

1. UPGRADING FIRMWARE FOR THE 7725DSK-LG



Please note: It is imperative that the user follow the procedures described herein in order to successfully upgrade the firmware on the 7725DSK-LG units using the new Overture 2 software or the serial upgrade process.

1.1. OVERVIEW

The firmware in the 7725DSK-LG is contained on a FLASH EPROM. Occasionally firmware updates will be provided to add additional features to the unit. The firmware update can be initiated using either the front panel, a terminal program or through the Overture™ software applications. The Overture™ based upgrade is the recommended method.

You will need the following equipment in order to update the Firmware:

- A PC with an available communications port. The communication speed is 57600 baud, therefore a 486 PC or better with a 16550 UART based communications port is recommended.
- “Straight-thru” serial extension cable (DB9 female to DB9 male).
- Terminal program that is capable of Xmodem file transfer protocol (such as HyperTerminal).
- Overture™ application (recommended).
- New firmware supplied by Evertz.
- Available Ethernet port
- Available serial port



After upgrading the 7725DSK-LG with new firmware, all presets should be recalled using the *Recall Preset* menu item, the values for new features must be set, and the preset must be saved again using the *Store Preset* menu item.

IF THIS IS NOT DONE, OLD PRESETS COULD BE RECALLED WITH UNDESIRABLE SETTINGS.

1.2. FIRMWARE UPGRADE VIA OVERTURE APPLICATION (RECOMMENDED PROCEDURE)

When updating firmware through Overture, Overture and the 7725DSK-LG communicate with each other through Ethernet. Using Overture to upgrade the firmware is the recommended procedure as it is a simple 1-Step Upgrade mechanism. Before you upgrade your unit, ensure that you are running Overture Suite 2. Please refer to the Overture Suite 2 manual for Overture installation and operation instructions.



If you are running Overture Version 1 then your upgrade will not work as it does not support the 1-step upgrade process.

1. When opening Overture 2, the Media Manager will have the device information listed in the *Configuration View*. If the device has not been added in Overture, right mouse click the *Devices* option in the Network panel. Select the *New Device...* option from the menu. Once the *New Device* window appears, enter a device name and the IP address, then select *OK*.
2. Select the newly created 7725DSK-LG device in the Network list and Right-click the mouse button.

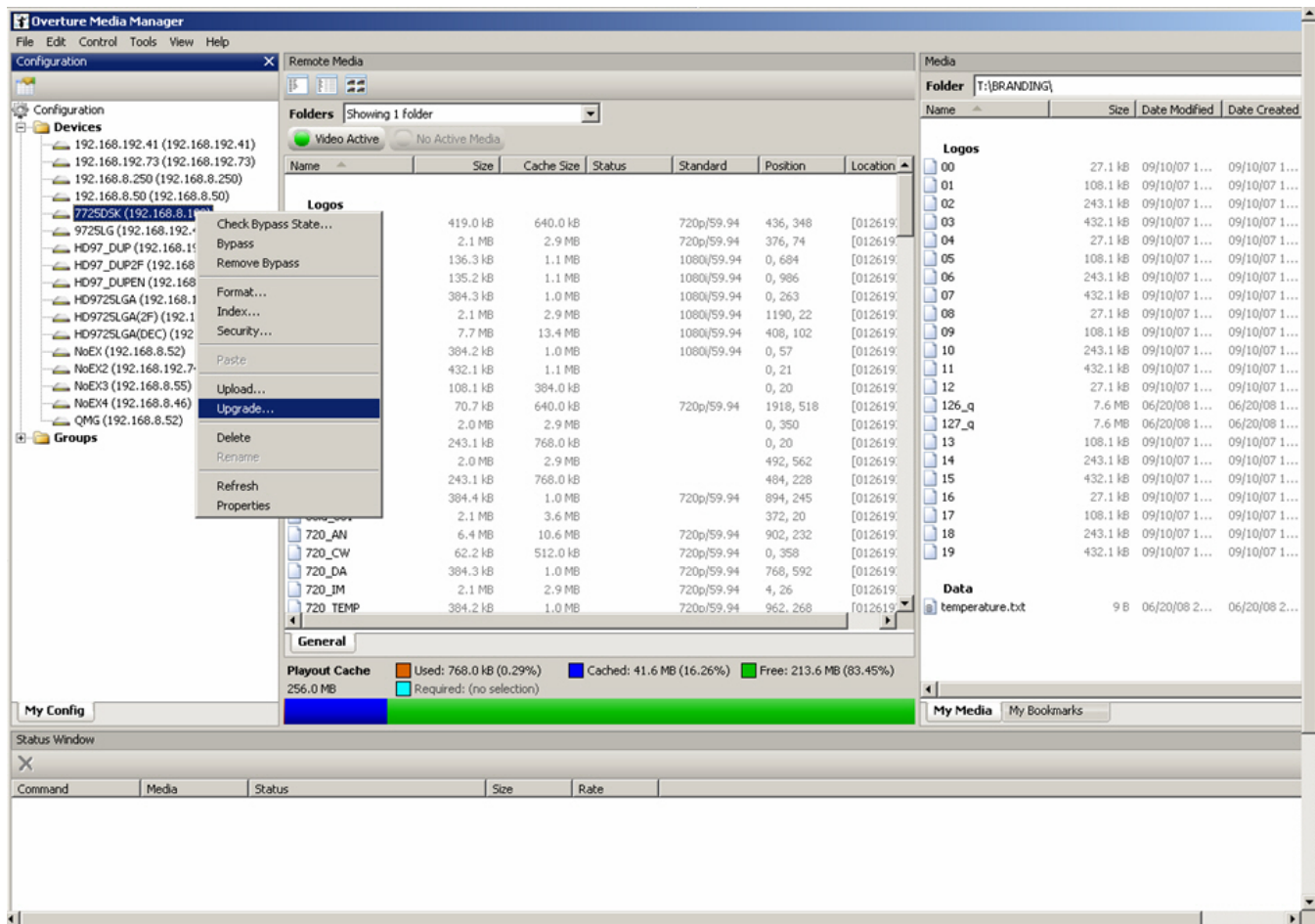


Figure 1-1: Upgrading via Overture

3. To upgrade the firmware, the user must select the **Upgrade...** button at the bottom of the drop down menu.
4. An upgrade window will appear. The user will then select the location of the BIN file required for the firmware upgrade. The bin file required will be "hd7725dsklg_xxxx.bin" for running HD and "sd7725dsklg_xxxx.bin" for running SD.
5. Click the "Open" button to start the firmware upgrade. In the console menu of Overture it will indicate the status of the firmware file being uploaded. When the upgrade process finishes, the unit will re-boot automatically.
6. Since the upgrade was performed using Overture Suite 2, the 7725DSK-LG will reboot automatically.

1.3. FIRMWARE UPGRADE VIA TERMINAL PROGRAM

Upgrading the firmware using the terminal program is a two step process.

1.3.1. Step 1: Transferring the File to the CF

The user must transfer a file called "firmware_7725DSKLG" onto the Compact Flash (CF). The user can transfer this file in one of two ways.

1.3.1.1. Method 1: Using Overture 2

The user can transfer the "firmware_7725DSKLG" file using Overture 2.

1. Navigate to the Compact Flash on the selected device to display the items located on the CF.
2. Navigate to the appropriate folder in the *Media* pane which contains the "firmware_7725DSKLG" file.
3. To transfer the file to the compact flash, highlight the file from the *Media* pane and drag it into the *Remote Media* window.



Note: When "firmware_7725DSKLG" file is transferred it will not be visible in the Remote Media pane of Overture, this is made intentionally to prevent the file from being deleted.

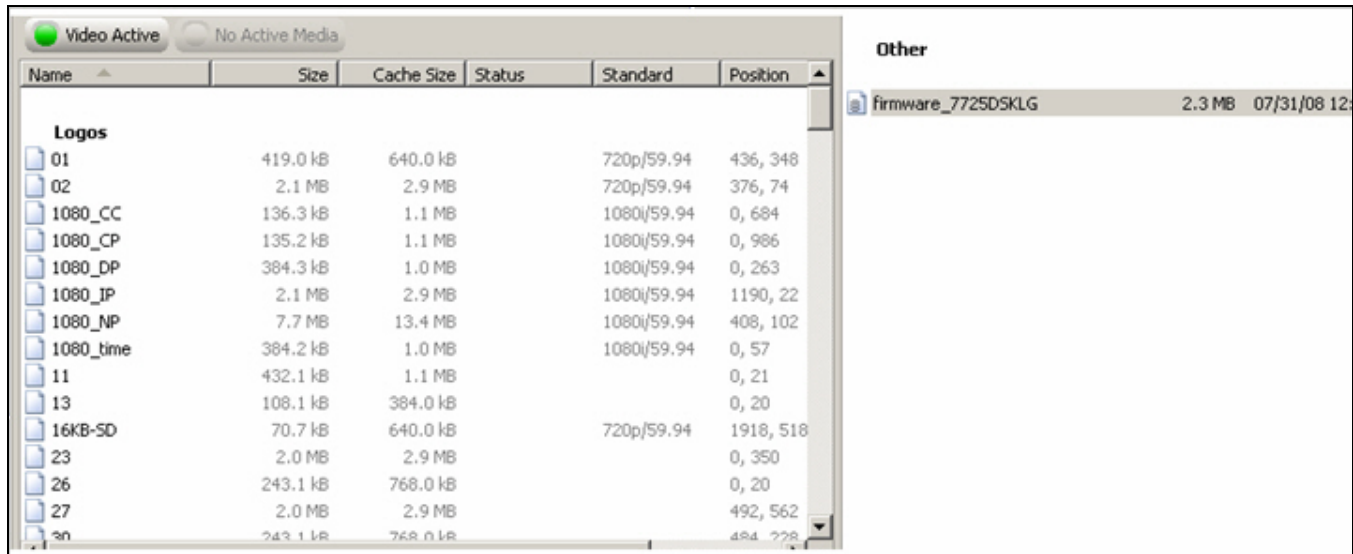


Figure 1-2: Transferring File in Overture

1.3.1.2. Method 2: Copy Using a CF Reader

The user can transfer the "firmware_7725DSKLG" to the CF using a CF reader.

1. To transfer this file, remove the CF card from the 7725DSK and insert it into a CF reader. Once in the CF reader, copy the "firmware_7725DSKLG" file.
2. Once the "firmware_7725DSKLG" file resides on the CF, place the CF back in the 7725DSK-LG unit and the user can proceed to step 2 (section 1.3.2)

1.3.2. Step 2: Serial Upgrade Procedure

1.3.2.1. Terminal Program Setup

1. In order to upgrade your unit serially, you will be required to download the hd7725dsklg_2v01_xxx.bin file (zipped file) from the Evertz website, which contains the following items:
 - boot2.bin
 - The firmware file is "firmware_7725DSKLG"

The "firmware_7725DSKLG" file is put onto the CF, and boot2.bin is applied using the "upgrade" command in the serial prompt.

2. When you are updating the keyer unit firmware, connect the rainbow cable (Evertz part # WA-S76) to the four pin connector on the front of the 7725DSK-LG module. Connect the other end of the rainbow cable to the serial connector.
3. Connect the 9 pin connector on the end of the serial update cable to the PCs' RS-232 communications port.

4. Start the terminal program.
5. Configure the port settings of the terminal program as follows:

Baud	57600
Parity	None
Data bits	8
Stop bits	2
Flow Control	None

5. Power up the unit.

1.3.2.2. Initiating Firmware Upgrade Mode from the Terminal Program

You may send commands to the keyer unit boot monitor in order to upgrade the application firmware.

6. Move the upgrade jumper into UPGRADE mode. Re-insert the card.
7. Power up the unit. After the unit powers up, user should hit CTRLX 5 times and a banner with the boot code version information should appear in the terminal window. The cursor to the right of the word "BOOT>" should be spinning. The user should now type in the word *upgrade*. Please refer to Figure 1-3.

For example:

```
EVERTZ 7700FC BOOT MONITOR
MON8240 1.1 BUILD 9
COPYRIGHT 2000 EVERTZ MICROSYSTEMS LTD. ALL RIGHTS RESERVED
UPGRADE JUMPER PRESENT
UPLOAD MAIN PROGRAM
```

```
EVERTZ 7700FC BOOT MONITOR.
MON8240 1.1 BUILD 9.
COPYRIGHT 2000 EVERTZ MICROSYSTEMS LTD. ALL RIGHTS RESERVED.
UPGRADE JUMPER PRESENT
UPLOAD MAIN PROGRAM
$↑↑B↑B0↑↑B↑B0↑
UPLOAD CANCELLED
ENTERING COMMAND LOOP
>
>
> upgrade
UPLOAD MAIN PROGRAM
$$$$$
```

Figure 1-3: 7700FC Boot Monitor

8. You should now see a prompt asking you to upload the file. Please refer to Figure 1-3.
9. Upload the “boot2.bin” file supplied using the X-Modem transfer protocol of your terminal program. If you do not start the upload within 10 minutes the unit’s Boot code will time out. You can restart the upgrade process by power cycling the unit.
10. After “boot2.bin” finishes loading a confirmation messages such as UPLOAD OKAY should appear and at this stage user should type in the word *boot*.

```

UPLOAD MAIN PROGRAM
$$$$
UPLOAD OKAY
> boot

```

- ```

This is the second stage boot loader:
Upgrade jumper is present:
To upload the keyer firmware file: "firmware_7725DSKLG" to the CF, use Overture.

To see the command menu, press Enter


```

12. Once the user presses *enter*, the following menu shown in Figure 1-5 will appear.

```

| |
| Main Menu |
| (v2.01 b149) |
(1) Network Configuration
(2) boot full firmware

(X) Exit
```

13. The user should type in the number 2 to initiate the unit to boot fully. The upgrade process will be completed and the unit will fully boot.

14. The boot code will indicate whether the operation was successful upon completion of the upload.

For Example:

UPLOAD OKAY

15. The following is a list of possible reasons for a failed upload:

- If you get the message "transfer cancelled by remote" you must restart the terminal program and load the bin file, then remove and install the module again.
- The supplied "\*.bin" file is corrupt.
- Wrong file specified to be uploaded.
- Wrong file transfer protocol used – make sure you specify Xmodem, not Xmodem 1K.
- The PCs' RS-232 communications port cannot handle a port speed of 57600.
- Noise induced into the Serial Upgrade cable.

16. The following is a list of possible reasons for failed communications:

- Defective Serial Upgrade cable.
- Wrong communications port selected in the terminal program.
- Improper port settings in the terminal program. (Refer to step 4 for settings). Note that HyperTerminal will not change port settings while connected. Click on HyperTerminal's "Disconnect" Button then click the "Reconnect" button to activate changes to the port settings.

#### **1.3.2.4. Completing the Upgrade**

14. Remove the upgrade jumper and power cycle the card or frame. The unit should now reboot.

15. You can now close the terminal program and disconnect the RS-232 serial cable from the PC.

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