

- *ISS45 Mobile Computing*
- *Installation and Configuration Guide*
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## ISS45 Mobile Computing Installation Guide

<b>Date of Issue</b>	<b>Product Identification Number</b>	<b>Part Number</b>	<b>Brief Description</b>
June 2001	45001/053	89000079	Initial Release
November 2001	45001/053	89000091	Revision 2
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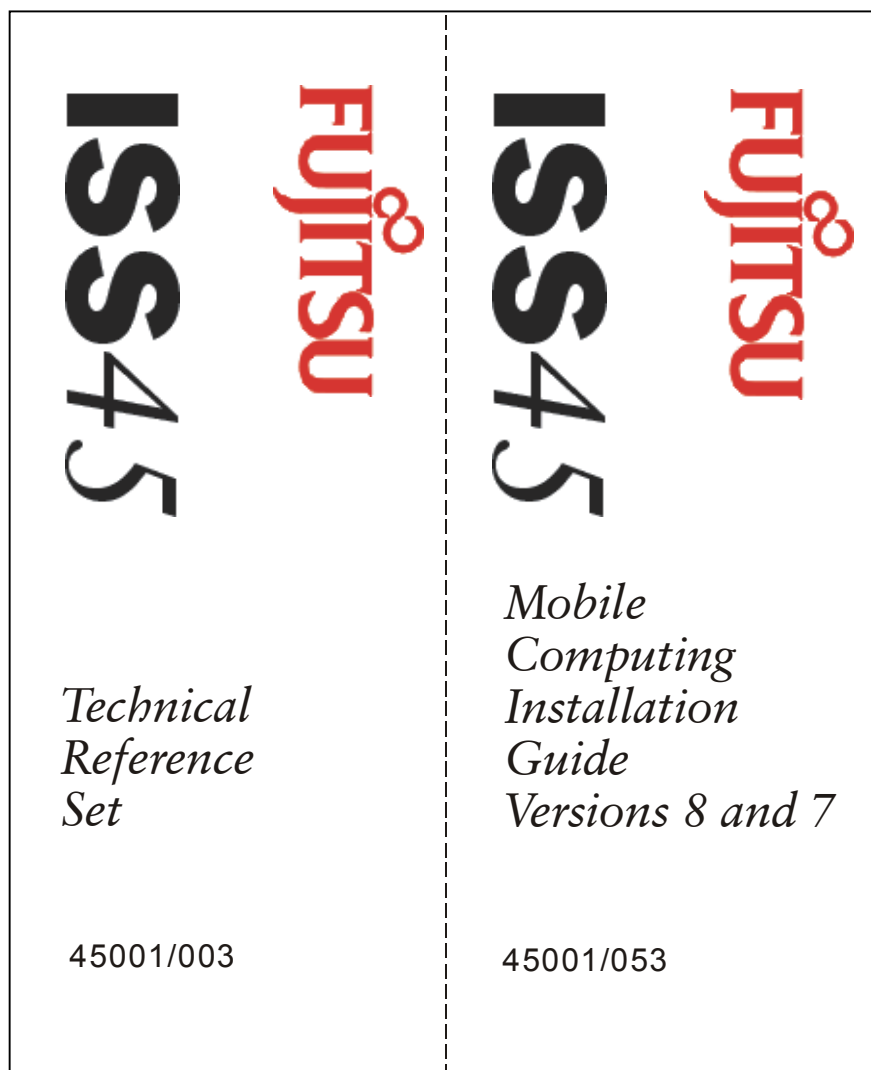
Fujitsu Transaction Solutions, Inc. has prepared this manual for use by users, authorized third parties and personnel of Fujitsu Transaction Solutions, Inc. as a guide to the proper installation, operation, customization and/or maintenance of Fujitsu Transaction Solutions, Inc. equipment and software. The drawings and specifications contained herein are the property of Fujitsu Transaction Solutions, Inc.

Address comments and corrections to:

Fujitsu Transaction Solutions, Inc.  
ISS45 Program Director  
2933 Bunker Hill Lane  
Suite 101  
Santa Clara, CA 95054

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# **ISS45 Mobile Computing**

## **Installation and Configuration Guide**

Using Windows2000 Server, TeamPad  
7500, Symbol Technologies Spectrum24  
3021 Access Point and Symbol  
Spectrum 24 802.11 RF LAN PCMCIA card  
and QS6000 Scanner

Revision 3

Fujitsu Transaction Solutions Inc.



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## **Revision Changes**

Revision 1: Initial Release

Revision 2: Added installation instructions for Handheld Scanner, QS6000  
WE/TTL w/Hirose Connector for use on the TP7500

Revision 3: Added step for QuickScan6000 support in TeamPad 7500 Network  
Configuration section step 22.

## Introduction

This manual is designed to aid support professionals in configuring and installing the ISS45 Mobile Computing package. Each of these steps has been validated “from scratch” in order to ensure 100% success with this particular set of components. Other similar components, of course, will become available or can be substituted as desired, although these instructions will no longer specifically apply.

The list of fundamental components includes:

- Windows 2000 Server
- TeamPad 7500, battery and charging cradle (PBT7599-01)
- Symbol Technologies Spectrum24 802.11 RF Access Point (AP-3021-500-US) with Access Point Antenna (ML-2499HPA1-00), Access Point Power Supply (50-24000-006), Access Point Power Cord (23844-00-00)
- Symbol Spectrum 24 802.11 RF LAN PCMCIA card (LA-3021-500-US)
- SanDisk flash card (430091-07)
- Serial Cable (PB000057)
- ISS45 Mobile Computing Software CD-ROM (89000078)

The overall installation process consists of the following principal steps. Each is detailed in the sections below:

- Install Windows 2000 Server, configured with Terminal Server capability
- Set up the TeamPad 7500
- Program the Access Point
- Install the LAN drivers for the PCMCIA card in the TeamPad 7500
- Program/configure the network settings in the TeamPad 7500

## Windows 2000 Installation

1. Change the computer's BIOS/CMOS setting to allow booting from a CDROM
2. Reboot PC with the Windows 2000 Server CD in the CDROM drive. Windows setup will now load the required files and drivers to support the build.
3. Press [ENTER] to set up Windows 2000.
4. Press [F8] (I agree to License).
5. Press [C] to create a partition on your hard drive.
6. Enter the size of the partition you want to create and press [ENTER]. (e.g., 2047, 4095, etc). Suggested minimum size is 4095.
7. Select C: New <Unformatted> partition and press [ENTER].
8. Select "Format the partition using the NTFS file system" if you want extra security on the partition and press [ENTER]. Upon completion of the format the PC will reboot and Windows 2000 setup will select and install devices on your computer.
9. Press [NEXT] on the Regional Settings screen
10. Enter Name and Organization and Press [NEXT].
11. Add your licenses at this screen and press [NEXT] on the Licenses screen.
12. Input computer name and password and press [NEXT] on Administrator Password screen.
13. Select Terminal Services component and press [NEXT] on the Windows 2000 Components screen.
14. Select the time zone and adjust time as required and press [NEXT].
15. Accept the default, Remote administration mode and Press [NEXT] on the Terminal Services Setup window. Windows will now install components based on the configuration you entered.

16. Accept default typical setting and Press [NEXT].
17. Accept the default and type a workgroup or domain name if the computer will be part of a domain and press [NEXT]. Windows will now install components based on the configuration you entered. This will take approximately 10 minutes
18. Press [FINISH]. The computer will automatically restart.
19. Logon as Administrator
20. Select one or more servers are already running in my network. Press [NEXT].
21. Uncheck show this screen at startup and close the screen.
22. You must now go through the steps to set up network addresses. Note: this step assumes only one card is installed on your computer. If there are more network cards, then repeat steps c through f below for each card.
  - a. Right click on "My Network Places" icon on the desktop.
  - b. Select and Click on Properties.
  - c. Double Click on Local Area Connection.
  - d. Click on Properties.
  - e. Highlight Internet Protocol (TCP/IP) and Click on Properties. Insure that the box remains checked.
  - f. Click "Use the following IP address" and key in the IP address, Subnet mask and Default gateway information required for your environment. (e.g., 129.103.10.1 for the IP address if MFS1, 255.255.255.0 for the subnet mask and if applicable set the default gateway address.
  - g. Exit by clicking on [OK], [OK], then [CLOSE].
  - h. Close the Network and Dial-up Connections screen.

## TeamPad 7500 User Setup

1. Create a new user "rdpuser" with a password "rdpuser"  
Start / Programs / Administrative Tools / Computer Management / Local Users and Groups
  - a. Expand "Local Users and Groups"
  - b. Right click on Users and select New User.
  - c. Enter rdpuser in User name.
  - d. Tab to password and enter rdpuser.
  - e. Tab to confirm password and enter rdpuser.
  - f. Uncheck "User must change password at next logon"
  - g. Check "User cannot change password".
  - h. Check "Password never expires".
  - i. Click [CREATE] and [CLOSE].
  - j. Double Click on rdpuser.
  - k. Click on the tab "Member of" and add Administrators.
  - l. Click [OK] to accept and close Computer Management window.
2. Change RDP-TCP logon settings to allow auto logon of rdpuser.  
Start / Programs / Administrative Tools / Terminal Services Configuration
  - a. Double Click on RDP-TCP connection in the right windowpane.
  - b. Click on the Logon Settings tab.
  - c. Uncheck "Always" prompt for password.
  - d. Click on [OK] and close the Terminal Service Configuration window.

## TeamPad 7500 Setup

Note that the TeamPad setup below assumes the use of the Symbol Spectrum24 Access Point AP-3021 and Spectrum24 Wireless LAN PC Card (2 Mbps)

Correct setup of the TeamPad 7500 consists of the following tasks:

- Configuring the Network Settings
- Changing network settings, access point settings and radio settings
- Configuring Server Settings
- Setting the connect entry to server
- Setting the Terminal Server/Power Saving parameters
- Setting power saving and auto-connect to server parameters

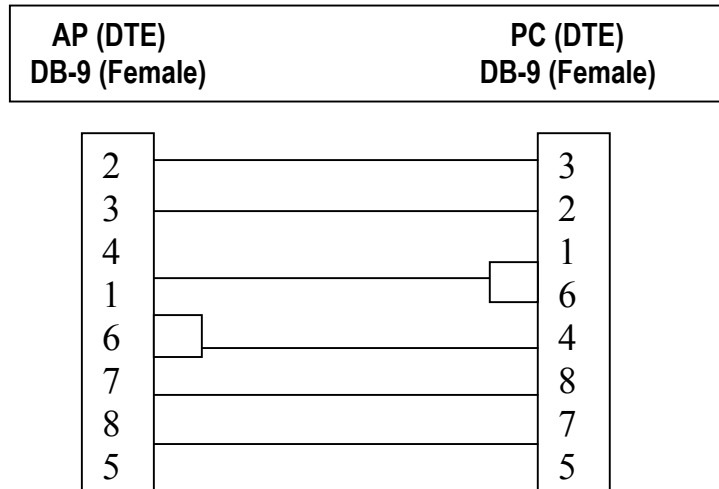
Network settings require the programming of a network number and Net\_ID (ESS) into the Access Point and the TeamPad 7500 for proper communication.

## Programming the Access Point

Note: The following is extracted from the Spectrum24 Access Point AP-302X Product Reference Guide INF-UAP-01 Revision A September 2000 and assumes that you will be using a direct serial connection to set settings in the Access Point.

### Using a Direct Serial Connection

The Access Point serial port is a DB-9, 9-pin male connector. The serial port allows a UI connection from a configuration computer (user PC) and the access point (AP). Connecting the AP directly to a computer with a 9-pin serial port requires a null modem cable with the following configuration:



The factory-configured Access Point accepts a direct serial connection to the UI.

1. Attach a null modem serial cable from the Access Point to the computer serial port. Connect power to the Access Point if not done already.
2. From the terminal, start the communication program, such as HyperTerminal for windows.

3. Select the correct COM port along with the following parameters:

Emulation	ANSI
Baud rate	19200 bps
Data bits	8
Stop bits	1
Parity	none
Flow control	none

There is no password requirement at this point.

4. Press [ESC] to refresh the display. The Access Point displays the Main Menu.
5. Exit the communication program to terminate the session when you are finished setting the Access Point configuration.

### Entering Admin Mode

The User Interface defaults to User mode that allows read-only to the Access Point functions (e.g., view statistics). Switching to Admin mode provides access to configuration menus and allows the user to configure the Access Point.

Entering Admin mode requires the administration password.

1. Select Enter Admin Mode from the Main Menu by TABbing down to the selection. The Access Point prompts for the administration password:

Enter System Password:

2. Enter the default password

Symbol

Note: this password is case-sensitive

- If the password is correct, the Access Point displays the Main Menu with the Enter Admin Mode menu item changed to Exit Admin Mode.
- If the password is incorrect, the Access Point continues to display the Main Menu with the Enter Admin Mode menu item.

### Access Point Minimum Setup Requirements

Enter Access Point installation from the MAIN MENU

1. Input the network IP address and Subnet Mask that you wish to assign to this Access Point.
2. Note the Net\_ID (ESS). (Default is 101)

Note: You can change this setting but all TeamPads will have to match this new setting for access into the network.

3. Tab down to Save-[F1] to save your settings and tab to [YES] to the question Are You Sure?
4. Exit Admin Mode, Exit HyperTerminal and disconnect Access Point.

Note: This should complete the minimum setup requirement on the Access Point.

## TeamPad 7500 RF LAN Driver Installation

The following instructions describe the procedures to install radio frequency LAN drivers on the TeamPad 7500 Thin Client device. In order to complete this process you need to have access to a computer (desktop or laptop) with an attached PCMCIA drive and also an ATA Flash card. Ensure power is off and install the Flash card in your desktop or laptop then reboot. Click on the self-extracting RF drivers file SymbolRFdrivers.exe from the Fujitsu Mobile Computing CD-ROM (these files are also available on the ISS45 Support Web Site). At the prompt to Unzip to folder, browse to your Flash card and unzip the files. Shutdown your desktop or laptop and remove the Flash card. The Flash card is then used to load the RF LAN drivers to the TeamPad 7500 Non Volatile RAM as described below.

The process by which Non-Volatile RAM is initialized in the TeamPad 7500 is normally disabled for the protection of the 7500 user and can be enabled from the 7500 system RAS Menu. It should be noted, however, that once Non Volatile RAM has been initialized the radio card driver must be re-installed.

### Initializing TeamPad 7500 Non-Volatile RAM

1. Power-on the TeamPad 7500 and depress the RAS button on the back of the device (using the pen stylus). The TeamPad 7500 RAS Menu will be displayed.
2. While the pointer (\*) is set to "ROM Version" on the menu screen, simultaneously press the [-] key and [FUNC] key - then release the [-] key. This will cause the ROM copy menu to add the line "Initialize NVRAM". Use the cursor up/ down keys to move the pointer (\*).
3. Place the pointer (\*) by the "Initialize NVRAM" selection and press the green ENT key on the keyboard. The message "Initialize NVRAM?" will be displayed on the LCD panel. Pressing the [ENTER] key will cause initialization of Non Volatile RAM to occur - you can return to the RAS Menu screen by pressing the CLR key to redisplay the Menu screen.
4. After completing the initializing of NVRAM, reset the TeamPad 7500 by depressing the Reset button on the back of the device (using the pen stylus).
5. Insert the ATA Flash card with the RF LAN drivers into the TeamPad 7500's PCMCIA slot (a Philips-head screwdriver will be required to gain access) and power the device on. The following message will appear on the unit's LCD

panel - "No RF-LAN driver has been installed. Please install your RF-LAN driver files"

6. Using the pen/ stylus, click on the [OK] button and complete the installation of the RF LAN drivers.
7. While power is off the TeamPad 7500, remove the ATA Flash card from the 7500 PCMCIA slot and replace it with a Spectrum24 Wireless LAN PC radio card. Connect the gold internal antenna wire inside the TeamPad 7500 to the slot on the edge of the card. You are now ready to configure your TeamPad 7500 to communicate with your Windows 2000 Server.

## **TeamPad 7500 Network Configuration**

1. Turn the TP 7500 unit on by pressing the PWR key until LED flashes bright green (about 1 second). As soon as the green light comes on, simultaneously hold a finger on the TOUCH SCREEN, SYS, and FUNC keys. The [Change Settings] window for network settings will be displayed.
2. Tap on the [YES] button displayed on the Change Setting window for networks settings. The control panel is displayed.
3. Double tap on the Network icon in the control panel.
4. Tap the Properties box.
5. Set the IP address of the TeamPad 7500 according to your network IP assignment, (e.g., 129.103.2.50).
6. Set the subnet mask of the network IP assignment, (e.g., 255.255.255.0).
7. Click the Name Servers Tab. Everything should be blank.
8. Tap [OK], Adapters message appears.
9. Tap [OK].
10. Tap [OK] and the network configuration screen will clear.
11. Double tap the Spectrum24 settings icon.

12. Change the ESS ID: to match the ID that was set in the Access Point (AP) in the prior steps above, (e.g., 101).
13. Close the window accepting the other default settings by Tapping OK.
14. Select File in the upper left corner of the screen and Close. The WTS change setting screen will appear.

Note: The WTS settings are a destructive read, if you answer [YES], the current parameters are not displayed and are forever lost.

15. Tap [YES] on the Change Settings window. The Server Type window will appear.
16. Tap the [TSE] button and the WTS Connection Wizard screen will appear.
17. Use the SYS and DOWN ARROW keys to invoke keyboard and enter the following settings in the WTS Connection Wizard windows:

- Name: fht
- Server: IP address of the server
- Low Speed Connection Box: Don't use

18. Tap [NEXT] and the next WTS Connection Wizard Auto logon screen will appear.

19. Set the following settings on the Automatic logon screen:

Check the Automatic Logon box

- Enter rdpuser in the Username box
- Enter rdpuser in the Password box
- Enter your workgroup in the Domain box

Press [NEXT] at the bottom of the window.

20. Press [NEXT] at the WTS Connection Wizard screen.

21. Press Finish at the next WTS Connection Wizard screen.

22. Change the auto Power Savings timers to desired length.

- Check the box under the Server connection tab to Enable Auto Connect to a server.
- Check the box under the Enable client serial ports.  
**Note: Above step added/required for QuickScan6000 Support.**

23. Click [OK] to Power savings and connecting to Terminal Server screen.
24. Click [YES] on the Save Settings screen. The TeamPad 7500 will save the settings and automatically power down. If the TeamPad was programmed according to this document, it should automatically log on and display the desktop of the server it connects to.

## QuickScan 6000 Installation

1. Required hardware for this installation is one of the following PINs available from Fujitsu:

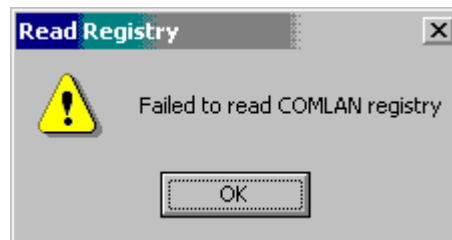
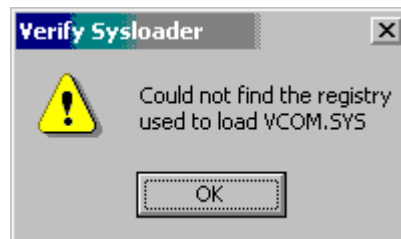
- PBT7X51-03 Handheld Scanner, QS6000 WE/TTL w/Hirose Connector
- PBT7X51-04 Handheld Scanner, QS6000 WE/TTL w/Hirose Connector and Stand (Note: this stand is probably not useful during remote computing activity.)

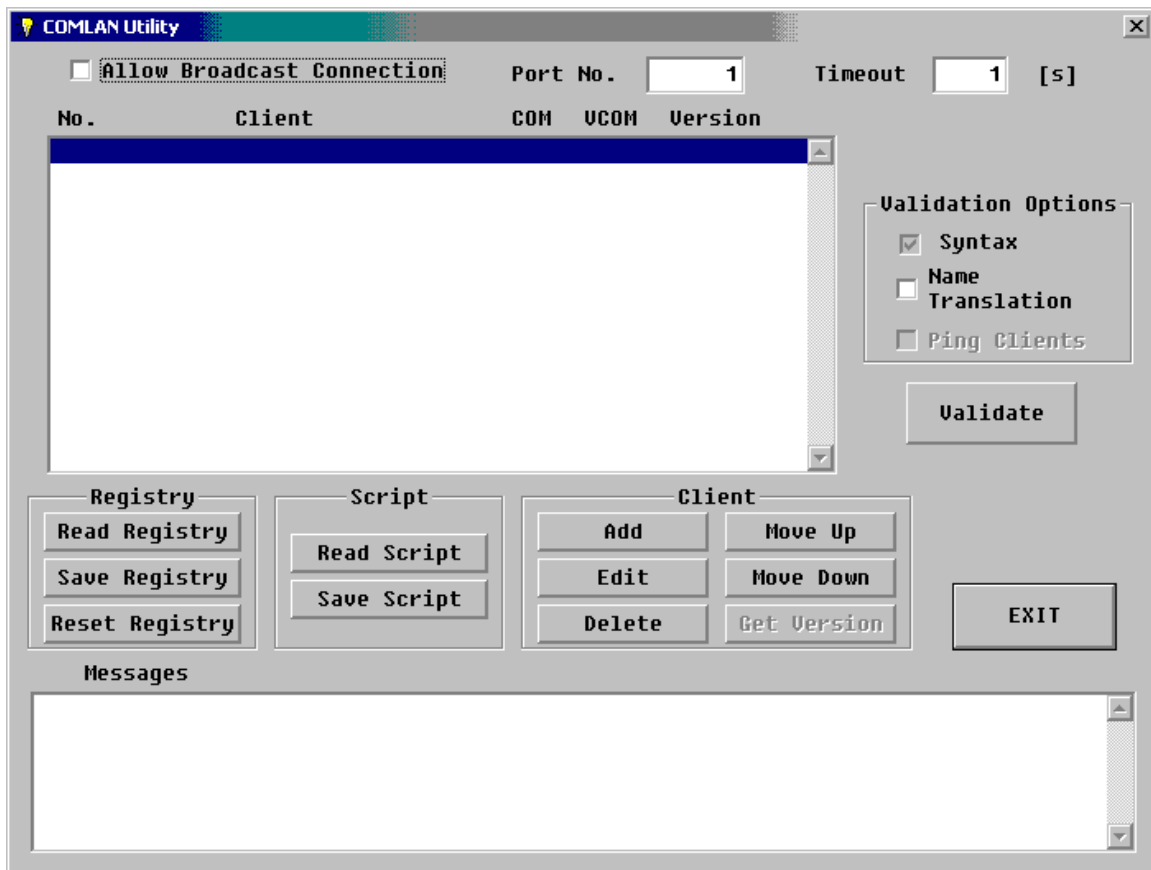
2. Software Installation: Current software at this writing is the following:

The Comlan diskette contains: (Must Order PIN PBT7561-25)

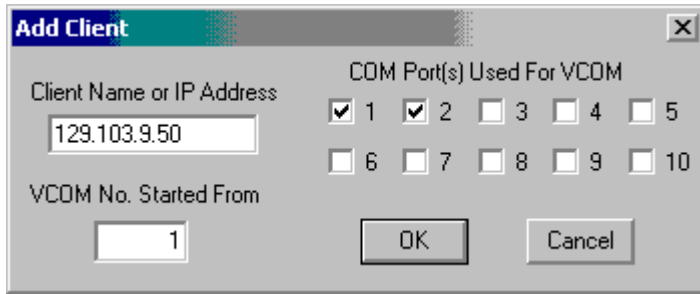
Readme.txt	12/04/2000	10:18 AM
Csutil.exe	11/22/2000	5:12 PM
Vcom.sys.	09/28/2000	1:15 PM
Comlanx.exe	09/26/2000	5:47 PM
Shortcut to comlanx.exe.lnk	10/24/2001	4:18 PM
Shortcut to CSUTIL.exe.lnk	10/22/2001	10:59 AM
TSE Shortcut to CSUTIL.exe.lnk	10/26/2001	2:46 PM
Setup.bat	10/26/2001	3:22 PM
Keygen.exe	05/18/2001	1:52 PM
Rtmous95.exe	05/19/1997	4:28 PM

3. On the Windows 2000 Server, run setup from the floppy disk. This installs the Comlan software and adds the Comlanx and Csutil shortcuts to the desktop.
4. Create shortcuts in the rdpuser startup group (C:\Documents and Settings\rdpuser\Start Menu\Programs\Startup) that point to C:\winnt\rtmous95.exe and c:\winnt\keygen.exe
5. Configure Comlan by clicking the shortcut for csutil. The first time it is run you will get the two following errors:

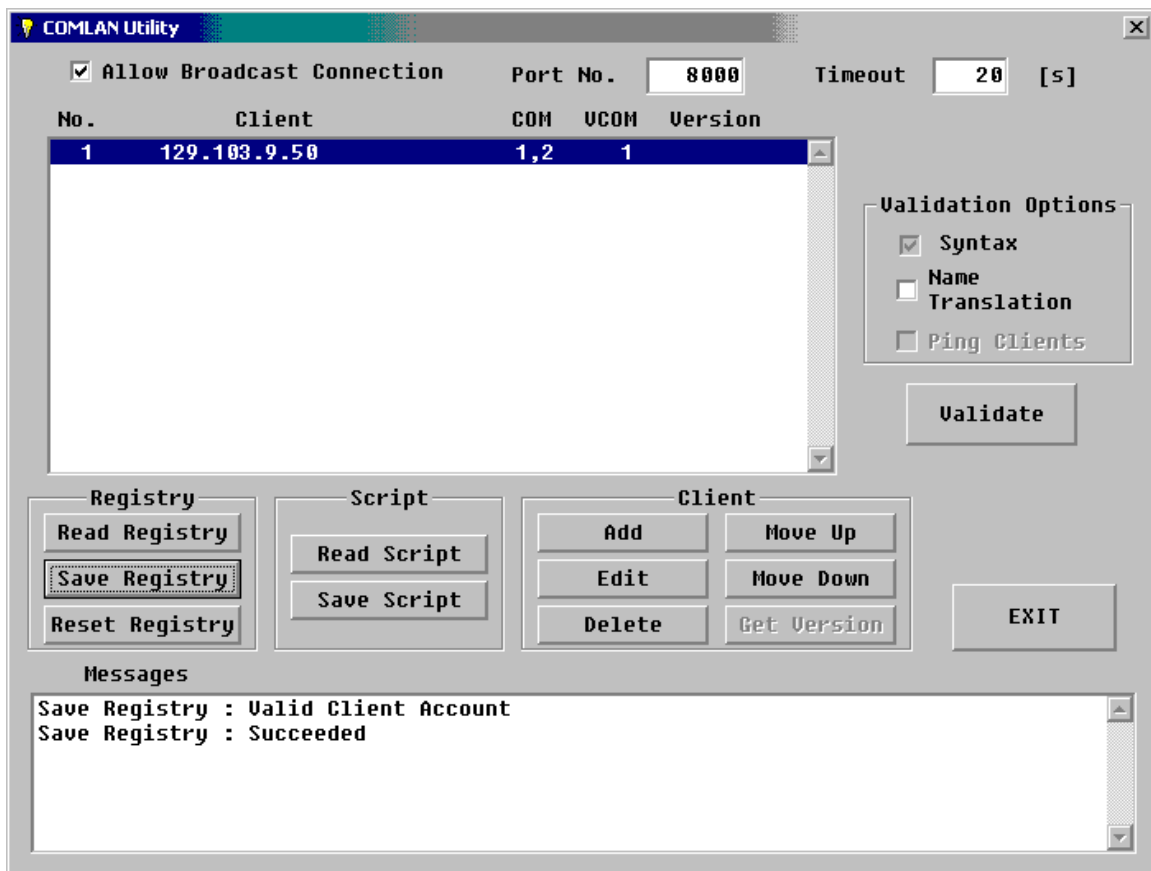




- a. Check the box next to Allow Broadcast Connection
- b. Set Port No. to 8000
- c. Set time out for 20
- d. Click the [Add] button under Client



- a. Insert your TP7500 IP address in the box
- b. Check both 1 and 2 for COM Ports User for VCOM
- c. Insert 1 in the box VCOM No. Started From
- d. Click on the [OK] button
- e. Click on the save registry under the registry column
- f. Click [EXIT] to end program.
- g. Reboot the PC after making changes.



6. When the server is restarted, sign on and click the Shortcut to Comlan to start the program.
7. Power on the TP7500 with the Quickscan6000 connected. You should get four (4) beeps when the TP7500 powers on indicating the scanner is working.
8. Use the QuickScan6000 Handheld Laser Scanner Programming Guide to program the scanner. Note: Suggested Labels are in Appendix A.

## Appendix A

Factory default label



Set label



Disable Label I.D. Control



UPC-E to UPC-A Expansion



EAN-8 to EAN-13 Expansion



Don't Send Check Digit for UPC-A



End







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**Fujitsu Transaction Solutions, Inc.  
2933 Bunker Hill Lane, #101  
Santa Clara, CA 95054**

**P/N 89000092  
PIN 45001/053**