8: UPGRADING THE RS290

You may upgrade the RS290 firmware using the RS295 and either of the two methods described below.

IMPORTANT: Read these instructions carefully before attempting to update your module.

There are two methods of upgrading the RS290 firmware:

*   Using the PC-based programmer "BootFlash"
*   Using a MIDI sequencer

PROGRAMMING WITH BOOTFLASH:

This is the safest method and is recommended if you have access to a PC running Windows 95 or later.

System requirements:

*   A PC running Windows 95 or later
*   A sound card, games port or other Windows™ compatible MIDI port
*   Two MIDI cables
*   The RS295 expander module.
*   WinZip™ to decompress the update file

Note: If required, WinZip can be obtained from http://www.winzip.com/

Procedure:

The Analogue Systems RS290 update file **echodelay-dd-mm-yy.zip** (where dd-mm-yy is the issue date of the firmware) contains all the files that you require to upgrade your RS290 firmware. The upgrade procedure is as follows:

*   Double-click on the file **echodelay-dd-mm-yy.zip**. WinZip™ will open and show you three files.
*   Click on the Extract button, then enter C:\echodelay in the "Extract to" box.
*   Click on the Extract button and after, extraction is completed, close WinZip™.
*   Make sure you have no other MIDI programs running on your PC.
    (Some programs, such as MidiOx, can cause the update procedure to fail.)
*   Connect your RS295:
    (i)   Ensure that the Expander is correctly plugged into the RS290 module
    (ii)   Connect the MIDI OUT on the computer to the MIDI IN on the RS295 Expander
    (iii)   Connect the MIDI IN on the computer to the MIDI OUT on the RS295 Expander
*   Turn on the RS290/RS295 and select "Firmware Update" from the "Misc Settings" menu.
*   Returning to the PC, go to "My Computer" and double-click on your C: drive.
*   Browse through the list of folders until you find the **echodelay** folder, then double click on it.
*   You should see three files. Double-click on **BootFlash** to run the programmer.

    If this is the first time you have performed a firmware update, you may have to configure the software to work with your PC. Click on 'Configure' then 'MIDI IN' and select your MIDI input port from the list (usually called MPU-401). Do the same for MIDI OUT.

- Click on the Check Connection button.

  If all is well you will see a message to say that the RS290 module has been found. If you get an error message then check your port settings and wiring.

- If the connection is OK, press the Program button. A dialogue box will pop up and ask you to select the file to program. Once you have selected the file, the programmer will begin programming the RS290.

PROGRAMMING WITH A MIDI SEQUENCER:

This method will work with any computer and OS capable of playing MIDI files.

System requirements:

- Any computer that can replay MIDI files
- A MIDI interface and cable for that computer
- MIDI software that recognises and plays .mid files and is able to send SysEx data
- The RS295 expander module.
- ZipIt™, Stuffit Expander™ or a similar program that can open ZIP files.

Procedure:

The Analogue Systems RS290 update file **echodelay-dd-mm-yy.zip** (where dd-mm-yy is the issue date of the firmware) contains all the files that you require to upgrade your RS290 firmware. The upgrade procedure is as follows:

- Connect your RS295 :
  - (i)   Ensure that the Expander is correctly plugged into the RS290 module
  - (ii)   Connect the MIDI OUT on the computer to the MIDI IN on the RS295 Expander
- Turn on the RS290/RS295 and select "Firmware Update" from the "Misc Settings" menu.
- Extract the file **echodelay-dd-mm-yy.mid** from the ZIP file and open it using your MIDI sequencer.
- Play the MIDI file

  Make sure that the whole MIDI sequence is played. It is quite long.

If everything is configured correctly, the RS290 module should reboot after a few minutes.

TROUBLESHOOTING

If the programming is interrupted for any reason (a power cut, program crash, etc.) the module will go into "fail-safe" mode. This means that, when you next turn on the RS290, the display will be blank and the module will not work.

However, all is not lost - the RS290 will still talk to the programmer. Connect everything up as before and run the programmer again.