preparation

Before you can start with the update procedure the following precautions must be taken:

- 1. Connect a USB cable between the Airlite USB Main port and the PC
- 2. Download and install Firmware Updatetool: <u>http://www.d-r.nl/wiki/dokuwiki/doku.php?id=software</u>
- 3. Download the latest firmware: <u>http://www.d-r.nl/wiki/doku.wiki/doku.php?id=software</u>
- 4. Startup the Airlite in bootloader mode (see next chapter).

Enter Bootloader mode

To enter the bootloader mode a special startup sequence should be followed:

- 1. Disconnect power
- 2. Push and hold down the [CONN]-switch (located on channel 8)
- 3. Connect power
- 4. Release the [CONN]-switch

Install USB bootloader drivers

When the Airlite enters the bootloader mode it will probably sign up as an 'unknown device' or 'DFU ATxMEGA128A4U' in the device manager from Windows (yellow exclamation mark). To determine if this unknown device is the Airlite in bootloader mode, right-click on the device and select properties. On the Details tab select Hardware-id's from the properties selection box and verify the VID and PID of the device.

VID (Vendor ID): **03EB** PID (Product ID): **2FE4**

| Apparaatbeheer | Eigenschappen van DFU ATXMEGA128A4U |
|---|--|
| Bestand Actie Beeld Help | |
| | Algemeen Stuurprogramma Details |
| RND6 Beeldschermen Beeldschermen Beeldschermen Beeldschermen Beeldschermen Beeldschermen Besturing voor geluid, video en spelletjes Draagbare apparaten Draagbare apparaten DIE ATA/ATAPI-controllers Multifunctionele adapters Multifunctionele adapters Netwerkadapters DFU ATXMEGA128A4U DVerige apparaten DFU ATXMEGA128A4U DVS AUDIO CODEC DVS AUDIO COD | DFU ATXMEGA128A4U Egenschap: Hardware-id's Waarde: USB\VID_03EB&PID_2FDE&REV_0005 USB\VID_03EB&PID_2FDE |
| > | |
| > 📲 Systeemapparaten | |
| > - Toetsenborden | |
| | OK Annuleren |

To install the drivers right-click on the device and select update drivers. The drivers can be found in a subdirectory '*usb*' of the Firmware Updatetool installation folder. For example:

C:\Program Files (x86)\D&R Firmware Updatetool\usb



If the installation of the drivers was succesfully you should be able to see a screen similar like below:

| ×` |
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In the device manager the unknown device is correctly installed and now shown as : Atmel USB Devices -> ATxmega128A4U

The ATxmega128A4U device indicates the Airlite is in bootloader mode.

| Apparaatbeheer | |
|--|--|
| Bestand Actie Beeld Help | |
| | |
| A 📲 RND6 | |
| 🔺 🏺 Atmel USB Devices | |
| ATxmega128A4U | |
| Beeldschermadapters | |
| Beeldschermen | |
| Besturing voor geluid, video en spelletjes | |
| ⊳ - 🖳 Computer | |
| Draagbare apparaten | |
| 👂 🕼 Human Interface-apparaten (HID) | |
| De ATA/ATAPI-controllers | |
| Jungo Connectivity | |
| 🔈 🖞 Muizen en andere aanwijsapparaten | |
| Multifunctionele adapters | |
| Netwerkadapters | |
| 🔉 👘 Overige apparaten | |
| Poorten (COM & LPT) | |
| Processors | |
| Schijfstations | |
| ⊳ 1 🜉 Systeemapparaten | |
| Die Toetsenborden | |
| Universal Serial Bus-controllers | |
| | |
| | |
| | |

Flash firmware into device



- 5. Startup the *D&R Firmware Updatetool* application.
- 6. Select D&R Airlite device from the drop down menu.
- 7. Select the firmware file (*.hex).
- 8. Press the UPDATE button.

The progress bar gives an indication of the status of the update procedure. When the update is successfully performed the Airlite automatically leaves the bootloader mode and reboots with the new firmware in normal operation mode. The following message should appear:

| 📥 Info | x |
|--------|--|
| i | Firmware succesfully updated! <airlite_firmware_v1.5.hex></airlite_firmware_v1.5.hex> |
| | ОК |

Troubleshooting

AtLibUsbDfu.dll not found

If you were prompted with the AtLibUsbDfu.dll not found error message, the USB bootloader drivers are not installed. Please see the chapter '*Install USB bootloader drivers*' in this document for installing the drivers for your mixer.

Java virtual machine (JVM)

| Program Error | × |
|---|---|
| Could not find a Java Virtual Machine, cannot continue. | |
| ОК | |

If you were prompted with the Java Virtual Machine (JVM) error, it means JVM is not installed on your system. Java is required for the *Airence Firmware Updatetool*.

You can download it for free from: <u>http://java.com/</u>