

FIRMWARE DOCUMENTATION

CyTime[™] Sequence of Events Recorder SER-3200

APPLICABLE PRODUCTS

This document contains information about firmware for the CyTime[™] Sequence of Events Recorder, model SER-3200, from Cyber Sciences. This information applies to the following catalog numbers:

- SER-3200-P2X2
- SER-3200-32GB
- SER-3200-P2X4
- SER-3200-P2X5
- SER-3200-P4X2
- SER-3200-P4X4
- SER-3200-P4X5
- SER-3200-P5X2
- SER-3200-P5X4
- SER-3200-P5X5

UPDATE INSTRUCTIONS

The CyTime SER-3200 uses three (3) microprocessors, each of which contains its own set of firmware (embedded software):

- Time processor
- Event processor
- System processor

UPDATE PROCESS OVERVIEW:

- 1) *EXTRACT* firmware update zip.
- 2) *SEND* files to SER-3200 via FTP.
- 3) *RESET* unit.
- 4) *CONFIRM* update by viewing LCD screen or Diagnostics web page.

To update SER-3200 firmware, first connect your PC to the SER-3200 using a standard Ethernet cable and establish communications. It is also possible to update firmware over a local area network. In either case, ensure that reliable control power is maintained to the SER-3200 during the update process. A loss of control power during the update could cause the unit to malfunction.

Download and extract the firmware files, then follow the instructions in the next sections to update firmware for all three processors. Finally, confirm all updates by viewing the SER-3200 Diagnostics web page and verifying the latest firmware versions.

FIRMWARE REVISION HISTORY

To determine the latest SER-3200 firmware release or to view complete details on firmware history, please refer to [SER-3200 Release Notes](#).

Note: Firmware updates should only be performed by qualified personnel.

DOWNLOAD / EXTRACT FILES

Note: The SER-3200 suspends normal event recording while the unit resets and the new firmware is installed.

Download the firmware zip file and extract to a folder in a known location on your PC, such as the Windows Desktop. The folder contains the following files:

Firmware files

- SER_TM_B.HEX
- SER_IO_B.HEX
- SER_SP_B.S19
- LOAD_TM.TXT
- LOAD_IO.TXT
- LOAD_SP.TXT

Optional files*

- IBSER01.PDF
- IBSER02.PDF
- _DEFAULT.XML
- others, as needed

* Optional files are only included if they are impacted by the firmware release, such as changes to instruction bulletins stored on the SD card.

UPDATE PROCEDURE:**Time / Event / System Processors**

Note: The SER-3200 FTP function must be enabled to send firmware files using this process. To verify that its FTP server has not been disabled, view the Communications Setup web page.

1.EXTRACT firmware files to a folder in a known location on your PC, such as the Windows Desktop:

- a. Double-click the firmware zip file.
- b. Choose "Extract all files."

2.SEND all files to the SER-3200:

- a. Open Windows Explorer and navigate to the folder with extracted firmware files.
- b. Click the first file to select it, then hit Ctrl-A to select all. (All firmware files should be highlighted at this point.)
- c. Now hit Ctrl-C to copy all files to the clipboard.
- d. In the pane at the top, type ftp:// followed by the IP address of the SER-3200 (e.g., ftp://169.254.0.10), then hit Enter.
- e. When prompted, enter the SER-3200 user name and password (default = admin / admin).
- f. Hit CTRL-V to paste all firmware files. (Click "Yes to all" to overwrite existing files.)
- g. Click the "Close" button on the Windows Explorer window to end the FTP connection to the SER-3200.

3.RESET the SER-3200:

- a. By pressing the reset button on top of the device, OR
- b. By clicking the "Reset" button found on the Administration Setup web page.

This resets the SER-3200 and initiates the firmware updates to the time, event and system processors. (Allow 3-5 minutes for all updates to complete.) Now continue to the next section to confirm updates have installed successfully.

*Important: After reset, allow 3-5 minutes for all updates to complete **before** you try to login and view Diagnostics web page.*

If Resetting the unit via the Admin Setup web page, close browser, wait for updates to complete, then re-open the browser and login again to confirm the updates.

XML SETUP FILE STRUCTURE CHANGE
(This step is not always required)

Note: The firmware update process does not affect existing event log data or user configuration settings.

In most cases, firmware updates will not affect the XML setup file structure. However, if the “_default.xml” file is included among the “optional” files, then a corresponding update will be required to the file called “_setup.xml” which contains user settings.

To take advantage of new features provided in the firmware update, the setup file must conform to the latest structure. This is accomplished automatically the first time the user visits the SER-3200 home page after a successful firmware update. If the SER-3200 detects an older version of setup file, it will alert the user and proceed to update the setup file to the new format. All previous user settings are preserved.

CONFIRMING SUCCESSFUL UPDATE

To verify that SER-3200 firmware was updated successfully, launch your web browser, enter the target SER-3200 IP address, and click the “Diagnostics” tab to view the Diagnostics web page. The current firmware versions are displayed on this page, as shown below.

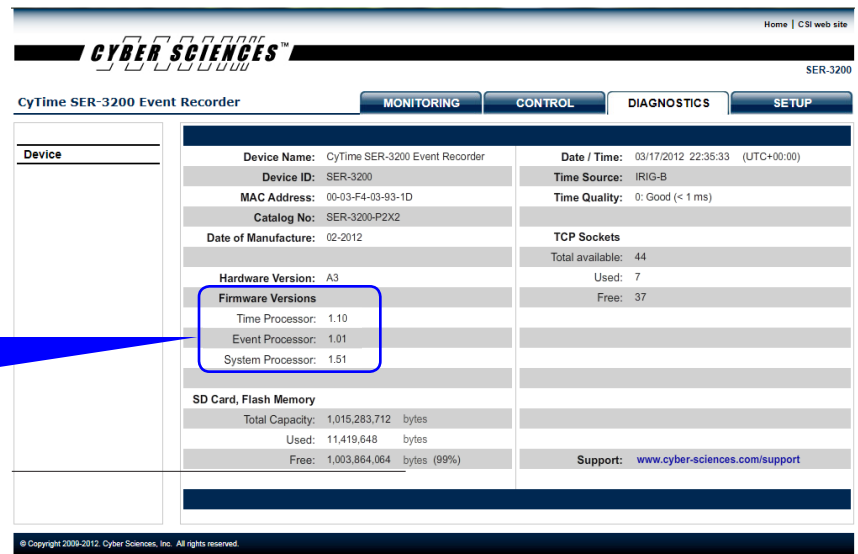
Firmware Versions

Time Processor: 1.10

Event Processor: 1.01

System Processor: 1.51

Verify the correct firmware versions



SER-3200 Diagnostics web page

If the correct firmware values do not appear, try resetting the CyTime SER-3200 (either by pressing the reset button on the top of the device, or by clicking the “Reset” button on the Administration Setup web page).

If this does not help, verify the IP address of the target SER-3200 and repeat the process, being careful to follow each step in this manual.

If you still need assistance, please contact Cyber Sciences using one of the methods found on the web site:

www.cyber-sciences.com/support

Doc. no: FW-SER-01R3
Apr-2012
(supersedes doc. dated Jan-2012)
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