



Firmware Updating Instructions for Evertz Model 5550 Universal Film Data Decoder

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In this zip file you will find the following files:

Updating 5550 Firmware.PDF This file

RELNOTE_UVxxxx.TXT Release notes describing changes to the Model 5550 operating code for build xxxx

UV55D4_xxxx.HEX The latest version of the model 5550 operating code for revision D boards. The xxxx represents the build number

FL.EXE DOS Program to upload new operating code to Model 5550.

!!!!NOTE This program is not compatible with Windows NT.

You can download WinFL, a Windows compatible version of this program

at <http://www.evertz.com/downloads/software>. You will find it in the KeyLog Tracker Section.

The 5550 is equipped with an electrically erasable and re-programmable program memory device called a FLASH PROM. This facilitates firmware upgrades in the field. The following procedures should be followed to reprogram the 5550.

1. Connect the model 5550 KeyCode Decoder to the computer's serial port. Most computers have two serial communications ports (known as COM1 and COM2). If you have both serial ports available, connect the 5550 to COM1. The diagram below shows the correct cable pinouts for both 9 pin and 25 pin COM ports on your computer.

5550 Serial I/O		Computer End		
Male		Female		
Description	DB-9	DB-25	DB-9	Description
Shield Ground	1 -----	1	1	Shield Ground
RS 232 Transmit	2 -----	3	2	RS 232 Receive
Ground	5 -----	7	5	Signal Ground
RS 232 Receive	3 -----	2	3	RS 232 Transmit

2. If you received the firmware update on CD-ROM, insert the disc in the drive of the computer. Change directories to the root of the Cd-ROM drive (e.g. D:\)

If you received this update from our Internet FTP site, change to the directory of your hard disk where you have the upgrade files located. The upgrade files you downloaded have been compressed using WINZIP and will need to be expanded before you can proceed.

3. To set up the 5550 for programming at 38400 baud, hold down the SHIFT and up arrow (^) keys while you apply power to the 5550 KeyCode Decoder. When the 5550 completes its boot-up sequence, it will say LOAD FLASH-38400.

To set up the 5550 for programming at 9600 baud, hold down the SHIFT and down arrow (v) keys while you apply power to the 5550 KeyCode Decoder. When the 5550 completes its boot-up sequence, it will say LOAD FLASH-9600.

4. (a) Using the DOS flash Loader program FL

The 5550 firmware is contained in an Intel HEX format file and is called UV55D4_XXXX.HEX. (XXXX is the build number) A DOS Flash Loader software utility (called FL.EXE) was provided along with the upgrade files you received. This utility uploads the HEX file to the 5550.

Note: If your operating system does not support longer than 8 character file names you may have to rename the file (e.g. REN UV55D4_XXXX UV55D4)

Run FL.EXE, with the UV55D4_XXXX.HEX file as the first argument. For example:

```
FL UV55D4.HEX
```

This will run the Flash loader program in its default configuration: COM1, 38400 baud, and software flow control. If you connected the computer using COM2 you will need to use additional command line parameter to specify the COM port as follows:

```
FL UV55D4.HEX /p2
```

If you set up the 5550 for programming at 9600 baud you will need to use additional command line parameter to specify the baud rate as follows:

```
FL UV55D4.HEX /b9600
```

Entering the FL with no file name will generate a usage message to show you all the available options for the Flash Loader program.

The Flash Loader will announce that it is establishing communications. If the program fails to establish communications then you are probably using the wrong baud rate or your cable is not wired correctly. Next the program will erase the FLASH EPROM and will pause until the 5550 completes the erasing function. When the erasing of the FLASH is completed, the FL program will proceed giving a status report as it sends each line of the HEX file to the 5550. During programming, the 5550 will also show a programming status on its front panel display.

The reprogramming will be complete when FL announces "End of File" and returns you to the DOS prompt.

4b. Using the windows flash Loader program WinFL

Start the WinFL by selecting its shortcut on the Start Menu. You will find it under \Evertz\winFL on the Program Files folder. Configure the COM port you wish to use and press OK.

Using the File\Open menu item, choose the UV55D4_XXXX.bin file that you want to load and press Ok. Press the Start Download button. You will be prompted to *Prepare the device for download*. If you have followed the procedure outlined in step 3, then press OK.

WinFL will announce that it is erasing the FLASH PROM and will pause until the 5550 completes the erasing function. If you do not get the Erasing message then you are probably using the wrong baud rate or your cable is not wired correctly. If the WinFL program does not pause while the 5550 is erasing the EPROM, you probably are having flow control problems. Check the COM port settings and try again, possibly at a lower baud rate.

When the erasing of the FLASH is completed, the WinFL program will proceed giving a progress indicator as it sends the HEX file to the 5550. During programming, the 5550 will also show a programming status on its front panel display.

The reprogramming will be complete when WinFL announces "Download Complete".

5. The 5550 will reboot when it successfully reprograms the FLASH EPROM. As a part of the 5550 boot-up cycle it will say "FLASH BASED" to indicate that it is running on the FLASH EPROM now. It will also announce the new firmware version.

Our aim at Evertz Microsystems is to provide high quality, professional products. If you have any comments or suggestions regarding the 5550 KeyCode Decoder or any other Evertz product, please contact us.