

Manual Update Zephyr Xstream Version 2.5.7p

01 March, 2003

To: Zephyr Xstream Users

RE: Zephyr Xstream software version 2.5.7p

Please note the following with regard to Zephyr Xstream version 2.5.0p or later:

1. Version 2.5.0p or later is required to connect using aacPlus to a Zephyr Xport that is using a POTS telephone line. ISDN “modem” support has been added to allow for this functionality.
2. All incoming voice mode calls will be automatically connected to the modem if a carrier is detected. This implies a short delay in audio connection when an incoming voice mode call is not from an Xport.
3. A new “Mode” in the dial menu is used for placing calls to an Xport that is on a POTS line. Simply choose the *Xport* option for mode when calling an Xport that is on a POTS line. Just as with *Phone* mode, when using *Xport* mode the user need not set codec, bit rate or sample rate – the correct settings are inherent to this mode.
4. To call on Xport that is on an ISDN line, set following codec settings as indicated below, and use the usual *Zephyr* option for *MODE* in the *DIAL* screen:

Transmit: AAC-LD Mono 64
Receive: AAC-LD Mono 64
Bitrate: 56 or 64
Sample: 48 kHz

5. *ISDN Modem* option added to the *TEL/INTERFACE* menu. NOTE: Either *ISDN Modem* or *ISDN* setting may be selected when using the ISDN interface.
6. Zephyr Xport transmits high quality audio to the Zephyr Xstream using the aacPlus algorithm. Note that the return path, from the Xstream to the Xport, uses a communications quality algorithm with reduced delay.



Zephyr Xstream's software is stored on a re-programmable module. The Xstream can use FTP (File Transfer Protocol) over any IP network to download new firmware from an FTP server into the memory module. We advise you to contact Telos Customer Support (have your current software version and Serial number when you call) to discuss whether the latest version would better meet your needs.

I Installing the Telos Updater ftp server

Note, if your firewall allows access to ftp.zephyr.com skip to *section III*, to update directly from the Telos FTP server over the web.

Launch the ZX255xx installer file. Follow the prompts to install the Telos updater and the update files. You can go with the default settings.

This will install the Telos Updater (tsFTP) program, create the proper directory structure, and unpack the update files to the correct directory of the target computer.

II Updating from your local ftp server.

Note, if your firewall allows access to beta.zephyr.com skip to *section III*

First, install the Telos ftp server as described in *section I*, above.

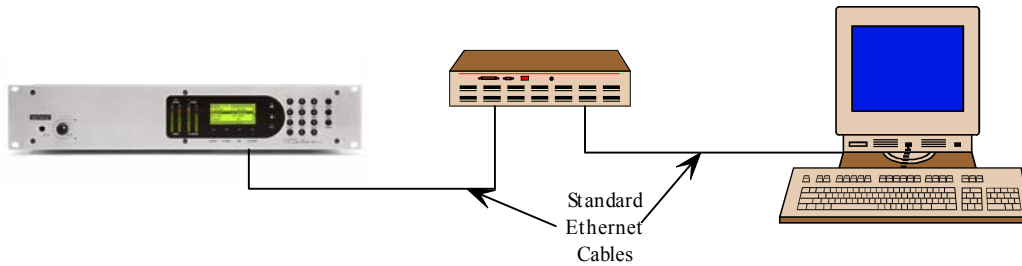
Software update step-by-step (Local Server)

1. You will need to know the IP address of the machine that will be running the ftp server. You can find out your IP address by going to the MS-DOS window and typing: IPConfig <enter> . The information about this machine's network configuration will be displayed.
2. Start the Telos update server (tsFTP). This is normally in a programs group called Telos Systems and is called "Start FTP Server".

It is important that the download process completed without interruption. If local power is not reliable, you might wish to place the Zephyr Xstream (and local FTP server, if used) on an un-interruptible power supply.

3. Connect the computer to be used for the update and the Zephyr Xstream to the same Ethernet network. The following diagram shows the usual connections. Note that a direct connection between the Xstream and the computer may be made, if

the appropriate Ethernet “Crossover” cable is used. See *Appendix 5* of the Xstream User’s Manual for details on that cable.



4. Program the following information into your Zephyr Xstream. Ask your network administrator if you need help.

Press the <SYSTEM> button three times. You will see a screen that looks like the following:

```
AUDIO CODEC TEL SYSTEM
IP Addr 192.168.0.200
SN Mask 255.255.255.0
Gateway 192.168.0.1
DNS      192.168.0.4
Unit's IP address
```

Enter the following information in this menu:

IP Address–

The IP address for this unit. As with any computer on an IP network, the Xstream must have an IP address before it can be used over the network.

SN Mask–

The subnet mask is to determine the size of your local network. All packets addressed to a destination outside this local area are sent to the gateway node entered in the next selection. Normally you should enter 255.255.255.0 here.

Press <SYSTEM>. The following screen will be displayed:

```
AUDIO CODEC TEL SYSTEM
Trusted <none>
FTP site ftp.zephyr.com
FTP update...
Reboot...
Trusted IP or Domain
```

FTP Site–

Enter the *FTP site* to be used. This is the IP address of the computer running the Telos Update FTP server (see step 1).

5. Update the system

Select *FTP update...* and press <SEL>. Press <▲> or <▼> to choose *OK* . Press <SEL>.

The unit will reboot once the update is complete. It may also give a message about non-volatile RAM values. This message is normal.

You can confirm that the update process was successful by looking at the Telos update FTP server window. If all went properly you will see “RETR/pub/Zxstream/update/Image was successful”

6. If you are updating from a pre version 2.5.x version to 2.5.x or later, the Xstream will display the following message once it has rebooted: “You must update your unit again to complete the update process!”. Repeat step 5.

IMPORTANT TIP	When updating from version 1.2.20p, it is recommended that you update your unit a second time (i.e. repeat step 5).
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7. Press <SYSTEM> once and verify that the new software version is shown. The update process is now complete.



```
AUDIO CODEC TEL SYSTEM
System Status
Uptime 0-00:11:53
Loopmode None
Version 1.3.3i BETA
Interface ISDN
```

III Updating directly from the Telos ftp site

Note: This method may be convenient if your firewall allows access to the Telos ftp site (<ftp.zephyr.com>).

If your firewall allows FTP (usually port 21) through, then the Xstream can download the new software directly from the Telos FTP site (<ftp.telos-systems.com>). If your firewall does not allow direct FTP download, see sections *I and II*, above.

Software update step-by-step (Telos Remote Server)

It is important that the download process completed without interruption. If local power is not reliable, you might wish to place the Zephyr Xstream (and local FTP server, if used) on an uninterruptible power supply.

1. Connect the Zephyr Xstream to a network with internet access.

2. Program the following information into your Zephyr Xstream. Ask your network administrator if you need help.

Ask your network administrator if you do not know the correct settings for the following items.

Press the <SYSTEM> button three times. The following menu will be shown:



Enter the following information in this menu:

IP Address –

The IP address for this unit). As with any computer on an IP network, the Xstream must have an IP address before it can be used over the network.

SN Mask –

The subnet mask is to determine the size of your local network. All packets addressed to a destination outside this local area are sent to the gateway node entered in the next selection. Normally you should enter 255.255.255.0 here.

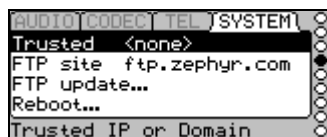
Gateway –

This is the IP address of a gateway router connecting you to the internet.

DNS –

This is the IP address of the DNS (Domain Name Server) you will be using.

Press <SYSTEM> once. The following menu will be displayed:



FTP Site –

Enter the FTP site to be used. This would normally be *ftp.zephyr.com* if downloading from Telos FTP site.

3. Select *FTP update...* and press <SEL>. Press <▲> or <▼> to choose *OK* . Press <SEL>.

The unit will reboot once the update is complete. It may also give a message about non volatile RAM values. This message is normal. You can confirm that the update process was successful by looking at the Telos update FTP server window. If all went properly you will see “RETR/pub/Zxstream/update/Image was successful”.

If you are updating from a pre version 2.5.x version to 2.5.x or later, the Xstream will display the following message once it has rebooted: “You must update your unit again to complete the update process!”. Repeat step 3.

IMPORTANT TIP	When updating to from 1.2.20p, it is recommended that you update your unit a second time (i.e. repeat step 3).
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Press <SYSTEM> once and verify that the new software version (2.5.xxp) is shown. The update process is complete.

```
AUDIO CODEC TEL SYSTEM
System Status
Uptime      0-00:11:53
Loopmode    None
Version     1.3.31 BETA
Interface   ISDN
```

Talos:D:/Manuals/ZXS... release 2.5.7 memo.doc

Telos Zephyr Xstream Software Release Notes

20 February, 2003

Many users inquire what features are new in the latest firmware release. The following Release Notes show the improvements and features added with each significant release.

1.2.20p

April 2001

Initial release

1.5.2p

August 2001

Production version (limited release)

- ❑ Multi-print deadlock conflict solved. Prevents occasional non-volatile memory corruption and lockup.
- ❑ L3 Dual Decoder added. Now supports fully independent Layer 3 mono 64 operation on B1 and B2.
- ❑ AAC-LD changed. New version requires 1.5.1p or later for compatibility.
- ❑ Contact closure support (ancillary data and local control) added. Menus for inputs and outputs added.
- ❑ Ancillary data support added. Contact closures and serial data transmission available in all L3 modes, all AAC modes, all AAC-LD modes. Also available in L2 Mono 64 and L2 Half 24.
- ❑ Panic Dial added.
- ❑ Dial prefix fixed.
- ❑ Changed connect sound.
- ❑ Enhanced software de-bounce of front panel buttons.
- ❑ SYSTEM status screen added.
- ❑ Added *Timeout* option to the *SYSTEM* menu to determine if default screen is automatically displayed.
- ❑ Default status screen added.
- ❑ Improved screen re-writes.
- ❑ Changed some default values.
- ❑ Added L3 Mono 128 mode.
- ❑ Minor ISDN changes; B channel 2 no longer incorrectly reports busy.
- ❑ Auto Receive mode only active when ISDN B channel(s) or V.35/X.21 port(s) are active.
- ❑ Improved L2 Mono-128 compatibility.
- ❑ Fixed AES output sync when “AES IN” option was selected.
- ❑ Layer 3 (MP3) streaming to Real Audio and Telos Audioactive players.
- ❑ MX/MXP; Added support for Consumer/Professional line output level selection.
- ❑ MX/MXP; Fixed output assignment issue.
- ❑ Non Mixer version; *Send Mix* option added to first *AUDIO* menu. Allows the sum of A+B to be sent when (primarily useful when mono modes are used).

1.5.5p
August 2001
Production version

- ❑ Memory management changed to reduce occasional problems encountered with FTP update.

2.1.0p
December 2001
Production Version

- ❑ Added HTML Web browser interface support.
- ❑ Default system password changed from <> to <Telos> (Case sensitive).
- ❑ Changed dial screen to reflect last number dialed if Line 2 is dialed first.
- ❑ Fixed problem with G.722 decoder adding gain to received audio.
- ❑ Improved the ability to boot and display errors in the case of hardware POST failure.
- ❑ Removed delay in G.722 encoder present if unit rebooted while in G.722 Xmt.
- ❑ Fixed problem where excessive AUTO setups could prevent proper bootup.
- ❑ Improved ISDN compatibility with certain ETS 300 lines and DMS-100 custom (signal IE no longer sent in DMS Cust.).
- ❑ Added "V.35 single mode" to the INTERFACE selection of the TEL menu (for single V.35 port at 112, 128, 256, 384 kbps). Renamed "V.35" mode to "V.35 split".
- ❑ Added streaming encoder support for AAC. Added streaming decoder for Layer 3 and AAC.
- ❑ Fixed instability in AAC at 32 kHz.
- ❑ Fixed instability in AAC-LD at 48 kHz.
- ❑ Update process improved (checksum for loadset).
- ❑ Fixed contact closure incompatibility with Zephyr rev 2.66 and earlier.
- ❑ Non-Mixer only: fixed *GAIN TRIM* in *AUDIO* menu to be 1 dB steps +/- 12 dB.
- ❑ Non-Mixer only: fixed problem were A and B inputs would be summed.
- ❑ MX/MXP only: Improved audio fidelity at 48kHz sample rate.
- ❑ MX/MXP only: Fixed mixer inputs vs pots assignment issue and monitor 1 vs 2 issue.

2.1.1p
February 2002
Production Version

- ❑ Improved compatibility with Dialog-4 codecs

2.2.30i
July 2002
Beta Version

- ❑ Improved G.722 decoder. More robust in the presence of clipped audio from far end.

2.2.35i
Aug 2002
Beta Version

- ❑ Added *COMPATIBILITY MODE* option to the *CODEC* menu. Set to *Slimline* to operate with Dialog-4 Slimline codecs.
- ❑ DDS clock now used for Ethernet audio clock.

2.5.0p

Feb 2003

Production Version

- ❑ Includes changes in 2.2.30i and 2.2.35i.
- ❑ Added aacPlus for use with Zephyr Xport.
- ❑ Added ISDN modem DSP support for use with Zephyr Xport. New *Interface* added: *ISDN Modem*
- ❑ New call mode *Xport* for aacPlus modem communication with Zephyr Xport.
- ❑ AAC decoder enhanced to include error concealment. Also more robust when bit errors are present.
- ❑ Fixed several problems with HTML interface including line 2 dialing problem.
- ❑ *CODEC* status menu changed to include ISDN modem information and compatibility setting.

Talos:D:/Manuals/ZXS...updater readme rev2.5.7p.doc