



TimeSource 3500

Software Release Document

Release 1.04.02

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General

This document provides information about Release 1.04.02 of the software for Symmetricom's TimeSource 3500.

The TimeSource 3500 plug-in card is shipped from the factory with software installed. The procedure in this document should be used only for reinstalling existing software, or for installing a software upgrade.

New Features

New features in this release:

- Monitors synchronization performance of incoming lines
- Supports Ethernet network communications

Corrected Issues

This release of the software includes no corrected issues.

Known Issues

This release of the software includes the following issue:

- *Issue 4-51:* After installing this software release, the system performance may enter the degraded region of the PRS mask for up to 1 hr.

Workaround: None.

Estimated Down Time

Not applicable.

Estimated Installation Time

Installing this software release takes approximately 30 minutes.

Requirements

The hardware, software, and documentation required to operate this software release is listed below.

Hardware

A PC with the following minimum items is required.

- 90 MHz Pentium
- 8 MB RAM
- One available serial communications port
- CD-ROM drive

Software

The software listed below is required for the PC.

- Windows 95 (Windows 98 recommended) or Windows NT 4.0 operating system
- Terminal emulation software with Y-modem capability

Documentation

Use the manual/revision listed below. Higher revisions of the manual can also be used.

| <u>Manual</u> | <u>Part Number</u> | <u>Revision</u> |
|-----------------|--------------------|-----------------|
| TimeSource 3500 | 997-72050-01 | A |

Installation

To install this software release, follow the steps in Procedure A.

Procedure A. Software Installation

| Step | Procedure |
|------|--|
| | <p>Use this procedure to install the software in the TimeSource 3500. This procedure assumes that the TimeSource 3500 Shelf is installed and powered.</p> |
| | <p><i>Caution:</i> After installing this software release, the system performance may enter the degraded region of the PRS mask for up to 1 hr.</p> |
| | <p>Notes:</p> |
| | <ol style="list-style-type: none">1. In this procedure, ignore all responses and alarms not specifically mentioned.2. Some events may be present after the power-up/restart event clears. These events will clear within 5 minutes. |
| | <p>Equipment:</p> |
| | <ol style="list-style-type: none">1. A computer that accepts a CD-ROM drive, has a hard drive with at least 2 megabytes of disk space available, and has an ASCII terminal emulation program capable of a Y-modem batch transfer of files. The computer must have an RS-232 connection to the shelf with the following settings: local echo off, 8 data bits, no parity, and 1 stop bit.2. The TimeSource 3500 CD-ROM labeled 092-72050-01 Version 1.04.02. |
| 1 | Insert the TimeSource 3500 CD-ROM labeled 092-72050-01 Version 1.04.02 into the computer. |
| 2 | Create a new directory on the hard drive of the computer. |
| 3 | <p>Copy the TS3000 .hex, GPS .hex, and DEVn .hex files from the TimeSource 3500 CD-ROM to the directory created in the previous step. A system requires a specific DEVn.hex file:</p> <ul style="list-style-type: none">• 990-72050-01 systems (no module) require the DEV1 .hex file• 990-72050-02 systems (eight TI outputs module) require the DEV5 .hex file• 990-72050-03 systems (eight composite clock outputs module) require the DEV7 .hex file• 990-72050-05 systems (two IRIG-B outputs module) require the DEV3 .hex file |
| 4 | Remove the TimeSource 3500 CD-ROM from the computer. |
| 5 | <p>At the computer, from the terminal emulation program, press the semicolon (;) key.</p> <p><i>Requirement:</i> The computer shows one of the following:</p> <p>“C”</p> <p>or</p> <p>a TLI deny message</p> |
| 6 | If “C” was the response in the previous step, continue with the next step. If “C” was <i>not</i> the response in the previous step, skip to Step 9. |
| 7 | Activate a Y-modem transfer of the TS3000 .hex file from the directory created in Step 2 to the TimeSource 3500. The download may take up to 20 minutes. |

Procedure A. Software Installation (cont'd)

| Step | Procedure |
|------|--|
| 8 | <p>After the terminal emulation software indicates that the transfer has been completed, wait 90 seconds, then enter “;”.</p> <p>If the result is “C”, the transfer was incomplete; repeat Step 7. If the result is a deny response, the transfer has been completed; continue with the next step.</p> |
| 9 | <p>Enter the following command:</p> <pre>ACT-USER::<uid>:<ctag>::<pid>;< pre=""> <p><i>Note:</i> If you do not know the <uid> parameter (user identifier or user name) or <pid> parameter (private identifier or password), ask your system administrator.</p> <p><i>Requirement:</i> When completed, the following is displayed:</p> <pre>TS3000 <date> <time> M <ctag> COMPLD /* LINK: x, CMD: ACT-USER::<uid>:<ctag>::<pid> *="" ;<="" pre=""> </uid>:<ctag>::<pid>></pre></uid>:<ctag>::<pid>;<></pre> |
| 10 | <p>Determine the versions of the operating system software, the GPS receiver software, and the hardware option software currently installed by entering the following command:</p> <pre>RTRV-INVENTORY:[<tid>]:TS3000:<ctag>;</pre> <p><i>Requirement:</i> The following is displayed:</p> <pre>TS3000 <date> <time> M <ctag> COMPLD “TS3500::::<CARD=TS3500> TYPE=T1 PART=x, SERIAL=x, SOFTVER_TS3000=x, SOFTVER_GPS=x, SOFTVER_DEV=x” /* LINK: x, CMD: RTRV-INVENTORY:[<tid>]:TS3000:<ctag> */ ;</pre> <p>The versions of software for the operating system (SOFTVER_TS3000=x), the GPS receiver (SOFTVER_GPS=x), and the hardware option (SOFTVER_DEV=x) are shown near the bottom of the response.</p> |

Procedure A. Software Installation (cont'd)

| Step | Procedure | | | | | | | | | | | | | | | | | | | | | | | | |
|---|--|------------------|---|---------------------------|---------------------------|-----------------------|---------------------|---|-----|----------------------------------|---|----------------------------------|-----------------------------|----------------------------------|-----------------------------|----------------------------------|-----------------------------|------|----------|-----------------------------|------|----------|-----------------------------|------|----------|
| 11 | <p>Determine if the latest software versions are installed by comparing the results of the previous step with the software versions in this software release. This software release includes the following:</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;"><u>Software</u></th> <th style="text-align: left;"><u>TLI response for the version in this release</u></th> </tr> </thead> <tbody> <tr> <td>Operating System software</td> <td>SOFTVER_TS3000=1.04.02</td> </tr> <tr> <td>GPS Receiver software</td> <td>SOFTVER_GPS=1.01.02</td> </tr> <tr> <td colspan="2">Plus software for one of the following:</td> </tr> <tr> <td> Hardware for 090-72050-01 (DEV1)</td> <td>SOFTVER_DEV=x.xx.xx</td> </tr> <tr> <td> Hardware for 090-72050-02 (DEV5)</td> <td>SOFTVER_DEV=x.xx.xx-x.xx.xx</td> </tr> <tr> <td> Hardware for 090-72050-03 (DEV7)</td> <td>SOFTVER_DEV=x.xx.xx-x.xx.xx</td> </tr> <tr> <td> Hardware for 090-72050-05 (DEV3)</td> <td>SOFTVER_DEV=x.xx.xx-x.xx.xx</td> </tr> </tbody> </table> | <u>Software</u> | <u>TLI response for the version in this release</u> | Operating System software | SOFTVER_TS3000=1.04.02 | GPS Receiver software | SOFTVER_GPS=1.01.02 | Plus software for one of the following: | | Hardware for 090-72050-01 (DEV1) | SOFTVER_DEV=x.xx.xx | Hardware for 090-72050-02 (DEV5) | SOFTVER_DEV=x.xx.xx-x.xx.xx | Hardware for 090-72050-03 (DEV7) | SOFTVER_DEV=x.xx.xx-x.xx.xx | Hardware for 090-72050-05 (DEV3) | SOFTVER_DEV=x.xx.xx-x.xx.xx | | | | | | | | |
| <u>Software</u> | <u>TLI response for the version in this release</u> | | | | | | | | | | | | | | | | | | | | | | | | |
| Operating System software | SOFTVER_TS3000=1.04.02 | | | | | | | | | | | | | | | | | | | | | | | | |
| GPS Receiver software | SOFTVER_GPS=1.01.02 | | | | | | | | | | | | | | | | | | | | | | | | |
| Plus software for one of the following: | | | | | | | | | | | | | | | | | | | | | | | | | |
| Hardware for 090-72050-01 (DEV1) | SOFTVER_DEV=x.xx.xx | | | | | | | | | | | | | | | | | | | | | | | | |
| Hardware for 090-72050-02 (DEV5) | SOFTVER_DEV=x.xx.xx-x.xx.xx | | | | | | | | | | | | | | | | | | | | | | | | |
| Hardware for 090-72050-03 (DEV7) | SOFTVER_DEV=x.xx.xx-x.xx.xx | | | | | | | | | | | | | | | | | | | | | | | | |
| Hardware for 090-72050-05 (DEV3) | SOFTVER_DEV=x.xx.xx-x.xx.xx | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | <p>If no further downloading is required, skip to Step 19. To download files, continue with the next step.</p> <p><i>Note:</i> If any alarms are present, clear them.</p> | | | | | | | | | | | | | | | | | | | | | | | | |
| 13 | <p>Based on the results of Step 11, determine the names of the software files to download, then the <aid> associated with that software from the following:</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;"><u>Software</u></th> <th style="text-align: left;"><u><aid></u></th> <th style="text-align: left;"><u>File Name</u></th> </tr> </thead> <tbody> <tr> <td>Operating System software</td> <td>TS3000</td> <td>TS3000.hex</td> </tr> <tr> <td>GPS Receiver software</td> <td>GPS</td> <td>GPS.hex</td> </tr> <tr> <td colspan="3">Plus software for one of the following (if upgrade is necessary):</td> </tr> <tr> <td> Hardware (for 990-72050-01)</td> <td>DEV1</td> <td>DEV1.hex</td> </tr> <tr> <td> Hardware (for 990-72050-02)</td> <td>DEV5</td> <td>DEV5.hex</td> </tr> <tr> <td> Hardware (for 990-72050-03)</td> <td>DEV7</td> <td>DEV7.hex</td> </tr> <tr> <td> Hardware (for 990-72050-05)</td> <td>DEV3</td> <td>DEV3.hex</td> </tr> </tbody> </table> <p><i>Notes:</i></p> <ol style="list-style-type: none"> 1. The <aid> and file name will be used in the next two steps. 2. The DEV files are not upgraded from the previous release, and downloading any of the DEV files will take the system out of service for up to 20 minutes. Do not download a DEVn.hex file unless the currently installed file is corrupted or new hardware is installed. | <u>Software</u> | <u><aid></u> | <u>File Name</u> | Operating System software | TS3000 | TS3000.hex | GPS Receiver software | GPS | GPS.hex | Plus software for one of the following (if upgrade is necessary): | | | Hardware (for 990-72050-01) | DEV1 | DEV1.hex | Hardware (for 990-72050-02) | DEV5 | DEV5.hex | Hardware (for 990-72050-03) | DEV7 | DEV7.hex | Hardware (for 990-72050-05) | DEV3 | DEV3.hex |
| <u>Software</u> | <u><aid></u> | <u>File Name</u> | | | | | | | | | | | | | | | | | | | | | | | |
| Operating System software | TS3000 | TS3000.hex | | | | | | | | | | | | | | | | | | | | | | | |
| GPS Receiver software | GPS | GPS.hex | | | | | | | | | | | | | | | | | | | | | | | |
| Plus software for one of the following (if upgrade is necessary): | | | | | | | | | | | | | | | | | | | | | | | | | |
| Hardware (for 990-72050-01) | DEV1 | DEV1.hex | | | | | | | | | | | | | | | | | | | | | | | |
| Hardware (for 990-72050-02) | DEV5 | DEV5.hex | | | | | | | | | | | | | | | | | | | | | | | |
| Hardware (for 990-72050-03) | DEV7 | DEV7.hex | | | | | | | | | | | | | | | | | | | | | | | |
| Hardware (for 990-72050-05) | DEV3 | DEV3.hex | | | | | | | | | | | | | | | | | | | | | | | |
| 14 | <p>Enter the following command with the <aid> determined in the previous step:</p> <pre style="margin-left: 40px;">CPY-MEM::<aid>:ctag::AUX,,WKG:PGM;</pre> <p><i>Note:</i> The Y-modem transfer in the next step must be started within 60 seconds of entering the CPY-MEM command in this step, or the system times out and the CPY-MEM command must be re-entered.</p> | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 | <p>Activate a Y-modem transfer of the appropriate file (from Step 13) from the directory created in Step 2 to the TimeSource 3500. The transfer may take up to 20 minutes.</p> | | | | | | | | | | | | | | | | | | | | | | | | |

Procedure A. Software Installation (cont'd)

| Step | Procedure |
|--------------------------------|--|
| 16 | <p>After the terminal emulation software indicates that the transfer has been completed, wait 90 seconds.</p> <p><i>Requirement:</i> Either a TLI completed message or a TLI deny message is displayed.</p> <p><i>Note:</i> If the TS3000 .hex or DEVn .hex file was downloaded, the user is logged off. If the GPS .hex file was downloaded, the user remains logged on.</p> |
| 17 | <p>If a deny message was displayed in the previous step, repeat Steps 14 through 16. If a completed message was displayed in the previous step, continue with the next step.</p> |
| 18 | <p>If additional files require downloading:</p> <ul style="list-style-type: none">• If the TS3000 .hex or DEVn .hex file was downloaded and another file requires downloading, repeat Steps 9 through 17.• If the GPS .hex file was downloaded and another file requires downloading, repeat Steps 10 through 17. <p>If no additional files require downloading, continue with the next step.</p> |
| 19 | <p>Delete all files in the directory created in Step 2.</p> |
| 20 | <p>Delete the directory created in Step 2.</p> |
| <p><i>End of Procedure</i></p> | |