

# **TCP TEST TOOL**

**Version 2.0**

**User Guide**

**09/2003**



## OVERVIEW

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**This document contains information that is PATENT PENDING**

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## OVERVIEW

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SimpleComTools **TCP Test Tool™** is a software solution that provides the ability to both initiate and capture TCP session requests to or from any Windows® PC. Designed for software programmers and network engineers, the TCP Test Tool will work with any IP network, including Ethernet LANs and wireless IP networks such as CDPD, CDMA, or GPRS.

TCP Test Tool provides (2) tools in one. The first is a TCP SESSION INITIATOR (client) for initiating the TCP session and sending TCP traffic. The next is a TCP RECEIVER (server). Both tools provide one complete solution for debugging TCP sessions and networking related issues.

TCP Test Tool is also great for network administrators and security professionals who need to test inter-network connectivity or firewall performance. By providing a complete tool for starting, stopping, and logging TCP traffic, the TCP Test Tool is a much better tool for such testing and troubleshooting than most other conventional tools.

When used as a client, TCP Test Tool can initiate a TCP request and send packets to any pre-defined LAN or Internet IP address on any predefined TCP port. It let's you control the destination, exact message being sent, and message framing (Line Feed/Carriage Return). Messages can be formatted as ASCII or HEX formats, so you can actually send the type of traffic that mimics messages that may be expected by the remote TCP server.

The TCP Test Tool can also automate the sending of data packets. Once the session is established, you can control sending the desired text string on a recurring basis, sending the data stream every x seconds until you choose to stop it. This feature lets you start a session, and continue to send data while you are debugging the data stream on the receiving (server) side.

As a TCP server, TCP Test Tool allows you to bind to a specific TCP port, answer incoming TCP session requests, send packets back to the TCP client, format sent or received data in ASCII or HEX formats, and control the presentation and display of messages received, including adding Date and Time stamps to each message received. This last feature helps a great deal when you need to automatically trap traffic for later review.

TCP Test Tool can be easily installed on any Windows-based computer, and is ideal for numerous types of applications:

- **Network Administrators**
- **Network technicians**
- **Technical Support Staff**
- **SCADA/Telemetry Engineers**
- **Wireless Developers**
- **Wireless Systems Integrators**
- **Telecom Engineers**
- **Application Developers**

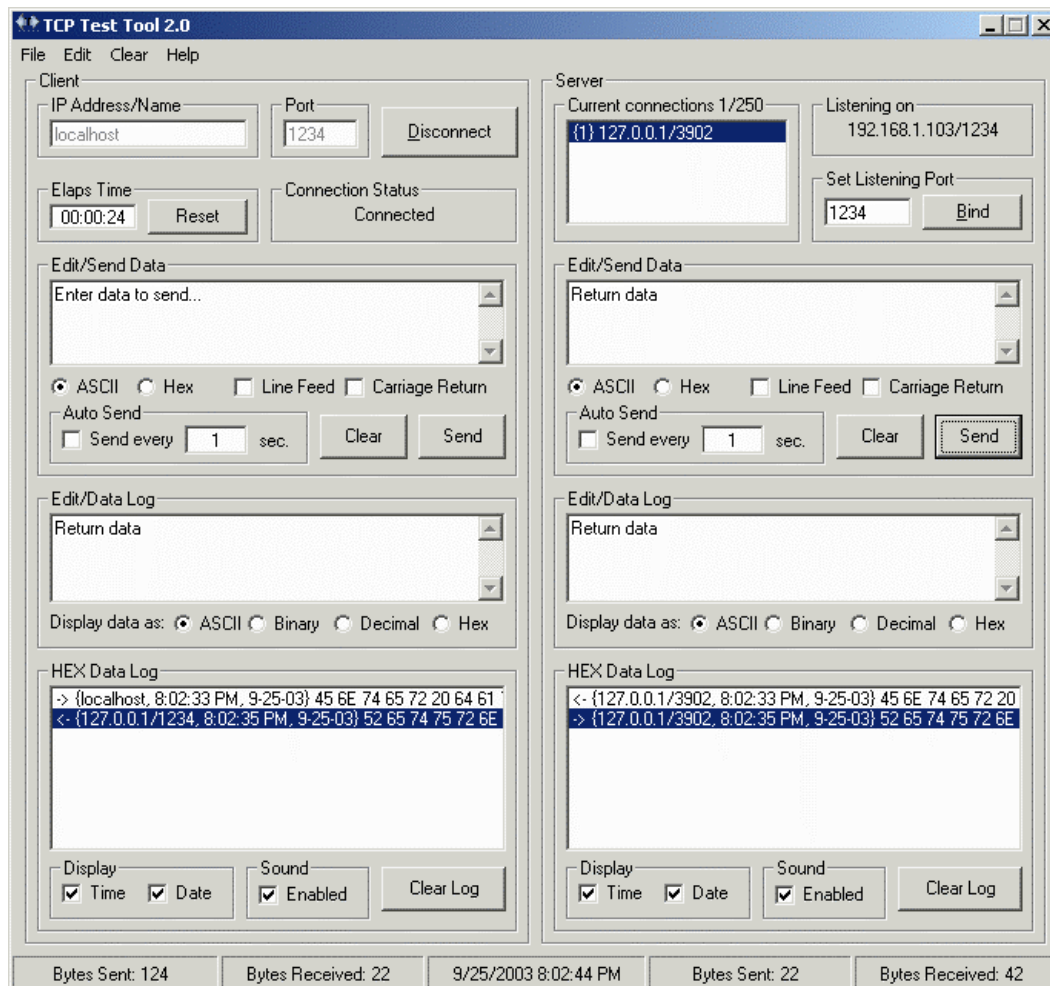
## SOFTWARE INSTALLATION

Install TCP Test Tool by downloading and unzipping the TCP Test Tool install package.

- Launch Setup.exe
- Accept the License Agreement
- Select the Destination Folder where the software will be installed
- The installer will complete the installation and automatically open the destination folder

### Getting Started...

Begin setup by double-clicking the "TCP Test Tool" icon. If you see this red highlighted alert screen, your version of software is unlicensed. An unlicensed version will only run for a period of 2 minutes before terminating. Select OK and the software will open to the main screen/desktop. This is the only screen or window you will be using.



## SOFTWARE CONFIGURATION

TCP Test Tool has a simple and intuitive user interface. There is no real configuration or 'setup' that needs to be done, as the main screen/desktop puts all the settings at your fingertips.

### Using the software...

The application software involves only one screen, which is broken down into (2) sections:

1. The REMOTE COMMUNICATIONS section  
This 'section' is the TCP SESSION INITIATOR (sender) tool.  
It is used for sending data to any remote IP address and definable TCP port
2. The HOST/LOCAL COMMUNICATIONS section  
This 'section' is the TCP SESSION INITIATOR (receiver) tool.  
It is used for answering TCP sessions from a remote device on a user definable TCP port

### TCP Test Tool view broken down into (2) sections

#### Remote Communications (Transmit)

This part is for **initiating** data streams to a remote IP and TCP port. You can initiate it using an IP or a hostname. Data can be in ASCII or HEX format.

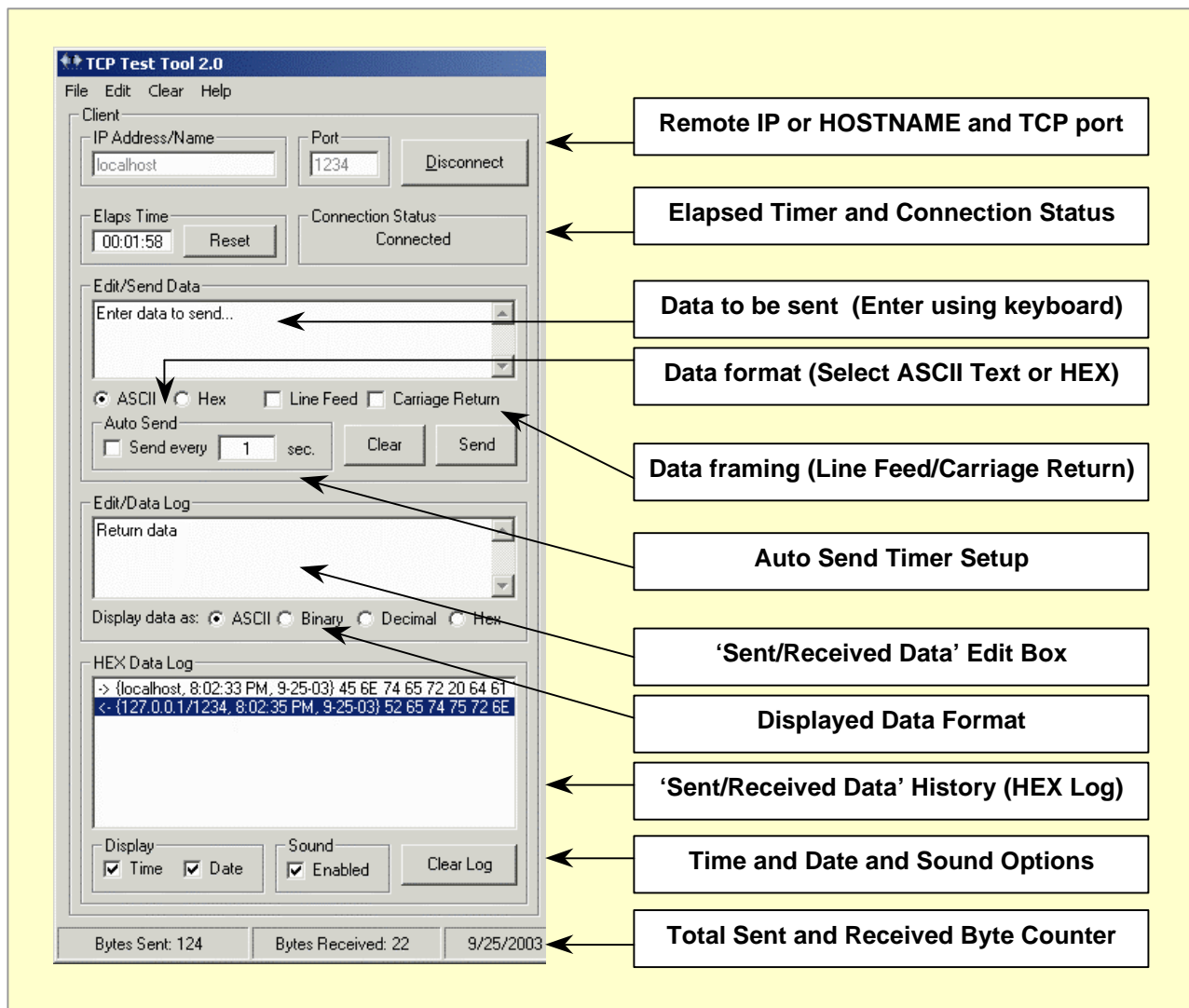
#### Host/Local Communications (Receive)

This part is for **receiving** sessions on any desired TCP port. Data is displayed in ASCII or HEX formats. You can log and edit the data adding Date and/or Time stamps if needed.

## TCP Client Communications (Initiator)

Initiating data sessions to a remote location and TCP port is easy.

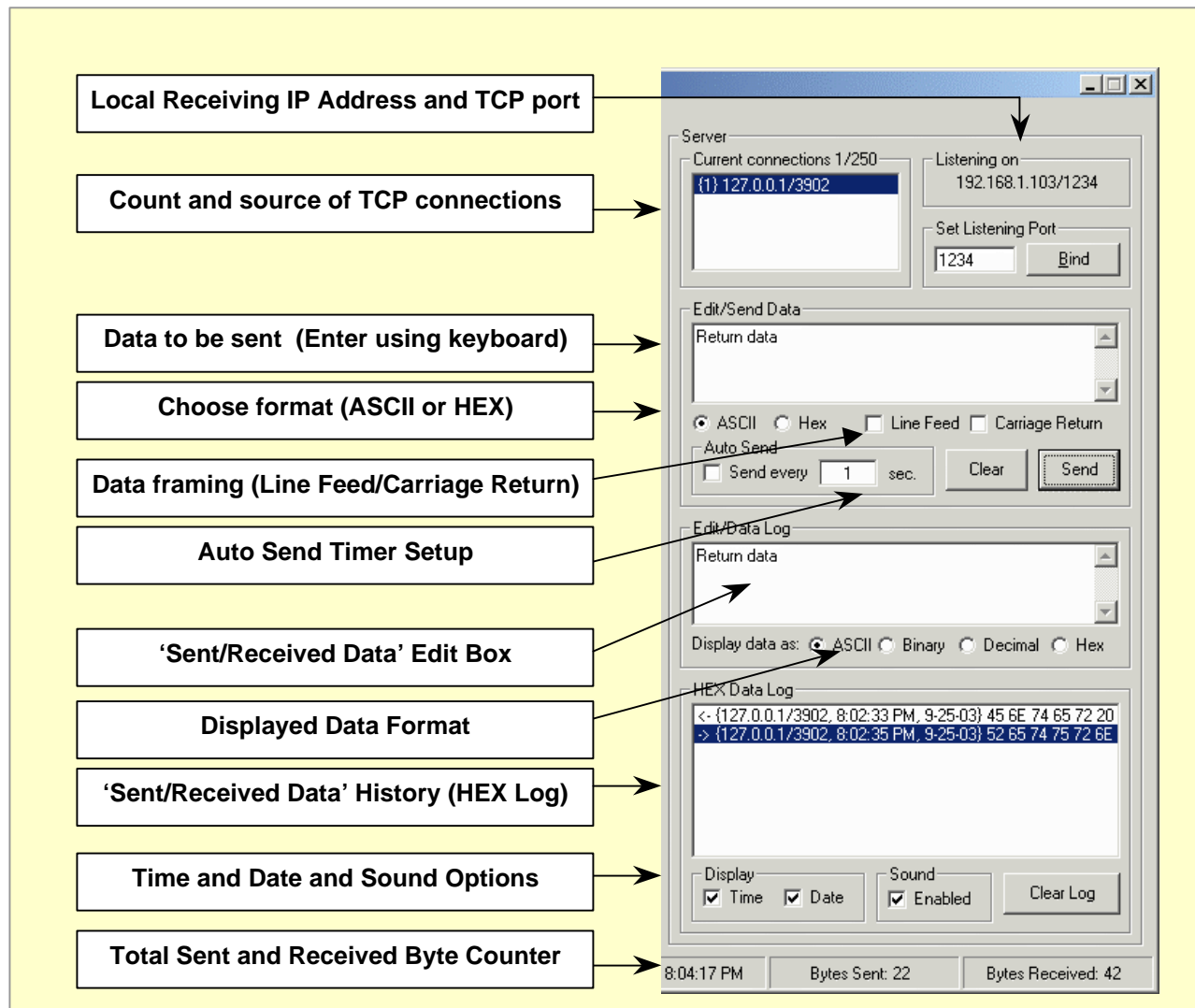
1. Enter the Remote IP or HOSTNAME and the desired destination TCP port. Since this is where you want the data to be sent, it assumes that there must be something listening for the packet at that location. The default is 'localhost' meaning it will send data to itself.
2. Enter the Data to be sent. Type into the box or paste text from another application.
3. Select the required data format and framing type. Most text will be ASCII. Most machine or coded data will be in HEX format. Add Line Feeds and/or Carriage Returns as needed.
4. Hit the **Connect** button to start the session. To send a single packet, hit the **Send** button. If you want to send the packet on a recurring basis, select **Auto Send** and enter the time interval. The application will send the data stream every x seconds until you stop the software or de-select the Auto Send button. (Default is every 1 second).
5. Data will be displayed in the Sent Data Log. You can change the display format to either ASCII or HEX, as well as choose to append a Time and/or Date to each data stream.
6. Data totals in bytes are displayed in the bottom status tray.



## TCP Server Communications (Receiver)

Receiving data on a TCP port is just as easy.

1. Enter the TCP 'listening' port on which you intend to be receiving data and select **Bind**. To stop listening for data on that port, or to release the port for another application, simply change the port number and select the **Bind** button again, or exit the software application completely. (There is no 'Un-Bind' control button).
2. Enter the Data to be sent back to the TCP session originator (client), select the required data format (ASCII or HEX) and add Line Feeds and/or Carriage Returns as needed.
3. To send data back to the TCP originator, just hit the **Send** button. If you want to send the packet on a recurring basis, select **Auto Send** and enter the time interval. The application will send the data stream every x seconds until you stop the software or de-select the Auto Send button. (Default is every 1 second).
4. Data will be displayed in the Sent Data Log. You can change the display format to either ASCII or HEX, as well as choose to append a Time and/or Date to each data stream.
5. Data totals in bytes are displayed in the bottom status tray.



## SOFTWARE LICENSING

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To obtain a license, send the Serial Number shown on this screen to your SimpleComTools reseller and request a permanent LICENSE KEY.

If purchasing direct from SimpleComTools, enter the Serial Number shown on this screen in the appropriate field when completing your online transaction.

Questions about either process can be sent to [Support@SimpleComTools.com](mailto:Support@SimpleComTools.com).

**Thanks for using the TCP Test Tool!**

**- SimpleComTools, LLC**

