



9581 SST CONVERT

OPERATION MANUAL



9581SST Convert Operation Manual

Table of Contents

TABLE OF CONTENTS	2
COMPANY PROFILE	3
HOW THIS MANUAL IS ORGANIZED	4
CONVENTIONS USED IN THIS MANUAL	4
ADDITIONAL RESOURCES	4
GETTING TECHNICAL SUPPORT	5
WHAT IS SST CONVERT?	6
INSTALLING THE SST CONVERT SOFTWARE	6
REQUIREMENTS.....	6
INSTALLING SST CONVERT.....	6
PREPARE YOUR 9581SST FOR CONVERSION	11
CONVERT YOUR 9581SST FROM AN R3 TO AN R4	15

Company Profile

Trilithic, Inc. was founded in 1986 as an engineering and assembly company providing customized communications and routing systems for business and government applications. As business expanded, Trilithic broadened its offerings by acquiring components manufacturer Cir-Q-tel and instruments manufacturer Texscan, adding broadband solutions to the product line.

Today, Trilithic is comprised of three major divisions, Broadband/CATV Instruments & Systems, Wireless & RF Microwave Components, and Field Technical Products. The Instruments Division specializes in the design and manufacturing of portable RF and digital test equipment and integrated test systems performing in a wide range of Broadband and LAN applications. The Wireless division provides components and custom solutions for companies specializing in cellular, military and other wireless applications. The Field Technical Products Division is a leading supplier of government-mandated Emergency Alert Systems used by Broadband service providers.

An industry leader providing telecommunications solutions for major broadband and wireless markets around the world, Trilithic is dedicated to providing quality products, services and communications solutions meeting or exceeding our customers' expectations. Today, from our worldwide headquarters in Indianapolis Indiana, we provide over 1500 measurement products and communications components to thousands of customers around the world.



Welcome to the SST Convert software reference guide. This guide provides information that you will need to install and run the SST Convert software (P/N 0930107000).

How This Manual Is Organized

This manual is divided into two chapters. The chapters are organized in the order in which you might set up and use the various features.

Chapter 1, "Getting Started," introduces you to the SST Convert software and shows you how to install it. You'll see the installation procedure step-by-step.

Chapter 2, "Using SST Convert," tells you how to use SST Convert to upgrade your 9581SST to a Release 4 level. You'll also be shown the steps required to prepare your SST for conversion to an R4.

Conventions Used in This Manual

This manual has several standard conventions for presenting information.

Menus and menu options appear in **bold**.

Web and email addresses appear in *italics*.



A note is information that will be of assistance to you related to the current step or procedure.



A caution alerts you to any condition that could cause confusion or potential loss of data.

Additional Resources

There are a number of additional resources that may be of interest to you, such as the following:

<http://www.trilithic.com>

This is the Web site for Trilithic, Inc. It contains tips, release information, marketing information, FAQs ("Frequently Asked Questions"), bulletins, and other technical information. You can also check the Web site for product updates, service releases, and add-ons.

<http://www.guardiansystemonline.com>

This is the Web site for the Guardian II family of products. It contains information about the Guardian II family, including marketing data, new product information, FAQs, and downloads.

Getting Technical Support

Trilithic, Inc. technical support is available from 8:00AM to 5:00PM M-F, Eastern Standard Time. International callers should dial (317) 895-3600 or fax questions to (317) 895-3613. You can also E-mail technical support at techsupport@trilithic.com.

For quicker support response when calling or sending E-mail, please provide the following information:

- Your name
- Your company name
- The technical point of contact (name, phone number, E-mail)
- The version number of the SST Convert software (this appears on the software title bar)
- The version of Windows you are using (including any Service Packs and patches)
- A detailed description of the problem you are having, including any error or information messages that have appeared.

This chapter introduces you to the SST Convert software and shows you how to install it

What Is SST Convert?

SST Convert is an upgrade tool for the Trilithic 9581SST Reverse Path Analyzer. It allows you to upgrade your current investment in 9581SST units (referred to as EU, R3, or “Release 3” units) to Release 4 (“R4”) level. This allows you to fully experience the enhanced feature set available in the R4 units.

Installing the SST Convert Software

This section describes how to install SST Convert on your system.

Requirements

To operate the SST Convert software, you need the following minimum requirements:

- Pentium class processor (recommended 400MHz or higher)
- 64 MB RAM
- 50 MB free disk space
- Windows 2000, Windows XP, or Windows Server 2003
- Color monitor running at 256 colors or higher, 1024x768 screen resolution
- Windows compatible mouse
- DB-9 straight through serial data cable



Since the conversion process will likely take place in the headend, you may want to install the software onto a laptop computer.



As with any software upgrade, a loss of power or unforeseen problem at a critical moment can result in disabling your SST until the microprocessor board is replaced with a new one. If you need to minimize the risk of any downtime, you may want to consider having a replacement micro board available before proceeding with the conversion process.



If you have any concerns about this process, please call Trilithic to arrange for a factory upgrade of your SST.

Installing SST Convert

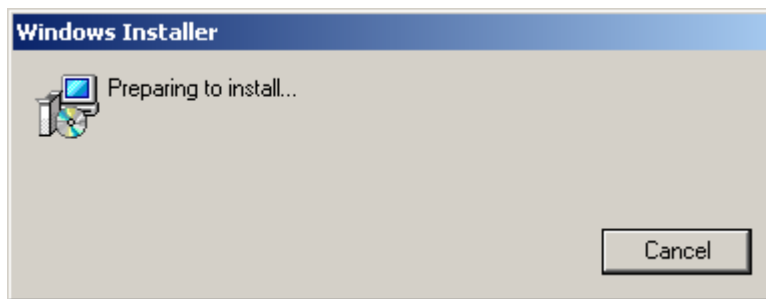
Once you have made sure that your system meets the minimum requirements, you're ready to install the SST Convert software.



Be sure to check the CD for release notes that may affect the installation and conversion process!

To install the SST Convert software, do the following:

1. Depending on the operating system you are installing the SST Convert software on, you may need to log on as the local administrator. (Check with your network or systems administrator if you're not sure about your current login account permissions.)
2. Insert the Convert software CD in the appropriate drive.
3. If you have Autorun enabled for the CD-ROM drive, the SST Convert software setup program will start automatically. Otherwise, click **Start**, then click **Run**, and type [drive]:\setup.exe, then click **OK**. (Substitute the appropriate drive path in the command.) The Setup program starts.

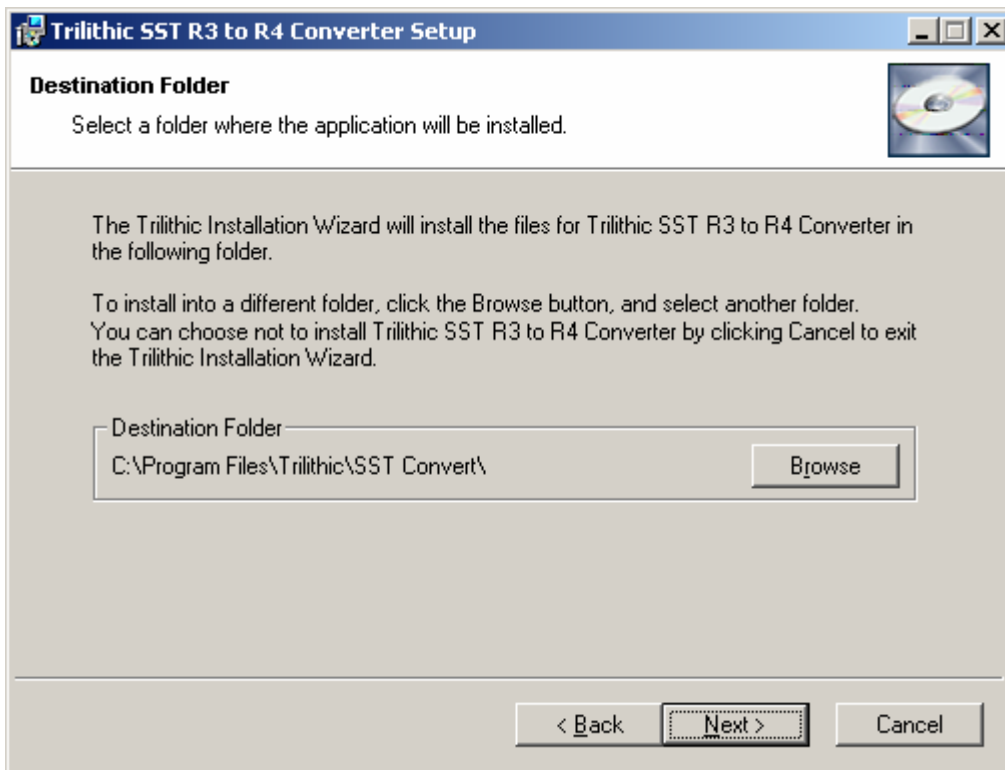


The setup program examines your system before starting for the Microsoft .NET Framework component. If this component is missing from your system, the installation procedure installs it for you before continuing with the SST Convert setup.

4. After a short time, the initial Trilithic SST Convert setup screen appears.



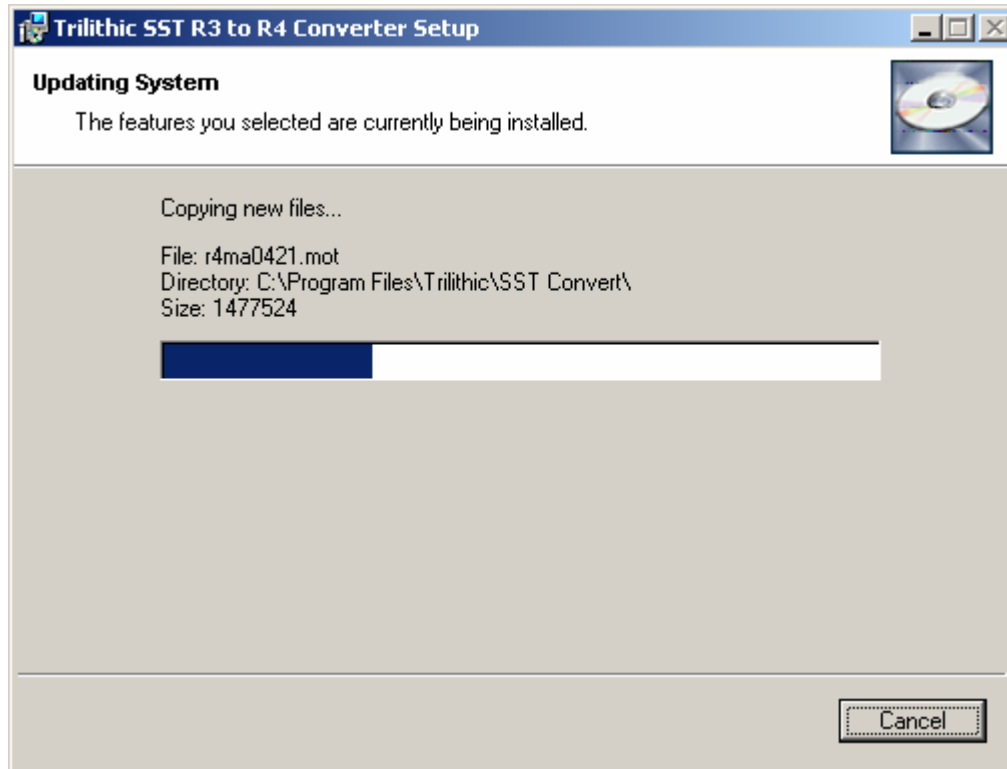
5. Click **Next**. The Destination Folder screen appears.



6. Enter information on this screen as follows:

Destination Folder: By default, the installation procedure installs SST Convert in the C:\Program Files\Trilithic\SST Convert\ folder. You can select a different location by clicking Browse.

7. After you have selected the destination folder for SST Convert, click **Next** to start the installation process. The Trilithic installation procedure installs the files. While the software is being installed, a screen appears that shows the progress of the installation. (The entire installation process should only take a minute or two at most.)



8. When the SST Convert software has been installed on your system, a dialog box appears. After clicking **Finish**, the Installation will be complete.



9. You should now find the software located on your Start menu, under Programs, Trilithic, SST Convert.



If you do create a desktop shortcut, make sure the "Start in" directory property is not changed from the installation directory, or certain files may not be found correctly during the conversion process.

This chapter tells you how to use SST Convert to upgrade your 9581SST to a Release 4 level. You'll also be shown the steps required to prepare your SST for conversion to an R4.

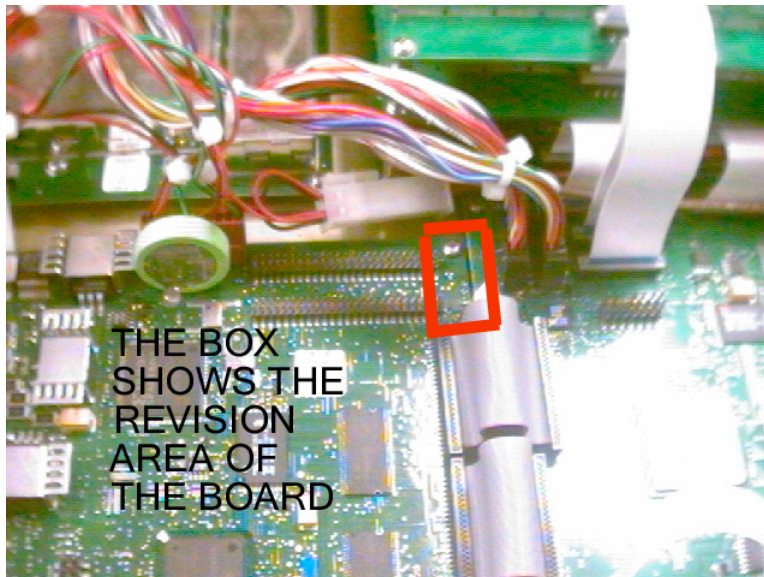
Prepare Your 9581SST for conversion



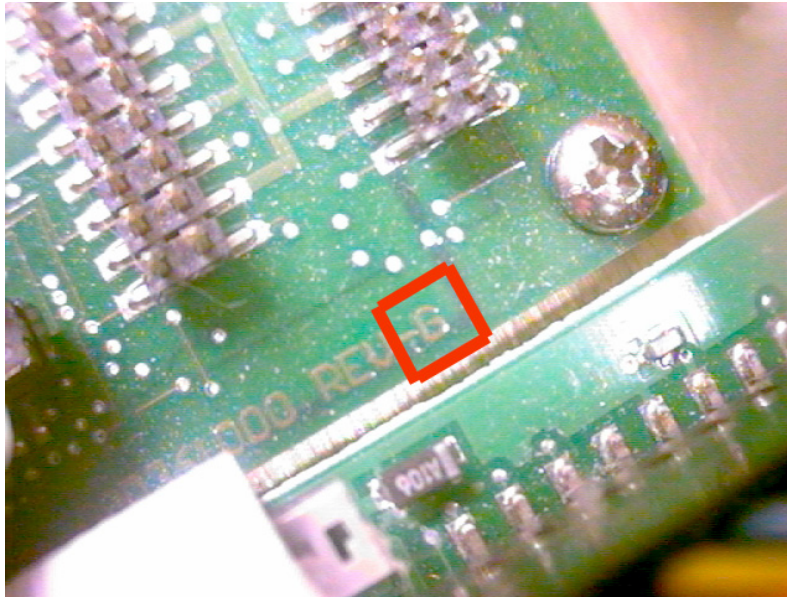
The R4 software may not operate correctly on older hardware revisions. This appears in two ways; the unit may not reboot after an upgrade to R4, and the LCD display may have “measles”, or speckles in the display.

The display speckles may happen on any revision of hardware, and require a microprocessor board swap to fix. Since this is a cosmetic problem only, and the LCD display is not used in normal operation, it is recommended to leave this alone if it happens.

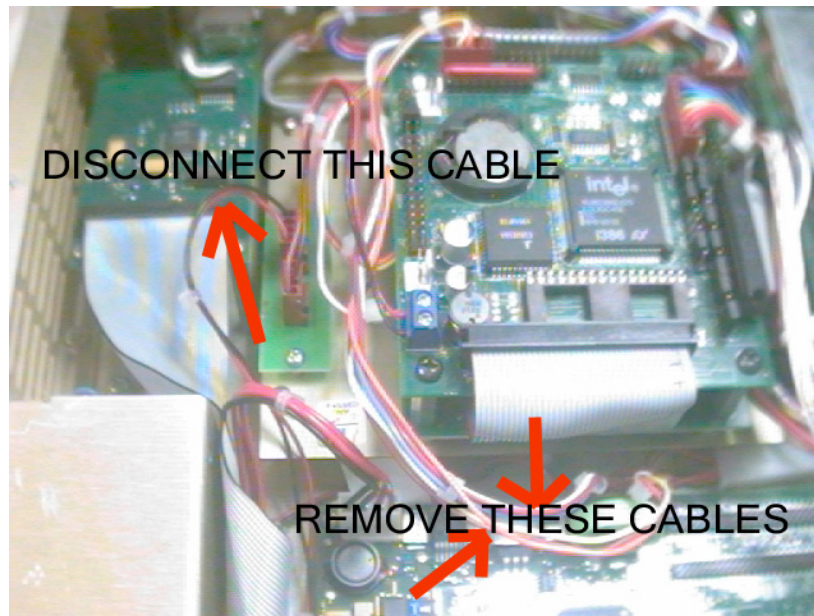
The failure to reboot is a bigger issue, as it will disable the SST until the microprocessor board is swapped out. If the SST micro board is at Rev G or greater, then it should not have this problem. Boards before Rev G may or may not have the problem. To determine which revision you have, remove the top cover and locate the micro board (the large circuit board on the front left side). The revision is on the upper right side of the board.



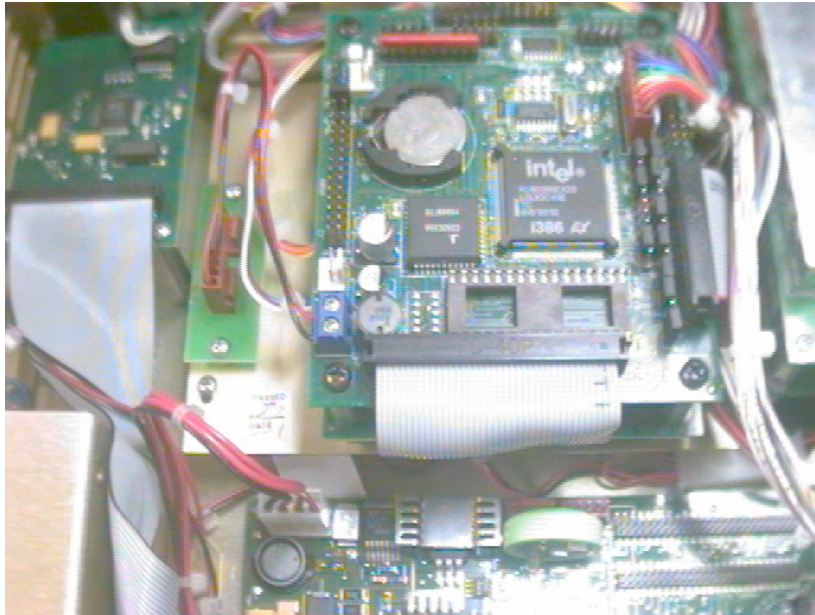
Determine the revision of the micro board.



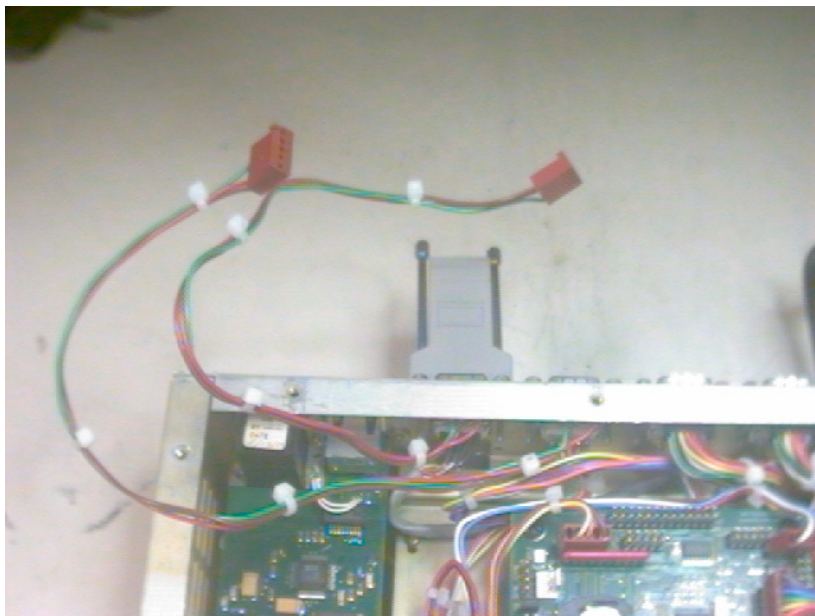
If the SST has an NCM-4 option installed, it should be disconnected. With the top cover removed, locate the power cable and two serial connections to the NCM-4 board, as shown below. Disconnect the power cable (the one on the left in the picture below) and tuck the wires out of the way. The other two cables should be completely removed and discarded.



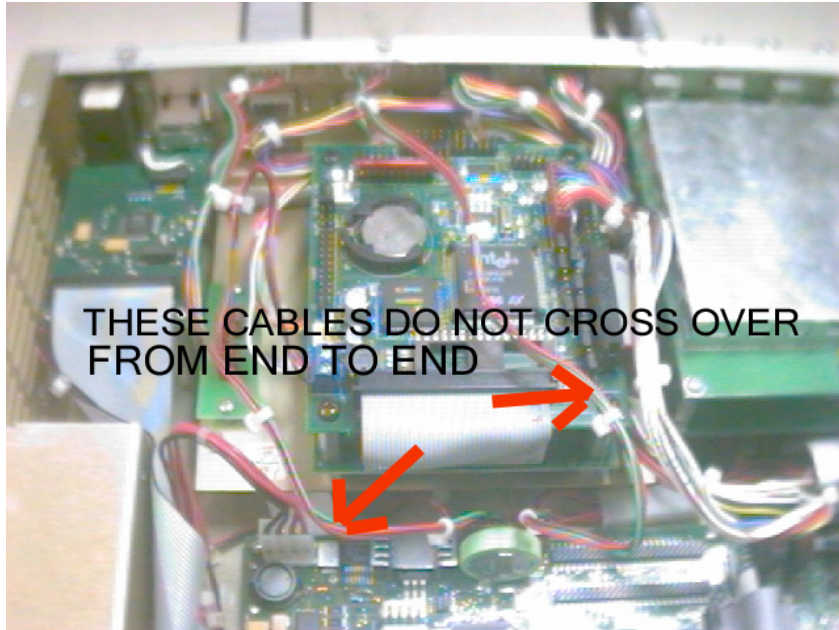
Your SST should now look like the following picture.



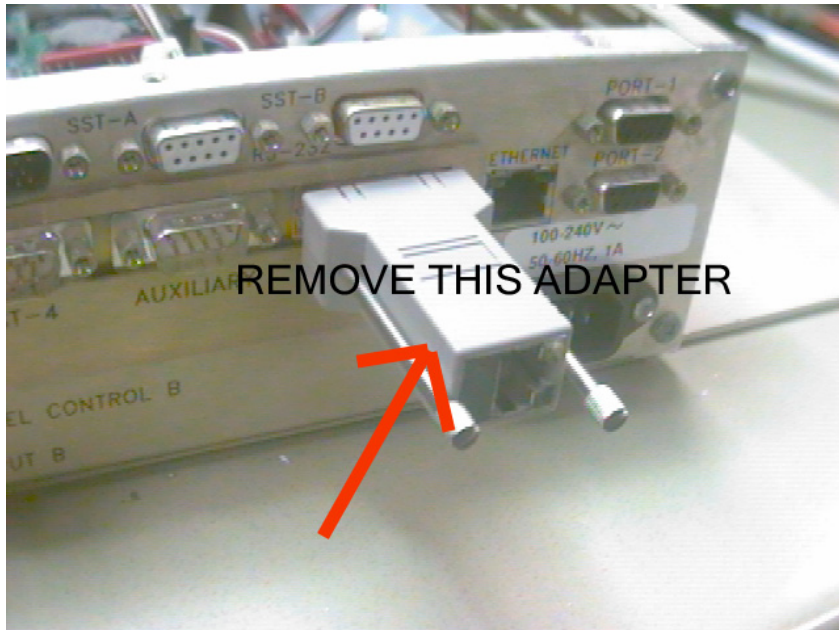
Locate the two DB-9 connectors labeled SST-A and SST-B on the rear panel of the SST. Inside the SST, there should be cables attached to these connectors, secured by wire ties. Carefully clip and remove the wire ties, so that the cables look like this.



Connect the free ends of these two cables to the micro board, where the first cables were removed. These cables should not cross over each other if they are plugged in correctly.



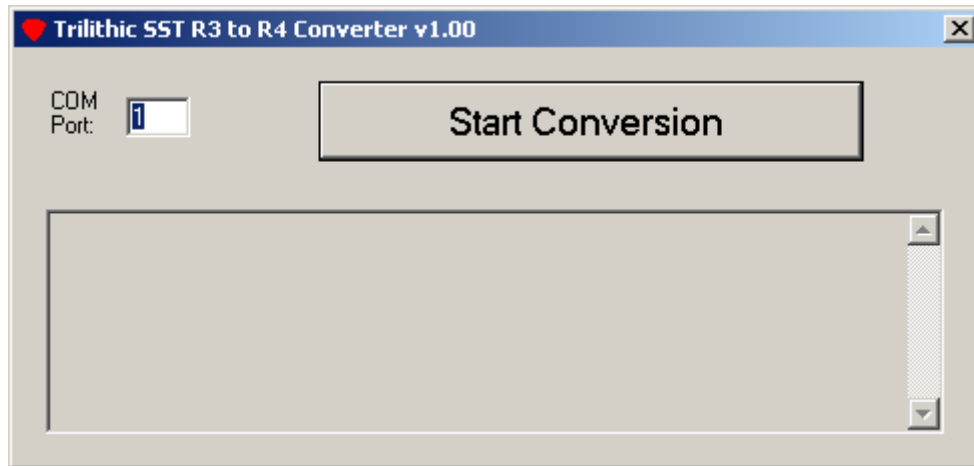
The NCM-4 utilizes an external 9-pin to RJ45 adapter for its Ethernet connection. For a 9581SST R4, the Ethernet connection is directly to the RJ45 connector on the back panel of the SST. Move your Ethernet cable from the external adapter to the RJ45 connector, and remove the external adapter.



Convert your 9581SST from an R3 to an R4

Now you should be ready to complete the conversion of your 9581SST to a Release 4 level.

1. Connect a straight through serial cable from your PC to the DB9 connector on the back of the SST labeled "PORT-1". There are two DB9 connectors just above the AC power entry module; PORT-1 is the one on top.
2. Start SST Convert (Start, Programs, Trilithic, SST Convert).



3. The Conversion software has a single entry field to specify which PC COM port to use. Enter 1, 2 etc.
4. The software has a single button to start the conversion process. Processing steps are indicated in the list box, and you will be prompted to cycle power on the SST a few times during the procedure. The last message displayed should be either "Conversion completed!" or "Conversion was NOT successful!" depending on whether the software detected any problems.
5. Now use SST Configure to set up the SST appropriately.



SST Configure will need to be used locally (via the serial port) to setup at least the Ethernet connection parameters (IP, etc.) for each SST. Once these parameters are set up, further configuration may be done remotely via the Ethernet connection. Use the initial default username "admin" and password "admin".



SST Configure will need to be used to enable the ECM and SNMP options if desired. Activation codes can be requested from Trilithic Sales. Certain SST Configure items may not download correctly until these options are set; this may involve more than a single pass using Configure.



If SST Convert indicates that the conversion was not successful, the SST may still be in a recoverable state. If the SST appears to be running R4 software, then you just need to call Trilithic Support to get a "password reset code" to reset the SST to use its default "admin" username and password. If R3 code is running, if the R3 bootloader display is shown on the LCD, or if the R4 bootloader appears to be running (the LCD backlight is on), then try re-running SST Convert. For any other situations you will likely need to call Trilithic to arrange for a micro board swap or a factory repair.



9710 Park Davis Drive
Indianapolis, IN 46235
(317) 895-3600