



Supported Equipment Manual

For the BHT-7500 and BHT-103 Devices Manufactured by Denso Corporation

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Chapter 1 • Introduction

Release Notes

1. For the 7500W terminal only (not 7500S) in all emulations, setting the backlight timer in the Timers tab to 5 seconds or more enables the backlight when the trigger (or any key) is pressed.
2. For the 7500W terminal only (not 7500S) in all emulations, choosing Spec 1 in the Mode scrolling list box under the Alarm tab enables vibrate only, and choosing Spec 2 enables vibrate and beep.
3. Denso 103: firmware version E001 is required. Denso 7500W: firmware version SB06 or newer is required. Denso 7500S: latest firmware version 1.12 is required.
4. Denso 103: in all emulations, scanning of 2D barcodes of up to 500 characters is supported.

Descriptions

The Denso BHT-7500 measures 203 mm H x 75 mm W x 50 mm T, and weighs approximately 10.6 oz (300 g). This terminal meets the environmental requirements of an operating temperature of -5°C to 50°C and a drip-proof requirement of JIS drip-proof II. The BHT-7500 terminal is powered by a Lithium-ion battery cartridge (not included). Auxiliary functions include: clock, beeper, resume functions, low battery indication, and remote wake-up function.

Additional features of this terminal are as follows:

- Controller Unit
 - 32-bit RISC memory
 - 8.5 MB memory (User's area: 6.5 MB)

Note: The Controller Unit is required for operation of the terminal.

- Display Unit
 - backlight
 - FSTN liquid crystal dot matrix display device
 - 160x159 pixel display

- Scanner Unit
 - laser scanning system
 - scanning area of 520mm max. (*2)
 - resolution of 0.127 mm (PCS=0.9 min.)

- Communications Unit
 - Optical interface
 - Communication speed of 115.2 kbps max.
 - Communication system of Infrared interface (IrDA-SIR 1.0 compliant)
 - Wireless interface utilizing SS wireless communications
 - RS-232C 115.2 kbps max. Cable interface

The new features for the BHT-103 (above and beyond the 7500) are as follows.

- Touch screen
- PDF scanning
- Formatter not supported

Pictures

BHT-7500



BHT-103



Setup Requirements

Installation of PowerNet Twin Client requires, at a minimum, the following:

- A Pentium-class processor
- 32 MB of RAM
- 10 MB of free hard disk space available
- Microsoft Windows 95, 98, ME, XP, or NT/2000 operating system

Accessories

The following accessories are available:

- IrDA communication unit CU-7001
- Battery charger C-700
- 4-slot battery charger C-750
- Software (see <http://www.denso-id.com/Default.aspx?tabid=27>)
 - Ir-transfer utility C (for Windows95/NT)
 - Ir-transfer utility E (for Windows95/NT)
 - Ir-transfer utility C DLL pack
 - BHT-BASIC 3.5 compiler

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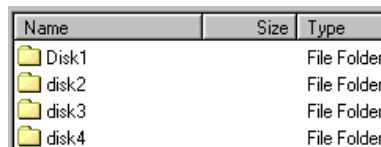
Chapter 2 • Terminal Setup

Downloading From the WEB

The PowerNet Twin Client software package can be downloaded from the Connect web site at <http://www.connectrf.com>. Click on *Partner Services* and then click on *Software Downloads*. Select the file named *PowerNet Twin Client for Denso*.

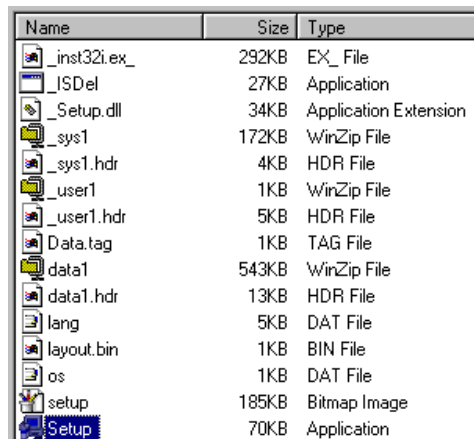
Running Setup from a Download File

The downloaded file is a compressed archive. After extraction using a utility such as *WinZip* or *PKWARE*, folders are created on the hard disk as shown in the following figure.



Name	Size	Type
Disk1		File Folder
disk2		File Folder
disk3		File Folder
disk4		File Folder

Click on the **Disk1** folder to view the files as shown in the following figure.

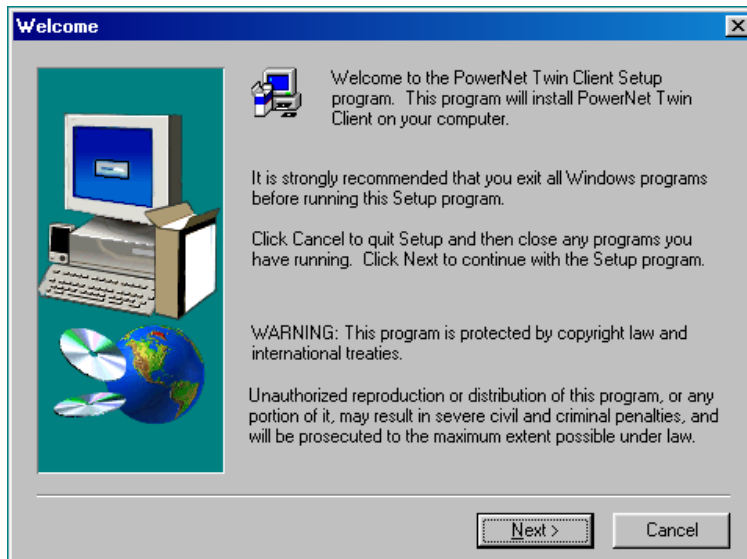


Name	Size	Type
inst32i.ex	292KB	EX_ File
_SDel	27KB	Application
_Setup.dll	34KB	Application Extension
_sys1	172KB	WinZip File
_sys1.hdr	4KB	HDR File
_user1	1KB	WinZip File
_user1.hdr	5KB	HDR File
Data.tag	1KB	TAG File
data1	543KB	WinZip File
data1.hdr	13KB	HDR File
lang	5KB	DAT File
layout.bin	1KB	BIN File
os	1KB	DAT File
setup	185KB	Bitmap Image
Setup	70KB	Application

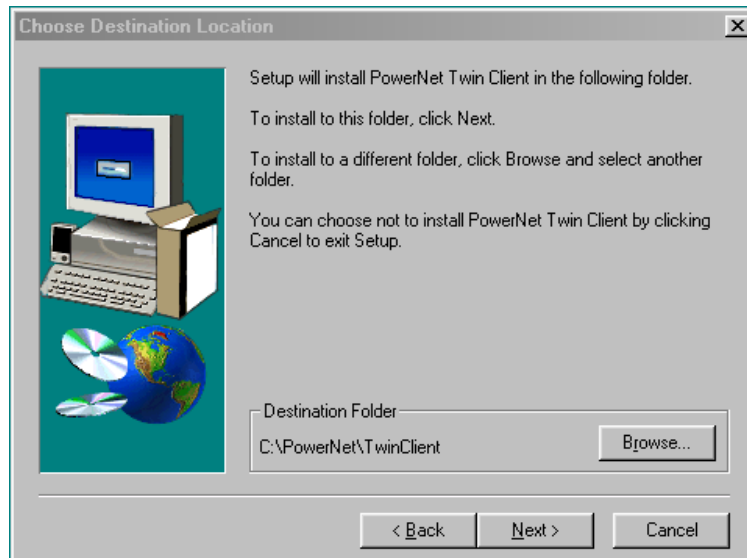
Click on the **Setup** application and proceed to the following section entitled *Installation* for further instructions.

Installation

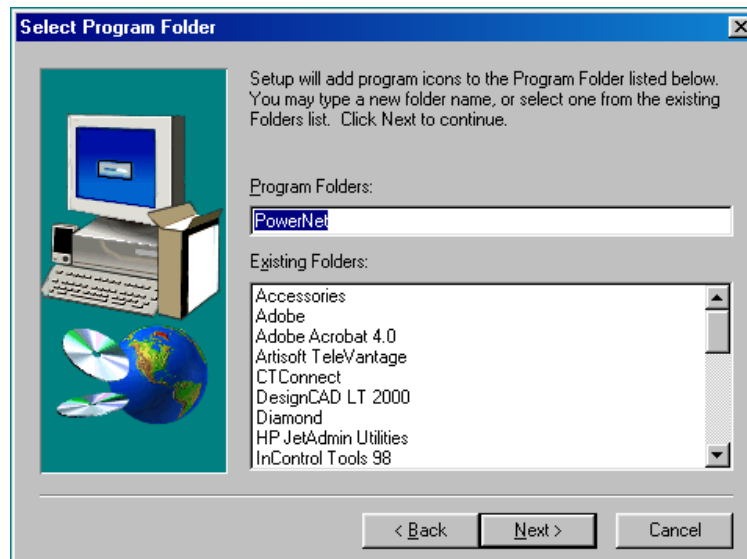
The InstallShield wizard runs and presents the following screen.



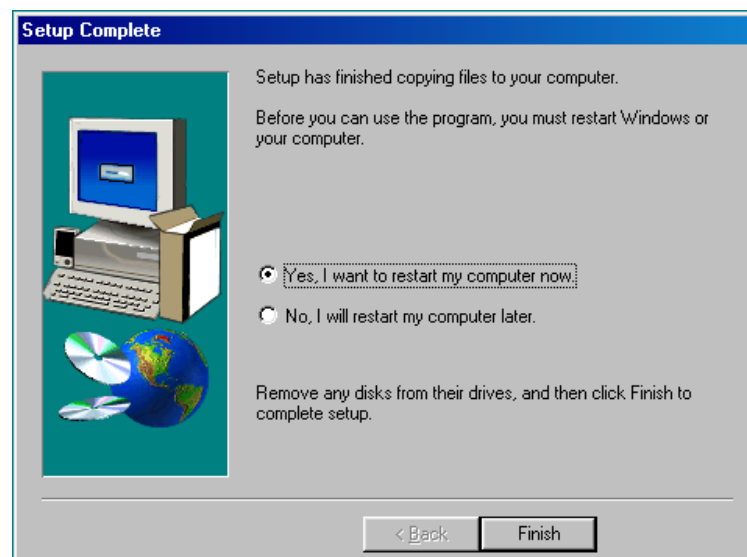
Click on **N**ext to begin the installation process.



To change the default Destination Location, click on **B**rowse and select a location. Then click on **N**ext.



The default folder is **PowerNet**. This default may be changed either by selecting an existing program group or by typing in a new name at the prompt. Then click on **Next**.



When the installation is complete, reboot the system to initialize the Twin Client software.

- a. To reboot the system immediately, click on **Finish**.
- b. To reboot later, click on the option to restart the computer later, and then click on **Finish**.

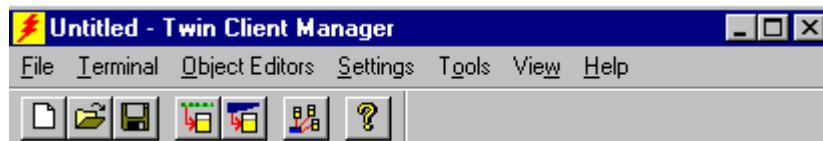
Running the Manager

The PowerNet Twin Client Manager is the utility that manages the terminal software and configurations.

Select **Start, Programs, PowerNet, and Twin Client Manager**. The PowerNet Twin Client Manager screen appears as shown in the following figure. This is the administrator's main screen, and all functions are accessed from its menu bar, tool bar, and tabs.








Menu Bar

The menu bar provides access to the functions used to configure the terminals and manage their software.



Toolbar

Found under the menu bar, the tool bar provides shortcuts to major features. The toolbar can be turned on or off by changing the Toolbar parameter found on the **View** menu. The shortcuts available from the toolbar are as follows.

-  Create a new terminal configuration.
-  Open an existing terminal configuration.
-  Save the current terminal configuration.
-  Download the configuration to terminal.
-  Download software to terminal.
-  Configure terminals automatically over the wireless network.
-  View PowerNet Twin Client Manager version.

The PowerNet Twin Client Manager is now successfully installed and ready for use. *Quick Start* provides detailed instructions for quickly configuring the terminal.

Quick Start

Quick Start describes how to prepare the Twin Client Manager and the Denso terminal for a Telnet session with the host. Following an initial serial download, the terminal software and configuration is managed automatically, over the wireless network.

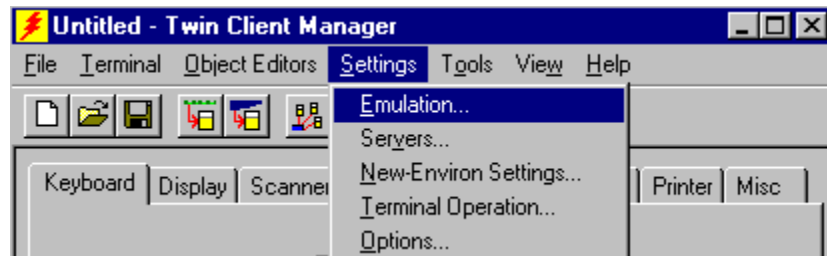
Note: Denso terminals are normally delivered with Denso files pre-installed.

Configuring the Manager

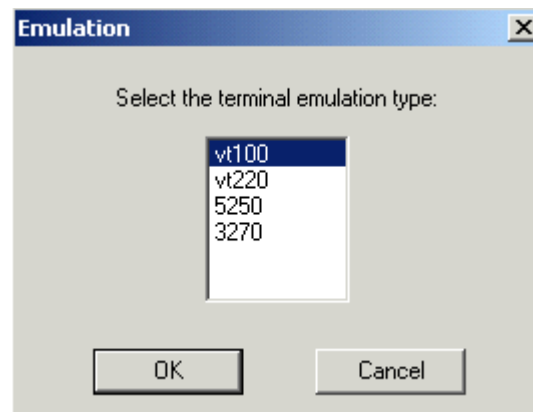
The first step is to configure the Twin Client Manager to meet site-specific requirements, and then prepare it for the automatic management of the terminal software and IP addresses. This simple procedure will require only a few minutes to complete.

Setting the Emulation

Click on **Start, Programs, PowerNet, and Twin Client Manager**. Select the **S**ettings menu.



Click on **E**mulation, select the desired emulation, and click on **O**K.

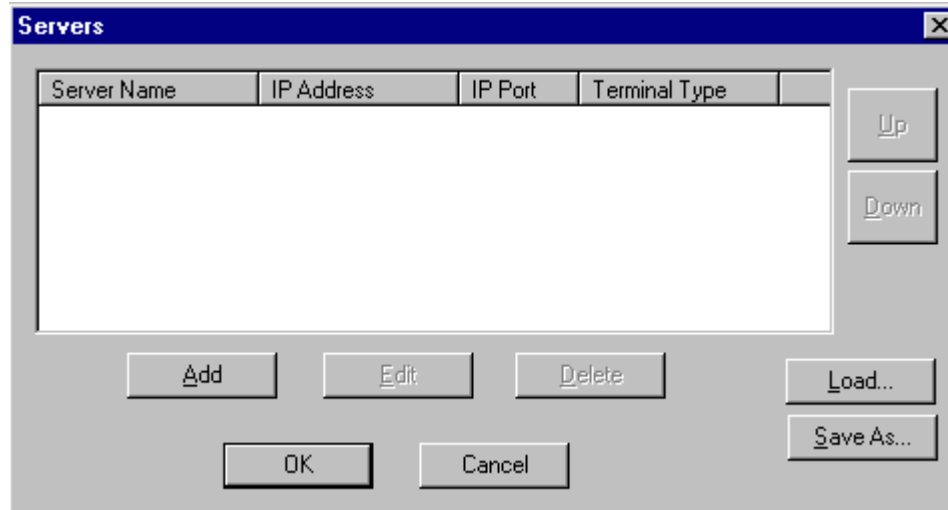


Setting the Servers

The Servers are the Telnet host systems the terminals will access.



To set these addresses from the **Settings** menu, click on **Servers** and then click on **Add**. Enter the name of each server, its IP Address and IP port (normally 23 for Telnet servers), and emulation type. Then click on **OK**.



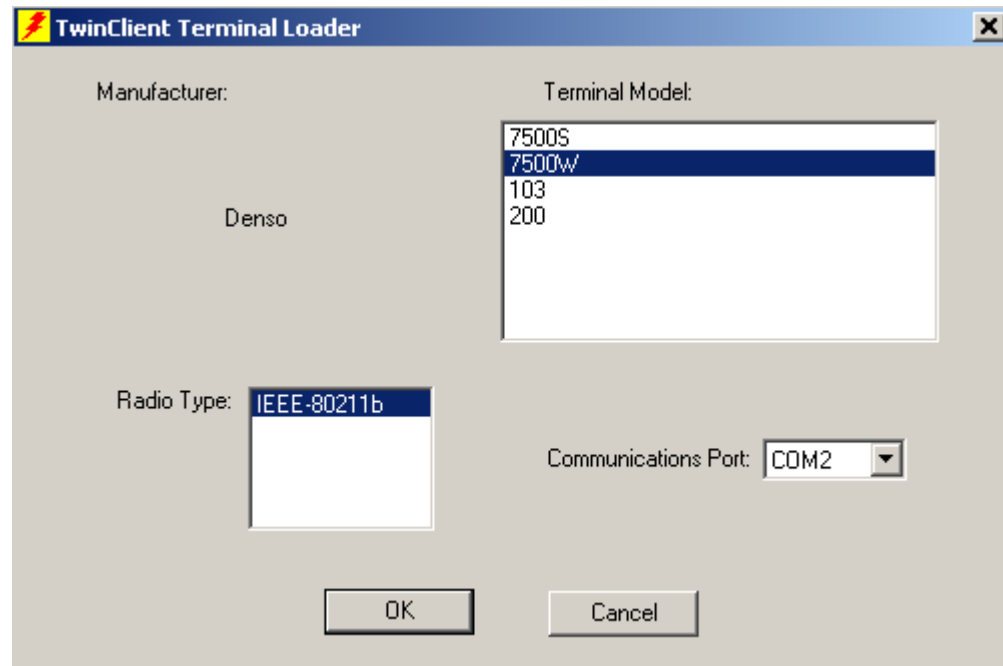
Repeat this step for each Telnet server the terminals are required to access. If an error is made in the name, IP Address, IP Port number, or Terminal emulation type, click on the line that is in error and then click on the **Edit** button to make the corrections. Use the **Load** button if you want to load an .svr file and use the **Save As** button if you want to save your file as an .svr file.

Setting Terminal Model and COM Port

The default serial connection to the Denso cradle is through COM1. To select a specific Denso terminal model and keypad, or to change the COM port assignment, click on the **Options** menu as shown.

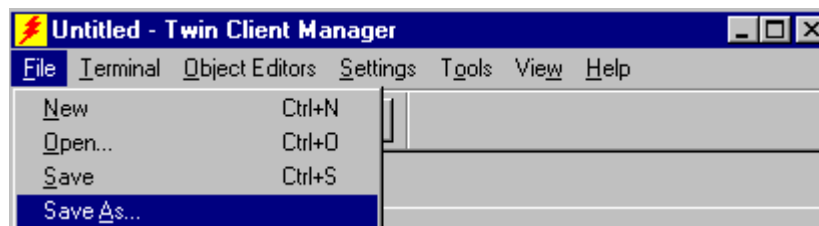


To maintain compatibility with existing Denso Telnet client keyboard layouts, a specific terminal model and keypad must be selected from the Terminal Model window.

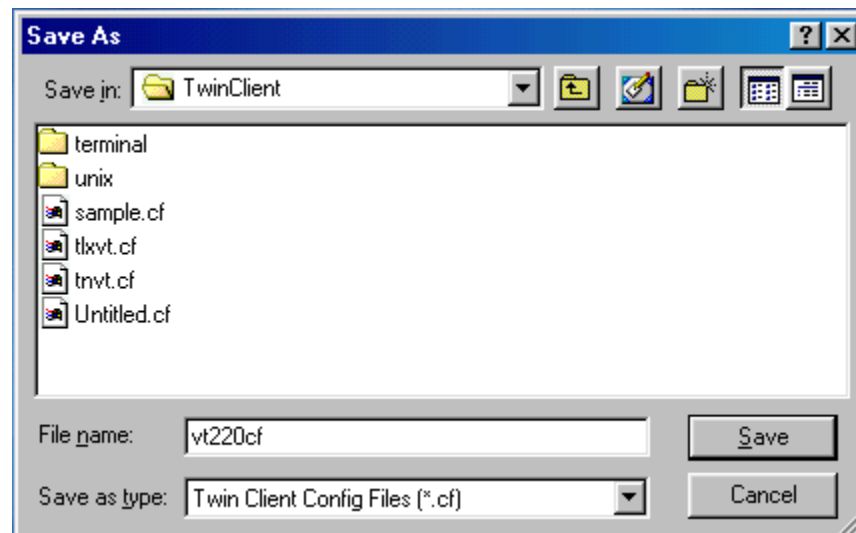


Saving the Configuration

Click **File** and **Save As**. Enter a name for this configuration.



For the purposes of this example, the name is vt220.



Configuring the Terminal for Download

The terminal is prepared for the addition of Twin Client by booting to *command mode*, selecting the program loader on the terminal, erasing the EEPROM, and setting the serial port parameters as described in this section. This simple procedure is described in the following sections, and requires only a few minutes to complete.

Connecting the Cradle

The terminal download requires a serial connection between the terminal and the PC through a cradle. In preparation for this download perform the following:

- Connect the selected serial port on the PC to the cradle with a null modem cable.
- Verify that the cradle is powered on.

Command Mode Safe Boot

On the portable terminal, power the terminal **OFF**, then boot the terminal using the key sequence shown in the following table.

Command Mode Boot Sequences	
Following Power OFF	
Terminal Model & Keypad	Key Sequence
BHT-7500, 36-key	Hold SF and 1 keys.
BHT-103, 18-key	Press and release PW .

Downloading EX3 Files

The EX3 files can be downloaded using the cradle or from the terminal. The download requires approximately 2 minutes to complete.

Downloading from the Cradle

Command boot the terminal.

The terminal will boot to System Menu.

SYSTEM MENU

- 1: EXECUTE PROGRAM
- 2: DOWNLOAD
- 3: UPLOAD
- 4: SET SYSTEM
- 5: TEST
- 6: VERSION
- 7: FTP
- 8: RF

From the System Menu cursor down or press 4: **Set System** and press **Enter**.

SYSTEM MENU

- 1: EXECUTE PROGRAM
- 2: DOWNLOAD
- 3: UPLOAD
- 4: SET SYSTEM
- 5: TEST
- 6: VERSION
- 7: FTP
- 8: RF

In the **Set System** menu, there are eight settings. Cursor down or press 5: **Communication** and press **Enter**.

SET SYSTEM

- 1: EXECUTE PROGRAM
- 2: DISPLAY
- 3: DATE /TIME
- 4: BARCODE
- 5: COMMUNICATION
- 6: KEY
- 7: RESUME
- 8: TCP/IP

There are four settings in the **Set Communication** menu. Select number 1: **Optical** and press **Enter**.

SET COMMUNICATION

- 1: OPTICAL
- 2: CONNECTOR
- 3: COM PORT
- 4: PROTOCOL TYPE

In the **Optical** menu, there are two settings, Parameter and Protocol. Choose the **Protocol** setting and press **Enter**.

SET COMMUNICATION

- 1: PARAMETER
- 2: PROTOCOL

In the Set Protocol Menu, unlike the previous menus, all the settings will need to be entered. The **Set Protocol** fields and settings are found in the table below.

Press 1 for or move cursor to the <**Serial No.**> field and move cursor to <**On**>.

Press 2: <**H. Parity**> and move cursor to <**On**>.

Press 3: <**Linkup Time**> and move cursor to <**30**>.

Press 4: <**Field Space**> and move cursor to <**Ignore**>.

SET PROTOCOLS
<OPTICAL>

- 1: SERIAL NO. **ON** OFF
- 2: H. PARITY **ON** OFF
- 3: LINKUP TIME
NONE **30** 60 90 120
- 4: FIELD SPACE
IGNORE DATA

When the settings have been recorded, press **Enter**. This will return the terminal to the **Set Communication** Menu.

SET COMMUNICATION

- 1: **PARAMETER**
- 2: PROTOCOL

Press **1** and **Enter**, and cursor to **115,200**.

SET PARAMETER
<OPTICAL>

- 1: TRANSMIT SPEED
2400 9600 19200
38400 57600 **115200**

Press **<C>** to return to the **Set Communication** Menu. Press 2: **<Connector>** and **Enter**.

SET COMMUNICATION

- 1: OPTICAL
- 2: **CONNECTOR**
- 3: COM PORT
- 4: PROTOCOL TYPE

Press 1 or move cursor to the **<Serial No.>** field and move cursor to **<On>**.

Press 2: **<H. Parity>** and move cursor to **<On>**.

Press 3: **<Linkup Time>** and move cursor to **<30>**.

Press 4: **<Field Space>** and move cursor to **<Ignore>**.

SET PROTOCOL
<CONNECTOR>

- 1: SERIAL NO. **ON** OFF
- 2: H. PARITY **ON** OFF
- 3: LINKUP TIME
NONE **30** 60 90 120
- 4: FIELD SPACE
IGNORE DATA

Press <C> to return to the **Set Communication** Menu. Press 3: <Com Port> and **Enter**.

SET COMMUNICATION

- 1: OPTICAL
- 2: CONNECTOR
- 3: COM PORT
- 4: PROTOCOL TYPE

Press **1** for **Basic Mode** settings, and cursor to **Optical**.

Press **2** for **System Mode** settings, and cursor to **Optical**.

SET COM DEFAULT PORT

- 1: BASIC
OPTICAL CONNECTOR
- 2: SYSTEM MODE
OPTICAL CONNECTOR

Press <C> to return to the **Set Communication** Menu.

Press 4: <Protocol Type> and **Enter**.

SET COMMUNICATION

- 1: OPTICAL
- 2: CONNECTOR
- 3: COM PORT
- 4: PROTOCOL TYPE

Press **2** and **Enter**.

PROTOCOL TYPE

- 1: BHT PROTOCOL
- 2: BHT-IR PROTOCOL

Enter the **ID** number and press **Enter**.

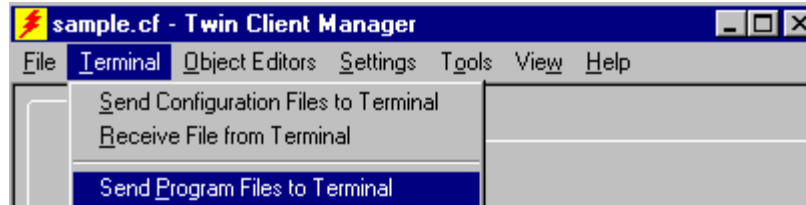
SET ID

65535 >> _

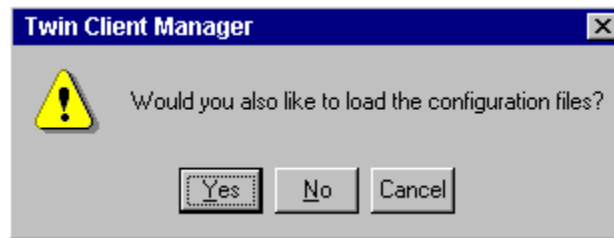
Press <C> twice to return the **System Menu**.

Press <SF><8> for the **Y Modem Menu**.

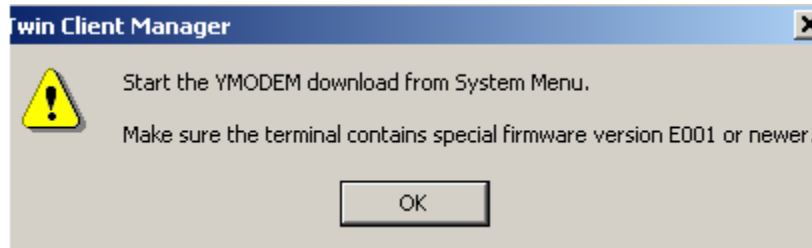
Under the **T**erminal menu on the PC, click on the **Send Program Files to Terminal** menu option.



At the prompt, choose **Yes** or **No** to download configurations. Choosing **Yes** is needed to run in Telnet mode.



The following screen will appear.



Choose **OK** at the prompt above.

Note: The screen above is for the BHT 103 terminal. The BHT 7500W terminal requires special firmware version SB06, and the BHT 7500S terminal requires latest firmware version 1.12.

At the same time, press **1** and **Enter** to start file download.

YMODEM MENU

1: DOWNLOAD
2: UPLOAD

The terminal will start downloading files. The following screen will appear.

DOWNLOAD FILE

WAIT

In the event of a failure, verify the following:

- The null modem cable connection between terminal and PC and condition of all connectors.
- The specification of correct COM port.
- The correct cradle power supply

The terminal then associates with an access point, contacts the Twin Client Manager, and then downloads the program, configuration, and IP address of the terminal.

During the download, progress messages are displayed on the terminal. Pauses in activity of up to 10 seconds will be observed as the terminal writes to EEPROM. The download requires approximately 2 minutes to complete.

The following describes the error messages that will be displayed on the terminal in the event of a download failure, and can be used as a guide to correcting the problem.

Errors in System Mode

If some error occurs during operation in **System Mode**, one of the following error messages will appear on the LCD.

When selecting a program file or data file

• Problem

You attempted to execute a user program in the **EXECUTE PROGRAM** menu, but no user program files had been stored in the memories.

```
EXECUTE PROGRAM
NO FILES EXIST
```

• Solution

Press the **C** key to return to the **SYSTEM MENU** screen, and then download user programs.

• Problem

In the **SET SYSTEM** menu, you attempted to select a user program file as an execution program to be run when the power is applied, but no user program files had been stored in the memories.

```
EXECUTE PROGRAM
NO FILES EXIST
```

• Solution

Press the **C** key to return to the **SYSTEM MENU** screen then download user programs.

• **Problem**

You attempted to select “ONE FILE” or “ALL FILES” for uploading in the **UPLOAD** menu, but no data files had been stored in the memory.

EXECUTE PROGRAM
NO FILES EXIST

• **Solution**

Press the **C** key to return to the **SYSTEM MENU** screen.

• **Problem**

You have deleted all of the files stored in the memory in the **DELETE FILE** menu.

EXECUTE PROGRAM
NO FILES EXIST

• **Solution**

Press the **C** key to return to the **SYSTEM MENU** screen.

During downloading of a program file, data file, BHT System parameter file, or system message file

• **Problem**

The memory is insufficient for storing files to be downloaded.

DOWNLOAD FILE
OUT OF MEMORY
RETRY?
1. YES 2. NO

• **Solution**

Press the **2** key to return to the **SYSTEM MENU**, then delete unnecessary files in the memory or decrease the size of the file to be downloaded.

• **Problem**

In the **SYSTEM PARAMETER** transfer menu, you attempted to download a file other than the BHT system parameter file. Or in the **SYSTEM MESSAGE** transfer menu, you attempted to download a file other than the system message file.

DOWNLOAD
 TOO MANY FILES
 RETRY?
 1. YES 2. NO

• **Solution**

Check file you attempted to download and download file in appropriate menu (**DOWNLOAD**, **SYSTEM PARAMETER** transfer, or **SYSTEM MESSAGE** transfer menu).

• **Problem**

The current download will exceed the maximum of 80 files in the memory.

DOWNLOAD
 TOO MANY FILES
 RETRY?
 1. YES 2. NO

• **Solution**

Press the **2** key to return to the **SYSTEM MENU**, and then delete unnecessary files in the memory (or decrease the number of files to be downloaded if you attempted to download more than one file in the **DOWNLOAD** menu).

• **Problem**

Downloading has failed.

DOWNLOAD FILE
 xxxxxxxx.xxx
 COMMUNICATION ERROR
 RETRY?
 1. YES 2. NO

• **Solution**

To retry downloading, press the **1** key. To return to the **SYSTEM MENU**, press the **2** key. Check the interface port, communications parameters, and communication protocol type in the **SET SYSTEM** menu or perform the communications test in the **TEST** menu. It is also necessary to check the communications parameters setup of the host computer.

• **Problem**

You attempted to download an invalid program file.

DOWNLOAD FILE
XXXXXXXX.XXX
PROGRAM FILE ERROR

RETRY?

1. YES 2. NO

• **Solution**

Check whether the program file you attempted to download is available to your BHT model. If it is not available, download the appropriate program.

A successful wireless connection/download is indicated by the Twin Client main menu.

Twin Client © 1991-2006, Connect, Inc. Keypress to Continue

Note: The date of 2006 is updated on the terminal at the time of a new release.

The terminal is now ready to establish a Telnet session with the host system.

Setting the Default Executable

From the **SYSTEM MENU**, press 4: **SET SYSTEM**.

SYSTEM MENU

- 1: EXECUTE PROGRAM
- 2: DOWNLOAD
- 3: UPLOAD
- 4: **SET SYSTEM**
- 5: TEST
- 6: VERSION
- 7: FTP
- 8: RF

Press 1: **SET EXECUTABLE PROGRAM**.

SET EXECUTABLE PROGRAM

TAPDVT.EX3

Starting a Telnet Session

Press <1> **Execute Program**.

SYSTEM MENU

- 1: EXECUTE PROGRAM
- 2: DOWNLOAD
- 3: UPLOAD
- 4: SET SYSTEM
- 5: TEST
- 6: VERSION
- 7: FTP
- 8: RF

Select an emulation and press **Enter**.

After a Telnet session has been successfully established, the terminal will remain in session for a maximum of 30 minutes at a time until it has been authorized. Once authorized, there is no software restriction on the session time. The instructions for authorizing the terminal are presented in *Authorizing PowerNet*.

Note: In order to run Twin Client, the heap area must be set up as follows.
(This is valid for the BHT7500 only.)

```

Start system menu ([SF]?[1]+[PW])
Select set system menu ([4]?[ENT])
Select heap size set menu ([SF]+[1])
+-----+
|SET FOR RUNNING C PROGRAMS|
| 1:HEAP SIZE [ 76]KB |
|   (in 4KB units)   |
|   MIN : 76KB |
|   MAX : 140KB |
Set heap size as 140KB
?push [ENT] (cursor move to ])
?push [C] (70 is turn off)
?push [1]?[4]?[0]?[ENT]
?push[C] to system menu

```

Standard Setup

The default terminal setup is sufficient for most installations. However, to meet site-specific requirements, it may be necessary to customize terminal operation. The standard setup options simplify this process and can be modified by the following methods:

- Using the Twin Client Manager.
- Using the Twin Client terminal menu system.

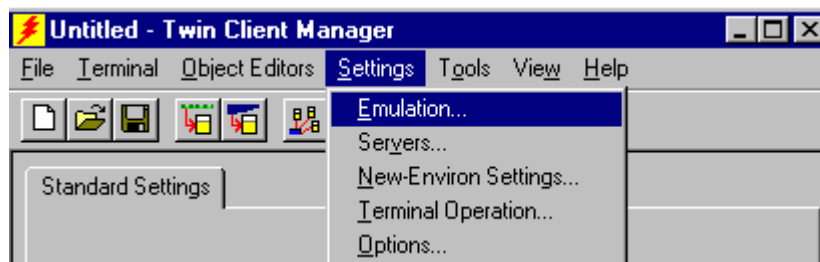
Standard Setup describes how to use the Twin Client Manager and the terminal menu systems to set up the terminal. Also described are the methods for authorizing the terminal software.

Setup Using Twin Client Manager

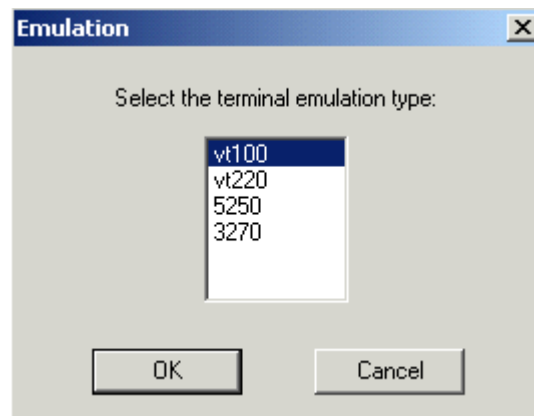
The Twin Client Manager provides a Standard Settings tab for automatic setup of the terminals. The options within this tab vary according to the emulation selected, each of which is described below. Click on **Standard** under the **View** option in the main menu.

VT Settings

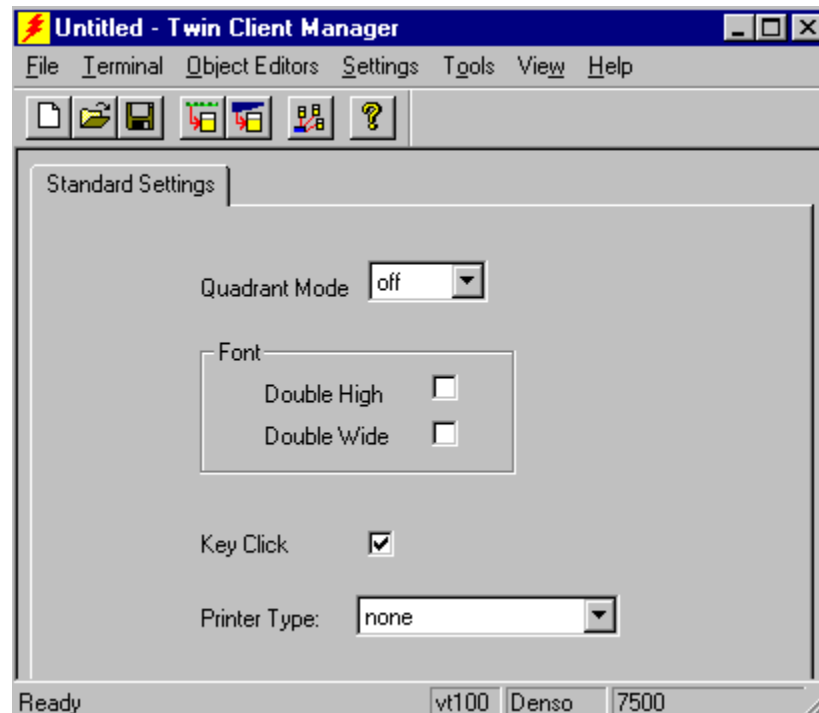
Select the VT emulation setup by clicking on the **Settings** menu and then the **Emulation** menu, as shown below.



Then click on the **VT100** or **VT220** selection, as shown below.



Click on **OK** after the selection is made, and return to the main Twin Client Manager menu. The standard settings tab will now reflect the settings for VT emulation



Quadrant Mode

This scrolling list option defines the rules by which the terminal display is positioned in the larger host display. As defined by Twin Client, quadrants are fixed position "windows" in the host display, and the terminal display is located on whatever quadrant contains the current cursor position.

Off disables quadrant processing and Twin Client simply centers the current host input field in the terminal display.

On enables quadrant processing. However, input fields that cross quadrant boundaries result in a shift to the left in order to locate as much of the current input field on the terminal display.

Soft always positions on a quadrant boundary regardless of input field boundaries. Viewing keys are enabled.

Hard is the same as **Soft** except the viewing keys are disabled.

Lock locks the terminal display origin (upper left corner) to fixed row and column (x,y) coordinates in the host display. The coordinates are zero-based.

Font

These check boxes enable (checked) or disable (unchecked) the display of characters in double high and double wide font.

Key Click

This check box enables (checked) or disables (unchecked) audible key clicks from the terminal, provided that the manufacturer supports the control of terminal key click sound. The default value is **on** (checked).

Printer Type

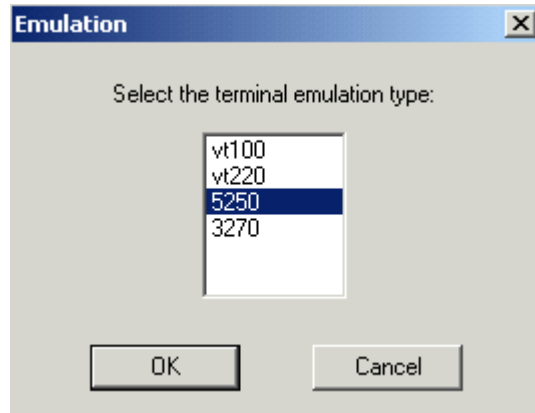
This scrolling list selects the attached printer type. The default value is **none**, indicating that no printer is attached.

5250 Settings

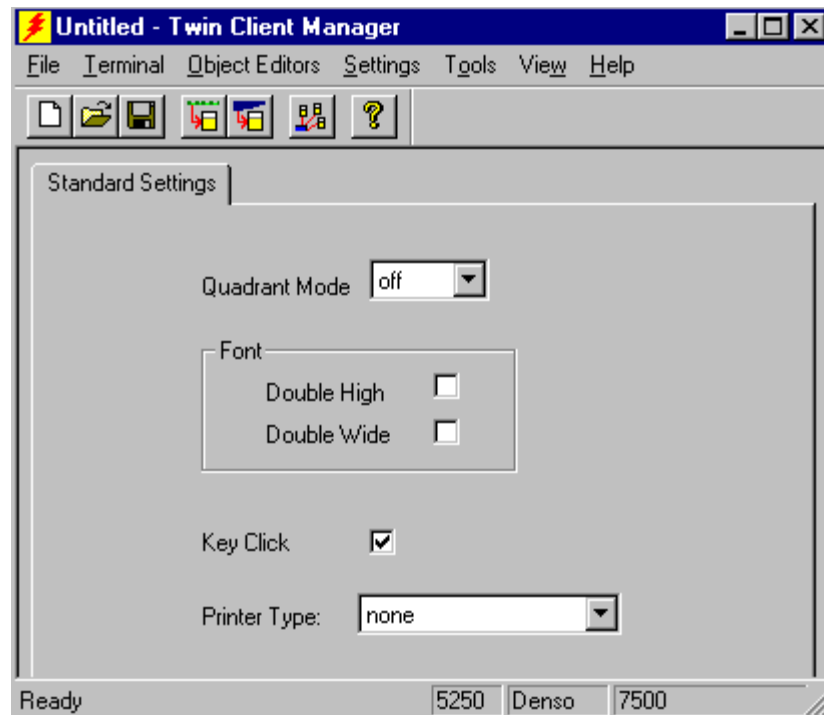
Select the 5250 emulation setup by clicking on the **S**ettings menu and then the **E**mulation menu, as shown below.



Then click on the **5250** selection, as shown below.



Click on **OK** after the selection is made, and return to the main Twin Client Manager menu. The standard settings tab will now reflect the settings for 5250 emulation



Quadrant Mode

This scrolling list option defines the rules by which the terminal display is positioned in the larger host display. As defined by Twin Client, quadrants are fixed position "windows" in the host display, and the terminal display is located on whatever quadrant contains the current cursor position.

Off disables quadrant processing and Twin Client simply centers the current host input field in the terminal display.

On enables quadrant processing. However, input fields that cross quadrant boundaries result in a shift to the left in order to locate as much of the current input field on the terminal display.

Soft always positions on a quadrant boundary regardless of input field boundaries. Viewing keys are enabled.

Hard is the same as **Soft** except the viewing keys are disabled.

Lock locks the terminal display origin (upper left corner) to fixed row and column (x,y) coordinates in the host display. The coordinates are zero-based.

Font

These check boxes enable (checked) or disable (unchecked) the display of characters in double high and double wide font.

Key Click

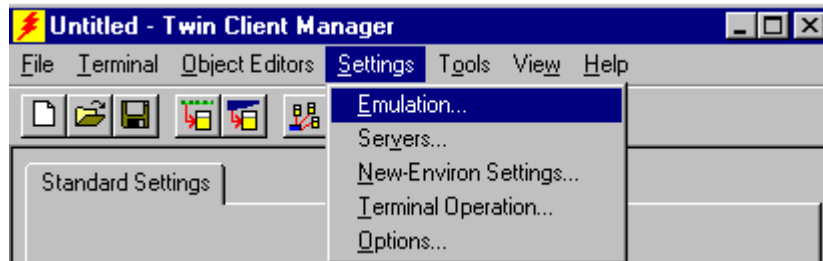
This check box enables (checked) or disables (unchecked) audible key clicks from the terminal, provided that the manufacturer supports the control of terminal key click sound. The default value is **on** (checked).

Printer Type

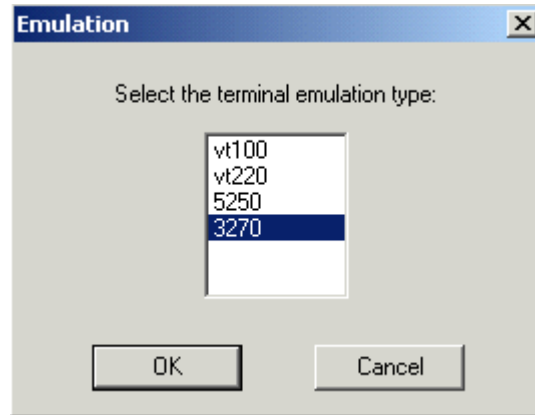
This scrolling list selects the attached printer type. The default value is **none**, indicating that no printer is attached.

3270 Settings

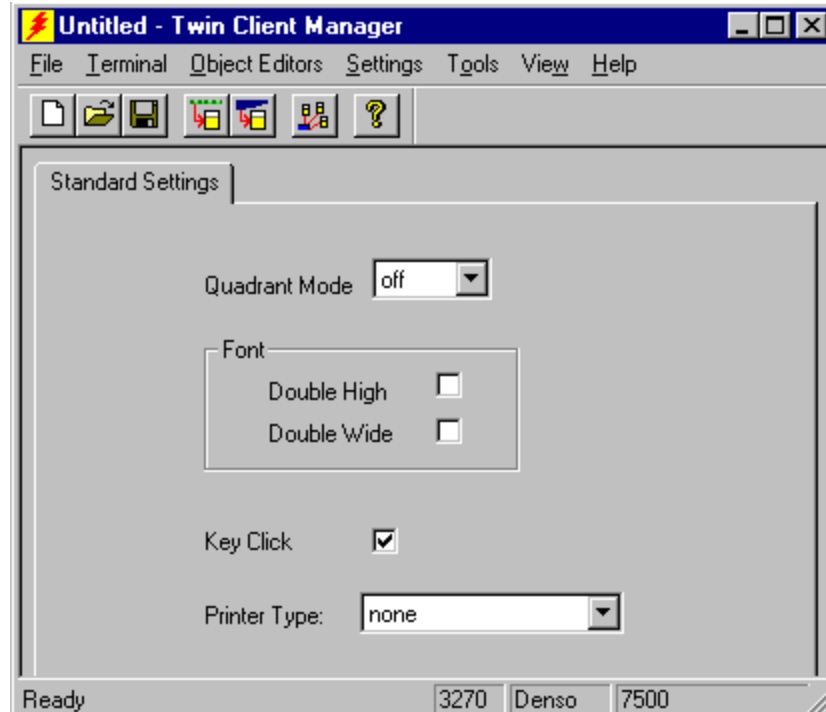
Select the 3270 emulation setup by clicking on the **S**ettings menu and then the **E**mulation menu, as shown below.



Then click on the **3270** selection, as shown below.



Click on **OK** after the selection is made, and return to the main Twin Client Manager menu. The standard settings tab will now reflect the settings for 3270 emulation



Quadrant Mode

This scrolling list option defines the rules by which the terminal display is positioned in the larger host display. As defined by Twin Client, quadrants are fixed position "windows" in the host display, and the terminal display is located on whatever quadrant contains the current cursor position.

Off disables quadrant processing and Twin Client simply centers the current host input field in the terminal display.

On enables quadrant processing. However, input fields that cross quadrant boundaries result in a shift to the left in order to locate as much of the current input field on the terminal display.

Soft always positions on a quadrant boundary regardless of input field boundaries. Viewing keys are enabled.

Hard is the same as **Soft** except the viewing keys are disabled.

Lock locks the terminal display origin (upper left corner) to fixed row and column (x,y) coordinates in the host display. The coordinates are zero-based.

Font

These check boxes enable (checked) or disable (unchecked) the display of characters in the double-high and double-wide font.

Key Click

This check box enables (checked) or disables (unchecked) audible key clicks from the terminal, provided that the manufacturer supports the control of terminal key click sound. The default value is **on** (checked).

Printer Type

This scrolling list selects the attached printer type. The default value is **none**, indicating that no printer is attached.

Terminal Setup Using Twin Client Menus

The Twin Client terminal software provides an internal menu system for configuring certain parameters on the terminal and for switching between Server and Telnet modes of operation.

To access this menu system for the BHT 7500 terminal, press uppercase **C** at the startup screen as shown in the following figure.

```
Twin Client
© 1991-2006, Connect, Inc.

Keypress to Continue
```

The following screen appears.

```
Edit Menu Options
Edit Mobile Unit IP
Edit Server/Host IPs
Edit License Key
Run Site Survey
Switch Client Modes
Run Client Emulator
Exit to OS
```

Use the **Up-Arrow** and **Down-Arrow** keys to navigate the menu, and press **Enter** to select the highlighted option. Each menu option is described below.

Edit Mobile Unit IP

The IP list contains the terminal IP address, the Subnet Mask and the Router IP address. Enter the appropriate address and select **F3** to save and/or **F7** to Quit.

```
IP 206.232.71.38
SN 255.255.255.0
RT 206.232.71.1

<F3> Save <F7> Quit
```

Edit Server/Host IPs

If the host IP address(es) were not pre-configured as described in the *Setting the Servers* section of *Configuring the Manager*, or if you wish to change those settings using the terminal menus, select this option and enter up to four Host IP addresses as required.


```

Host 0
IP 206.183.67.155
Port 23__
<F3> Save <F7> Quit

```

Press **F3** to save the configurations.

Edit License Key

The client software can be authorized automatically, as described in the next section, *Authorizing PowerNet*. This menu option permits authorization of each terminal manually. Select this option to obtain the terminal's Identification Code, which is used to obtain the Authorization code from the Connect web site, as described in the next section.

The 12-digits displayed at the terminal screen top is the terminal's Identification Code.

```

00A0F826E614
Authorization
_____
not authorized
<F3> Save <F7> Quit

```

Type the authorization code into the field as it appears on the web site. Punctuation characters, such as the hyphen (-), are required. Press **F3** to save the authorization code.

Run Site Survey

This option (a feature of Spectrum 1) is applicable to Release 5.0 and may be obsolete for your terminal.

Switch Client Modes

The PowerNet Twin Client normally operates in Telnet mode, which provides direct connection to Telnet hosts. It can also operate in Server mode, through a PowerNet OpenAir server. Select this menu option to switch between Server and Telnet modes of operation. Note that the host socket address for the PowerNet OpenAir servers is 1800, which must also be changed in the **Edit Server/Host IPs** menu described above.

Run Client Emulator

After all desired changes have been made, select this option to return to the Twin Client main menu. Then press any key to establish the Telnet session and begin emulation. Refer to the *Quick Start 3* sub-section, *Starting a Telnet Session*, for further instructions.

Setting Default Executable

From the System Menu, press <4> **Set System** and press <1> **Execute Program**.

SYSTEM MENU

- 1: EXECUTE PROGRAM
- 2: DOWNLOAD
- 3: UPLOAD
- 4: SET SYSTEM
- 5: TEST
- 6: VERSION
- 7: FTP
- 8: RF

From the Edit Options Menu,

- Press 1 for Edit Mobile Unit IP (edit IP for terminal).
- Press 2 for Edit Server/Host list (Edit IP and port for server).
- Press 3 for Edit License Key (to authorize the terminal).
- Press 4 for Switch Client Modes (switches to server/thin mode).
- Press 5 for Run Client Emulator (runs emulation program).
- Press 6 for Exit to OS (shuts down the terminal).

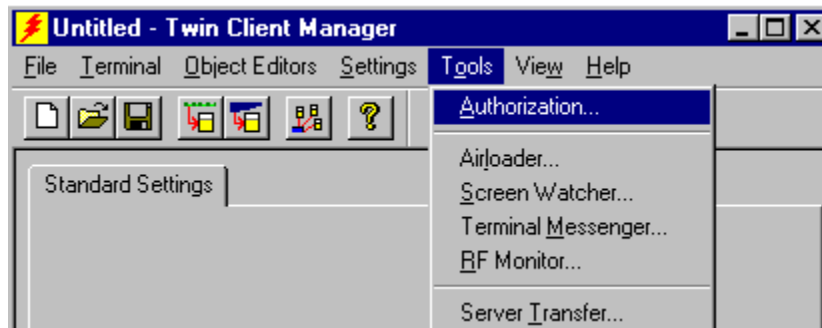
Authorizing PowerNet

Each PowerNet Twin Client will run for 30 minutes at a time without authorization. Uninterrupted operation for a production environment is the result of authorizing the software.

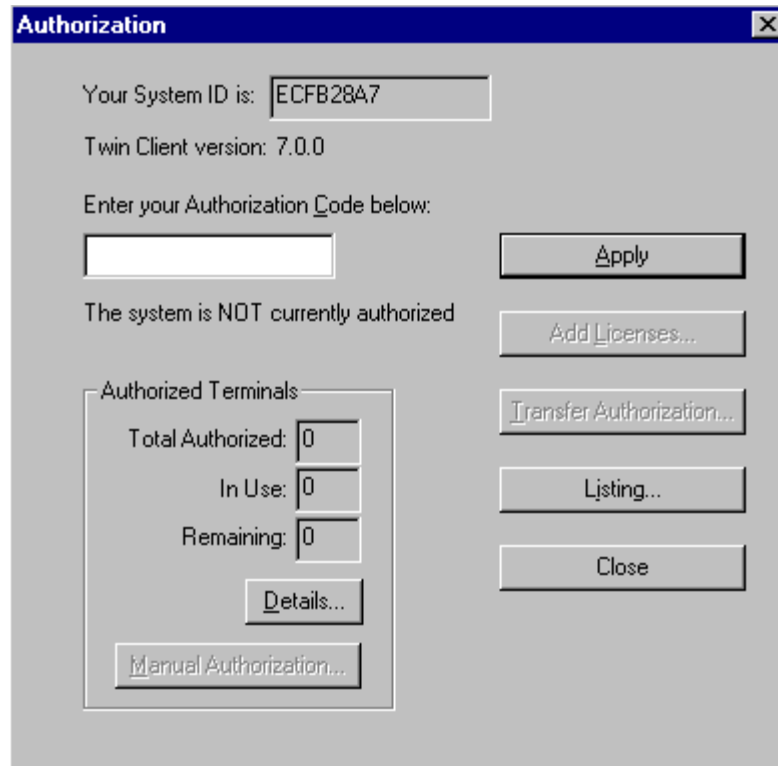
The Twin Client Manager can automatically authorize the terminal over the wireless network if the following requirements are met:

- A PC running Twin Client Manager is connected to the wire LAN segment with at least one access point within range of the terminal.
- The System ID of the PC on which Twin Client Manager is installed has been used to obtain a site license Authorization code from the Connect web site.

To obtain the System ID of the Twin Client Manager, click on the **A**uthorization option in the **T**ools menu, as shown below.



The Authorization window is displayed as shown below.



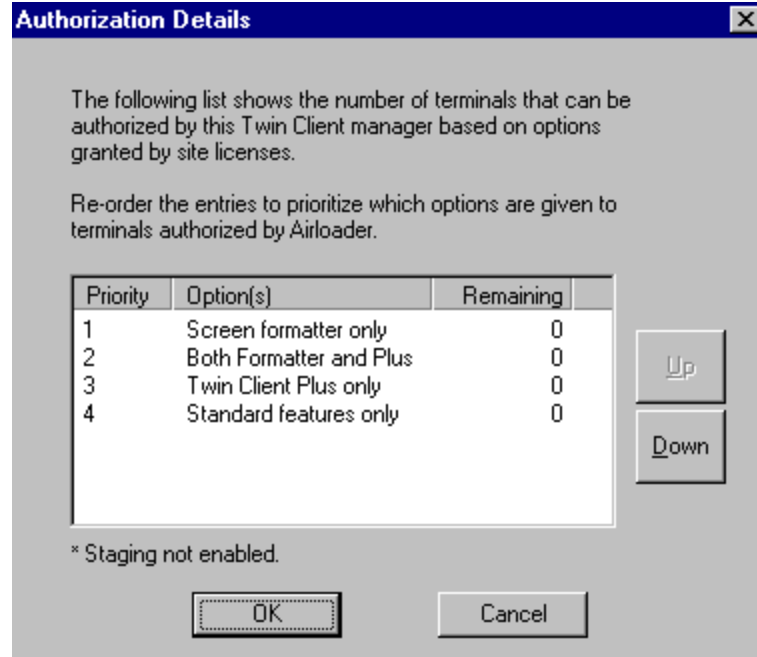
Go to <http://www.connectrf.com>. Click on **Partner Services**. Click on the **Generate Authorization** icon at the top of the page. Follow the directions on the web site.

Authorized Terminals

The number of terminals authorized, the number of terminals in use, and the number of terminals remaining is provided in the Authorized Terminals box on the lower left side of the screen.

Click on the **Details** button to number the options in the screen below in the order of your priority.

Note: The terminal may or may not be able to utilize the Formatter feature depending on its authorization codes.



Click on an option and move it using the **Up** and **Down** buttons.

Click on **OK** when finished.

The **Manual Authorization** button is an alternate method of obtaining an authorization code for a terminal. This method does not utilize Airloader, as does the other method.

Click on this button, manually enter your MAC address in the screen that appears, and click on **OK**. This enables you to generate individual authorization codes.

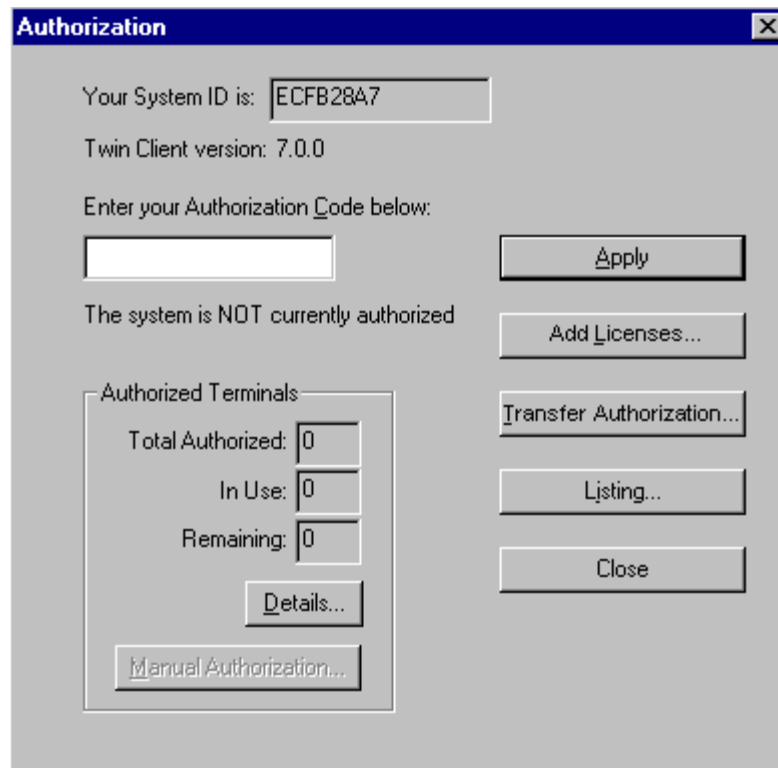
Add Licenses

The Add Licenses feature is used when adding additional licenses to an already site licensed Twin Client Manager.

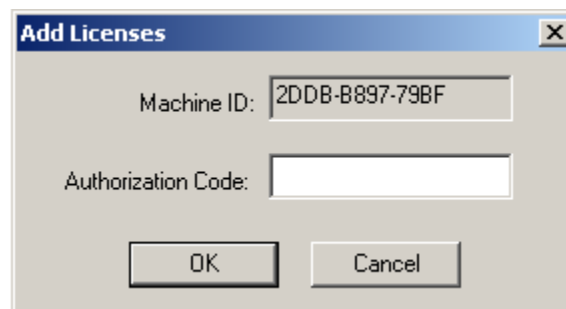
An example of this is the instance in which Twin Client Manager is licensed for 10 licenses, and the customer purchases another 10 licenses to make a total of 20 licenses.

From Twin Client Manager, choose **Authorization** from under the **Tools** menu.

Click on the **Add Licenses** button.



A pop-up box appears with the machine ID and a space for the additional license's authorization code.



Enter the additional license's authorization code and click on **OK**.

Use the machine ID in the pop-up box instead of the original machine ID to get your authorization code.

If adding users, click on the Add Licenses button before generating the authorization code to get the most current machine ID.

Transfer Authorization

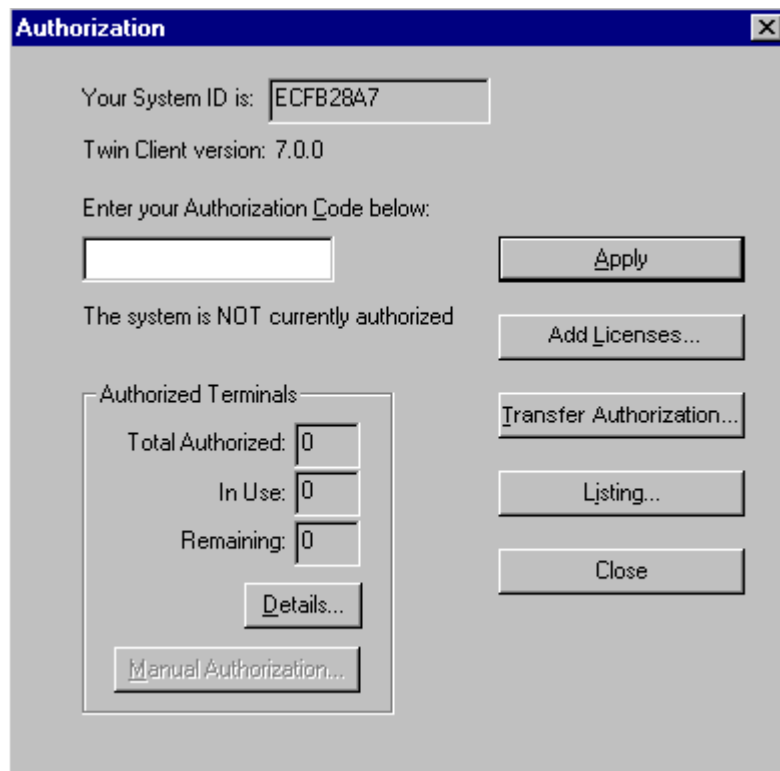
The Transfer Authorization feature is used when moving a site license from one PC to another.

After Twin Client Manager is installed on a new PC, you will need the system/machine ID for it. This ID appears in the first box of the authorization screen.

From Twin Client Manager, select **A**uthorization from under the **T**ools menu.

Click on the **Transfer Authorization** button on the old PC.

You will be asked for the new system ID. Enter this new system ID. It will generate an authorization code for the new PC's Twin Client Manager.



Note: This feature only works if there are licenses remaining on the old PC.

Listing

Click on the **Listing** button to view authorization codes issued.

The authorization codes used along with their corresponding serial numbers will appear.



Click on **OK** when finished.

Click on the **Close** button when finished.

Codabar Start/Stop Number

The Codabar start and stop characters (ABCD and ? for a wildcard) are selected by selecting the “General” symbology entry from the **Decoder Control** window under **Object Editors** in Twin Client. You can select any number from 0 to 24. Each number represents a combination of codabar start and stop characters as shown in the table below. For example, the start/stop number “7” selects a start character of “B” and stop character of “C”.

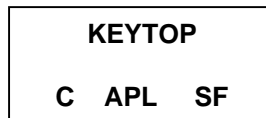
Start Character	Stop Character	“Codabar Start/Stop” Number
A	A	0
A	B	1
A	C	2
A	D	3
A	? (Wildcard)	4
B	A	5
B	B	6
B	C	7
B	D	8
B	? (WildCard)	9
C	A	10
C	B	11
C	C	12
C	D	13
C	? (WildCard)	14
D	A	15
D	B	16
D	C	17
D	D	18
D	? (WildCard)	19
? (WildCard)	A	20
? (WildCard)	B	21
? (WildCard)	C	22
? (WildCard)	D	23
? (WildCard)	? (WildCard)	24

Chapter 3 • Keypad Configuration

The following describes the default key assignments applied to Denso terminals used in Twin Client advanced mode. The figures and tables identify the key assignments by terminal model and emulation.

Adhesive decals that reflect the configurations described in this chapter are available for Denso terminals in each of the emulations (3270, 5250, and VT).

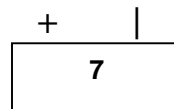
The keypad figures in this section are designed to be of use without color. The convention for describing the effect of modifier keys is as follows:



KEYTOP refers to the characters printed on the top of the key by the manufacturer. Above the keytop is the key value for each of the available modifier keys. In this example, the Control (C), Alphabet (ALP), Shift (SF) keys are the modifiers.

In the example figure above, the keystroke generated in the un-modified state is a **7**. The programmable function key **+** is generated by pressing the **SF** modifier key before pressing the **7** key, and a **|** is generated by using the **ALP** modifier key.

Modifier	Key Function
Alpha (ALP)	Lock Mode
Shift (SF)	Hold down in combination with key
Control (C)	One key sequence

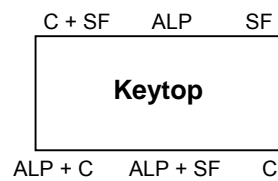
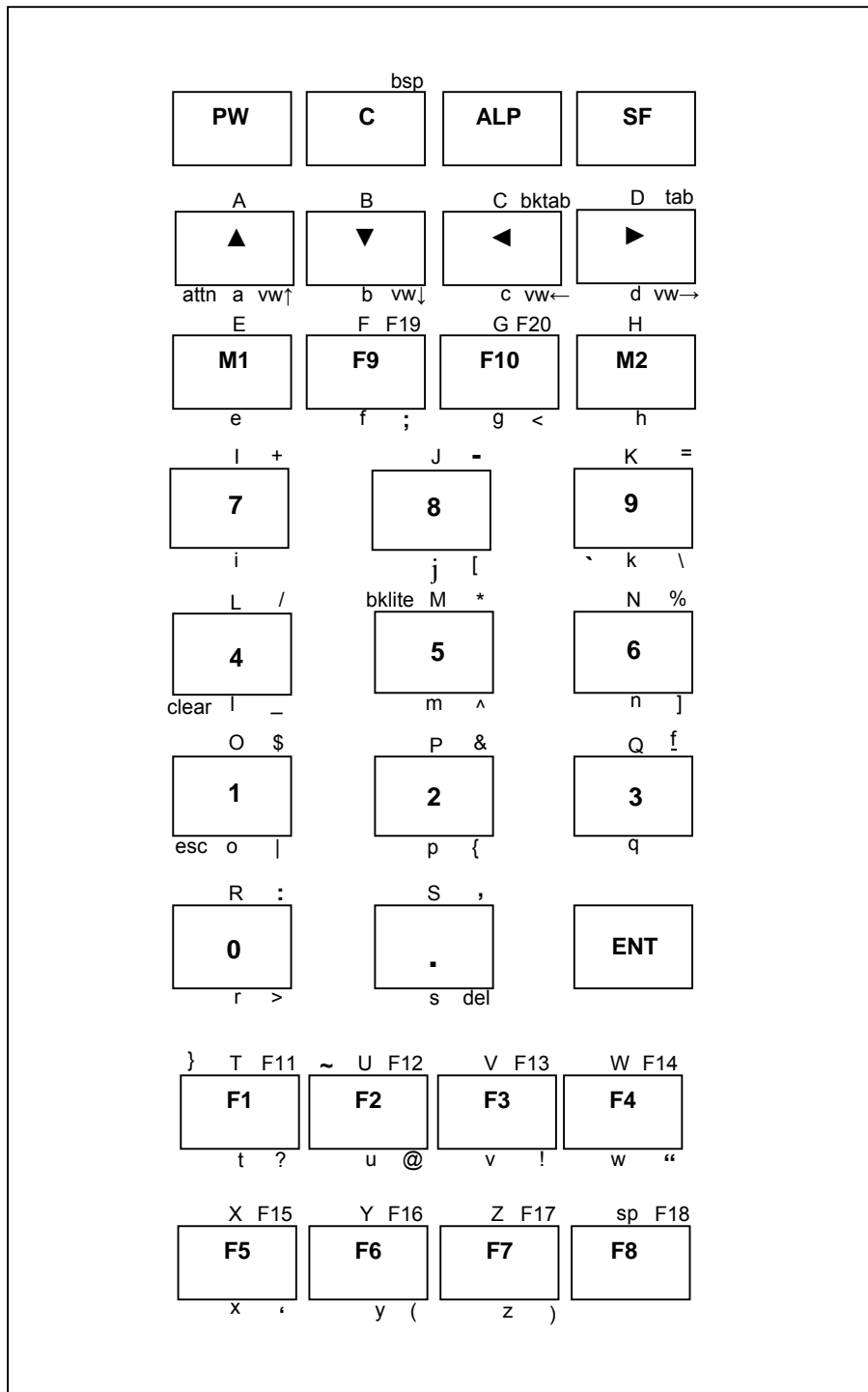


BHT-7500

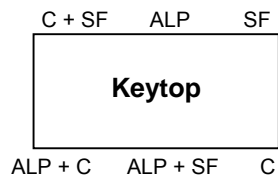
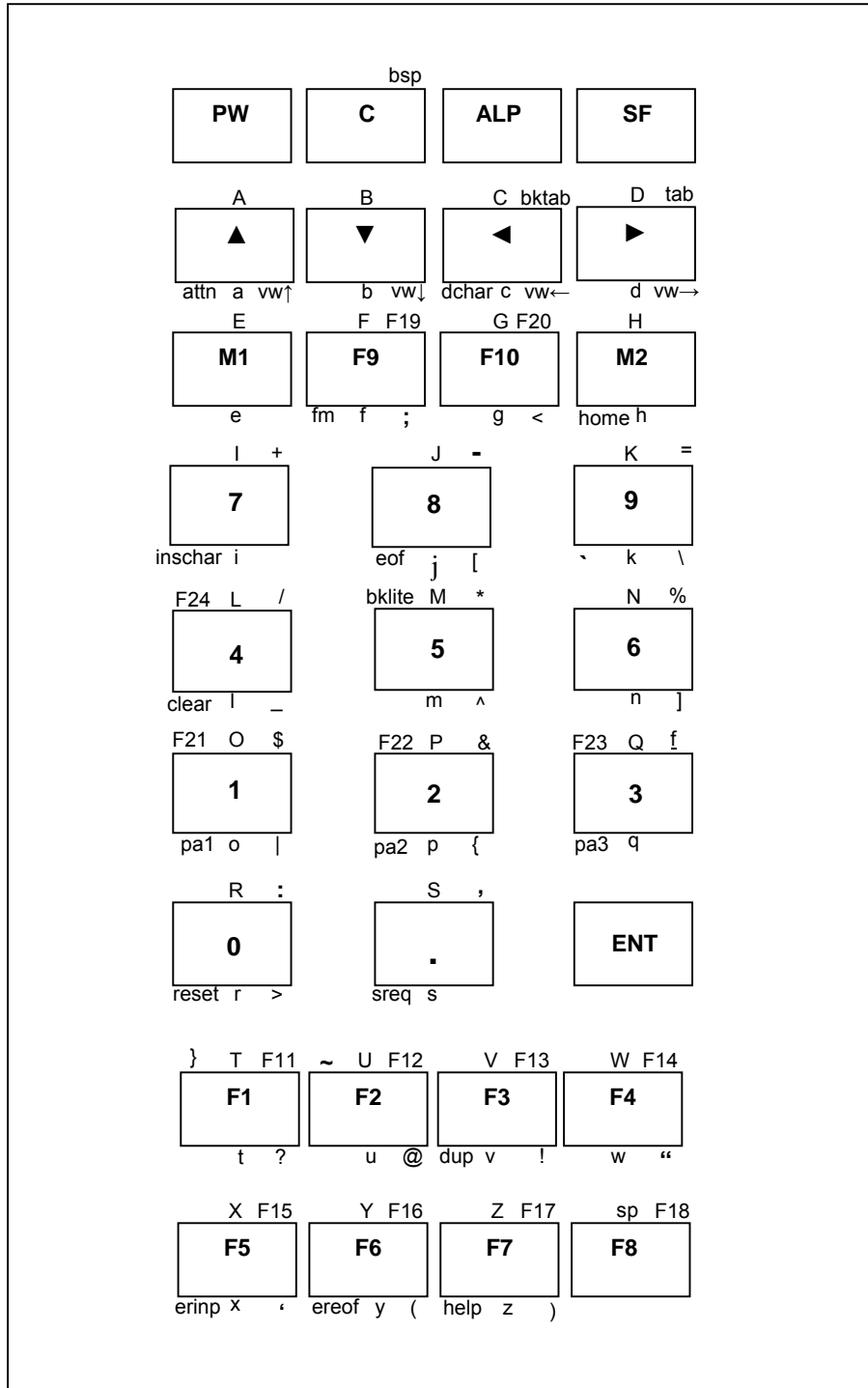
Keypad Figures

The keypad figures begin on the following page.

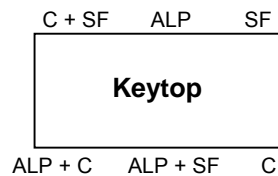
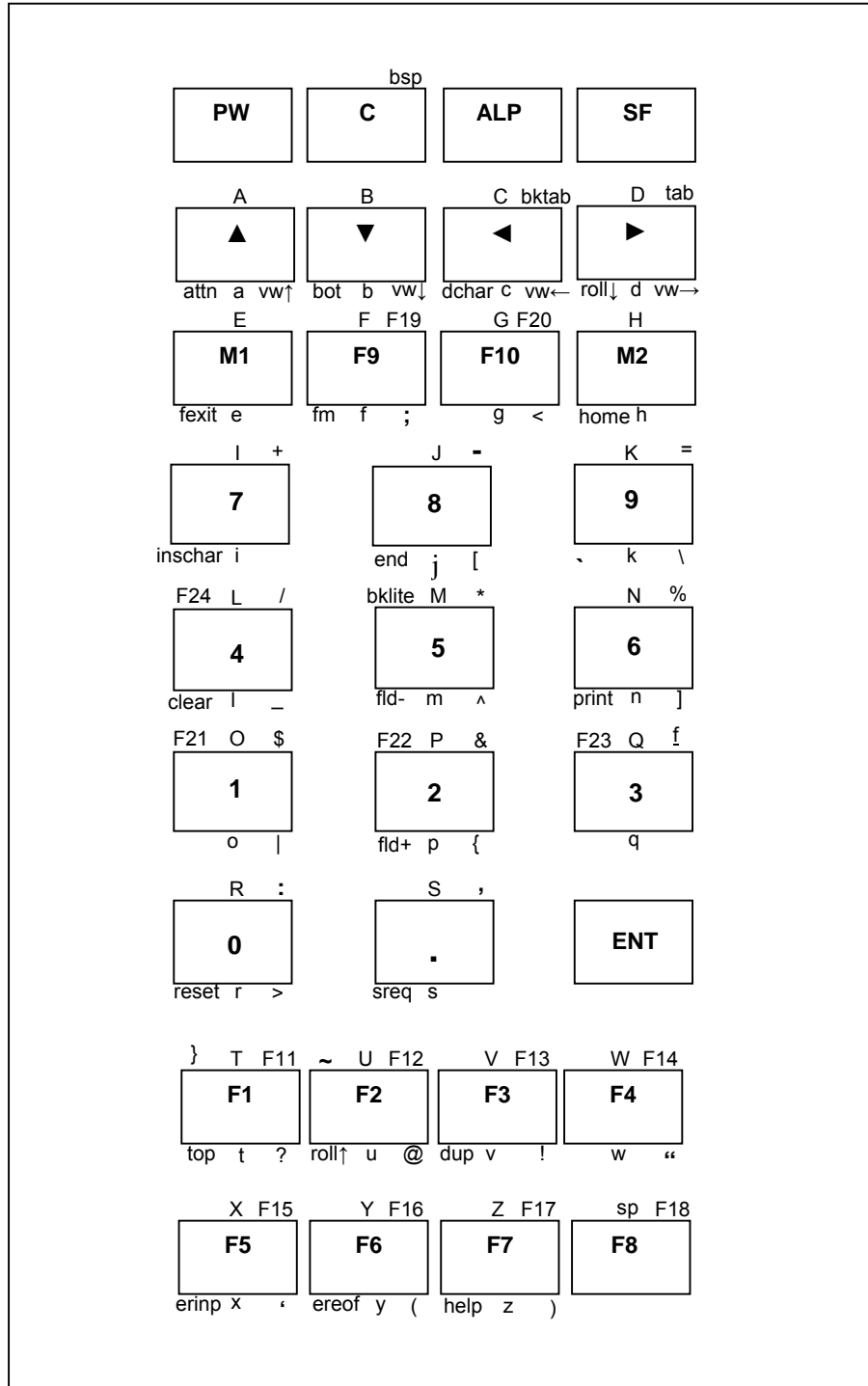
VT Keyboard



3270 Keyboard



5250 Keyboard



Keypad Table

The keypad table in this section is organized by terminal model, keypad configuration, and emulation. The key values represent the default keypad assignments applied to the terminal in Twin Client advanced mode.

Table entries that are blank indicate the key is not assigned, or not relevant to the emulation.

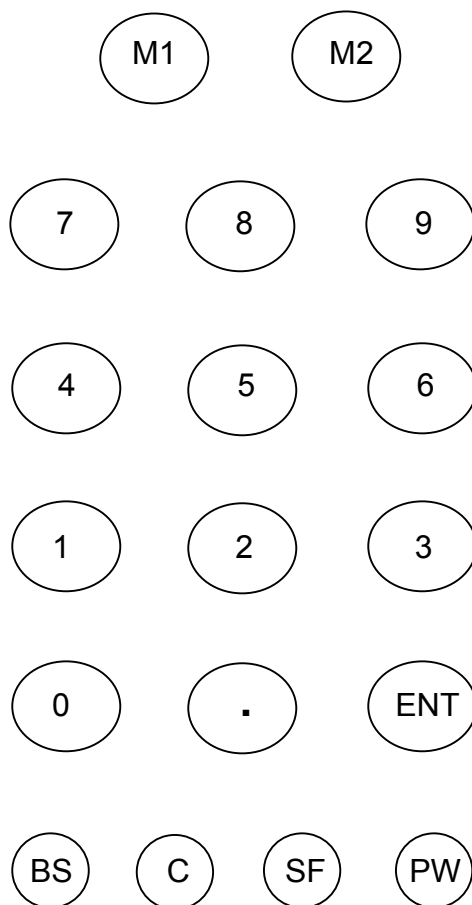
KEY	5250	3270	VT
ATTENTION	<ALP><C><UP ARROW>	<ALP><C><UP ARROW>	---
BACK TAB	<SF><LT ARROW>	<SF><LT ARROW>	<SF><LT ARROW>
BACKLIGHT	<C><SF><5>	<C><SF><5>	<C><SF><5>
BACKSPACE	<SF><C>	<SF><C>	<SF><C>
BOT	<ALP><C><DW ARROW>	---	---
CLEAR	<ALP><C><4>	<ALP><C><4>	<ALP><C><4>
CURSOR DOWN	<DW ARROW KEY>	<DW ARROW KEY>	---
CURSOR LEFT	<LT ARROW KEY>	<LT ARROW KEY>	---
CURSOR RIGHT	<RT ARROW KEY>	<RT ARROW KEY>	---
CURSOR UP	<UP ARROW KEY>	<UP ARROW KEY>	---
DELETE	---	---	<C><PERIOD>
DELETE CHAR	<ALP><C><LT ARROW>	<ALP><C><LT ARROW>	---
DUPLICATE	<ALP><C><F3>	<ALP><C><F3>	---
END	<ALP><C><8>	---	---
ENTER	<ENT>	<ENT>	<ENT>
EOF	---	<ALP><C><8>	---
ERASE EOF	<ALP><C><F6>	<ALP><C><F6>	---
ERINP	<ALP><C><F5>	<ALP><C><F5>	---
ESCAPE	---	---	<ALP><C><O>
FIELD PLUS	<ALP><C><2>	---	---
FIELD EXIT	<ALP><C><M1>	---	---
FIELD MINUS	<ALP><C><5>	---	---
FM	<ALP><C><F9>	<ALP><C><F9>	---
HELP	<ALP><C><F7>	<ALP><C><F7>	---
HOME	<ALP><C><M2>	<ALP><C><M2>	---
INSCHAR	<ALP><C><7>	<ALP><C><7>	---
PRINT	<ALP><C><6>	---	---
RESET	<ALP><C><0>	<ALP><C><0>	---
ROLL DOWN	<ALP><C><RT ARROW>	---	---
ROLL UP	<ALP><C><F2>	---	---
SPACE	<ALP><F8>	<ALP><F8>	<ALP><F8>
SYS REQUEST	<ALP><C><PERIOD>	<ALP><C><PERIOD>	---
TAB	<SF><RT ARROW>	<SF><RT ARROW>	<SF><RT ARROW>
TOP	<ALP><C><F1>	---	---
VIEW DOWN	<C><DW ARROW>	<C><DW ARROW>	<C><DW ARROW>
VIEW LEFT	<C><LT ARROW>	<C><LT ARROW>	<C><LT ARROW>
VIEW RIGHT	<C><RT ARROW>	<C><RT ARROW>	<C><RT ARROW>
VIEW UP	<C><UP ARROW>	<C><UP ARROW>	<C><UP ARROW>
PA1	---	<ALP><C><1>	---
PA2	---	<ALP><C><2>	---
PA3	---	<ALP><C><3>	---
F1	<F1>	<F1>	<F1>
F2	<F2>	<F2>	<F2>
F3	<F3>	<F3>	<F3>
F4	<F4>	<F4>	<F4>
F5	<F5>	<F5>	<F5>
F6	<F6>	<F6>	<F6>
F7	<F7>	<F7>	<F7>
F8	<F8>	<F8>	<F8>
F9	<F9>	<F9>	<F9>
F10	<F10>	<F10>	<F10>
F11	<SF><F1>	<SF><F1>	<SF><F1>
F12	<SF><F2>	<SF><F2>	<SF><F2>

KEY	5250	3270	VT
F13	<SF><F3>	<SF><F3>	<SF><F3>
F14	<SF><F4>	<SF><F4>	<SF><F4>
F15	<SF><F5>	<SF><F5>	<SF><F5>
F16	<SF><F6>	<SF><F6>	<SF><F6>
F17	<SF><F7>	<SF><F7>	<SF><F7>
F18	<SF><F8>	<SF><F8>	<SF><F8>
F19	<SF><F9>	<SF><F9>	<SF><F9>
F20	<SF><F10>	<SF><F10>	<SF><F10>
P21	<C><SF><1>	<C><SF><1>	---
P22	<C><SF><2>	<C><SF><2>	---
P23	<C><SF><3>	<C><SF><3>	---
P24	<C><SF><4>	<C><SF><4>	---
0	<0>	<0>	<0>
1	<1>	<1>	<1>
2	<2>	<2>	<2>
3	<3>	<3>	<3>
4	<4>	<4>	<4>
5	<5>	<5>	<5>
6	<6>	<6>	<6>
7	<7>	<7>	<7>
8	<8>	<8>	<8>
9	<9>	<9>	<9>
A	<ALP><UP ARROW>	<ALP><UP ARROW>	<ALP><UP ARROW>
B	<ALP><DN ARROW>	<ALP><DN ARROW>	<ALP><DN ARROW>
C	<ALP><LT ARROW>	<ALP><LT ARROW>	<ALP><LT ARROW>
D	<ALP><RT ARROW>	<ALP><RT ARROW>	<ALP><RT ARROW>
E	<ALP><M1>	<ALP><M1>	<ALP><M1>
F	<ALP><F9>	<ALP><F9>	<ALP><F9>
G	<ALP><F10>	<ALP><F10>	<ALP><F10>
H	<ALP><M2>	<ALP><M2>	<ALP><M2>
I	<ALP><7>	<ALP><7>	<ALP><7>
J	<ALP><8>	<ALP><8>	<ALP><8>
K	<ALP><9>	<ALP><9>	<ALP><9>
L	<ALP><4>	<ALP><4>	<ALP><4>
M	<ALP><5>	<ALP><5>	<ALP><5>
N	<ALP><6>	<ALP><6>	<ALP><6>
O	<ALP><1>	<ALP><1>	<ALP><1>
P	<ALP><2>	<ALP><2>	<ALP><2>
Q	<ALP><3>	<ALP><3>	<ALP><3>
R	<ALP><0>	<ALP><0>	<ALP><0>
S	<ALP><PERIOD>	<ALP><PERIOD>	<ALP><PERIOD>
T	<ALP><F1>	<ALP><F1>	<ALP><F1>
U	<ALP><F2>	<ALP><F2>	<ALP><F2>
V	<ALP><F3>	<ALP><F3>	<ALP><F3>
W	<ALP><F4>	<ALP><F4>	<ALP><F4>
X	<ALP><F5>	<ALP><F5>	<ALP><F5>
Y	<ALP><F6>	<ALP><F6>	<ALP><F6>
Z	<ALP><F7>	<ALP><F7>	<ALP><F7>
a	<ALP><SF><UP ARROW>	<ALP><SF><UP ARROW>	<ALP><SF><UP ARROW>
b	<ALP><SF><DN ARROW>	<ALP><SF><DN ARROW>	<ALP><SF><DN ARROW>
c	<ALP><SF><LT ARROW>	<ALP><SF><LT ARROW>	<ALP><SF><LT ARROW>
d	<ALP><SF><RT ARROW>	<ALP><SF><RT ARROW>	<ALP><SF><RT ARROW>
e	<ALP><SF><M1>	<ALP><SF><M1>	<ALP><SF><M1>
f	<ALP><SF><F9>	<ALP><SF><F9>	<ALP><SF><F9>
g	<ALP><SF><F10>	<ALP><SF><F10>	<ALP><SF><F10>
h	<ALP><SF><M2>	<ALP><SF><M2>	<ALP><SF><M2>
i	<ALP><SF><7>	<ALP><SF><7>	<ALP><SF><7>
j	<ALP><SF><8>	<ALP><SF><8>	<ALP><SF><8>
k	<ALP><SF><9>	<ALP><SF><9>	<ALP><SF><9>
l	<ALP><SF><4>	<ALP><SF><4>	<ALP><SF><4>
m	<ALP><SF><5>	<ALP><SF><5>	<ALP><SF><5>
n	<ALP><SF><6>	<ALP><SF><6>	<ALP><SF><6>

KEY	5250	3270	VT
o	<ALP><SF><1>	<ALP><SF><1>	<ALP><SF><1>
p	<ALP><SF><2>	<ALP><SF><2>	<ALP><SF><2>
q	<ALP><SF><3>	<ALP><SF><3>	<ALP><SF><3>
r	<ALP><SF><0>	<ALP><SF><0>	<ALP><SF><0>
s	<ALP><SF><PERIOD>	<ALP><SF><PERIOD>	<ALP><SF><PERIOD>
t	<ALP><SF><F1>	<ALP><SF><F1>	<ALP><SF><F1>
u	<ALP><SF><F2>	<ALP><SF><F2>	<ALP><SF><F2>
v	<ALP><SF><F3>	<ALP><SF><F3>	<ALP><SF><F3>
w	<ALP><SF><F4>	<ALP><SF><F4>	<ALP><SF><F4>
x	<ALP><SF><F5>	<ALP><SF><F5>	<ALP><SF><F5>
y	<ALP><SF><F6>	<ALP><SF><F6>	<ALP><SF><F6>
z	<ALP><SF><F7>	<ALP><SF><F7>	<ALP><SF><F7>
!	exclamation <C><F3>	<C><F3>	<C><F3>
@	at sign <C><F2>	<C><F2>	<C><F2>
f	pound <SF><3>	<SF><3>	<SF><3>
\$	dollar <SF><1>	<SF><1>	<SF><1>
%	percent <SF><6>	<SF><6>	<SF><6>
^	carat <C><5>	<C><5>	<C><5>
&	ampersand <SF><2>	<SF><2>	<SF><2>
(left parenthesis <C><F6>	<C><F6>	<C><F6>
)	right parenthesis <C><F7>	<C><F7>	<C><F7>
-	dash <SF><8>	<SF><8>	<SF><8>
+	plus <SF><7>	<SF><7>	<SF><7>
'	apostrophe <C><F5>	<C><F5>	<C><F5>
*	asterisk <SF><5>	<SF><5>	<SF><5>
,	comma <SF><PERIOD>	<SF><PERIOD>	<SF><PERIOD>
.	period <PERIOD KEY>	<PERIOD KEY>	<PERIOD KEY>
/	forward slash <SF><4>	<SF><4>	<SF><4>
[left bracket <C><8>	<C><8>	<C><8>
\	back slash <C><9>	<C><9>	<C><9>
]	right bracket <C><6>	<C><6>	<C><6>
_	underline <C><4>	<C><4>	<C><4>
:	colon <SF><0>	<SF><0>	<SF><0>
;	semi-colon <C><F9>	<C><F9>	<C><F9>
<	less than <C><F10>	<C><F10>	<C><F10>
=	equal <SF><9>	<SF><9>	<SF><9>
>	greater than <C><0>	<C><0>	<C><0>
?	question <C><F1>	<C><F1>	<C><F1>
{	left brace <C><2>	<C><2>	<C><2>
	vertical bar <C><1>	<C><1>	<C><1>
}	right brace <C><SF>F1>	<C><SF>F1>	<C><SF>F1>
~	tilde <C><SF><F2>	<C><SF><F2>	<C><SF><F2>
`	grave accent <ALP><C><K>	<ALP><C><K>	<ALP><C><K>
“	quote <C><F4>	<C><F4>	<C><F4>

BHT-103

Keypad Figures



terminal keypad

1	2	3	4	5	6	7	8	9	0
Q	W	E	R	T	Y	U	I	O	P
A	S	D	F	G	H	J	K	L	;
Z	X	C	V	B	N	M	.		/
BS		CLR		FNC1		ENT		EXIT	

uppercase character screen

Note: This is accessed by pressing M1.

		#	\$	%	&	@	-	=	+
q	w	e	r	t	y	u	i	o	p
a	s	d	f	g	h	j	k	l	:
z	x	c	v	b	n	m	,		*
BS		CLR		FNC2		ENT		EXIT	

lowercase character screen

Note: This is accessed by pressing M1 + FNC1.

Note: To close these touchscreens, press M1 again.

F9	F10	F11	F12
F13	F14	F15	F16

F9-F16 screen

Note: This is accessed by pressing M2 + SF.

Note: To close this touchscreen, press M2 again.

F1	F2	F3	F4
TAB	FEX	ATN	RES

5250 emulation

Note: This is accessed by pressing M2.

F1	F2	F3	F4
TAB	STA	HLP	BKT

3270 emulation

Note: This is accessed by pressing M2.

F1	F2	F3	F4
TAB	ESC	DEL	BKT

VT emulation

Note: This is accessed by pressing M2.

Note: To close these touchscreens, press M2 again.

Keypad Table

Key	VT	3270	5250
a	<M1><FNC1>	<M1><FNC1>	<M1><FNC1>
b	<M1><FNC1>	<M1><FNC1>	<M1><FNC1>
c	<M1><FNC1>	<M1><FNC1>	<M1><FNC1>
d	<M1><FNC1>	<M1><FNC1>	<M1><FNC1>
e	<M1><FNC1>	<M1><FNC1>	<M1><FNC1>
f	<M1><FNC1>	<M1><FNC1>	<M1><FNC1>
g	<M1><FNC1>	<M1><FNC1>	<M1><FNC1>
h	<M1><FNC1>	<M1><FNC1>	<M1><FNC1>
i	<M1><FNC1>	<M1><FNC1>	<M1><FNC1>
j	<M1><FNC1>	<M1><FNC1>	<M1><FNC1>
k	<M1><FNC1>	<M1><FNC1>	<M1><FNC1>
l	<M1><FNC1>	<M1><FNC1>	<M1><FNC1>
m	<M1><FNC1>	<M1><FNC1>	<M1><FNC1>
n	<M1><FNC1>	<M1><FNC1>	<M1><FNC1>
o	<M1><FNC1>	<M1><FNC1>	<M1><FNC1>
p	<M1><FNC1>	<M1><FNC1>	<M1><FNC1>
q	<M1><FNC1>	<M1><FNC1>	<M1><FNC1>
r	<M1><FNC1>	<M1><FNC1>	<M1><FNC1>
s	<M1><FNC1>	<M1><FNC1>	<M1><FNC1>
t	<M1><FNC1>	<M1><FNC1>	<M1><FNC1>
u	<M1><FNC1>	<M1><FNC1>	<M1><FNC1>
v	<M1><FNC1>	<M1><FNC1>	<M1><FNC1>
w	<M1><FNC1>	<M1><FNC1>	<M1><FNC1>
x	<M1><FNC1>	<M1><FNC1>	<M1><FNC1>
y	<M1><FNC1>	<M1><FNC1>	<M1><FNC1>
z	<M1><FNC1>	<M1><FNC1>	<M1><FNC1>
A	<M1>	<M1>	<M1>
B	<M1>	<M1>	<M1>
C	<M1>	<M1>	<M1>
E	<M1>	<M1>	<M1>
D	<M1>	<M1>	<M1>
F	<M1>	<M1>	<M1>
G	<M1>	<M1>	<M1>
H	<M1>	<M1>	<M1>
I	<M1>	<M1>	<M1>
J	<M1>	<M1>	<M1>
K	<M1>	<M1>	<M1>
L	<M1>	<M1>	<M1>
M	<M1>	<M1>	<M1>
N	<M1>	<M1>	<M1>
O	<M1>	<M1>	<M1>
P	<M1>	<M1>	<M1>
Q	<M1>	<M1>	<M1>
R	<M1>	<M1>	<M1>
S	<M1>	<M1>	<M1>
T	<M1>	<M1>	<M1>
U	<M1>	<M1>	<M1>
V	<M1>	<M1>	<M1>
W	<M1>	<M1>	<M1>
X	<M1>	<M1>	<M1>
Y	<M1>	<M1>	<M1>
Z	<M1>	<M1>	<M1>
ATN	---	<C><SF><A>	<M2>
BKT (Backtab)	<M2>	<M2>	---
BS	<BS>	<BS>	<BS>
Clear	---	<C><P>	<C><P>
DEL	<M2>	<C><C>	<C><C>
DUP	---	<C><V>	<C><V>
END	---	<C><J>	<C><J>
ENT	<ENT>	<ENT>	<ENT>
FEX	---	---	<M2>

FM	---	---	<C><F>
Help	<C><Z>	<M2>	<C><Z>
Home	---	<C><H>	<C><H>
INS	---	<C><I>	<C><I>
RES (Reset)	---	---	<M2>
Roll up	---	---	<C><U>
Roll down	---	---	<C><D>
STA (Stat)	---	<M2>	---
Sysreq	---	<C><S>	<C><S>
TAB	<M2>	<SF><BS>	<M2>
View down	<C><SF><5>	<C><SF><5>	<C><SF><5>
View left	<C><SF><7>	<C><SF><7>	<C><SF><7>
View up	<C><SF><8>	<C><SF><8>	<C><SF><8>
View right	<C><SF><9>	<C><SF><9>	<C><SF><9>
F1	<M2>	<M2>	<M2>
F2	<M2>	<M2>	<M2>
F3	<M2>	<M2>	<M2>
F4	<M2>	<M2>	<M2>
F9	<M2><SF>	<M2><SF>	<M2><SF>
F10	<M2><SF>	<M2><SF>	<M2><SF>
F11	<M2><SF>	<M2><SF>	<M2><SF>
F12	<M2><SF>	<M2><SF>	<M2><SF>
F13	<M2><SF>	<M2><SF>	<M2><SF>
F14	<M2><SF>	<M2><SF>	<M2><SF>
F15	<M2><SF>	<M2><SF>	<M2><SF>
F16	<M2><SF>	<M2><SF>	<M2><SF>
F17	<SF><7>	<SF><7>	<SF><7>
F18	<SF><8>	<SF><8>	<SF><8>
F19	<SF><9>	<SF><9>	<SF><9>
F20	<SF><C>	<SF><C>	<SF><C>
1	<1>	<1>	<1>
2	<2>	<2>	<2>
3	<3>	<3>	<3>
4	<4>	<4>	<4>
5	<5>	<5>	<5>
6	<6>	<6>	<6>
7	<7>	<7>	<7>
8	<8>	<8>	<8>
9	<9>	<9>	<9>
0	<0>	<0>	<0>
# (pound)	<M1><FNC1>	<M1><FNC1>	<M1><FNC1>
\$ (dollar)	<M1><FNC1>	<M1><FNC1>	<M1><FNC1>
% (percent)	<M1><FNC1>	<M1><FNC1>	<M1><FNC1>
& (ampersand)	<M1><FNC1>	<M1><FNC1>	<M1><FNC1>
@ (at sign)	<M1><FNC1>	<M1><FNC1>	<M1><FNC1>
- (hyphen)	<SF><0>	<SF><0>	<SF><0>
= (equal)	<M1><FNC1>	<M1><FNC1>	<M1><FNC1>
+ (plus)	<M1><FNC1>	<M1><FNC1>	<M1><FNC1>
: (colon)	<M1><FNC1>	<M1><FNC1>	<M1><FNC1>
; (semicolon)	<C><F9>	<C><F9>	<C><F9>
, (comma)	<M1><FNC1>	<M1><FNC1>	<M1><FNC1>
* (asterisk)	<M1><FNC1>	<M1><FNC1>	<M1><FNC1>
; (semicolon)	<M1>	<M1>	<M1>
. (period)	<M1>	<M1>	<M1>
/ (forward slash)	<M1>	<M1>	<M1>
< (less than)	<C><F10>	<C><F10>	<C><F10>
> (greater than)	<C><0>	<C><0>	<C><0>
((left parenthesis)	<C><2>	<C><2>	<C><2>
) (right parenthesis)	<C><F11>	<C><F11>	<C><F11>
? (question)	<C><F1>	<C><F1>	<C><F1>
(vertical bar)	<C><1>	<C><1>	<C><1>
~ (tilde)	<C><F12>	<C><F12>	<C><F12>
! (exclamation)	<C><F3>	<C><F3>	<C><F3>
" (quote)	<C><F4>	<C><F4>	<C><F4>
_ (underscore)	<C><4>	<C><4>	<C><4>

Down	<C><5>	<C><5>	<C><5>
Left	<C><7>	<C><7>	<C><7>
Up	<C><8>	<C><8>	<C><8>
Right	<C><9>	<C><9>	<C><9>

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Chapter 4 • Error Message Resolution Guide

Twin Client Error Message Resolution Guide

Message	Reason	Solution	Reference Tech Note
ENTRY TOO LONG;	Trying to key beyond the field size.	Ensure that you are entering input into the correct field.	---
ALPHABETIC ONLY;	Trying to key a character that is not alphabetic.	Ensure that you are entering input into the correct field.	---
MINUS NOT VALID;	Trying to key a Minus sign.	Ensure that you are entering input into the correct field.	---
DECIMAL NOT VALID;	Trying to key a Decimal (period).	Ensure that you are entering input into the correct field.	---
ALPHANUMERIC ONLY;	Trying to key characters other than Alphabetic and numeric.	Ensure that you are entering input into the correct field.	---
NUMERIC ONLY;	Trying to key characters other than numeric.	Ensure that you are entering input into the correct field.	---
ENTRY TOO SHORT;	Trying to exit the field before it is filled.	Ensure that you are entering input into the correct field.	---

Message	Reason	Solution	Reference Tech Note
INVALID KEY;	The key pressed is not valid.	Ensure that you are entering input into the correct field.	---
MUST CLEAR FIELD;	Trying to enter data in a field that must be cleared first.	Ensure that you are entering input into the correct field.	---
SCAN NOT ALLOWED;	Trying to scan into a key only field.	Ensure that you are entering input into the correct field.	---
KEY NOT ALLOWED;	Trying to key into a scan only field.	Ensure that you are entering input into the correct field.	---
ENTRY TOO SHORT;	Trying to exit the field before it is filled.	Ensure that you are entering input into the correct field.	---
RECOVERABLE ERROR;	Encountered an error from which you can continue.	Verify that your configuration settings for the hardware being used, usually a printer and cable issue.	---
UNRECOVERABLE ERROR;	Encountered an error from which you can NOT continue.	Verify that your Network settings are correct and you are in the correct mode using the correct Port.	T1113, T1114, T1161, T1171, T1187 and T1194
FUNCTION: \n\nFILE: \nLINE: \nCODE;	Encountered an error from which you can NOT continue.	Notify Connect over the WEB incident reporting system.	---
Press any key\nFor More Details...;	Press Enter for more information.	Advisory message.	---
Press any key;	Press a key to continue.	Advisory message.	---

Message	Reason	Solution	Reference Tech Note
Connection ERROR.\nREBOOT MOBILE UNIT;	Could not Connect.	Verify that your Network settings are correct and you are in the correct mode using the correct Port.	T1113, T1114, T1161, T1171, T1187 and T1194
Disconnect ERROR.\nREBOOT MOBILE UNIT;	Could not Disconnect.	Verify that your Network settings are correct and you are in the correct mode using the correct Port.	T1113, T1114, T1161, T1171, T1187 and T1194
RF Send ERROR.\nREBOOT MOBILE UNIT;	Could not Send.	Most likely a range, access point, radio, host or network issue. Troubleshoot the customer's environment.	T1113, T1114, T1161, T1171, T1187 and T1194
RF Receive ERROR.\nREBOOT MOBILE UNIT;	Could not Receive.	Most likely a range, access point, radio, host or network issue. Troubleshoot the customer's environment.	T1113, T1114, T1161, T1171, T1187 and T1194
RF Check ERROR.\nREBOOT MOBILE UNIT;	Could not run the RF Survey.	Most likely a range, access point, radio, host or network issue. Troubleshoot the customer's environment.	T1113, T1114, T1161, T1171, T1187 and T1194
RF Timeout ERROR.\nREBOOT MOBILE UNIT;	Have been trying to contact the host for the radio timeout period (2 minutes default).	Most likely a range, access point, radio, host or network issue. Troubleshoot the customer's environment.	T1113, T1114, T1161, T1171, T1187 and T1194
REBOOT MOBILE UNIT;	Reboot the Mobile Unit do to loss of connection.	Most likely a range, access point, radio, host or network issue. Troubleshoot the customer's environment.	T1113, T1114, T1161, T1171, T1187 and T1194
Retry (Y/N)?;	Try again.	Try to send or receive again, or perhaps ensure that the printer is cabled to the Mobile Unit and is on.	---

Message	Reason	Solution	Reference Tech Note
TIMEOUT\n\nSending Data;	Mobile Unit out of the coverage area.	Most likely a range, access point, radio, host or network issue. Troubleshoot the customer's environment.	T1113, T1114, T1161, T1171, T1187 and T1194
TIMEOUT\n\nReceiving Data;	Mobile Unit out of the coverage area.	Most likely a range, access point, radio, host or network issue. Troubleshoot the customer's environment.	T1113, T1114, T1161, T1171, T1187 and T1194
Host Received Data\nAwaiting App Reply!;	Mobile Unit has sent and received an acknowledgement from the IP stack and is waiting for the application to return data.	Most likely a host or network issue. Troubleshoot the customer's environment. Probable causes are Database record locking, application program failure, Host failure or network failure.	T1113, T1114, T1161, T1171, T1187 and T1194
* WAITING TO SEND *;	Mobile Unit out of the coverage area.	Most likely a range, access point, radio, host or network issue. Troubleshoot the customer's environment.	T1113, T1114, T1161, T1171, T1187 and T1194
TCP Error Reading\nMAC Address.\nREBOOT MOBILE UNIT;	Could not obtain the Mac Address from the Mobile Unit.	Possible hardware, driver or stack problem Contact the Mobile Unit manufacturer.	---
Invalid TIP Command;	Bad internal protocol.	Notify Connect over the WEB incident reporting system.	---
Session Ended\nBy User or Host;	User, Host, application or network has ended the session.	If the user did not end the session, most likely host or network issues. Troubleshoot the customer's environment.	T1113, T1114, T1161, T1171, T1187 and T1194
Server Packet Error;	Bad Protocol detected.	Usually a result of bad cabling, power or faulty transceiver. Also, will receive this if the Mobile Unit is in the wrong mode for server operation.	---

Message	Reason	Solution	Reference Tech Note
Error receiving host\nlist from Server;	Bad Protocol detected.	Usually a result of bad cabling, power or faulty transceiver. Also, will receive this if the Mobile Unit is in the wrong mode for server operation.	---
Unexpected Server\ndata received;	Bad Protocol detected.	Usually a result of bad cabling, power or faulty transceiver. Also, will receive this if the Mobile Unit is in the wrong mode for server operation.	---
Error starting\nhost application;	Connected to the server but can not connect to the distant end.	Configure the server handler to access the host application.	---
Select Host or App;	Need to choose your Host/application destination.	User selection required.	---
Connecting...;	Attempting to connect to the Host/application.	Advisory message.	---
TCP Error\nReading IP Address\nREBOOT MOBILE UNIT;	Mobile Unit missing Network IP information.	Configure the Mobile Unit with the correct network IP information.	---
Printer start error;	Could not initialize the printer.	Cable or power issue with the printer.	---
Battery too low\nnto print;	Not enough power to print.	Replace the battery with a fully recharged battery.	---
Paper Feed Error\nFix Then Hit Enter;	Paper in the printer is not ready.	Replace the paper or rethread the paper in the printer.	---
Printer Error\nPrint Ended;	Can not print.	Check cable, battery, communication settings and paper in the printer.	---

Message	Reason	Solution	Reference Tech Note
User Count Exceeded.\n Session Ended;	Possible authorization issue.	Verify that you have the correct number of licenses for the number of Mobile Units you are using.	---
Primary Unavailable\nTrying Alternate;	First Host IP address not available trying the remaining addresses in the Host list.	Verify the host address.	---
APMAC.DAT Error\nSession Ended;	Access point Media Access Control error.	Most likely a range, access point, radio, host or network issue. Troubleshoot the customer's environment.	T1113, T1114, T1161, T1171, T1187 and T1194
MUIP.DAT Error\nSession Ended;	Mobile Unit IP Error.	Most likely a Mobile Unit network setting issue. Troubleshoot the customer's environment.	T1113, T1114, T1161, T1171, T1187 and T1194
Missing Subnet IP\nSession Ended;	Mobile Unit IP Netmask Error.	Most likely a Mobile Unit network setting issue. Troubleshoot the customer's environment.	T1113, T1114, T1161, T1171, T1187 and T1194
Error Opening File;	File is missing.	Verify that the configuration files are on the Mobile Unit. Or perhaps there is a hardware failure.	---
Telnet API\nnot found;	Program files are missing.	Reload program files.	---
Battery Low Warning\n\nReplace Battery Soon;	Not enough power to operate the Mobile Unit.	Replace the battery with a fully recharged battery.	---
No Host List.\nPress any key\nTo Edit Host IP's;	Have not configured your target hosts.	Configure the target host IP addresses.	---
Unable to Allocate\nFont Memory;	Mobile Unit does not have enough memory to load the fonts.	Reduce the fonts in use or expand the memory in the Mobile Unit.	---

Message	Reason	Solution	Reference Tech Note
Font Loading Error;	Could not load the font.	Ensure that the font is available to load.	---
Printer Not Ready\nPress R to Retry\nC to Cancel Print;	Can not print.	Check cable, battery, communication settings and paper in the printer.	---
Mobile Unit in\nDemonstration Mode\nfor TwinClient;	Running in demo mode.	Purchase a license from Connect.	---
Connected to Host;	Successful connection to the target Host.	Advisory message.	---
Telnet Mode not\nsupported on\nthis Mobile Unit;	This Mobile Unit must be used with a Connect Server.	Order a Connect Server.	---
Telnet Setup files\nnot found. Reload\nfiles then switch;	Customer specific configuration files are missing.	Load the configuration files into the Mobile Unit from Twin Client Manager.	---
Switched Client to\nTelnet Direct Mode;	Mobile Unit running in Telnet mode direct to the target Host.	Advisory message.	---
Switched Client to\nServer Based Mode;	Mobile Unit running through a Connect server in Server mode usually at port 1800.	Advisory message.	---
Port 23 is only\nallowed in Telnet Mode;	Can not set the port to 23 in Server mode. Port 23 is the standard Telnet port.	Advisory message.	---
Not Enough Memory\nTo Run;	Mobile Unit does not have the capacity to run the program do to memory restrictions.	Expand the Mobile Unit memory.	---
Press any key;	Press a key to continue.	Advisory message.	---

Message	Reason	Solution	Reference Tech Note
TwinClient Telnet;	Prompt.	Advisory message.	---
TwinClient Server;	Prompt.	Advisory message.	---
TwinClient TN3270;	Prompt.	Advisory message.	---
TwinClient TN5250;	Prompt.	Advisory message.	---
TwinClient TNVT;	Prompt.	Advisory message.	---
(c) 1991-2006 Connect;	Prompt.	Advisory message.	---
Edit Menu Options;	Menu Title.	Advisory message.	---
Edit Mobile Unit IP;	Menu Option.	Advisory message.	---
Edit Server/Host IPs;	Menu Option.	Advisory message.	---
Edit Radio Option;	Menu Option.	Advisory message.	---

Message	Reason	Solution	Reference Tech Note
Edit License Key;	Menu Option.	Advisory message.	---
Run Site Survey;	Menu Option.	Advisory message.	---
Switch Client Modes;	Menu Option.	Advisory message.	---
Run TwinClient;	Menu Option.	Advisory message.	---
Exit to OS;	Menu Option.	Advisory message.	---
Printer may not be plugged in or turned on!;	Can not print.	Check cable, battery, communication settings and paper in the printer.	---
OUT OF RANGE OF BASE;	Mobile Unit out of the coverage area.	Most likely a range, access point, radio, host or network issue. Troubleshoot the customer's environment.	T1113, T1114, T1161, T1171, T1187 and T1194
CONNECT SERIAL CABLE;	Serial cable not connected to the Mobile Unit.	Check cable, battery and communication settings for the Mobile Unit.	---
REMOVE SERIAL CABLE;	Remove serial cable from to the Mobile Unit.	Check cable, battery and communication settings for the Mobile Unit.	---
PLACE IN CRADLE;	Place the Mobile Unit in the cradle.	Advisory message.	---

Message	Reason	Solution	Reference Tech Note
REMOVE FROM CRADLE;	Remove Mobile Unit from the cradle.	Advisory message.	---
ACQUIRING CRADLE BUS;	Attempting to access the cradle through the serial port you have configured.	Advisory message.	---
Printer Out\nOf Range;	Printer out of the coverage area.	Most likely a range, access point or radio issue. Troubleshoot the customer's environment.	T1113, T1114, T1161, T1171, T1187 and T1194
Connection Refused\nBy Host;	You connected to the target host but the host disconnected you.	Verify that the configuration file has the correct Mobile Unit type and New environment variable set. Fallback to the Connect Default to verify the connection.	---
Connection Timed Out;	You connected to the host but did not logon in the appropriate time so the host disconnected you.	Modify the Host parameters for login.	---
Connection Failed\nHost Not Responding;	Could not connect to the Host.	Most likely a range, access point, radio, host or network issue. Troubleshoot the customer's environment.	T1113, T1114, T1161, T1171, T1187 and T1194
Connection Failed\nHost Unreachable;	Could not connect to the Host.	Most likely a range, access point, radio, host or network issue. Troubleshoot the customer's environment.	T1113, T1114, T1161, T1171, T1187 and T1194
Mobile Unit Out\nOf Range, Unable\nTo Transmit;	Mobile Unit out of the coverage area.	Most likely a range, access point, radio, host or network issue. Troubleshoot the customer's environment.	T1113, T1114, T1161, T1171, T1187 and T1194
Mobile Unit Out\nOf Range, Unable\nTo Receive;	Mobile Unit out of the coverage area.	Most likely a range, access point, radio, host or network issue. Troubleshoot the customer's environment.	---

Message	Reason	Solution	Reference Tech Note
Printer Not Responding;	Can not print.	Check cable, battery, communication settings and paper in the printer.	---
Printer Out Of Range;	Printer out of the coverage area.	Most likely a range, access point or radio issue. Troubleshoot the customer's environment.	T1113, T1114, T1161, T1171, T1187 and T1194
Print Complete;	Prompt.	Advisory message.	---
Reprint (Y/N)?;	Yes or No prompt for a reprint.	Advisory message.	---
WARNING;	Prompt.	Advisory message.	---
Turning power off during a session will cause the program to restart;	This Mobile Unit will disconnect the session if powered off.	Mobile Unit manufacturer limitation. Advisory message.	---
Are you sure (y/n)?;	Yes or No prompt for a confirmation.	Advisory message.	---
You Sure? (YyNn);	Yes or No prompt for a confirmation.	Advisory message.	---
Domain Name Server Not Set;	DOMAIN NAME SERVER not configured.	Configure the Mobile Unit with the correct network IP information.	---
Domain Name Server Query Memory Error;	Memory error on the Mobile Unit	Expand the Mobile Unit memory or return the Mobile Unit for repair.	---

Message	Reason	Solution	Reference Tech Note
Domain Name Server\nQuery Sending Error;	Mobile Unit out of the coverage area.	Most likely a range, access point, radio, host or network issue. Troubleshoot the customer's environment.	T1113, T1114, T1161, T1171, T1187 and T1194
Domain Name Server\nQuery Receive Error;	Mobile Unit out of the coverage area.	Most likely a range, access point, radio, host or network issue. Troubleshoot the customer's environment.	T1113, T1114, T1161, T1171, T1187 and T1194
Domain Name Server\nUnavailable;	Could not connect to the DOMAIN NAME SERVER.	Most likely a range, access point, radio, host or network issue. Troubleshoot the customer's environment.	T1113, T1114, T1161, T1171, T1187 and T1194
Error loading\nparameter file;	Could not load the parameter file.	Reload the correct configuration files.	---
Could not open\nTelnet interface;	Could not Telnet.	Reload the program files.	---
Could not set\nTelnet options;	Could not use the Telnet configuration.	Reload the correct configuration files.	---
Setup file\nsetting mismatch\nReload Setup;	Emulation program selected is not compatible with the configuration file on the Mobile Unit.	Remove the emulation and configuration files. Run clear Telnet on the Mobile Unit then reload the Mobile Unit with the proper emulation and configuration files.	---
Display formatting\ntoo large for\ncurrent screen;	Mobile Unit does not have enough memory to run your configured reformatted screens.	Expand the Mobile Unit memory or order a server from Connect.	---
Mobile Unit\ninitialization error;	Mobile Unit problem.	Return the Mobile Unit to the manufacturer for repair.	---

Message	Reason	Solution	Reference Tech Note
Host/App/Network\nclosed the session;	Customer's environment disconnected the Mobile Unit session.	Most likely a range, access point, radio, host or network issue. Troubleshoot the customer's environment.	T1113, T1114, T1161, T1171, T1187 and T1194
Disconnecting...;	Prompt.	Advisory message.	---
Scan Barcode;	Bar code scanning test.	Advisory message.	---
Enter Setup\nPassword;	Prompt.	Advisory message.	---
Enter Profile \nPassword;	Prompt.	Advisory message.	---
Host IP;	Host IP address prompt.	Enter target host IP address.	---
Host Name;	Host name prompt.	Enter target host Name.	---
Port;	Host IP port required.	Enter 23 for Telnet or 1800 for a Connect server. Could also be a different number depending on the customer's environment.	T1113, T1114, T1161, T1171, T1187 and T1194
Mobile Unit Type;	Prompt.	Advisory message.	---
WARNING: This will \nend any\ncurrent session;	Prompt.	Advisory message.	---

Message	Reason	Solution	Reference Tech Note
Continue (Y/N)?;	Prompt.	Advisory message.	---
HOST ENTRY;	Prompt.	Advisory message.	---
VT(100/220) Setup;	Prompt.	Advisory message.	---
Mobile Unit Info;	Prompt.	Advisory message.	---
Emulation Setup;	Prompt.	Advisory message.	---
ANSI Setup;	Prompt.	Advisory message.	---
Miscellaneous Setup;	Prompt.	Advisory message.	---
Mobile Unit Type;	Prompt.	Advisory message.	---
Control Codes;	Prompt.	Advisory message.	---
Local Echo;	Prompt.	Advisory message.	---

Message	Reason	Solution	Reference Tech Note
<BK SP> Sends;	Prompt.	Advisory message.	---
New Line Mode;	Prompt.	Advisory message.	---
Insert Mode;	Prompt.	Advisory message.	---
Autowrap Mode;	Prompt.	Advisory message.	---
Cursor;	Prompt.	Advisory message.	---
EMULATION SETUP;	Prompt.	Advisory message.	---
Mobile Unit Type;	Prompt.	Advisory message.	---
Local Echo;	Prompt.	Advisory message.	---
Map Underline;	Prompt.	Advisory message.	---
Break Key;	Prompt.	Advisory message.	---

Message	Reason	Solution	Reference Tech Note
ANSI Setup;	Prompt.	Advisory message.	---
Control Codes;	Prompt.	Advisory message.	---
Backspace Key;	Prompt.	Advisory message.	---
MISCELLANEOUS SETUP;	Prompt.	Advisory message.	---
Test Options;	Prompt.	Advisory message.	---
Login Options;	Prompt.	Advisory message.	---
TEST OPTIONS;	Prompt.	Advisory message.	---
Printer Test;	Prompt.	Advisory message.	---
Scan Code Test;	Prompt.	Advisory message.	---
LOGIN OPTIONS;	Prompt.	Advisory message.	---

Message	Reason	Solution	Reference Tech Note
User Name;	Prompt.	Advisory message.	---
User Password;	Prompt.	Advisory message.	---
ON;	Prompt.	Advisory message.	---
OFF;	Prompt.	Advisory message.	---
Map;	Prompt.	Advisory message.	---
Don't Map;	Prompt.	Advisory message.	---
Enable Break;	Prompt.	Advisory message.	---
Disable Break;	Prompt.	Advisory message.	---
7 bit;	Prompt.	Advisory message.	---
8 bit;	Prompt.	Advisory message.	---

Message	Reason	Solution	Reference Tech Note
Send Delete;	Prompt.	Advisory message.	---
Send Backspace;	Prompt.	Advisory message.	---
Mobile Unit Setup;	Prompt.	Advisory message.	---
Scanner Options;	Prompt.	Advisory message.	---
Program Options;	Prompt.	Advisory message.	---
Special Options;	Prompt.	Advisory message.	---
Beeper Options;	Prompt.	Advisory message.	---
Exit to DOS;	Prompt.	Advisory message.	---
Backlight Time;	Prompt.	Advisory message.	---
Enter Key Action;	Prompt.	Advisory message.	---

Message	Reason	Solution	Reference Tech Note
Reset Options;	Prompt.	Advisory message.	---
Font Size;	Prompt.	Advisory message.	---
Portable Printer;	Prompt.	Advisory message.	---
Reprint Option;	Prompt.	Advisory message.	---
Data IDs;	Prompt.	Advisory message.	---
Internal/External;	Prompt.	Advisory message.	---
Modify Beeps;	Prompt.	Advisory message.	---
Message Beeps;	Prompt.	Advisory message.	---
Scan Identifier;	Prompt.	Advisory message.	---
AID Scan Setup;	Prompt.	Advisory message.	---

Message	Reason	Solution	Reference Tech Note
Long Scans;	Prompt.	Advisory message.	---
Scan Send;	Prompt.	Advisory message.	---
Yes;	Prompt.	Advisory message.	---
No;	Prompt.	Advisory message.	---
Normal;	Prompt.	Advisory message.	---
Double Wide;	Prompt.	Advisory message.	---
Double High;	Prompt.	Advisory message.	---
Double High and Wide;	Prompt.	Advisory message.	---
Errors Only;	Prompt.	Advisory message.	---
Automatic;	Prompt.	Advisory message.	---

Message	Reason	Solution	Reference Tech Note
All Messages;	Prompt.	Advisory message.	---
Reject;	Prompt.	Advisory message.	---
Truncate;	Prompt.	Advisory message.	---
Split;	Prompt.	Advisory message.	---
Do Not Send;	Prompt.	Advisory message.	---
Always Send;	Prompt.	Advisory message.	---
Last Field Only;	Prompt.	Advisory message.	---
Internal;	Prompt.	Advisory message.	---
External;	Prompt.	Advisory message.	---
none;	Prompt.	Advisory message.	---

Message	Reason	Solution	Reference Tech Note
monarch;	Prompt.	Advisory message.	---
pddumb;	Prompt.	Advisory message.	---
comtec;	Prompt.	Advisory message.	---
rascal;	Prompt.	Advisory message.	---
codewriter;	Prompt.	Advisory message.	---
comtec(S);	Prompt.	Advisory message.	---
User Name;	Prompt.	Advisory message.	---
Password;	Prompt.	Advisory message.	---
Frequency: Hz;	Prompt.	Advisory message.	---
Duration: ms;	Prompt.	Advisory message.	---

Message	Reason	Solution	Reference Tech Note
Delay: ms;	Prompt.	Advisory message.	---
Select Scanner;	Prompt.	Advisory message.	---
Setup Scanner;	Prompt.	Advisory message.	---
Scan Test;	Prompt.	Advisory message.	---
Scan Operation;	Prompt.	Advisory message.	---
Laser;	Prompt.	Advisory message.	---
Contact/Pulse;	Prompt.	Advisory message.	---
Contact/No Pulse;	Prompt.	Advisory message.	---
Auto/Pulse;	Prompt.	Advisory message.	---
Auto/No Pulse;	Prompt.	Advisory message.	---

Message	Reason	Solution	Reference Tech Note
Wand Simulation;	Prompt.	Advisory message.	---
VT100;	Prompt.	Advisory message.	---
VT220;	Prompt.	Advisory message.	---
SETUP;	Prompt.	Advisory message.	---
Mobile Unit IP/Radio;	Prompt.	Advisory message.	---
Host List;	Prompt.	Advisory message.	---
NULL;	Prompt.	Advisory message.	---