

The S7702R standalone enclosure allows 3 slot modules to be operated as single modules with their own power supply. The standalone module comes with an external 12 VDC power adapter that plugs into your local power mains.

This document is a supplement to the operating instructions for the individual module. Unless otherwise noted, follow the installation and operation instructions in the following module specific chapter.

1 POWER

The S7702R standalone enclosure comes with an auto-ranging DC voltage adapter that automatically senses the input voltage. Power should be applied by connecting a 3-wire grounding type power supply cord to the power entry module on the DC voltage adapter. The power cord should be minimum 18 AWG wire size; type SVT marked VW-1, maximum 2.5 m in length. The DC cable of the voltage adapter should be connected to the DC power jack on the standalone module rear panel.



The S7702FR standalone enclosure has an auto-resetting fuse inside. To reset the fuse, disconnect the DC power adapter for about 10 seconds and then reapply power to the unit. If the condition that caused the fuse to trip still exists the fuse will trip again. In this case you should contact Evertz customer service for instructions on how to proceed.

2 REMOVING THE FRONT COVER

Many of the modules have card edge controls that need to be set. In order to gain access to these controls you will need to remove the front cover. Turn the two captive screws located on the front panel counter clockwise several turns until they release completely from the top cover. Carefully remove the front cover. To replace the front cover align the two captive screws with the threaded inserts of the top cover. Make sure that the **evertz** is at the top. Turn the two captive screws clockwise several turns until they are finger tight.

3 UPGRADING FIRMWARE

Some of the 7700 series modules contain firmware that is contained in a FLASH EPROM device. From time to time firmware updates will be provided to add additional features to the unit. The following procedure will allow you to upload new firmware from your computer.

The procedure for upgrading the firmware in each of these modules is the same. Through the rest of this section these modules will be referred to generically as the 7700 module.



Some modules may have additional instructions for upgrading firmware via Ethernet. Consult the upgrade instructions in the following module specific chapter for further information.

You will need the following equipment in order to update the 7700 Firmware

- PC with 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) or (DB25 female to DB9 male)
- Terminal program that is capable of Xmodem file transfer protocol (such as HyperTerminal).
- New firmware supplied by Evertz (available at the download site on www.evertz.com)
- Special upgrade cable supplied with the S7702FR frame. (Evertz part #WA-S76).

3.1 UPDATE PROCEDURE

3.1.1 PART 1: Configuring the Module for Firmware Upgrades

1. Remove the module from the frame.
2. Connect the Evertz Serial Upgrade cable to the 2 row x 3 pin header on the front edge of the 7700 series module as shown in the manual chapter for the module. Install the cable with the ribbon cable towards the front of the board.

7700 End			PC End	
2 row X 3 pin Berg	Pin	3 ft. Cable	9 pin D Female	Pin
Key	1			1
Rx	2	-----1a-----	Tx	2
Tx	3	-----1b-----	Rx	3
Tx Gnd	4	----drain-----	Gnd	5
Key	5			
---	6			

Table 1: Evertz Serial Upgrade Cable (WA-S76)

3. Move the UPGRADE jumper to the UPGRADE position.
4. Connect the 9 pin connector on the end of the Serial Update cable to the PCs' RS-232 communications port

3.1.2 PART 2: Terminal Program Setup

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

Baud	57600
Parity	no
Data bits	8
Stop bits	2
Flow Control	None

7. Install the 7700 module into the frame. After the module powers up, a banner with the boot code version information should appear in the terminal window.

For example:

```
EVERTZ MFC5407 MONITOR 2.1.3  
COPYRIGHT 1997, 1998, 1999, 2000, 2001, 2002 EVERTZ MICROSYSTEMS LTD.  
UPGRADE JUMPER INSTALLED  
  
UPLOAD FILE NOW, CONTROL-X TO CANCEL
```

8. The following is a list of possible reasons for failed communications:
 - Defective Evertz Serial Upgrade cable.
 - Wrong communications port selected in the terminal program.
 - Improper port settings in the terminal program. (Refer to step 7 for settings).

3.1.3 PART 3: Uploading the New Firmware

9. Upload the “*.bin” file supplied using the X-Modem transfer protocol of your terminal program. If you do not start the upload within 10 minutes the 7700 Boot code will time out. You can restart the upgrade process by removing and reinstalling the module.
10. The boot code will indicate whether the operation was successful upon completion of the upload.

For Example:

```
UPLOAD OKAY  
COLD BOOT> |
```

The cursor to the right of the word “BOOT>” should be spinning for about 5 seconds then the module will reboot.

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11. 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.
- The PCs' RS-232 communications port can't handle a port speed of 57600.
- Noise induced into the 7700 Serial Upgrade cable.

3.1.4 PART 4: Completing the Upgrade

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

13. Remove the module from the frame and disconnect the 7700 Serial Upgrade cable from the module. Restore the *UPGRADE* jumper to the RUN position

14. Reinsert the module into the frame.

The update procedure is now completed.