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## Telos Zephyr Firmware Release Notes & Update Instructions

1 December, 2001

### Zephyr Firmware Release Notes

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. See below for information on installing your Zephyr upgrade.

System Firmware//Loadsets

2.40//2.14

Last version before Layer II+III became available

2.56//2.20

First production version of Layer II+III

- Number of Autodials increased from 20 to 40.
- Major changes to serial port commands.
- Requires ZephyrControl rev 2.4 or later.
- Default serial port speed changed to 9600bps from 2400bps.
- Added help menus.

2.63//2.22

Beta version

- Fix for DMS-100 ISDN switch buffer problem (Fatal error 3043 and dropped calls) present since 2.40//2.14.
- Improved G.722 for better compatibility.

2.65//2.23 (Spring through Summer 1996)

Production version.

- Added "Near" loopback mode (requires ISDN TA card). Renamed "Loopback Yes" to "Loopback Far". Note, ISDN line must be attached if Euro terminal adaptor is used.
- Restored low end frequency response of G.722 lost in 2.22 loadset.
- Fixed G.722 problem present since 2.40//2.14; G.722 no longer cares which "line" is connected to which.
- Maximum local serial port speed changed to 19.2Kbps from 9600bps.
- Cold boot now requires confirmation.

### 2.65b//2.23

Production for Zephyrs with Layer III only hardware

### 2.65e//2.23

Production version for Europe with 64kbps and ETS300 defaults

### 2.66//2.23 (Summer through Fall 1996 and Spring 1997 through Fall 1997)

Production version for Rev F motherboards only.

- Supports AES/EBU.
- Number of autodials increased from 40 to 50. 2 digit selection of autodials added.
- Fixed Euro ISDN dialing bug.
- Allows up to 4 Panic Dial inputs.

### 2.68//2.25 (Fall 1996-Winter 1996, limited release)

Production version

- Fixed G.722 decoder's attempts to decode audio from POTS calls (present since 2.66). Caller ID displayed when available.
- Changed call proceeding displays. Now uses ConnX codes. Second call can be attempted before first call clears.
- Fixed ISDN; restarts if ISDN line is removed and then restored.
- ISDN changed; No longer specifies B channel on outgoing call (uses "any B")
- ISDN changed; improved compatibility with ETS-300 ISDN.
- Fixed transparent serial data mode to allow <#> and <+> characters.
- Fixed transparent serial mode problem present since 2.65 to allow continuous characters.
- Fixed front panel speaker noise pops present on Rev F motherboards.
- Fixed V.35 handshaking problem.
- Added serial port "lock" command.

### 2.68b//2.25

Production version for Zephyrs with Layer III only hardware.

### 2.68e//2.25

Production version for Europe with 64kbps and ETS300 defaults.

### 2.69//2.32 (Winter 1997/98 - April 1998)

Production Version

- Added L2 HALF/24 Xmt and Rcv modes (24kHz L2 mono).
- Compatibility mode added to allow Dialog 4 codec compatibility.
- Fixed overseas dialing bug (from North America) present since 2.68.
- Changed ISDN behavior; more compatible with AT&T/Lucent Definity switch versions G3r and G2.2; better Euro ISDN compatibility.
- Restored call progress audio during unsupervised POTS calls (via front panel).
- Behavior of SPID screen dependent on Telco Setting (MSN 1&2 displayed if Telco is set to ETS300. No SPID screen if set to PTP).
- Added Ancil Data Utility option.

- Added Utility menu option for LCD brightness; Changed how front panel LCD contrast and brightness settings are stored in memory (no longer in FP processor). Holding <Help> down restores default settings for LCD.
- Renamed L2 Dual to L2 Stereo
- Requires ZephyrControl Rev 2.13 or later.
- Rate adaption information disregarded if a call is already up.
- AES/EBU output muted on bootup.
- AES/EBU less hardware selective (Xilinx problem).
- Improved ETS300 compatibility.

2.69e//2.32

Production version for Europe with 64kbps and ETS300 defaults.

2.70//2.36 (Spring 1998-Summer 1999)

Production version

- Fixed various display idiosyncrasies present since 2.69.
- SPID screen changed. No longer disappears when Telco is set to "PTP".
- Fixed problem with local loopback under certain circumstances.
- Faster receive lock in L3 stereo than loadset 2.32.
- AES/EBU (Xilinx problem) problem solved.
- POTS call progress tones routed to main outputs as well as front panel speaker.
- Time since last boot added to about screen.
- Special Setups to set Telco and SPIDs are now supported (see app note for details)

2.70b//2.36

Production version for Zephyrs with Layer III only hardware.

2.70e//2.36

Production version for Europe with 64kbps and ETS300 defaults.

2.70e//2.36-56 (Summer of 1999 – Fall 2001)

Production version

- ISDN Change; Unit will send "calling party ID" if Directory numbers are present and unit is set to Natl I-1, or if MSN numbers are present and Telco is set to ETS 300.
- Improved reliability in G.722 when Compat = Slimline.
- AES/EBU validity bit now set properly.
- Enabling AES/EBU disables the limit LEDs
- Dial screen now shows line number and call type as with versions prior to 2.70.
- New startup key added. Pressing 7 sets unit to 1200 bps in transparent mode.
- Change to NRW presets. Phone speaker = 0
- ISDN Change. SETUP-ACK message response supported (Canadian problem).

2.72//2.36 (Fall 2001-present)

Production Version

- Change in writing to Mitel S chip.
- ISDN change; support for DM reply from switch after SABME (per Pac Bell/ITU-T Q.921 5.5.1.2). Allows reliable initialization with DMS-100 switch, versions LEC 0004 and later.
- RS-232 port changes: "Decoder Locked" or "Decoder Unlocked" sent to port when lock status transitions.
- Utility Screen #4 & #7 comes up with cursor at top line.
- Autodial Screen Display option now shows correct setup information.
- Menu timeout works when RS-232 is polled.
- Sync LED updated periodically rather than just at transitions.
- Ancillary data at 300bps now works.
- RS-232 port data rate of 19,200 bps now operates.

2.72b//2.36

Release version for Zephyrs with Layer III only hardware

2.72be//2.36

Release version for Europe with 64kbps and ETS300 defaults. For Zephyrs with Layer III only hardware.

2.72e//2.36

Release version for Europe with 64kbps and ETS300 defaults.

# Telos Zephyr Firmware Update Installation Instructions

Enclosed are EPROMS containing new Firmware upgrades for your Zephyr. Please follow these steps carefully, and if you experience difficulty call us for assistance.

When you finish this installation procedure, the Zephyr will power up with all modes set to the factory defaults. You will need to enter SPIDs and set "Telco" to National ISDN-1 if you are using National ISDN or Northern Telecom DMS-100 Custom ISDN service. If using the Custom Point-to-Point ISDN service you will need to set your "Telco" to "PTP". If using the ETS 300 (Euro ISDN) ISDN service you will need to set your "Telco" to "ETS". In addition, you will need to re-enter any Auto-Dial settings you may have previously saved. You may wish to write those settings down before continuing.

Installation procedure:

1. Power Zephyr off and remove the AC Mains power connector.
2. Remove top cover (remove all screws on top cover).
3. Locate the ISDN Terminal Adapter card that is installed in the position closest to the side panel of the Zephyr and remove the capture screws attaching the card to the back panel. Carefully remove the card from its connector on the motherboard by pulling it straight up.
4. Locate the AES/EBU card (if present) that is installed in the second position from the side panel of the Zephyr and remove the capture screws attaching the card to the back panel. Remove the two screws holding the left end (as viewed from the rear) of the back panel to the chassis. Carefully remove the card from its connector on the motherboard by pulling it straight up.
5. Locate U4, U5 U6 and U7 on the motherboard (U7 might be empty). Carefully remove the EPROMs from their sockets with an IC extractor.
6. Install the new EPROMs U4, U5 U6 and U7, using an IC inserter, if necessary. Use the locator notch on the end of each EPROM to ensure proper orientation. Make sure that all of the pins are properly seated.
7. Re-install the ISDN Terminal Adapter Card. Install the capture screws.
8. Re-install the AES/EBU card. Replaced the rear panel mounting screws and the card capture screws.
9. Replace top cover and connect AC Mains power connector.
10. Power the Zephyr on. After initialization, press the help key until you see "Line status..." on the display. Press the star "\*" key. Press the "#" when prompted. The Zephyr will cold boot and load with all factory defaults. Now you are ready to re-enter all of your user data.

Please return the old EPROMs to Telos, via regular US Mail. Your return of these parts allows us to continue to offer upgrades at the lowest cost to you.

Thanks for your support of Telos Systems. For more information, email [support@telos-systems.com](mailto:support@telos-systems.com), or [europe@telos-systems.com](mailto:europe@telos-systems.com).