Symmetricom

TimeSource 3000

Software Release Document

Release 1.02.02

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Contents

General

This document provides information about Release 1.02.02 of the software for Symmetricom's TimeSource 3000.

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The TimeSource 3000 Shelf 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

This release of the software includes the following new features:

- The Delete User Security command was added, to allow a system administrator to delete a user.

- The Edit Communication command was added, to change communication port parameters.

- The Enter User Security command was added, to allow a system administrator to enter a new user, including the user name, password, and access level.

- The Retrieve Communication command was added, to display communication port parameter settings.

- The Retrieve GPS Status command was added, to display the position of the GPS receiver, UTC time, and status information for each of the GPS satellites in view.

- The Retrieve User Security command was added, to allow a system administrator to retrieve security parameters for a single user or for all users.

- The Set Source Identifier command was added, to set the name of the equipment sending the message.

- Command parameters were modified to implement the following new features:

    – Time of Day output: NTP Type 4 or Cisco format

    – Software and hardware flow control

    – Alarm conditioning

    – Eight additional T1 outputs option

    – IRIG-B format Time of Day outputs option

Corrected Issues

This release of the software includes the following corrections:

- *Issue 0-04:* When downloading the `DEV1.hex` or `GPS.hex file` to the TimeSource 3000, there was no `COMPL` response to the `CPY-MEM` command.

    Correction: When downloading the `DEV.hex` or `GPS.hex` file to the TimeSource 3000, there is a `COMPL` response to the `CPY-MEM` command.

- *Issue 0-10:* The <atag> parameter in autonomous messages showed "ct" instead of a number which increments with each message.

    Correction: The <atag> parameter in autonomous messages shows a number which increments with each message.

- *Issue 0-25:* The alarm logic allowed a higher severity alarm to be overridden by a lower severity alarm.

    Correction: The alarm logic does not allow a higher severity alarm to be overridden by a lower severity alarm.

- *Issue 0-28:* If a line of text was repeatedly sent to the TimeSource 3000 without waiting for a response between entries, the third or fourth deny message occasionally showed only a partial representation of the text string that was entered.

    Correction: If a line of text is repeatedly sent to the TimeSource 3000 without waiting for a response between entries, all deny messages show the complete representation of the text string that was entered.

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/recommended for the PC.

- Windows 95, Windows 98, or Windows NT 4.0 operating system (required)

- Terminal emulation software with Y-modem capability

Documentation

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

Manual	Part Number	Revision
TimeSource 3000	997-72000-01	E

Installation

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

Procedure A. Software Installation

Step	Procedure
	Use this procedure to install the software in the TimeSource 3000. This procedure assumes that the TimeSource 3000 Shelf is installed and powered. *Caution: After installing this software release, the system performance may enter the degraded region of the PRS mask for up to 1 hr.* *Note:* In this procedure, ignore all responses and alarms not specifically mentioned. *Equipment:* 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, 1 stop bit, and 9600 baud. 2. The TimeSource 3000 CD-ROM labeled 092-72010-02 Version 1.02.02.
1	Insert the TimeSource 3000 CD-ROM labeled 092-72010-02 Version 1.02.02 into the computer.
2	Create a new directory on the hard drive of the computer.
3	Copy the `TS3000.hex`, `GPS.hex`, and `DEV.hex` files from the TimeSource 3000 CD-ROM to the directory created in the previous step. For 990-72010-01 systems (two T1 outputs), copy the `DEV1.hex` file; for 990-72010-05 systems (two T1 and eight composite clock outputs), copy the `DEV3.hex` file; for 990-72010-02 systems (two T1 and IRIG-B outputs), copy the `DEV5.hex` file.
4	Remove the TimeSource 3000 CD-ROM from the computer.
5	At the computer, from the terminal emulation program, press the semicolon (;) key. *Requirement:* The computer shows one of the following: "C" or a TL1 deny message

Step	Procedure
6	If "C" was the response in the previous step, continue with the next step. If "C" was *not* 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 Time-Source 3000. The download may take up to 20 minutes.
8	After the terminal emulation software indicates that the transfer has been completed, wait 90 seconds, then enter ";". 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.
9	Enter the following command: `    ACT-USER::<uid>:<ctag>::<pid>;` *Note:* If you do not know the <uid> parameter (user identifier or user name) or <pid> parameter (private identifier or password), ask your system administrator. *Requirement:* When completed, the following is displayed: <pre> TS3000 <date> <time>\nM <ctag> COMPLD\n /* LINK: x, CMD: <command> */\n ;</pre>
10	Determine the version of software currently installed by entering the following command: `    RTRV-INVENTORY:[<tid>]:TS3000:<ctag>;` *Requirement:* The following is displayed: <pre> TS3000 <date> <time>\nM <ctag> COMPLD\n "TS3000::::<CARD=TS3000>\n TYPE=STD,\n PART=x,\n SERIAL=x,\n SOFTVER_TS3000=x,\n SOFTVER_GPS=x,\n SOFTVER_DEV=x"\n /* LINK: x, CMD: <command> */\n ;</pre> The software version of the operating system (`SOFTVER_TS3000=x`), the GPS receiver (`SOFTVER_GPS=x`), and the hardware (`SOFTVER_DEV=x`) are shown near the bottom of the response.

Procedure A. Software Installation (cont'd)

Step	Procedure
11	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: Software Version in this release Operating System software (SOFTVER_TS3000=x) 1.02.02 GPS Receiver software (SOFTVER_GPS=x) 1.01.01 Plus one of the following: Hardware (SOFTVER_DEV=1) for 090-72010-01 1.02.01 Hardware (SOFTVER_DEV=3) for 090-72010-05 1.02.01-1.01.01 Hardware (SOFTVER_DEV=5) for 090-72010-02 1.02.01-1.01.01
12	If no further downloading is required, skip to Step 19. To download files, continue with the next step. *Note:* If any alarms are present, clear them.
13	Based on the results of Step 11, determine which software files are to be downloaded, then the <aid> associated with that software, and the file name for that software from the following: Software <aid> File Name Operating System software TS3000 `TS3000.hex` GPS Receiver software GPS `GPS.hex` Plus one of the following: Hardware (for 990-72010-01) DEV1 `DEV1.hex` Hardware (for 990-72010-05) DEV3 `DEV3.hex` Hardware (for 990-72010-02) DEV5 `DEV5.hex` *Notes:* 1. The <aid> and file name will be used in the next two steps. 2. Downloading any of the DEV files will take the system out of service for up to 20 minutes.
14	Enter the following command with the appropriate <aid> (determined in the previous step): `CPY-MEM::<aid>:ctag::AUX,,WKG:PGM;` *Note:* The Y-modem transfer in the next step must be started within 60 seconds of entering the `CPY-MEM` command above, or the system will time out, and the `CPY-MEM` command will have to be re-entered.
15	Activate a Y-modem transfer of the appropriate file (from Step 13) from the directory created in Step 2 to the TimeSource 3000. The download may take up to 20 minutes.
16	After the terminal emulation software indicates that the transfer has been completed, wait 90 seconds. *Requirement:* Either a TL1 completed message or a TL1 deny message is displayed. *Note:* If the `TS3000.hex` or `DEV.hex` file was downloaded, the user is logged off. If the `GPS.hex` file was downloaded, the user remains logged on.

Procedure A. Software Installation (cont'd)

Step	Procedure
17	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.
18	If additional files require downloading: • If the `TS3000.hex` or `DEV.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. If no additional files require downloading, continue with the next step.
19	Delete all files in the directory created in Step 2.
20	Delete the directory created in Step 2.

End of Procedure