



# ***YESTablet 7370***

## **Wireless Digital Tablet**

### **User Guide**



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## General Description

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### Introduction

You have acquired the Affirmative Computer Products tablet device – the *YEStablet 7370*. Featuring a robust magnesium alloy enclosure, the sub 2-lb *YEStablet 7370* with 8.4” TFT display is powered by the Intel StrongARM processor providing “instant-on” capability with extended battery life. An external battery expansion option will provide an additional 3-4 hours of battery operation.

The operating software is Windows CE.net, bringing with it numerous applications including support for terminal emulation, handwriting recognition, advanced thin client/server computing client software (RDP and ICA), Windows Media Player, local email client, dynamic display rotation and word processing.

### Precautions

- Always exercise care when operating and handling the *YEStablet 7370*.
- Do not apply excessive pressure to the display screen.
- Do not touch the display screen directly with your fingers. You may damage the screen, and oil from your skin may be difficult to remove. Please use the Stylus provided, as other pointers may scratch or damage the screen.
- Avoid exposing the panel screen to direct sunlight or other heat source. Where possible, the *YEStablet 7370* should be facing away from direct lighting to reduce glare. A brightness enhancement option is available for outdoor use.
- When recharging or directly powering the device, DO NOT use any AC-DC adapter other than the one provided with the device or acquired from Affirmative Computer Products or its distributors..
- Never attempt to disassemble the *YEStablet 7370*. You will lose any product warranty on the *YEStablet 7370*.

### Package Contents

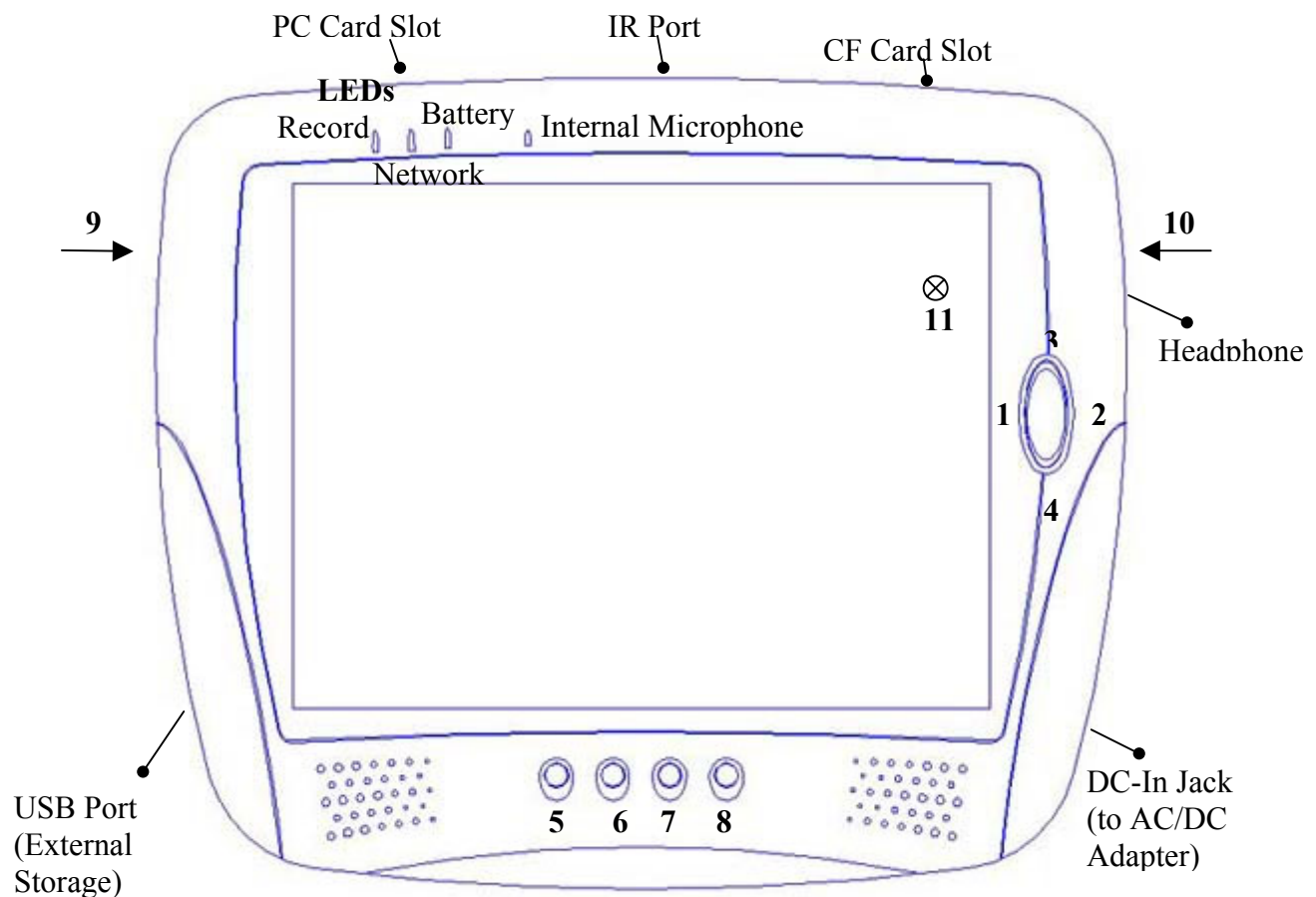
- *YEStablet 7370* (battery pack built-in) with stylus.
- Protective jacket.
- AC-DC Power Adapter – DO NOT use any other AC-DC adapter.
- Charging cradle with USB slave port and IR keyboard interface.

- Power cord (USA Type).
- USB cable.
- Quick Start card.

## Available Options

- LCD brightness enhancement.
- External battery pack.
- External battery charger.
- Embedded wireless LAN adapter with antenna.
- Carrying pouch.
- Vehicle mounting stand.
- Vehicle battery charger.

## Front-View Layout





# Button Functions

Button	Description	Default Action
1	4-Way Left	Volume Down/Scroll Left*
2	4-Way Right	Volume Up/Scroll Right*
3	4-Way Up	Brightness Up/Scroll Up*
4	4-Way Down	Brightness Down/Scroll Down*
5	Virtual keyboard	Toggle: Launch/Close virtual keyboard.
6	Cradle I/F Enable (USB)	Enable USB link with cradle after device is secure on cradle.
7	Remote Desktop Connection	Launch Remote Desktop Connection application.
8	Desktop	Minimize current application and return to Desktop.
9	Suspend/Resume	Toggle: Enter/exit Suspend Mode.
10	Right Edge	No Action
11	Reset/Power Button (Rear Cover)	Use stylus to push and hold to Power Off (hold for 4+ seconds until display goes off) the device; then quick push to restart and complete (Cold) Reboot process. There is no Warm Reboot procedure.

\* Scrolls can only be executed in Internet Explorer.

The actions for all buttons *except* Buttons 9 and 11 can be changed from the default if desired. See [Setup|Control Panel|Button Settings](#) for more information.

## Requirements

The YES<sup>table</sup> 7370 features a CompactFlash (CF) slot and a PCMCIA (PC Card) slot. It is anticipated that the PCMCIA interface will be mostly used to provide 802.11b wireless LAN connectivity. However, with the proper PCMCIA cards, the YES<sup>table</sup> 7370 can also support dialup modem and tethered Ethernet. Currently you must have (as base stations) 802.11b wireless Access Points or Gateways with network (Internet, Intranet, etc.) access to adequately experience the full capability of the YES<sup>table</sup> 7370. If your YES<sup>table</sup> 7370 does not come equipped with the standard wireless LAN 802.11b adapter, the Z-Com XL-325, the YES<sup>table</sup> 7370 can be used with a Cisco Aironet 350 802.11b PC Card. The number of compatible cards is expected to increase as other 802.11b PC Card vendors ramp up their support for the Windows CE.net operating system.

**NOTE:** If you elect to use a WLAN adapter whose vendor offers a driver to operate under Windows CE.net on an ARM-processor-based platform, you should be able to install the driver onto the YES<sup>table</sup> 7370 by referring to [Operation|Software Installation and Synchronization](#) in this document.

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## Setup

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**Note:** This document refers to “clicking” or “tapping” interchangeably, although the physical action is actually a tapping of the stylus on the YESTablet 7370 touchscreen.

## Wireless Access Points

The YESTablet is normally used as a wireless workstation. For wireless operation, there must be 802.11b access points available to provide the connection between YESTablets and the local Ethernet network. Specific access point configuration depends upon the vendor and model, but here are some general guidelines.

## Identification

All points in an 802.11b wireless network share a unique name called a Service Set ID (SSID) or an Extended Service Set ID (ESSID). In this document, the two terms will be used interchangeably. This name is specified in each access point, and is configured in the YESTablet in one of two ways.

- **Broadcast.** An access point can be configured to broadcast its SSID. Under the *zero configuration* design of the wireless 802.11b LAN support under CE.net, the YESTablet 7370 will detect all broadcasted SSIDs within its range. You can then select the desired access point for your connection.
- **Non-Broadcast.** For security purposes, an access point may be configured to disable SSID broadcasts. In this case, the SSID must be manually entered into the YESTablet’s wireless adaptor card configuration parameters. Note that SSIDs are case-sensitive.

## Security

In addition to SSIDs, two more-sophisticated security methods are available:

### Wired Equivalent Privacy (WEP)

WEP is a data privacy mechanism based on 64-bit or 128-bit encryption. To use WEP encryption, all points in the wireless network must enable WEP and have the same 40-bit or 104-bit key setting. WEP is disabled as default on the YESTablet.

### Extensible Authentication Protocol (EAP)

The new standard for wireless LAN security, as defined by the Institute of Electrical and Electronics Engineers (IEEE), is called *802.1X for 802.11*, or simply **802.1X**. An access point that supports 802.1X

and its protocol, Extensible Authentication Protocol (EAP), acts as the interface between a wireless client and an authentication server to which the access point communicates over the wired network. The wireless client adapter uses a user name and password to perform mutual authentication with the authentication server through the access point. Then a WEP key is dynamically assigned to the adapter. EAP is disabled as default on the *YESTablet*.

**Note:** In order to use EAP authentication, your client adapter and access point firmware must have matching 802.1X draft standards (i.e. draft 8, draft 10, etc.).

## Wireless LAN Adapters

The exact configuration parameters and configuration interface are dependent upon the type of wireless LAN adapter card being used with the *YESTablet*. If you go to **Control Panel → Network and Dial-up Connections**, you will see that the *YESTablet* automatically creates a connection here for the type of adapter card that it detects on boot-up. Currently, the *YESTablet 7370* supports two adapter cards:

- Z-Com XL-325.
- Cisco Aironet 350.

Double-click on the connection icon to configure **IP Address** and **Name Servers** for either adapter card.

## IP Address

The IP address for your *YESTablet* can be obtained in one of two ways. Select the appropriate radio button to match your preference.

- **Obtain an IP address via DHCP.** The *YESTablet* obtains an IP address automatically from a DHCP server on the network. The *YESTablet* will ask for an address assignment every time it is booted up, and hence the IP address may change occasionally.
- **Specify an IP address.** The *YESTablet* IP address is a static assignment. Enter that static address in **IP Address**, along with the **Subnet Mask** and the **Default Gateway** (if there is one) IP address.

## Name Servers

Name servers convert “friendly” device names to device IP addresses, which are necessary to actually communicate with other devices on your internal network or on the Internet. If you have chosen DHCP address assignment, the DHCP server may be configured to automatically provide these name server addresses. If you have chosen static address assignment, or if the DHCP server does not provide these addresses, you will have to enter them here.

## Z-Com

The standard wireless adapter card in the *YESTablet* is the Z-Com XL-325 Wireless PC Card. If the *YESTablet* detects the Z-Com adapter, you will see a **PRISMNDS1** icon in **Control Panel → Network and Dial-up Connections** and one of the two icons below in the System Tray.



**Connection Established**  
(Blinking icon indicates activity)



**Connection Lost**

If this is the initial configuration, it is likely that you will see the “Connection Lost” form of the icon.

To open the Wireless LAN PC Card Settings window, you can double-click on the **PRISMNDS1** icon. You can also access this window by double-clicking on the **Connection Lost** icon and then taking the path **Wireless Information** → **Advanced**. You will see three tabs. IP Address and Name Servers have already been explained; the third is Wireless Networks.

## Wireless Networks

You can also access the Wireless Networks tab by double-clicking on the Z-Com **Connection** icon in the System Tray.

## Available Networks

If access points are broadcasting their SSIDs, this window will display all the SSIDs discovered by the adaptor. Each SSID is considered the identifier for a specific wireless network. There can be multiple wireless networks accessing the same wired Local Area Network.

## Preferred Networks

If there are some access points that are not broadcasting SSIDs, you can manually add their SSIDs here. Click on **Add** and add an SSID in the resulting Wireless Network Properties window (we will discuss other properties in Wireless Network Properties). When you **OK** out, you will see this SSID in the Preferred Networks window. Also, broadcasted SSIDs will appear in this window after they have been configured. You can now arrange the SSIDs in the order you wish the adaptor card to search, by using the **Move Up** and **Move Down** buttons.

## Refresh

Click on **Refresh** to have the adaptor card search the SSID list in the Preferred Networks window to see which are available from active access points. The available SSIDs will then be shown in the Available Networks window.

## Configure Properties

To configure the network properties of an SSID in the Available Networks window, highlight that SSID and then click on **Configure**. To configure the network properties of an SSID in the Preferred Networks window, highlight that SSID and then click on **Properties**. The resulting window, Wireless Network Properties, will be identical in either case. You will also see this window when you click on the **Add** button.

## Network Name (SSID)

If you are adding an SSID, this window will be blank. If you are configuring an existing SSID, that SSID will be in this window.

## Computer-to-Computer (Ad Hoc) Network

It is possible for wireless devices to communicate with each other without using an access point. In that case, this box would be checked. However, leave this box unchecked since your operation of the YESTablet will always require an access point.

## Wireless Network Key (WEP)

WEP is discussed in [Wireless Access Points|Security|Wired Equivalency Privacy](#).

- **Data Encryption.** To use WEP security. Check this box.
- **Network Authentication.** To use a static key, check this box.
- **The key is provided automatically.** Leave this box unchecked. If EAP security is selected, this box will automatically be checked since the key is assigned automatically from the authentication server.

## Modify WEP Key

If **Network Authentication** is selected above, and **EAP** is not selected, this button will be enabled. Click on it to see the Wireless (WEP) Key Settings window. The settings in this window must match the settings in the SSID access point.


- **Network Key.** This key might be generated in the access point, based upon the hashing of some user-selected key word, or it might be manually determined. In either case, it must meet the length and format restrictions selected below. Enter the key sequence here.
- **Key Format.** Choose from **ASCII** or **Hexadecimal**.
- **Key Length.** For 64-bit encryption, the key length will be 40 bits, consisting of five ASCII characters or 10 hexadecimal characters. For 128-bit encryption, the key length will be 104 bits, consisting of thirteen ASCII characters or 26 hexadecimal characters.
- **Key Index.** Leave at the default value of 0.

## IEEE 802.1x Authentication

802.1x (EAP) is discussed in [Wireless Access Points|Security|Extensible Authentication Protocol](#).

In order to use EAP authentication, your client adapter and access point firmware must have matching 802.1X draft standards. In practical terms, this means that successful use of EAP usually requires that the same vendor manufacture the wireless adapter and access point. So if you enable EAP here, you had better use an access point that understands what TLS and MD5-Challenge mean.

## Cisco

The Cisco Aironet 350 Wireless LAN Client Adapter is an option for the YESTablet 7370. If the YESTablet detects the Cisco adapter, you will see a **CISCO1** icon in **Control Panel → Network and Dial-up Connections** and a **Connection** icon similar to  in the System Tray. This icon will have a red **X** superimposed on it if there is no connection to an access point. Double-click on the **CISCO1** icon to open the Cisco Wireless LAN Adapter Settings window with two tabs, **IP Address** and **Name Servers**. These two tabs have already been explained at the beginning of the [Wireless LAN Adapters](#) section.

**NOTE: For maximum speed in ICA and RDP sessions, it is recommended that you match the Cisco 350 Aironet card with a Cisco access point. We have seen noticeable speed degradation**

**when using an Aironet card with a non-Cisco access point. If you must use a non-Cisco access point, be sure that your Aironet card firmware is at level 5.02.19 or above; this will overcome some of the degradation. Also, bring your access point up to its latest firmware.**

## Aironet Client Utility (ACU)

This utility is used to configure the myriad of wireless parameters for the Cisco adapter, as well as to display connection information. Detailed instructions can be obtained from the Cisco web site at

[http://www.cisco.com/univercd/cc/td/doc/product/wireless/airo\\_350/350cards/index.htm](http://www.cisco.com/univercd/cc/td/doc/product/wireless/airo_350/350cards/index.htm)

but we will cover the basics here. Open this utility from **My Computer → Control Panel → Wireless Network Card** or by clicking down the path **Start → Programs → Cisco → ACU**. You will see a window with five tabs.

**Note:** If you are connected to an access point when you open ACU, you will be automatically disconnected. After you close ACU, you can initiate a connection by momentarily entering and then exiting the Suspend Mode.

## Profiles

Most of the configuration is done under this tab. Multiple profiles can be defined, since it may be necessary to have a different set of parameters for different networks or for different users. The default is to start with one active profile, **Profile0**. Buttons are available to **Rename** or **Edit** this profile, or to **Add** more profiles. If there are multiple profiles, you can **Delete** some if you wish. The Select Active Profile field allows you to select the current active profile. The **Options** button allows you to select % or dbm as the measurement unit when signal strength is displayed. The **About** button shows the ACU version.

Highlight a profile in the Manage Profiles sub-window and click on **Edit** to set the configuration parameters for that profile.

## Edit

The entire profile configuration is done here. When you click on **Edit**, you will see a Profile Properties sub-window. Select a property in the Property box, and the existing value for that property will appear in the Value box. If there are predefined value choices for a property, a drop-down list will appear for your selection in the Value box. Otherwise, you can enter alphanumeric characters into that box, or change existing characters.

A description of each property is given in the following table.

**Table 1: Aironet 350 Adapter Configuration Properties**

Parameter	Description	
SSID	<p>The service set identifier (SSID) identifies the specific wireless network that you want to access.</p> <p><b>Range:</b> You can key in up to 32 characters (case sensitive)</p> <p><b>Default:</b> A blank field</p> <p><b>Note:</b> If you leave this parameter blank, your client adapter can associate to any access point on the network that is configured to allow broadcast SSIDs (see <a href="#">Wireless Access Points/Identification</a>). If the access point with which the client adapter is to communicate is not configured to allow broadcast SSIDs, the value of this parameter must match the SSID of the access point. Otherwise, the client adapter cannot access the network.</p>	
Client Name	<p>A logical name for your Windows CE device. It allows an administrator to determine which devices are connected to the access point without having to memorize every MAC address. This name is included in the access point's list of connected devices.</p> <p><b>Range:</b> You can key in up to 16 characters</p> <p><b>Default:</b> A blank field</p> <p><b>Note:</b> Each computer on the network should have a unique client name.</p>	
Infrastructure Mode	<p>Specifies the type of network in which your client adapter is installed.</p> <p><b>Options:</b> Yes or No</p> <p><b>Default:</b> Yes</p>	
	<b>Infrastructure Mode</b>	<b>Description</b>
	Yes	Indicates that your wireless network is connected to a wired Ethernet network through an access point.
	No	Indicates that your wireless network consists of a few wireless devices that are not connected to a wired Ethernet network through an access point (referred to as <i>ad hoc mode</i> ).



Parameter	Description	
Power Save Mode	<p>Sets your client adapter to its optimum power-consumption setting.</p> <p><b>Options:</b> CAM, Fast PSP, or Max PSP</p> <p><b>Default:</b> CAM (Constantly Awake Mode)</p>	
	<b>Power Save Mode</b>	<b>Description</b>
	CAM (Constantly Awake Mode)	<p>Keeps the client adapter powered up continuously so there is little lag in message response time.</p> <p>Consumes the most power but offers the highest throughput. Recommended if the YESTablet is in the cradle or connected to the AC/DC power adapter.</p>
	Fast PSP (Power Save Mode)	<p>Switches between PSP mode and CAM mode, depending on network traffic. This mode switches to CAM when retrieving a large number of packets and switches back to PSP after the packets have been retrieved.</p> <p>Recommended when power consumption is a concern but you need greater throughput than that allowed by Max PSP.</p>
	Max PSP (Max Power Savings)	<p>Causes the access point to buffer incoming messages for the client adapter, which wakes up periodically and polls the access point to see if any buffered messages are waiting for it. The adapter can request each message and then go back to sleep.</p> <p>Conserves the most power but offers the lowest throughput. Recommended if the YESTablet will be operating on battery power for an extended period of time.</p>

Network Security Type	<p>Enables or disables LEAP authentication for your client adapter. LEAP is Cisco's proprietary interpretation of EAP (see <a href="#">Wireless Access Points Security Extensible Authentication Protocol</a>).</p> <p><b>Options:</b> None or LEAP</p> <p><b>Default:</b> None</p>	
	<b>Network Security Type</b>	<b>Description</b>
	LEAP	<p>Enables LEAP after you enter a username and password in WLM. See <a href="#">Wireless Login Module</a> for a description of WLM.</p> <p><b>Note:</b> This parameter must be enabled <i>before</i> you set a LEAP username and password in WLM.</p>
	None	Disables LEAP. LEAP can be disabled as desired.
WEP	<p>Enables or disables WEP (see <a href="#">Wireless Access Points Security Wired Equivalency Privacy</a>) for your client adapter.</p> <p><b>Options:</b> No WEP, Static WEP Keys, or Dynamic WEP Keys.</p> <p><b>Default:</b> No WEP</p>	
	<b>WEP</b>	<b>Description</b>
	No WEP	WEP is disabled.
	Static WEP Keys	If you wish to use WEP, but are not using LEAP, you must select this option. See <a href="#">Using Static WEP Keys</a> after this table for a description on using static WEP keys.
	Dynamic WEP Keys	If you enabled LEAP for your Network Security Type, this parameter is selected automatically, and the RADIUS authentication server assigns a dynamic, session-based WEP key to the adapter

Authentication Type	<p>Defines how your client adapter will attempt to authenticate to an access point.</p> <p><b>Options:</b> Open or Shared Key</p> <p><b>Default:</b> Open</p>	
	Authentication	Description
	Open Authentication	<p>Allows your client adapter, regardless of its WEP settings, to associate with an access point. If LEAP is enabled on your client adapter, Open Authentication is the only available option.</p>
	Shared Key Authentication	<p>Allows your client adapter to associate only with access points that have the same WEP key. This option is available only if WEP is enabled, and LEAP is not enabled.</p> <p>The access point sends a known unencrypted "challenge packet" to the client adapter, which encrypts the packet and sends it back to the access point. The access point attempts to decrypt the encrypted packet and sends an authentication response packet indicating the success or failure of the decryption back to the client adapter.</p> <p><b>Note:</b> Cisco recommends that shared key authentication not be used because it presents a security risk.</p>
Mixed Mode	<p>Indicates if the client adapter can associate to an access point that allows both WEP and non-WEP associations.</p> <ul style="list-style-type: none"> <li>• If the access point with which the client adapter is to associate has WEP set to Optional, you must enable Mixed Mode on the adapter (regardless of whether WEP is enabled on the adapter). Otherwise, the client adapter cannot establish a connection with the access point.</li> <li>• If the access point with which the client adapter is to associate does not have WEP set to Optional, Mixed Mode should be set to Disabled on the adapter.</li> </ul> <p><b>Options:</b> Enabled or Disabled</p> <p><b>Default:</b> Disabled</p> <p><b>Note:</b> For security reasons, Cisco recommends that WEP-enabled and WEP-disabled clients not be allowed in the same wireless network, because broadcast packets will be sent unencrypted, even to clients running WEP.</p>	

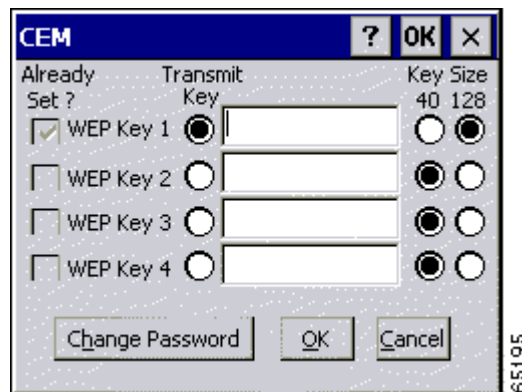
World Mode	<p>Enables the client adapter to adopt the maximum transmit power level and the frequency range of the access point to which it is associated, provided the access point is also configured for world mode. This parameter is available only in infrastructure mode and is designed for users who travel between countries and want their client adapters to associate to access points in different regulatory domains.</p> <p><b>Options:</b> Enabled or Disabled</p> <p><b>Default:</b> Disabled</p> <p><b>Note</b> When World Mode is enabled, the client adapter is limited to the maximum transmit power level allowed by the country of operation's regulatory agency.</p>	
Data Rates	<p>Specifies the rate at which your client adapter should transmit or receive packets to or from access points (in infrastructure mode) or other clients (in ad hoc mode).</p> <p>Auto is recommended for infrastructure mode; setting a specific data rate is recommended for ad hoc mode.</p> <p><b>Options:</b> Auto, 1 Mb Only, 2 Mb Only, 5.5 Mb Only, or 11 Mb Only</p> <p><b>Default:</b> Auto</p>	
	<b>Data Rate</b>	<b>Description</b>
	Auto	Uses the 11-Mbps data rate when possible but drops to lower rates when necessary
	1 Mb Only	Offers the greatest range but the lowest throughput
	2 Mb Only	Offers less range but greater throughput than the 1 Mbps Only option
	5.5 Mb Only	Offers less range but greater throughput than the 2 Mbps Only option
	11 Mb Only	Offers the greatest throughput but the lowest range
	<p><b>Note</b> Your client adapter's data rate must be set to Auto or must match the data rate of the access point (in infrastructure mode) or the other clients (in ad hoc mode) with which it is to communicate. Otherwise, your client adapter may not be able to associate to them.</p>	

Transmit Power	<p>Defines the power level at which your client adapter transmits. This value must not be higher than that allowed by your country's regulatory agency (FCC in the U.S., DOC in Canada, ETSI in Europe, MKK in Japan, etc.).</p> <p><b>Options:</b> Dependent on the power table programmed into the client adapter; see the table below</p> <p><b>Default:</b> Max (the maximum level programmed into the client adapter and allowed by your country's regulatory agency)</p>	
	Power Levels	Client Adapter Type
	Max, 100 mW, 50 mW, 30 mW, 20 mW, 5 mW, or 1 mW	350 series PC and LM cards
	<p><b>Note:</b> Reducing the transmit power level conserves battery power but decreases radio range.</p> <p><b>Note:</b> When World Mode is enabled, the client adapter is limited to the maximum transmit power level allowed by the country of operation's regulatory agency.</p>	

**NOTE:** Before doing a power-off/Cold Boot, you must save all your new settings by executing a Registries Save/Restore from the Control Panel.

## Using Static WEP Keys

1. Go to **WEP** in the Property box.
2. Select the value **Static WEP Keys**.
3. Click on the **WEP Keys** button. The WEP Keys screen, similar to the following screen, will appear.



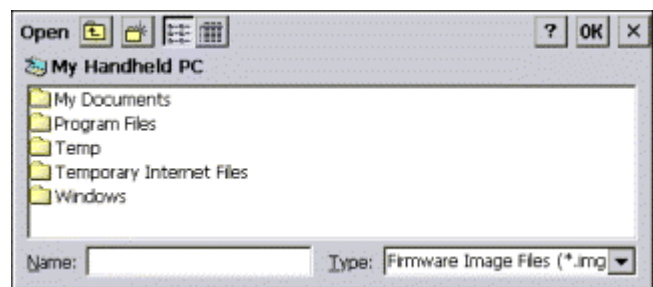
4. A checkmark appears in the Already Set? box for all existing static WEP keys. **Note:** For security reasons, the codes for existing static WEP keys do not appear on the screen.

5. If you want to use an existing static WEP key, make sure the **Transmit Key** button to the left of the key is selected and click **OK**. This is the key that will be used to transmit packets.
6. If no static WEP keys have been set, or if you want to write over an existing key, execute the following steps to create a new key. You can create up to four static keys.
  - a. For the static WEP key that you are entering (1, 2, 3, or 4), select a WEP key size of 40 or 128 on the right side of the screen. **Note:** Although the screen says 128, the actual key size is 104 bits.
  - b. Obtain the static WEP key from your system administrator and enter it in the blank field for the key you are creating. Follow the guidelines below to enter a new static WEP key:
    - WEP keys can consist of the following hexadecimal characters: 0-9, A-F, and a-f.
    - WEP keys must contain the following number of characters:
      - 10 hexadecimal characters for 40-bit keys.  
Example: 12345abcde
      - 26 hexadecimal characters for 104-bit keys.  
Example: AB34CD78EFab01cd23ef456789
    - Your client adapter's WEP key must match the WEP key used by the access point (in infrastructure mode) or clients (in ad hoc mode) with which you are planning to communicate.
  - c. When setting more than one WEP key, the keys must be assigned to the same WEP key numbers for all devices. For example, WEP key 2 must be WEP key number 2 on all devices. When multiple WEP keys are set, they must be in the same order on all devices. **Note:** After you enter a WEP key, you can write over it, but you cannot edit or delete it, even if you later choose to disable WEP.
7. Click the **Transmit Key** button to the left of the key you want to use to transmit packets. Only one WEP key can be selected as the transmit key.
8. **OK** out of the ACU utility.
9. Save your keys in the Windows registry using the [Registries Save/Restore](#) feature in Control Panel.

## Firmware

This tab allows you to upgrade the firmware in the flash memory of the adapter card. Follow these steps.

1. Before opening ACU, download and extract the latest firmware from the Cisco web site to a PC or laptop containing the Microsoft ActiveSync program.
2. Use a USB cable to connect the YES<sup>table</sup> to the PC/laptop.
3. Establish an ActiveSync connection.
4. Transfer the new firmware file to the YES<sup>table</sup>.
5. Open ACU and click on the **Firmware** tab.
6. Click on the **Browse** button. The Open screen, similar to the following screen, will appear.



7. Browse to the folder containing the firmware .img file.

8. Open the folder. A list of available .img files should appear.
9. Click on the desired .img file. The file name should then appear in the Name box.
10. Click on **OK** and the image should be loaded into the adapter's flash memory.
11. If the load is successful, a "Firmware Upgrade Complete!" message will appear.

An alternate, easier method, if you have the right hardware, is:

1. After downloading and extracting the .img file, load the .img file onto a USB Zip drive.
2. Connect the Zip drive to the tablet. It will show up as **Hard Disk in My Computer**.
3. Execute steps 5-11 above.

## Status

This tab displays several useful pieces of information.

- **Cisco 350 is Associated to.** This is the MAC address of the associated access point.
- **Signal Strength.** This is the signal strength for all received packets. The higher the value and the more green the bar graph is, the stronger the signal. The histogram below the bar graph provides a visual interpretation of the current signal strength. Differences in signal strength are indicated by the following colors: green (strongest), yellow (middle of the range), and red (weakest).
- **Signal Quality.** This is the signal quality for all received packets. The higher the value and the more green the bar graph is, the clearer the signal. The histogram below the bar graph provides a visual interpretation of the current signal quality. Differences in signal quality are indicated by the following colors: green (highest quality), yellow (average), and red (lowest quality).
- **Overall Link Quality.** This is the client adapter's ability to communicate with the access point, which is determined by the combined result of the adapter's signal strength and signal quality. The range of values is: Not Associated, Poor, Fair, Good, and Excellent.
- **Driver Version.** This is the version of the Cisco adapter card driver that is loaded in the *YEStablet*.
- **Firmware Version.** This is the version of the firmware that is loaded in the Cisco adapter card.
- **Message Integrity Check.** MIC prevents attacks on encrypted packets called *bit-flip* attacks. During a bit-flip attack, an intruder intercepts an encrypted message, alters it slightly, and retransmits it, and the receiver accepts the retransmitted message as legitimate. The MIC, when implemented on both the access point and all associated client devices, adds a few bytes to each packet to make the packets tamper-proof. There is no configuration parameter for MIC in ACU; it is automatically implemented in the Aironet 350 adapter if WEP is enabled and the access point is configured for MIC.
- **Current IP address:** This is the *YEStablet* IP address that has been dynamically assigned by a DHCP server or that has been statically assigned in **Control Panel → Network and Dial-up Connections**.

## Statistics

This tab enables you to view statistics that indicate how data is being received and transmitted by the client adapter. It also shows message integrity check (MIC) statistics if MIC is enabled on the access point. The receive and transmit statistics are host statistics. That is, they show packets and errors received or sent by the adapter. Link status tests from the access point are performed at the adapter firmware level; therefore, they have no effect on the statistics shown here.

Receive statistics are defined in Table 2. Transmit statistics are defined in Table 3. MIC statistics are defined in Table 4.

**Table 2: Aironet Receive Statistics Definitions**

Statistic	Description
Multicast Packets	The number of multicast packets that were received successfully.
Broadcast Packets	The number of broadcast packets that were received successfully.
Unicast Packets	The number of unicast packets that were received successfully.
Bytes Received	The number of bytes of data that were received successfully.
Beacons Received	The number of beacon packets that were received successfully.
PLCP CRC Errors	<p>The number of times the client adapter started to receive an 802.11 Physical Layer Convergence Protocol (PLCP) header but the rest of the packet was ignored due to a cyclic redundancy check (CRC) error in the header.</p> <p><b>Note.</b> CRC errors can be attributed to packet collisions caused by a dense population of client adapters, overlapping access point coverage on a channel, high multipath conditions due to bounced signals, or the presence of other 2.4-GHz signals from devices such as microwave ovens, wireless handset phones, etc.</p>
<b>MAC CRC Errors</b>	<p>The number of packets that had a valid 802.11 PLCP header but contained a CRC error in the data portion of the packet.</p> <p><b>Note.</b> CRC errors can be attributed to packet collisions caused by a dense population of client adapters, overlapping access point coverage on a channel, high multipath conditions due to bounced signals, or the presence of other 2.4-GHz signals from devices such as microwave ovens, wireless handset phones, etc.</p>
Up Time (hh:mm:ss)	The amount of time (in hours:minutes:seconds) since your client adapter was started. If the client adapter has been running for more than 24 hours, the time is displayed in days, hours:minutes:seconds.

**Table 3: Aironet Transmit Statistics Definitions**

Statistic	Description
Multicast Packets	The number of multicast packets that were transmitted successfully.
Broadcast Packets	The number of broadcast packets that were transmitted successfully.



<b>Statistic</b>	<b>Description</b>
Unicast Packets	The number of unicast packets that were transmitted successfully.
Bytes Transmitted	The number of bytes of data that were transmitted successfully.
Packets Retry Long	The number of normal data packets that were retransmitted.
Packets Retry Short	The number of request-to-send (RTS) packets that were retransmitted.
Packets Max Retries	The number of packets that failed to be transmitted successfully after exhausting the maximum number of retries.
Up Time (hh:mm:ss)	The amount of time (in hours:minutes:seconds) since your client adapter was started. If the client adapter has been running for more than 24 hours, the time is displayed in days, hours:minutes:seconds.

**Table 4. Aironet MIC Statistics Definitions**

<b>Statistic</b>	<b>Description</b>
Packets MIC OK	The number of packets that were received successfully with a valid MIC.
Packets No MIC	The number of packets that were discarded due to no MIC being found.
Packets Incorrect MIC	The number of packets that were discarded due to an incorrect MIC value.
Packets No MIC Seed	The number of packets that were discarded due to no MIC seed being received.
Packets Wrong MIC Seq	The number of packets that were discarded due to the MIC sequence number being wrong.

# Survey

The Survey tab can assist you in conducting a site survey. Survey operates at the RF level and is used to determine the best placement and coverage (overlap) for your network's infrastructure devices. During a site survey, the current status of the network is read from the client adapter and displayed four times per second so you can accurately gauge network performance. The feedback that you receive can help you to eliminate areas of low RF signal levels that can result in a loss of connection between the client adapter and its associated access point (or other infrastructure device).

Survey can be operated in two modes:

- **Passive.** This is the default site survey mode. It does not initiate any RF network traffic; it simply listens to the traffic that the client adapter hears and displays the results. Follow the instructions in the ["Using Passive Mode" section](#) to activate the passive mode.
- **Active.** This mode causes the client adapter to actively send or receive low-level RF packets to or from its associated access point and provides information on the success rate. It also enables you to set parameters governing how the site survey is performed (such as the data rate). Follow the instructions in the ["Using Active Mode" section](#) to activate the active mode.

## Guidelines

Keep the following guidelines in mind when preparing to perform a site survey:

- Use the active mode when performing a site survey.
- Perform the site survey when the RF link is functioning with all other systems and noise sources operational.
- Execute the site survey entirely from the *YESTablet*.
- Conduct the site survey with all variables set to operational values.
- Consider the following operating and environmental conditions when performing a site survey:
  - **Data rates** - Sensitivity and range are inversely proportional to data bit rates. Therefore, the maximum radio range is achieved at the lowest workable data rate, and a decrease in receiver threshold sensitivity occurs as the radio data increases.
  - **Antenna type and placement** - Proper antenna configuration is a critical factor in maximizing radio range. As a general rule, range increases in proportion to antenna height.
  - **Physical environment** - Clear or open areas provide better radio range than closed or filled areas. Also, the less cluttered the work environment, the greater the range.
  - **Obstructions** - A physical obstruction such as metal shelving or a steel pillar can hinder the performance of wireless devices. Avoid placing these devices in a location where a metal barrier is between the sending and receiving antennas.
  - **Building materials** - Radio penetration is greatly influenced by the building material used in construction. For example, drywall construction allows greater range than concrete blocks, and metal or steel construction is a barrier to radio signals.

## Using Passive Mode

This is the default site survey mode when you click on the **Survey** tab. It does not initiate any RF network traffic; it simply listens to the traffic that the client adapter hears and displays the results. As you move the *YESTablet* to various locations in your site, you will see the effect on the metrics described in Table 5 change.

**Table 5: ACU Survey Passive Mode Data**

Metric	Description
The first line of the Survey screen	<p>Indicates the operational mode of your client adapter and the name or MAC address of any associated access point.</p> <p><b>Value:</b> Associated, Not Associated, Authenticated, or Ad Hoc Mode</p>
Signal Strength	<p>The signal strength for all received packets. The higher the value and the more green the bar graph is, the stronger the signal.</p> <p>The histogram below the bar graph provides a visual interpretation of the current signal strength. Differences in signal strength are indicated by the following colors: green (strongest), yellow (middle of the range), and red (weakest).</p> <p><b>Range:</b> 0 to 100%</p>
Signal Quality	<p>The signal quality for all received packets. The higher the value and the more green the bar graph is, the clearer the signal.</p> <p>The histogram below the bar graph provides a visual interpretation of the current signal quality. Differences in signal quality are indicated by the following colors: green (highest quality), yellow (average), and red (lowest quality).</p> <p><b>Range:</b> 0 to 100%</p>
Link Speed	<p>The rate at which your client adapter is receiving echo packets from its associated access point.</p> <p>The Link Speed histogram provides a visual interpretation of the current rate at which your client adapter is receiving packets. Differences in link speed are indicated by the following colors: green (fastest), yellow (middle of the range), and red (slowest).</p> <p><b>Value:</b> 1, 2, 5.5, or 11 Mbps</p> <p><b>Note</b> To examine real-time link speed for your client adapter, use the active mode. In passive mode, the link-speed indicator reports the speed of echo packets and does not indicate real-time link speed.</p>
Overall Link Quality	<p>The client adapter's ability to communicate with the access point.</p> <p><b>Value:</b> Not Associated, Poor, Fair, Good, Excellent</p>

## Using Active Mode

Follow the steps below to activate the site survey active mode and obtain current information about your client adapter's ability to transmit and receive RF packets.

1. From the Survey tab, click the **Setup** button. The Active Mode Setup screen appears.

2. Table 6 lists and describes the parameters that affect the site survey. Follow the instructions in the table to set any parameters.

**Table 6. ACU Survey Active Mode Setup Parameters**

Parameter	Description
Destination MAC Address	<p>The MAC address of the access point that will be used in the test.</p> <p><b>Default:</b> The MAC address of the access point to which your client adapter is associated</p> <p><b>Note</b> During the test, the client adapter will not roam to other access points so that the size of a single cell can be determined.</p>
Destination Is Another Cisco Aironet Device	<p>Selecting this checkbox indicates that the device you named in the Destination MAC Address field is a Cisco Aironet access. In this case, packets sent to the client from the Cisco Aironet device contain additional information, such as lost to source, lost to target, and percent retries, and this information is displayed in the Survey tab.</p> <p>If the device specified in the Destination MAC Address field is not a Cisco Aironet device, do not select this checkbox. In this case, the test sends out loopback packets, which originate from and return to the client adapter.</p> <p><b>Default:</b> Selected</p>

Parameter	Description	
Number of Packets	<p>The number of packets that will be sent during the test.</p> <p><b>Range:</b> 1 to 999</p> <p><b>Default:</b> 100</p>	
Data Rate	<p>The bit rate at which packets will be transmitted. Rate shifting will not occur during the test because the echo test built into the radio firmware does not support it</p> <p><b>Value:</b> 1, 2, 5.5, or 11 Mbps</p> <p><b>Default:</b> 11 Mbps</p>	
Continuous Link Test	<p>Selecting this checkbox causes the test to run until you click <b>OK</b> or <b>Stop</b>. The test loops repeatedly for the number of packets specified in the Number of Packets field.</p> <p><b>Default:</b> Deselected</p>	
Packet Size	<p>The size of the packets that will be sent during the test. Select a size that will be typical during normal system use.</p> <p><b>Range:</b> 30 to 1450</p> <p><b>Default:</b> 512</p>	
Delay Between Packets	<p>The delay (in milliseconds) between successive transmissions.</p> <p><b>Range:</b> 1 to 2048 ms</p> <p><b>Default:</b> 50 ms</p>	
Percent Success Threshold	<p>The percentage of packets that is not lost.</p> <p>This parameter controls the red line on the Percent Success histograms in the Survey tab. Percentages greater than or equal to this value are displayed as green bars; percentages below this value are displayed as yellow bars.</p> <p><b>Range:</b> 0 to 100%</p> <p><b>Default:</b> 75</p>	
Data Retries	<p>The number of times a transmission will be retried if an acknowledgment (Ack) is not returned by the destination device.</p> <p><b>Default:</b> None</p>	
	<b>Retry Value</b>	<b>Description</b>
	None	No retries will occur.
	Default Retries	The firmware's default value for retries (16) will be used.

Parameter	Description	
Tx Type	The packet type that will be transmitted during the test. <b>Default:</b> Unicast	
	Packet Type	Description
	Unicast	When unicast packets are used, the system expects to receive an acknowledgment from the destination, and retries can occur.
	Multicast	When multicast packets are used, no packet retries occur during the test.

- After setting any parameters, click **OK** to save the settings. The Survey tab appears.
- Click the **Start** button to run the site survey test. Table 7 interprets the information that is displayed on the Survey tab while the site survey test is running.

**Table 7. ACU Survey Information**

Statistic	Description
The first line of the Survey tab	Indicates the operational mode of your client adapter and the name or MAC address of any associated access point. <b>Value:</b> Associated, Not Associated, Authenticated, or Ad Hoc Mode
Signal Strength	The signal strength for all received packets. The higher the value and the more green the bar graph is, the stronger the signal. The histogram below the bar graph provides a visual interpretation of the current signal strength. Differences in signal strength are indicated by the following colors: green (strongest), yellow (middle of the range), and red (weakest). <b>Range:</b> 0 to 100%
Signal Quality	The signal quality for all received packets. The higher the value and the more green the bar graph is, the clearer the signal. The histogram below the bar graph provides a visual interpretation of the current signal quality. Differences in signal quality are indicated by the following colors: green (highest quality), yellow (average), and red (lowest quality). <b>Range:</b> 0 to 100%
Link Speed	The rate at which your client adapter is transmitting or receiving packets to or from its associated access point. <b>Value:</b> 1, 2, 5.5, or 11 Mbps

Statistic	Description
Quality	The client adapter's ability to communicate with the access point. <b>Value:</b> Not Associated, Poor, Fair, Good, Excellent
Percent Complete	The percentage of packets that have been transmitted based on the number specified in the Number of Packets field.
Percent Success	The percentage of packets that were transmitted successfully. The Percent Success histogram provides a visual interpretation of the percentage of packets that are not lost. The red line indicates the value that you set for the Percent Success Threshold. Percentages greater than or equal to this value are displayed as green bars; percentages below this value are displayed as yellow bars.
Lost To Target	The number of packets that were not transmitted successfully to the access point.
Lost To Source	The number of packets that were not received successfully from the access point.
Percent Retries	The percentage of packets that were retried for transmission. <b>Note</b> This value is calculated as follows: $(\text{number of retries} \times 100) / \text{number of packets sent}$ .  If a lot of packets get lost, the number of retries could be greater than the number of packets sent. Then this field would show a value greater than 100%.

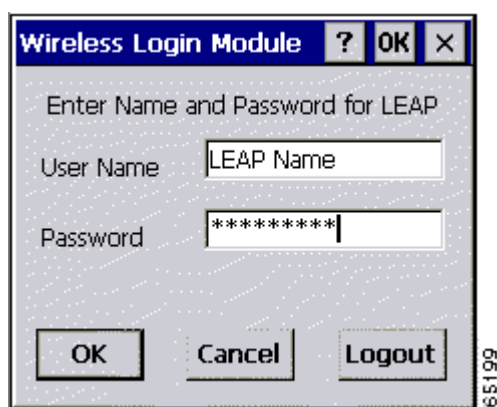
- When you click the **Stop** button or when the Percent Complete reaches 100%, the active mode changes back to the passive mode.

## Wireless Login Module (WLM)

If LEAP authentication is enabled, a valid username and password must be entered whenever a connection is made to the access point. WLM is used to enter these values. Follow these steps to enter the LEAP username and password.

- WLM starts automatically whenever you start ACU, change the LEAP parameter from Disabled to Enabled, click **OK**, and then connect to a LEAP-enabled access point. If LEAP is already enabled, WLM starts automatically whenever you insert the client adapter, or reboot the YESTablet, or load new firmware, and then connect to a LEAP-enabled access point. You can also start WLM by selecting **Start → Programs → Cisco → Wireless Login Module** or by going to **My Computer → Control Panel → Wireless Network Card**. You may want to do this if you inadvertently exited WLM after it started or if you roam to a different part of the network where a different login is required.

When WLM starts, the Wireless Login Module screen appears.



2. Obtain the username and password for your authentication server account from your system administrator. **Note:** The password is optional because not all host accounts on the authentication server are set up with a password.
3. Enter the username in the User Name field. Usernames and passwords are case sensitive and can contain up to 32 alphanumeric characters. **Note:** If your RADIUS server account specifies a domain, enter the domain name before the username and separate the two with a forward slash (e.g., *domain/username*).
4. Enter the password in the Password field if the authentication server account was set up with a password. **Note:** For security reasons, the characters entered for the password are displayed as asterisks.
5. Click **OK**. If the username and password were entered correctly, they are written to volatile memory on the Aironet adapter. The username and password remain on the adapter until power is removed from the adapter, typically due to the adapter being ejected or the YESTablet powering down.
6. One of three scenarios occurs:
  - a) The client adapter authenticates to the authentication server using your username and password and receives a dynamic, session-based WEP key. The bottom of the ACU screen indicates that your client adapter is authenticated to an access point.
  - b) If you enter the username and password incorrectly or enter ones that are not valid, the Wireless Login Module screen reappears with a message indicating that your login was incorrect. You are able to retry immediately by re-entering the username and password.
  - c) The adapter times out while trying to authenticate, possibly because it is out of range of an access point. After 60 seconds, a message appears indicating that the first attempt to authenticate failed and that the adapter will continue trying. **Note:** During the 60 seconds before the timeout occurs, WLM is running in the background. It is hidden and does not appear as a running program. If you try to start WLM during this time, nothing happens because it is already running.

## Control Panel

YESTablet properties are normally accessed and set up from the Control Panel, which can be accessed from **My Computer** → **Control Panel** or **Start** → **Settings** → **Control Panel**. From the Control Panel, you can access over twenty different property categories, many of which are very similar to, or are a subset of, standard Windows PC properties.



# Bluetooth Device Management

The 7370 is Bluetooth-compatible. Use this utility if you have a Bluetooth card in the PCMCIA slot. Click on ? to see detailed Bluetooth help.

## Brightness

Use the sliding control to set the brightness of your screen. **Note:** Set brightness to the lowest comfortable level in order to increase the 7370 battery life.

## Button Settings

You can change the functions of nine of the eleven buttons on the 7370. Buttons 1-8 and button 10 (see [General Description](#)[Front-View Layout](#)[Button Functions](#) for button identification) can be reassigned by highlighting the button name and then double-clicking on one of the items in the list in the right pane. You can also point the button to an executable file not on that list by clicking on **Other** and then filling in the fields of the resulting dialog box. You can always go back to the original functions by clicking on **Restore defaults**.

## Certificates

You can identify trusted certificates here for Secure Socket Layer security.

## Date/Time

You can set the local date, time, and time zone just like a standard Windows PC. However, this information, except for time zone, is not saved after a Cold Boot.

## Dialing

Dial-up connections can be made using a Bluetooth-enabled modem or mobile phone connection (see [Network and Dial-up Connections](#)). Set the dialing properties here.

## Display

This is used just like the Display properties on a Windows PC. Ignore the Backlight tab; it has no effect in the 7370.

## Input Panel

You can choose between the default keyboard and a standard numeric pad as the virtual input device that appears when you press the **Keyboard** button ([Button 5](#)) on the 7370.

# Internet Options

These properties are a subset of the properties offered in the full PC version of Internet Explorer. These same properties can also be accessed and edited from the **View** menu in Internet Explorer.

## Keyboard

This allows adjustment of the Character Repeat properties as found in a standard Windows PC.

## Mouse

This allows adjustment of the stylus double-click properties.

## Network and Dial-up Connections

Your wireless network connections will automatically appear here and the appearance of the connection properties will depend upon the wireless adapter that you are using. Dial-up connections can also be configured if you have a Bluetooth adapter card communicating with a Bluetooth-enabled modem or mobile phone.

## OBEX Settings

Object Exchange Protocol (OBEX) is an efficient, compact binary protocol that enables a wide range of devices to exchange data spontaneously in a simple, efficient manner. This feature in the 7370 supports the Infrared Data Association (IrDA) protocol and allows objects to be transferred to another OBEX-compatible device using the IrDA port.

OBEX is primarily used to push or pull data objects. It performs functions that are similar to Hypertext Transfer Protocol (HTTP), only OBEX does not require the resources that an HTTP server requires.

When two devices are about to exchange information over OBEX, the requester, commonly known as the client, will send out commands to the server, which will carry out the commands as requested.

An OBEX client is a device that initiates a connection to an OBEX server. An OBEX server is a device that listens for incoming connections from a client.

The 7370 can act as an OBEX server, if the server is activated in this window.

## Owner

You can enter a number of informational tidbits about the 7370 user/owner if you wish, but the important tab is Network ID. Enter appropriate information here if you want to automatically log on to network resources.

# Password

A system password cannot be set in the 7370.

# PC Connection

Check the **Allow connection...** box to allow a USB connection with a Windows PC using ActiveSync.

# Power

This is an important set of properties for the 7370 user.

- **Battery.** You have to disconnect the 7370 from the power cord or the cradle in order to see the battery status. Wait several seconds to get an accurate reading. The **Main Battery** status shows the amount of power left in the internal battery. The **Second Battery** status shows the amount of power left in the auxiliary external battery, if there is one attached. When the batteries are in use, the second battery will be used up first; when it is completely discharged, the 7370 should automatically switch to the main battery without disrupting operation.
- **Schemes.** This allows you to define power schemes for both battery and external (AC) power operation. Obviously, your battery scheme is very important in maintaining a long battery life. **User Idle** and **System Idle** are not implemented in the 7370, but you still must enter switch-state times in these boxes. The three switch-state times are consecutive; the tablet times through the **User Idle** switch-state time before timing down through the **System Idle** switch-state time, and then finally times down through the **Suspend** switch-state time before Suspending.
- **Device Status.** Some devices, such as the Cisco Aironet wireless adapter, have settings for power consumption, and this tab shows the current settings. Some devices show up in this window even if their power consumptions are not adjustable.

# Regional Settings

When you choose an input locale, the effect is to change the wording on the Date/Time calendar, and to change the default settings in the other tabs in this window. You can override the defaults by going to the individual tabs and making other choices.

# Registries Save/Restore

This is somewhat of a misnomer, since you can only save from this utility. But saving is very important, because *parameter changes in the Control Panel or in applications will not be saved after a Cold Boot unless you carry out a **Save Current Settings** operation in this window.* The procedure is:

1. Check the **Save Current Settings** box.
2. Click **OK** in the resulting Message box.
3. Wait several seconds, and then click **OK** in the “finished” Message box.
4. Click **OK** in the Registries Save/Restore window.

A Registry Save will also occur automatically if the 7370 is operating on battery power and reaches the end of the battery life.

# Remove Programs

Only programs that have been added from a PC using ActiveSync (see [Software Installation and Synchronization](#)) will appear in the Programs list.

# Storage Manager

This can be used to partition, format, scan or de-fragment auxiliary storage, such as a Compact Flash card or a USB hard disk drive. Click on **Properties** to see storage properties and to access the **Scan** and **Defrag** buttons.

# Stylus

- **Double-Tap.** This tab controls the stylus double-click properties just like the **Double-Click** tab in [Mouse](#) properties.
- **Calibration.** When a new or reset 7370 is first booted up, the **Calibration Properties** screen will appear on top of the Windows Desktop. It is recommended that you take this opportunity to calibrate the action point of the stylus relative to your eyesight; otherwise you will probably be frustrated when trying to control stylus action such as tapping or cursor placement. When the YES<sup>table</sup> 7370 prompts you to calibrate the touchscreen, use the stylus to tap where indicated on the touchscreen in accordance with the displayed instructions.

You can also initiate a recalibration at anytime from the **Calibration** tab of the **Stylus Properties**.

# System

- **General.** This tab provides information about the 7370 operating system, system processor, system memory, and the type of card inserted in the PCMCIA slot.
- **Memory.** You can adjust the allocation of unused RAM to run programs or for storage (by moving the arrow to right or left).
- **Device Name.** This name identifies your 7370 to other devices on the network and to the YES<sup>manager</sup> remote central management software. It is recommended that you insert a unique name here for ease of identification by your network administrator.
- **Copyrights.** This tab provides copyright information about some of the firmware components.
- **About.** This tab provides version information for the overall firmware (OS) and for several components within the firmware. Make a note of the OS version and report this information if you have to call Affirmative Computer Products Tech Support about a problem.

# Update

The 7370 YES<sup>table</sup> firmware can be upgraded either from local storage or from an FTP server. For either method, you must first perform the following:

1. Download the latest-version firmware from the Affirmative Computer Products web site, per the Affirmative Computer Products Technical Support instructions.
2. Extract the downloaded file. You will see a .dtr or a .bin file.
3. Follow the steps in Local or FTP below, as appropriate.

**NOTE:** You will lose all your configuration information during the upgrade. So record your configuration information before upgrading.

## Local

1. Make the extracted file available for local browsing. You can do this by establishing an ActiveSync connection from the extraction PC to the 7370, or by loading the extracted file onto a USB storage device and then connecting that storage device to the 7370 USB port.
2. Connect the 7370 to external power.
3. Open the **Update** utility.
4. Click on the **Local** tab.
5. Click on **Browse**.
6. Browse to the extracted firmware file.
7. Click on the firmware file name to place the name in the Name box.
8. Click on **OK** and the update will begin.
9. You will see a box called Updating WinCE OS and a **Copying data** progress bar.
10. After completion of the file copy, you will see a **Verifying WinCE OS** content progress bar. When this bar is complete, click on **Update**.
11. You will see messages and a rotating icon on a DOS-like screen, but no progress bar. This step takes several minutes.
12. When the icon stops, the 7370 will reboot automatically.
13. Reconfigure your 7370.

## FTP

You must have an FTP server that is network-accessible from the 7370.

1. Set up your FTP server software to access the extracted file.
2. Connect the 7370 to external power.
3. Verify that the 7370 can communicate with the FTP server. Since there is no ping capability in the 7370, the typical way to verify is to ping from the server.
4. Open the **Update** utility.
5. Click on the **FTP** tab.
6. In **File Name**, enter the name of the extracted file.
7. In **Server IP Address**, enter the IP address of the FTP server.
8. If your FTP server is set up to allow an anonymous transfer, leave **Use "Anonymous" FTP** connection checked. Otherwise, uncheck this box and enter a **User Name** and **Password**.
9. Click on **Update**.
10. You will see a box called Updating WinCE OS and a **Copying data** progress bar.
11. After completion of the file copy, which will take several minutes, you will see a **Verifying WinCE OS** progress bar. When this bar is complete, click on **Update**.
12. You will see messages on a DOS-like screen, but no progress bar. This step takes several minutes.
13. After the upgrade is complete, the 7370 boots up automatically.
14. Reconfigure your 7370.

# Cradle USB

Sometimes an FTP or Local upgrade may fail, or may result in corrupted flash memory. When that happens, there still is a way to recover, in most cases, through a cradle USB connection to a Windows 2000 or Windows XP PC. The PC must also have Microsoft's ActiveSync program installed. You can download and install ActiveSync from the following link:

<http://www.microsoft.com/mobile/pocketpc/downloads/activesync36.asp>

The PC must also have the utility software, **sa\_usb\_update.exe**, available in a folder. You can obtain this utility from Affirmative Computer Products Tech Support. This utility is used to select and coordinate the OS image to be sent to the client (7370) side. After all the required software is installed, execute the following procedure:

1. Temporarily disable the ActiveSync USB connection by executing the following instructions:
  - a. Right-click the mouse button on the ActiveSync icon, which is located in the Taskbar.
  - b. Select **Connection Settings...** and then **UNCHECK Allow USB connection with this desktop computer.**
2. Place your 7370 on a cradle.
3. Connect a USB cable from the PC to the cradle.
4. Press and hold the **Reset** button ([Button 11](#)) for more than 4 seconds to completely turn off the power.
5. Press the pinhole button again to turn on the power and quickly (BEFORE the display shows the LOGO) press and hold the **Virtual Keyboard** button ([Button 5](#)) AND the **4-Way Right** button ([Button 2](#)) simultaneously. You will see the following selection menu on the screen:
  - **Launch WinCE OS**
  - **Clear Registry**
  - **Clear FileSystem**
  - **EBoot**
  - **Update via Cradle USB**
  - **Check Flash Memory Size**
6. Use the **4-Way Down** button, ([Button 4](#)) to move the cursor down to **Update via Cradle USB**.
7. Press the **Virtual Keyboard** button on the device front bezel. An "Update OS image via USB port" message will appear, and now your 7370 is ready to accept an OS image from a server through the USB port.
8. Run the **sa\_usb\_update.exe** utility on the PC, either by double clicking on the file name in Windows Explorer, or by running from the command line. You will see a DT385 USB Update window, and at the bottom of that window you should see "DT385 USB Devices Connected"
9. In the Select Update Image box, leave the setting at **WinCE OS**.
10. Click **Select** to browse to the new OS image file (xxx.dtr).
11. Highlight the image file name and click on **Open**.
12. Click on **Update** to start the transfer of the OS image.
13. The OS update process will be done automatically in the 7370 after the OS image has been successfully downloaded.

## Volume and Sounds

Double-click on this icon to open the Volume & Sounds Properties window, which allows a wide range of flexibility in controlling the audio properties of the 7370.

# Volume

This tab enables or disables sounds for various events and actions, and controls their volume via the slider bar. The **Volume** slider bar is also available by clicking on the speaker icon in the System Tray.

# Sounds

In this tab, you can match .wav file sounds with common Windows CE events, and you can define multiple sets, or schemes, of sounds vs. events. The 7370 comes with a number of small .wav files that are assigned to the Windows CE events in the **Windows CE Default** scheme.

1. Select a scheme in the Scheme window.
2. Select an event in the Event window. The current sound for that event in that scheme will appear in the Sound window.
3. If you want to change the event sound in that scheme, or create a new scheme, you can select the new sound from the **Sound** drop-down list. Click on the **Play** (Right Arrow) button to play the .wav file for that sound. If you are playing a long .wav file, you can stop the sound by clicking on the **Stop** button to the right of the **Play** button.
4. You can also import your own .wav files via ActiveSync or from external storage, and select one of them using the **Browse** button.
5. After you have finished modifying the scheme event sounds, you can save the changes under a new scheme name by clicking on the **Save As...** button and entering the new name, or you can save the changes under the existing scheme name
6. Click on **OK** to save the changes.
7. If you want to retain these changes after a Cold Boot, be sure to exercise a [Registries Save](#) operation.

# Wireless Network Card

This icon provides access to two Cisco utilities, and is present even if there is no Cisco card installed. **Aironet Client Utility.** See [Setup|Wireless LAN Adapter|Cisco|Aironet Client Utility](#) for details on using this utility.

**Wireless Login Module.** See [Setup|Wireless LAN Adapter|Cisco|Wireless Login Module](#) for details on using this utility.

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## Operation

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### Power ON and OFF

- The battery shipped with your sample device may be low in power – please be prepared to use the AC-DC adapter with the YES*table*t 7370 in setting up the device for the first time and to fully charge the internal battery pack.
- The YES*table*t 7370 is delivered in a “Power Off” or “Reset State”. To start (Cold Boot) the YES*table*t 7370 for the first time, briefly push on the **Reset** button ([Button 11](#)) located in a recessed opening at the back of the device.
- **BE CAREFUL** when using the **Reset** button as part of normal device operation – you may lose all software settings and information you may have established through your pattern of usage. See [Setup|Control Panel|Registries Save/Restore](#) for information on saving settings before using **Reset**.
- Please use (push and quick release) the **Suspend** button ([Button 9](#)) to “shut off” the device while not in use. In the Suspend mode, the wireless LAN adapter will disconnect from the access point. Pushing briefly on the **Suspend** button will wake up the system within seconds. The Power scheme (see [Setup|Control Panel|Power](#)) can also be set to put the 7370 into the Suspend mode after a defined period of inactivity.

### Start Up

The start-up sequence varies, depending upon whether you are executing a Cold Boot from the Reset mode or executing a Resume from the Suspend mode.

### Cold Boot

1. Using your stylus, briefly push on the **Reset** button ([Button 11](#)) located in a recessed opening at the back of the device.
2. The Affirmative Computer Products logo screen appears within several seconds.
3. After approximately fifteen seconds, the Windows Desktop will appear, along with the YES*term* IP Administrator window and a Calibration Request for your stylus.
4. If you want to calibrate your stylus pointing, click on **Yes**. Then use the stylus to tap where indicated on the touchscreen in accordance with the displayed instructions.
5. If you don’t want to calibrate, click on **No** or **Cancel**. Despite the information on the screen, clicking on **No** will sometimes not prevent a future request.
6. The wireless LAN adapter will have to establish a connection with a wireless access point. If you are using a Cisco Aironet card, this will occur automatically after 10-15 seconds. If you are using

the Z-Com card, it will often happen automatically, but sometimes you may have to execute the following procedure:

- a. The PRISMNDS1 window will appear. **Status** should read “Not Connected”, and **Signal Strength** should read “No Signal”. Follow this procedure:
- b. Highlight the desired network name (SSID) in the box.
- c. Click on **Connect**. The Wireless Network Properties box will appear.
- d. If you want to make any changes from the previous properties, make them here. See [Setup|Wireless LAN Adapter|Z-Com|Wireless Networks|Configure Properties|Wireless Network Properties](#) for configuration information.
- e. Click on **OK**. You will return to the PRISMNDS1 window.
- f. After several seconds, there should now be some **Signal Strength** reading if an access point is available, and the **Status** should first read “Scanning”, then “Associating with xxx” and finally “Connected to xxx”.
- g. The 7370 can now communicate on the xxx network.

**Note:** Occasionally, the **Status** will never advance past “Associating with xxx”. In this case, you will have to do a Cold Boot again.

7. Choose one of the YESTerm Administrator options or close this window and double-click on any of the displayed icons on the Desktop to activate the corresponding application.

## Resume

1. Push briefly on the **Suspend** button.
2. Within several seconds, you should return to the same screen that was displayed at the time that the Suspend mode was invoked.
3. If you were previously connected to an access point, the wireless LAN adapter will automatically reconnect to the access point in 10-20 seconds.
4. You can continue operation from the same point at which you entered the Suspend mode.

## Reset/Power Off

The **Reset** button ([Button 11](#)) resides in a small cavity at the back of the YESTablet 7370. Use a fine-tip instrument, such as the stylus, to operate this button. You may use the **Reset** button to perform a Cold Reboot on the YESTablet 7370 in the unlikely event of device lock. To execute, push on the button for over 4 seconds to activate the Reset or Power Off. The 7370 will be turned completely off, and you will need to restart the device by pushing briefly on the button again. This Reset/Power Off operation will clear any software settings and information not saved to flash memory.

**Note:** If the battery becomes completely drained while the 7370 is disengaged from an external power source, a Reset/Power Off will be automatically executed.

## Suspend/Resume

The **Suspend** button ([Button 9](#)) is the slightly recessed button along the left edge when facing the device. A quick push of the button toggles between Suspend and Resume – with enough intervening lapse. The machine cannot enter into Suspend mode again within 15 seconds after Resuming. This is

designed to protect external file systems, such as a FAT file system on a CompactFlash card. **NOTE:** Holding on to the button may not engage Suspend/Resume – it may only dim the display.

## Reset to Factory Defaults

There may be occasions where you want to reset the YES<sup>table</sup> 7370 to the default state, just as it was delivered from the factory. The procedure is:

1. Press and hold the **Reset** button ([Button 11](#)) for more than 4 seconds to completely turn off the power.
2. Press the **Reset** button again to turn on the power and quickly (BEFORE the display shows the LOGO) press and hold the **Virtual Keyboard** button ([Button 5](#)) AND the **4-Way Right** button ([Button 2](#)) simultaneously. You should see the following selection menu on the screen:
  - **Launch WinCE OS**
  - **Clear Registry**
  - **Clear FileSystem**
  - **EBoot**
  - **Update via Cradle USB**
  - **Check Flash Memory Size**
3. Use the **4-Way Down** button, ([Button 4](#)) to move the cursor down to **Clear FileSystem..**
4. Press the **Virtual Keyboard** button on the device front bezel. **NOTE: You will *not* be asked to confirm your action, so be sure this is what you want to do before pressing the Virtual Keyboard button.** If you want to renege on your decision, just execute a [Cold Boot](#) at this point.
5. An "Erasing flash..." message will appear, followed in several seconds by a "Programming flash..." message. When that is finished, the 7370 will automatically reboot, and you can begin [Setup](#) again.

## Battery and Power Management

The YES<sup>table</sup> 7370 is equipped with an internal Li-Ion battery pack that is capable of supporting approximately 2.5 hours of continuous operation. The period of continuous operation can be extended to approximately 6 hours with the aid of an optional external battery pack that clips onto the back of the device. The operation time can be significantly lengthened by putting the device into Suspend mode through the Suspend button ([Button 9](#)) whenever the device is not in use. The YES<sup>table</sup> 7370 may also be configured to automatically enter into power-saving modes after user-definable periods of device idle (see [Setup|Control Panel|Power](#)).

The YES<sup>table</sup> 7370 battery pack may be recharged with the provided AC-DC adapter connected directly to the DC-in jack on the device or connected to the device cradle. Allow one-to-two minutes of charging time for every minute of operation.

An auxiliary battery charger is available for the optional external battery, so that spare batteries can be charged while the YES<sup>table</sup> 7370 is in portable use. In most cases, one spare battery and one auxiliary charger should allow continuous use; two spare batteries should insure continuous use under even the heaviest 7370 use, if you are diligent in recharging the external batteries after they become discharged.

# Low Battery Condition

When your internal battery has discharged to approximately five percent of remaining life, the YESTablet 7370 will start generating warning messages at regular intervals (approximately five minutes). When the internal battery reaches the two-percent point, the 7370 will be placed into Suspend mode after a final warning. If the YESTablet 7370 enters Suspend mode due to a Low Battery condition, the Suspend/Resume button cannot resume operation until an AC-DC adapter is connected directly or through the cradle.

Within 12 hours, users can use an AC-DC adapter to return the machine to an operational state and to begin battery recharge. If over 12 hours elapses without using the AC-DC adapter, the 7370 will automatically save Registry changes (see [Windows Registry](#)), and execute a Power Off. In that case, the only way to recover the system is by connecting an AC-DC adapter and then doing a [Cold Boot](#).

## Operation with the Cradle

A cradle for support; pass-through charging, and communication with a PC complements the YESTablet 7370. On the cradle, you will find: a DC-in jack for the AC-DC adapter; a USB port for a USB cable; and a protected IR opening (not used at present). Seat the YESTablet 7370 securely onto the cradle and use the procedure cited in this section to activate and verify the connection between the device and the cradle.

1. You may charge the battery pack(s) on the YESTablet 7370 by connecting the AC-DC adapter directly to the [DC-in Jack](#) on the YESTablet 7370 or through the DC-in Jack on the cradle while the YESTablet 7370 is docked on the cradle.



**USB Slave or Type B Port and Cradle Connector**

2. The slave-type (Type B) USB port on the cradle is used for connection between a desktop computer and the YESTablet 7370 when the device is docked on the Cradle. This connection may be used for software installation, software update, and software development purposes. The required ActiveSync software on the PC also leverages this connection for synchronization between PC and the YESTablet 7370.

**NOTE:** You will need to engage a pre-programmed button ([Button 6](#)) on the front bezel to enable the USB Slave port (e.g., ActiveSync operation). Removing the unit from this cradle or Suspending the unit is designed to cause the connection to be lost. An “X” will re-appear across the Cradle

Connection icon if the connection is lost or if the YESTablet 7370 is not properly seated on the cradle. The button needs to be engaged again to re-establish a lost or improper connection.



Connection Established



Connection Not Established

## Wireless Network Card Antenna System

The YESTablet 7370 has a PC Card slot along the upper left edge of the device. This slot houses the wireless LAN adapter. This slot may be left open for the user to insert a Cisco Aironet 350 adapter, or the YESTablet 7370 may be delivered with an embedded Z-Com card with a custom antenna in a snap-type housing. In the latter case, the user has the choice of leaving the antenna in the snap-on position (A) or of pulling the antenna tip off the retainer snap in order to obtain better wireless connectivity through varying orientations up to near vertical (B).

(A)



(B)



## Dynamic Display Rotation

The YESTablet 7370 allows dynamic rotation of the display in 90-degree increments. Double-click on the Desktop icon and then select the desired rotation from the Screen Rotation window. The rotation change will be effected immediately, without needing to re-start the 7370. Invoking a rotation change may not fully apply to applications that are already open.

## Software Installation and Synchronization (ActiveSync)

The YESTablet 7370 is amenable to software installation and synchronization through connection to a host PC. Connection can be made with a USB cable between the host PC and the USB Slave port on the cradle of the YESTablet 7370. Connect as follows:

1. Install Microsoft's ActiveSync 3.6 or above on the host PC. You can download this program from

<http://www.microsoft.com/mobile/pocketpc/downloads/activesync36.asp>

2. Make sure that **Allow USB connection...** is checked in ActiveSync Connection Settings and that the status is “USB is available”.
3. Securely seat the YESTablet 7370 on the cradle.
4. Connect a USB cable between YESTablet 7370’s cradle and the host PC.
5. Enable the USB connection by engaging the **Cradle I/F Enable** button ([Button 6](#)) on the YESTablet 7370. Verify that the Cradle Connection icon is active. **Note:** This icon only signifies that there is a good connection between the 7370 and the cradle. It does not guarantee a completed USB connection to the ActiveSync PC.
6. Use the ActiveSync application to select and initiate the files/software transfer.

**NOTE:** Suspend/Resume or removing the YESTablet 7370 from the cradle will turn off the connection between the YESTablet 7370 and the host PC. The Cradle I/F Enable button needs to be used again to re-establish the connection. Always refer to the Cradle Connection icon on the Windows System Tray for verification.

## Windows Registry

The Windows Registry characterizes the YESTablet, defining supported device components and peripherals, 7370 configuration, applications, and content. Many Registry elements are changed or updated during a typical session of operation.

If the battery charge reaches a very low level (see [Battery and Power Management](#)), Registry contents will be saved from volatile memory to flash ROM automatically, ensuring persistence of the Registry settings, even after total power loss. A typical save process will take about 4 seconds. The [Registries Save/Restore](#) utility in Windows Control Panel can be used to manually save Registry contents to ROM as well.

## Virtual Keyboard

A virtual keyboard can be invoked on the 7370 Desktop to enable text entries into applications and configuration utilities. The keyboard can be displayed or hidden in either of two ways:

- Press the Virtual Keyboard toggle button ([Button 5](#)) at the bottom of the tablet.
- Double-click on the Keyboard/Stylus toggle icon in the System Tray.

When displayed, tap on the desired character or cursor control keys with your stylus.

The displayed keyboard can be toggled in size by tapping on the key just to the right of the space bar. The keyboard nomenclature can be toggled between a standard PC character set and two sets of special characters by tapping on the second (**123**) key and/or the third (**au**) keys to the right of the space bar.

## System Tray Functions

The System Tray is seen at the right end of the Task Bar, just like on a standard Windows PC. It contains icons that are short cuts to certain functions. Double-click on the icon to invoke the function. The standard System Tray has seven icons:

- **Desktop.** This icon is at the far right of the Status Bar. Unlike the other icons, it only requires a single click to minimize the current window and reveal the Desktop.

- **Power Properties.** This icon looks like an AC power plug. It invokes the same utility as the [Power](#) icon in Control Panel.
- **Virtual Keyboard.** This icon looks like a keyboard with a stylus on top of it. It toggles the virtual keyboard on and off, just like the Virtual Keyboard button ([Button 5](#)).
- **Volume.** This icon looks like an audio speaker. It invokes the same volume slider control seen in the [Volume & Sounds](#) utility in Control Panel.
- **Cradle Connectivity.** This icon looks like a house with or without a red **X** on it. The **X** disappears if the **Cradle I/F Enable** button ([Button 6](#)) is pressed while there is a good connection between the 7370 tablet and the cradle. This connection is usually of interest only if you want to establish a USB link with an ActiveSync PC.
- **Mouse Right Click.** This icon looks like a two-button mouse. It invokes a similar icon on the lower right corner of the desktop. The next tap of the stylus will be interpreted as a mouse right-click.
- **Wireless Adapter Connection.** This appearance of this icon varies depending upon the type of wireless adapter in the 7370. It invokes IP address and adapter connection information.

## Mouse Right-Click

As all you Windows users know, a mouse right-click invokes some very convenient menus. You can simulate a mouse right-click in the 7370 in two ways:

- Double-click on the mouse icon in the System Tray. You will then see a mouse icon or a small yellow square in the lower right corner of the screen. The next tap of your stylus will be interpreted as a mouse right-click. You have to repeat this process for every right click.
- Click on the **Alt** key of the virtual keyboard. Now all of your stylus taps will be interpreted as mouse right-clicks until you toggle the **Alt** key again.

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## Applications

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The *YESTablet 7370* has an impressive array of user applications. These applications can be opened by double –clicking on the appropriate Desktop icon or by selecting from **Start → Programs**.

**NOTE:** Some of these applications allow you to store files. Stored files will be retained in the 7370 after a Cold Boot *ONLY* if they have been stored in the **Internal Storage** folder.

### Citrix ICA

You can create, delete, configure, or open Citrix sessions in this application. Citrix sessions are used to run applications on a Citrix server.

**Note:** **Refresh** does not work in the **Edit Connection Details|Server** tab. You will have to type in the name or IP address of the desired Citrix server.

**Note:** You can create a session shortcut on the Desktop from **Edit Connection Details|Title** or from the **Entry** menu. But this shortcut will not be saved after a Cold Boot.

### Inbox (E-mail)

You may choose to use the local email client (Inbox) instead of web-based email solutions.

## Configuration

1. Click on the **Inbox** icon on the Desktop.
2. Open the **Services** menu.
3. Click on **Options**. The Options window will open in the Services tab.
4. Click **Add**.
5. Select the type of email service that you have, **IMAP** or **POP3**, and give it a name if you wish.
6. In the Mail Service Definition window #1, you must provide the required information for **Connection**, **Server**, **User ID**, and **Password**. If you expect to send email, provide the SMTP host name and the Return Address.
7. Click **Next**.
8. In window #2, configure the **Connections Settings** to your preferences.
9. Click **Next**.
10. In the third and last window, configure **Mail Inbox Preferences**. **NOTE:** Files in .TXT, .DOC, .DOT, .RTF, HTML, .GIF and .JPG formats may be read.
11. Click **Finish**.
12. You can now select any of the other tabs, **Compose**, **Read**, **Delete**, and **Storage**, and configure your preferences there.

13. Save your settings using [Registries Save/Restore](#) in the Control Panel.

**NOTE:** You can access an Address Book from **Go** on the Menu bar, or from the icon on the Tool bar. But any entries that you make in the Address Book will be lost after a Cold Boot.

## Inking

Inking allows you to write or sketch freehand as well as type text. You can use either a blank screen or a lined screen. If you use the lined screen, typed text will follow the grid lines on the screen. Inking files can be saved either in .bmp or .jpg formats and can be transmitted via e-mail as attachments. If you want to retain these files after a Cold Boot, you must save them to the **Internal Storage** folder.

Click on **Help** in the Inking Menu bar for extensive details on using Inking.

## Internet Explorer

The IE browser in the 7370 is based on the IE 5.5 engine.

- When you want to surf the web, click on **Internet Explorer** in the Desktop screen – the *YESTablet* 7370 will display the default web site (for example, [www.affirmative.net](http://www.affirmative.net)). You can change the default web site by using **Internet Options** from the **View** menu..
- If you want to leave the Internet to go to Windows CE desktop while keeping the web browser open, just “minimize” the browser window. You can click on the Windows CE Taskbar any time to return to the browser.
- You can examine and manipulate your browser configuration options through **Internet Explorer > View > Internet Options** to optimize your experience.
- You can add favorites from the **Favorites** menu.

**NOTE:** If you make any configuration changes or add any favorites, be sure to save your settings using [Registries Save/Restore](#) in the Control Panel before doing a Cold Boot.

## Media Player

This application allows you to play a media file from local storage, external storage (USB or CompactFlash), or the Web.

## Messenger

This application allows you to engage in Instant Messaging over the Internet. Be sure to save your configuration using [Control Panel|Registries Save/Restore](#) before doing a Cold Boot.

# Microsoft File Viewers

These five viewer applications allow you to open and view common document files. You cannot save files from these applications.

- **Excel.** Used to view .xls spreadsheet files.
- **Image.** Image Viewer is used to view image files and arrange them as a slide show. See Image Viewer Help for details.
- **PDF.** Used to view Acrobat .pdf document files.
- **PowerPoint.** Used to view PowerPoint .ppt presentation files.
- **Word.** Used to view .doc or .rtf documents.

# Microsoft WordPad

This application is a “lite” version of the standard PC WordPad.

# Recorder

This is an audio recorder that records a sound sequence from the built-in microphone and stores it as a .wav file.

1. To begin recording, click on the **Record** icon or select **Record** from the **Playback** menu.
2. To stop recording, click on the **Stop** icon or select **Stop** from the **Playback** menu.
3. You can play your recording back by clicking on the **Play** icon or selecting **Play** from the **Playback** menu. **Note:** You cannot play your recording in Recorder after you have saved it. You will have to use Media Player.
4. You can save your recording in two ways:
  - a. **For temporary storage** (file will be lost after a Cold Boot):
    - i. Click on the **Open** icon or select **Create** from the **File** menu.
    - ii. Enter a file name and it will be saved in the **Windows** folder of My Computer.  
**Note:** You can save these .wav files only to the **Windows** folder.
  - b. **For permanent storage:**
    - i. Exit Recorder by clicking on **X**.
    - ii. You will be asked if you want to save to file. Click on **Yes**.
    - iii. You will see the Save Wave File dialog box. Browse to the **InternalStorage** folder and open it.
    - iv. Name your new file in the **Name** field, and click on **OK**. The .wav extension will be added automatically.

# Remote Desktop Connection

You can create, delete, configure, or open RDP/RDC sessions in this application. These sessions are used to run applications on a Microsoft Terminal Server or to connect to a PC running Microsoft Windows XP Pro. **Note:** You must save your session configurations to the **Internal Storage** folder if you want to preserve them after a Cold Boot.

# Transcriber

This is Microsoft's natural handwriting recognitions solution. It recognizes words from its integrated dictionary and allows you to write in cursive, print, or mixed handwriting. See Transcriber Help for extensive details on using Transcriber.

**Note:** To avoid confusing mouse taps with handwriting entries, it is advised that you start your application (e.g., WordPad) before activating Transcriber.

# YES*term* IP Administrator

This application allows you to add, delete, configure, and open YES*term* IP 5250 and 3270 terminal emulation sessions. See the extensive section entitled [YES\*term\* IP Terminal Emulation](#) for details on configuring and using these emulation sessions.

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## YESterm IP Terminal Emulation

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YESterm/IP terminal emulation provides powerful Telnet TN5250e and TN3270e TCP/IP display and printer solutions developed by Affirmative Computer Products. These emulations provide YES<sup>table</sup> 7370 users with the capability to connect to AS/400, iSeries, 3290, and zSeries host computers via the TCP/IP protocol over Local Area Networks. Up to four YESterm/IP emulation sessions of any mix can be configured and activated at the same time, each to a different host if desired. The configuration of Telnet sessions is made simple by a Wizard application that guides the user during the configuration process.

## YESterm IP Administrator

The YESterm IP Administrator is used to add, delete, configure, and activate Telnet emulation sessions. It is opened automatically when a [Cold Boot](#) is executed on the 7370, and the following window appears on the Desktop.

- **Add....** Click on this button to add a Telnet emulation session. A New Connection window will appear with a drop-down list containing four session types. Choose one of the four and then click on **OK**. You will then be guided through a Setup Wizard. The Setup Wizards are described under the sections on the individual session types. You can add up to four YESterm/IP sessions of any mix, and each can be connected to a different host.
- **Remove....** Click on this button to delete the highlighted session. You will be asked to confirm your decision.
- **Edit....** The Setup Wizards provide a basic set of setup parameters. Highlight a session and then click on **Edit** to configure the complete set or to make changes to the existing configuration. Configuration details are described under the sections on the individual session types.
- **....** Click on this button to open the Administrator Properties window.
  - **Enable Administrator Password.** Check this box to enable a password that will be invoked whenever someone tries to add, remove, or edit a session, or tries to open the Administrator Properties window. Enter a password and confirm it in the provided fields.
  - **Administrator Autostart.** This check box has no effect, since the Administrator is always automatically started on a Cold Boot.

## TN5250e Emulation

The YESterm/IP TN5250e emulation provides enhanced functions for a wide range of IBM terminals and a "true" IBM 3812 Printer emulation with the support of all the enhanced features normally available only on very expensive 5250 Printer Interfaces. In addition, YESterm/IP TN5250e supports

the "Enhanced Display Auto-Signon and Password Encryption" allowing a secure connection to the AS/400, with no need of any SSL option.

## AS/400 Requirements

- OS/400 V3R2 with appropriate PTFs or higher

## iSeries Requirements

- No special requirements.

## Display Session Characteristics

- IBM emulations supported: 5251, 5291, 3196, 3180-2, 3477-FG, 3477-FC.
- Includes numerous resident national keyboard templates and Code Pages.
- Includes enhanced keyboard mapping and customization, using Shift, Caps Lock, Alt, Ctrl, function keys, etc.
- EURO (€) symbol supported.
- Includes enhanced copy and paste options.
- Includes Hotspot, Macros and programmable Keypad.
- Includes tools for keyboard mapping and attributes editing.
- Includes enhanced customizable Hot Spot feature.
- Includes enhanced Record/Playback feature.
- *Supports "Enhanced Display Auto-Signon and Password Encryption" allowing a secure connection to the AS/400.*

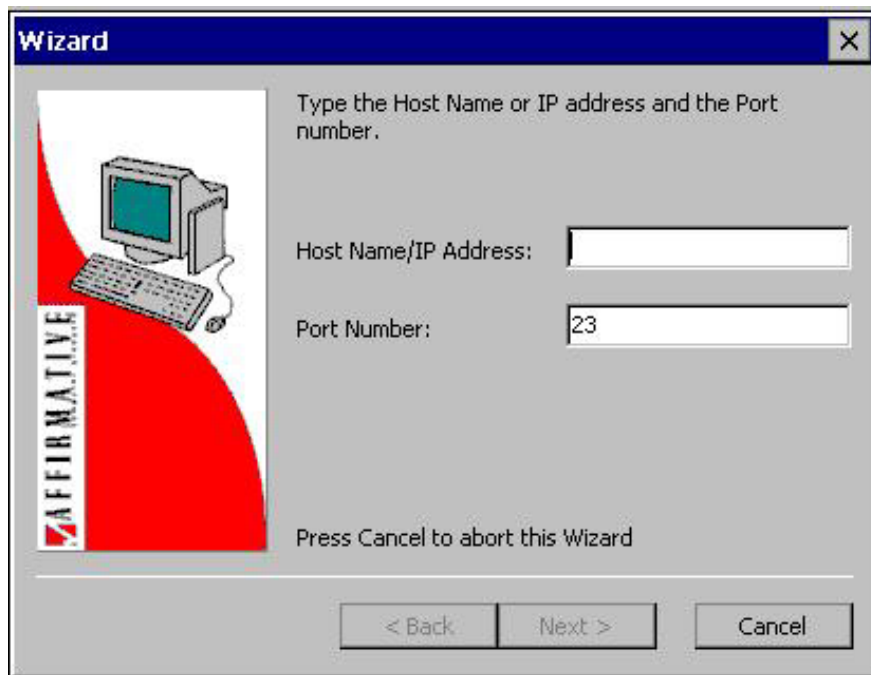
## Printer Session Characteristics

- IBM Emulation supported: 3812.
- Support for continuous forms, multi drawers, envelope, manual feeders, simplex/duplex, auto page orientation, and COR (Computer Output Reduction).
- Supports CPI, LPI Override and LQ, NLQ.
- Supports Host Print Transform.
- Supports Hex Pass-Through (HPT), with customizable leading and ending sequences and support of "non-printable characters".
- Supports the EURO symbol (€).

## Display Session Setup

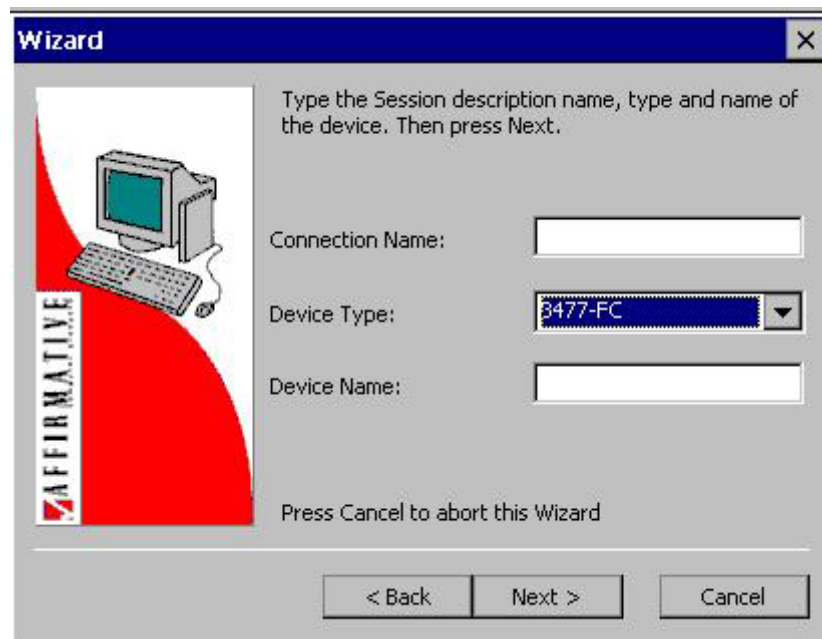
Setup and configuration are initiated from the YES<sup>term</sup> IP Administrator window. Click on **Add**. You are faced with a choice of four emulation types. After choosing **TN5250e Display**, a wizard will guide you through setup. You can have a maximum of four emulation sessions, with any mixture of 5250 and 3270 emulations.

A Setup Wizard will take you through three screens. Activate **Next** to go to the next screen, **Back** to return to the previous screen, and **Cancel** or the **Esc** key to abort the process.



**Display Setup Screen #1**

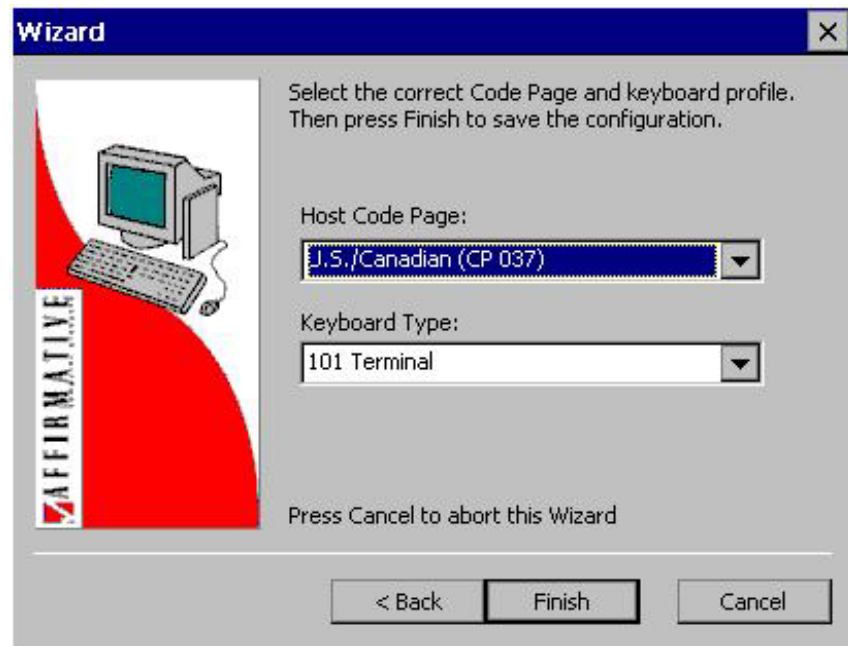
- **Host Name/IP Address:** If you have a local DNS or WINS server, you can type in the AS/400 host network name. Otherwise, type in the IP address of the AS/400 server.
- **Port Number:** Use the default of **23** unless directed to do otherwise by your AS/400 administrator.



**Display Setup Screen #2**

- **Connection Name:** This is the friendly name that will appear in the YESterm IP Administrator screen.

- **Device Type:** Select one from the drop-down list. The default **3477-FC** works well unless you have special needs.
- **Device Name:** If you are using named sessions, enter the session name here.



**Final Display Setup Screen**

- **Host Code Page:** Choose the applicable country from the drop-down list.
- **Keyboard Type:** It is recommended that you choose the default **101 Terminal** keyboard type.

This concludes the setup parameters covered by the wizard. However, you can configure many more parameters in each Display Session by highlighting the connection name in the YESterm IP Administrator window and activating **Edit**.

## Display Session Configuration

Open YESterm IP Administrator, highlight a display session, and click on **Edit** to see a very close resemblance to the following window.



**Display Session Properties** [?] [OK] [X]

Connection | General | Attributes | Hot Spot | Key Pad | Sign On | Advanced

**Connessione Host**

Host Name/IP Address: 100.100.100.1

Port Number: 23

Encryption Level: None

**Session**

Connection Name: 5250\_101

Device Name:

Device Type: 3477-FC

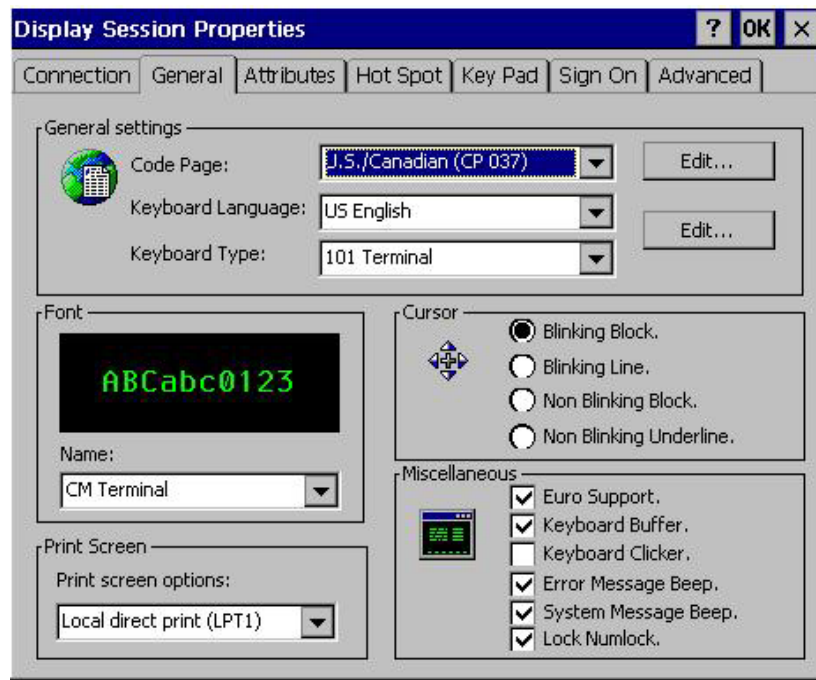
**Connection Properties Sheet**

## Connection

Five of the seven properties on this property sheet were already configured in the Setup Wizard, although you can change them here if you wish. The other two properties are:

- **Encryption Level.** If you want to use sign-on encryption, choose an appropriate encryption level from the drop-down list. Your AS/400 must also be configured for this encryption level.
- **Automatic Startup** (not shown above). Check this square if you wish the session to automatically start when the *YESTerm* IP Administrator window is opened. **Note:** Typically the session will report a failed connection after a [Cold Boot](#) because it takes several seconds after bootup for the wireless adapter to connect to an access port. You will have to reconnect the session after the adapter has connected to the access port.

# General



General Properties Sheet

## Code Page

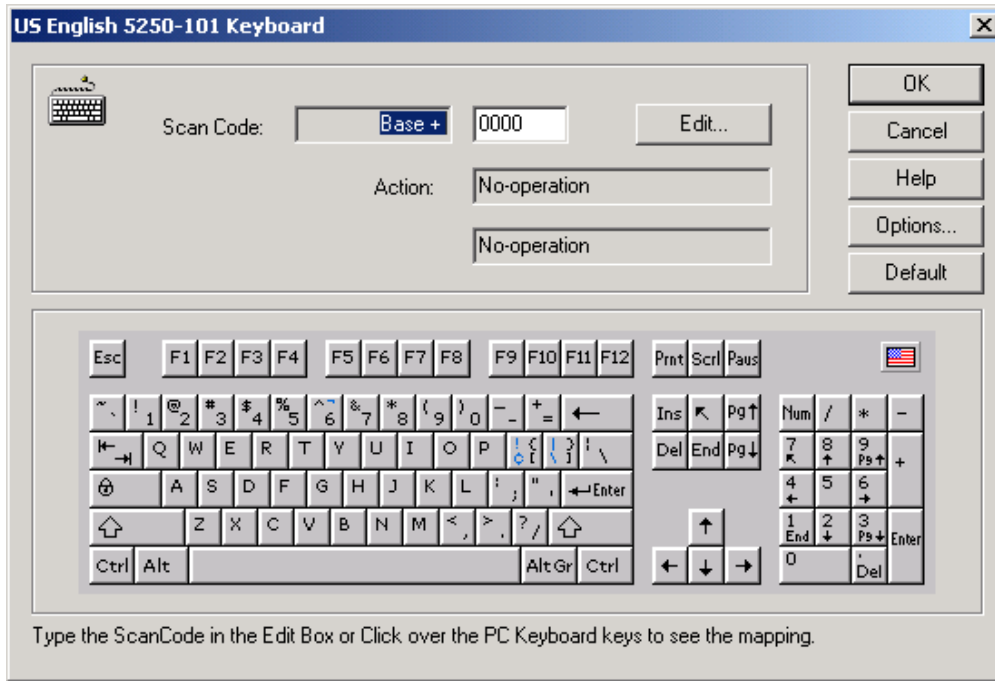
YES*term*/IP supports numerous language Code Pages. The Code Page selected here from the drop-down list should be the same one configured on the AS/400 for this specific device. Ignore the Code Page **Edit** button, since Code Page editing is not supported in the 7370.

## Keyboard Language

YES*term*/IP supports several non-English keyboard languages. If you wish to use one of them, select it from the drop-down list.

## Keyboard Type

YES*term*/IP supports 3 different keyboard types (101 PC, 101 Terminal, and 122 Key), but **101 Terminal** is recommended for an experienced 5250 user on the YES*tablet* virtual keyboard. It is also possible to create a custom keyboard map, if desired. Activate **Edit** to get to the keyboard map page.



**Keyboard Map Page for 101 Terminal U.S. English Keyboard**

You can check the current mapping in one of two ways:

- **Scan Codes.** The keyboard sends a unique scan code to the terminal when a key is pressed. If you want to see what key is associated with a specific scan code, type that code in the Edit box, shown highlighted in the above figure. The associated key will highlight, and any command mapped to that key will show in the Action boxes. Of course, most people couldn't care less about scan codes, so this method may be of little use to you.
- **Mouse Clicks.** Position the cursor over the key of interest and click. The scan code for that key will show in the Edit box, and any mapped command will show in the Action boxes. If you want to see the effect of that key plus a modifier key (**Shift**, **Alt**, **Ctrl**), click on the modifier key and then on the action key.

**Note:** Since the virtual keyboard does not support a **RightControl** key, it is recommended that the **Enter** command be remapped to the **End** keys even though this is not the default. Typically, this remapping will already be done when you receive a new YESTablet 7370.

## Edit

Activate this button to initiate custom keyboard mapping. See: [How To ...|Create a Custom Keyboard Map](#) for the mapping procedure.

## Default

This button will erase any custom mapping that exists in this map. Everything goes back to defaults. Obviously, you want to be very careful around this key if you have done much custom mapping.

## Options



**Keyboard Options Dialog Box**

This button opens a special dialog box where you can specify the Host Keyboard Language Option, and enable the Multinational character set. Keyboard ID is not used in the 7370.

## Font

Select one of two Font styles to be used as the default Font for the Display Session.

## Print Screen

From the drop-down list, select how the Print Screen function is to be performed:

- **Local Direct Print.** This selection is not valid in the 7370, since there is no LPT1 port.
- **Through the Host.** Make this selection if you wish to print to a remote printer through the AS/400.
- **Extended Local Print.** This selection provides local printing on steroids. To use it, you must create a printer emulation session. This session is used only for LAN printing, and it allows you to format your print output to the LAN printer. See [Printer Emulation](#) for more information.
- **Function Disabled.** Screens cannot be printed.

The Print Screen function can be activated from:

- Emulator Button bar.
- Emulator Menu bar (**File|Print**)
- Keyboard if a key has been remapped to the **Print** command.
- Key Pad, if it contains a corresponding button.

## Cursor

Select the type of cursor you want to use.

## Miscellaneous

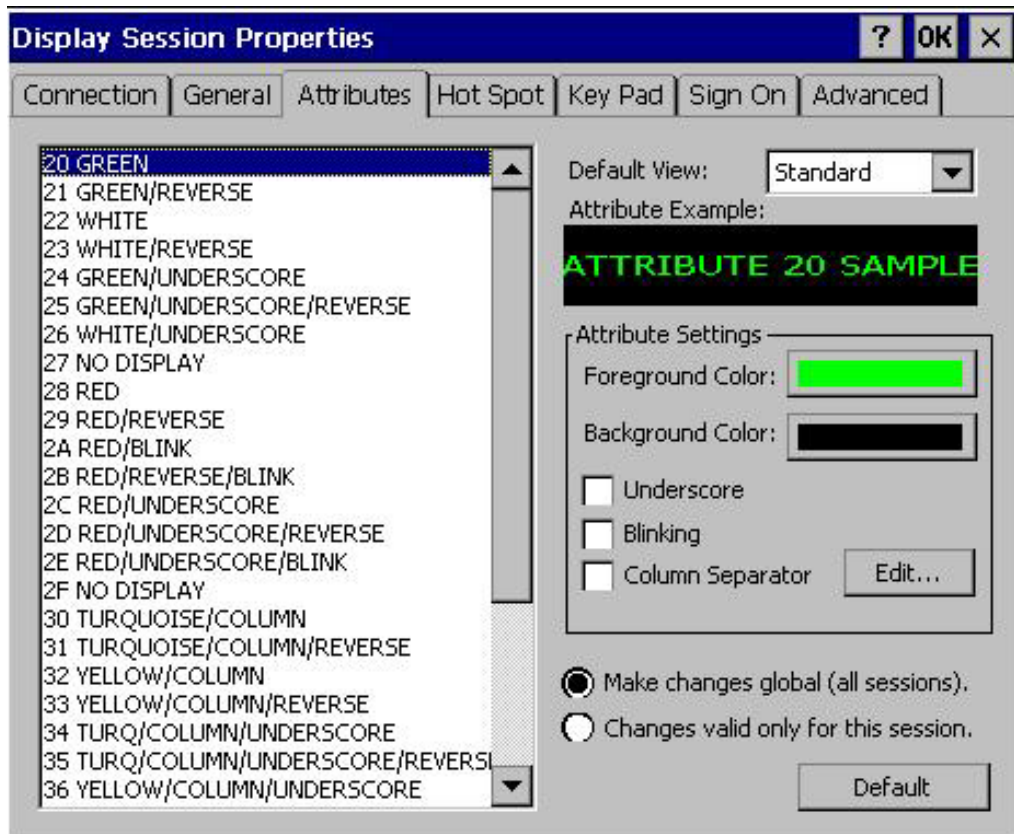
- Euro Support. When this option is enabled, you will enter the Euro symbol when you press **Alt+E**.
- Keyboard Buffer. This option enables Typeahead, but this option is of little use with a virtual keyboard.
- Keyboard Clicker. If this option is enabled, you can hear an enhanced click every time you press a

key on the keyboard.

- Error Message Beep. If this option is enabled, you can hear a "Beep" when an input error is made.
- System Message Beep. If this option is enabled, you can hear a "Beep" when a message is received from the Host.
- Lock NumLock. This option has no effect since there is no NumPad in the virtual keyboard.

## Attributes

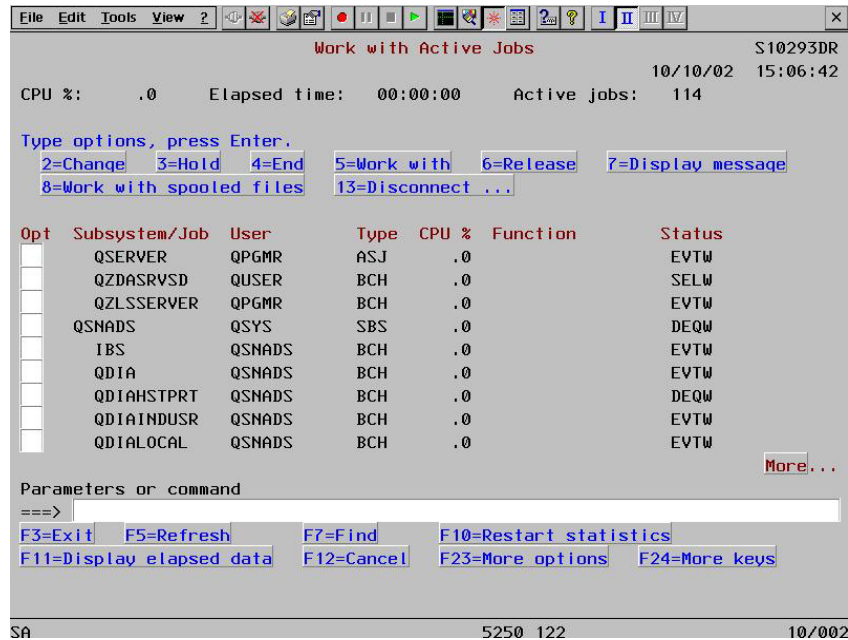
This properties sheet allows extensive editing of your screen appearance. At the lower right corner of this sheet are two radio buttons allowing you to make these edits global for all sessions, or restricting their use to this session only.



Attributes Properties Sheet

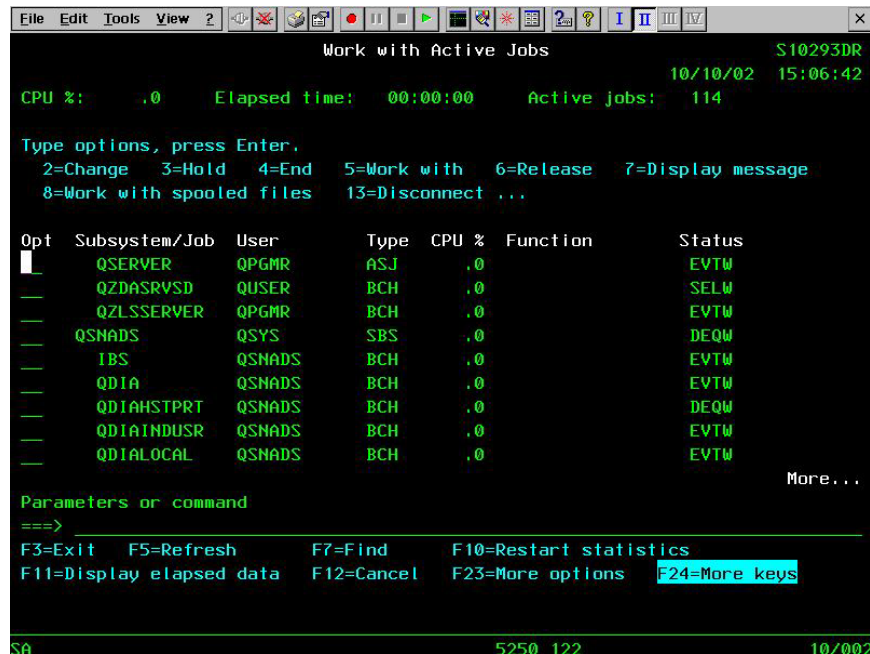
## Default View

- Advanced (Recommended).** This default selection provides a “graphics” appearance for your session screens, resembling a Windows application. All the [Hot Spots](#) are shown as raised buttons. Advanced View is the most productive way to operate in YESTablet emulation sessions since all menu items, Function Keys, sub-file options, and custom hot spots are always visible and accessible as raised buttons. The use of custom Hot Spot keywords, which can be linked to keyboard commands, often eliminates the need to use the virtual keyboard and reduces the number of screen taps required to run applications.



Display Emulation Screen with Advanced View and Hot Spots

- Standard (Not Recommended).** This selection provides the standard green screen “text” appearance for your session screens, duplicating terminal screens. Hot Spots are invisible unless the mouse cursor is placed over one of them, and then only that one Hot Spot is visible. Obviously, operating within the Standard view can become tedious if you have any custom Hot Spots or are unfamiliar with the default Function Key and Option Hot Spots.



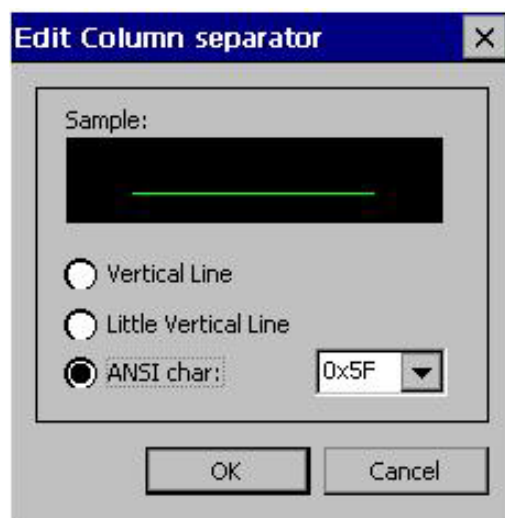
Display Emulation Screen with Standard View and Hot Spots

Either default view can be overridden from the emulation screen Toolbars if desired.

## Attribute Settings

Set the appearance of the attribute font on the screen. This includes properties such as foreground and background color, blinking, underscore, and the use of column separators. You will see a preview of the “new look” in the Sample field. Be careful with the colors you choose; a wrong choice can cause text or fields to be invisible on the screen because of lack of color contrast.

- Edit (Column Separator). Activate this button to invoke this dialog box.



Edit Column Separator Dialog Box

Make your choices and view them in the Sample field.



# Hot Spot

Changes made in this property sheet affect all sessions. There is only one Hot Spot configuration per emulator, not one per session.

**Display Session Properties** [?] [OK] [X]

Connection | General | Attributes | **Hot Spot** | Key Pad | Sign On | Advanced


Hot Spot List

KeyWord	Text	Action Type	Action ID	C.80	C.132
More		Cmd	Roll Up	68	120
+		Cmd	Roll Up	80	128
Bottom		Cmd	Roll Down	70	120
-		Cmd	Roll Down	80	128
End		Cmd	Roll Down	70	120
Enter		Cmd	Enter	70	120
Weitere		Cmd	Roll Up	68	120

Buttons: Add..., Edit..., Remove..., Default

☐ Enable Hot Spots

Hot Spot Item:

 Hot Spot Key: More > Col (80 W Screen)

Text String: [ ] 68

Action: Command > Col (132 W Screen)

Roll Up 120

**Hot Spot Properties Sheet**

A Hot Spot is an area of the session window on which you can single-click the left mouse button to execute a command or function. Actually, a Hot Spot is the result of a text search by the emulator for the specified Keyword on the screen. The Function Key and Numeric fields (from 1 to 99 followed by a "period" or "space") Hot Spots are active by default, but you can add other Hot Spot keys and/or edit/remove them.

A Hot Spot can be used to:

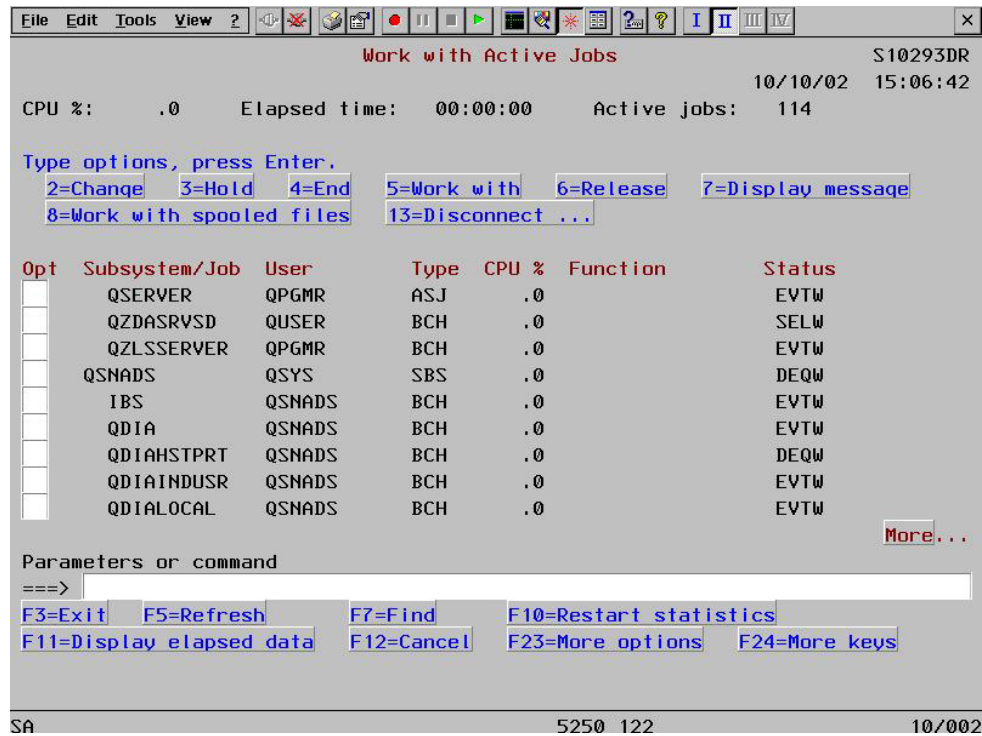
- Simulate a function key.
- Execute a Recorded Sequence that has the same name as the word that you select on the screen.
- Execute a command that you select.

To enable the use of Hot Spots, you must check the **Enable Hot Spots** box.

## **Advanced View (Default)**

Hot Spots are displayed as raised buttons if the **Advanced View** option is selected in the Attributes tab or the emulation screen Toolbars. Advanced View is the most productive way to operate in YESTablet emulation sessions since all menu items, Function Keys, sub-file options, and custom hot spots are always visible and accessible as raised buttons. The use of custom Hot Spot keywords, which can be linked to keyboard commands, often eliminates the need to use the virtual keyboard and reduces the number of screen taps required to run applications.

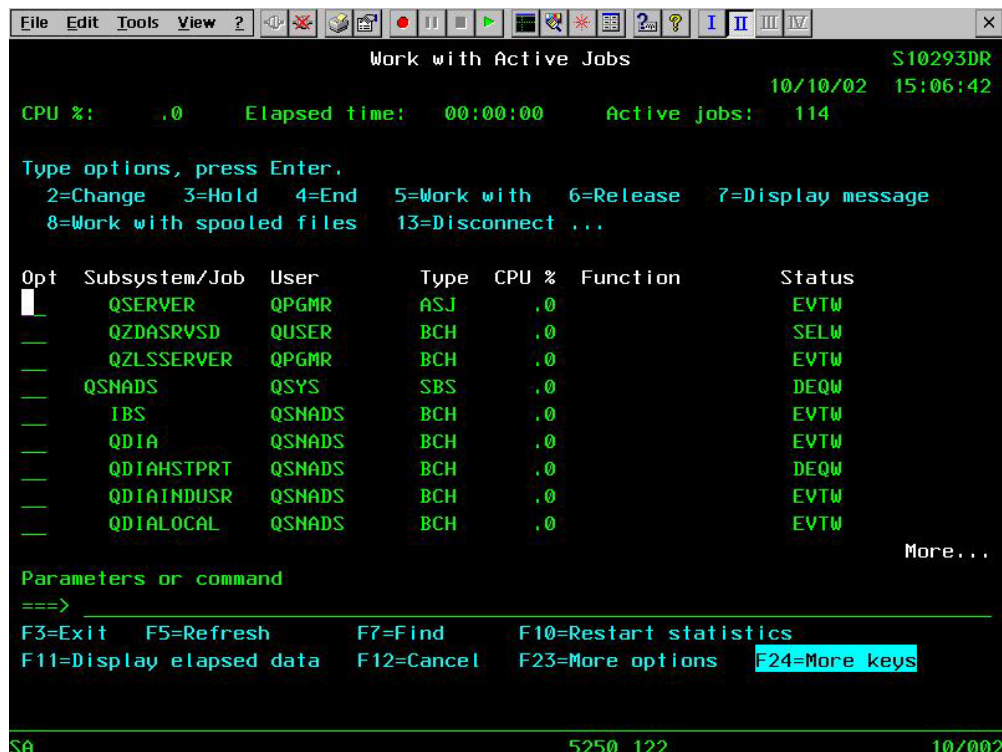




Emulation Screen with Advanced View and Hot Spots

### Standard View (Not Recommended)

If **Standard View** is selected in the Advanced tab or the emulation screen Toolbars, Hot Spots are invisible until the mouse cursor is dragged over them, and then only the one under the mouse cursor becomes visible.



Emulation Screen with Standard View and Hot Spots

**NOTE:** Standard View is not recommended because, in Standard View, Hot Spots are visible only when the stylus is positioned directly over the Hot Spot. Advanced View connects Hot Spots to full-time visible buttons, making the Hot Spot feature more intuitive and easier to use.

To Edit a Hot Spot:

1. Select the Function Key you want to modify.
2. Click on **Edit**.
3. If you want to send a Text String to the host every time you press the Function key, type it into the Text String field.
4. Select the Action from the Drop-Down List
5. From the drop-down list, select the command or the Recorded sequence that you want to associate to the Hot Spot key.
6. In c.80, specify where, in an 80-column screen, the text search engine should start looking for the specified Keyword. For example, the default start for the word “More” is column 68. So if there is a word “More” to the left of that column, it will not be defined as a Keyword or Hot Spot.
7. In c.132, specify where, in a 132-column screen, the text search engine should start looking for the specified Keyword.
8. Click on **Accept**.
9. Click on **Apply**.

To Remove a pre-defined Hot Spot:

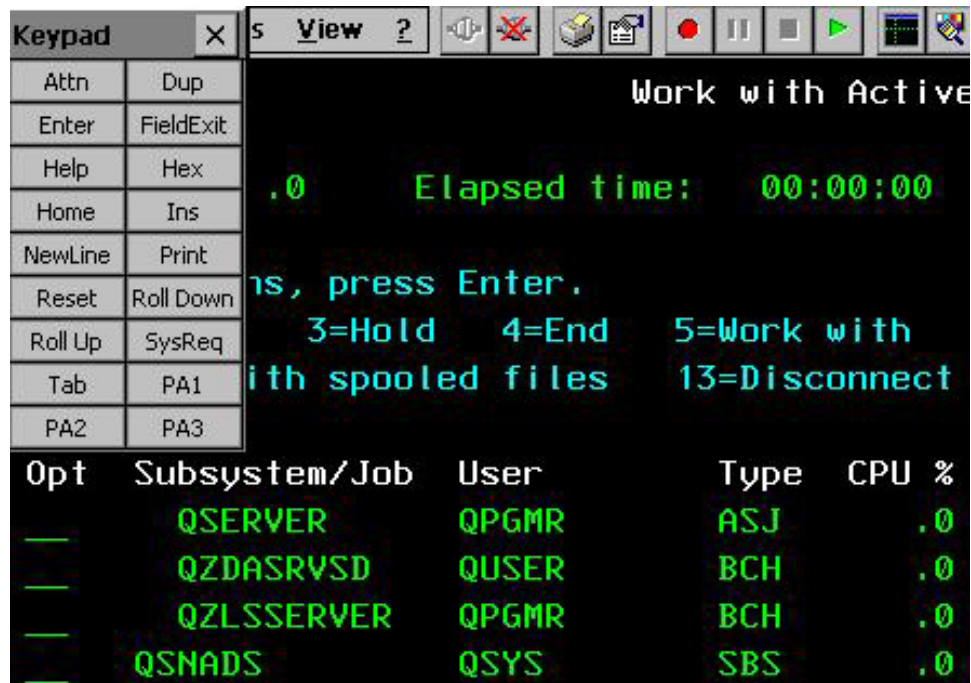
1. Select the Function Key.
2. Click on **Remove**.

To Add a Hot Spot:

1. Click on **Add**.
2. Type the Hot Spot Key Word you want to detect. If you want to send a Text String to the host, type it into the Text String field.
3. Select the Action from the Drop-Down List
4. From the drop-down list, select the command or the Recorded that you want to associate to the Hot Spot.
5. Specify the text search start columns in c.80 and c.132.
6. Click on **Accept**.
7. Click on **Apply**.

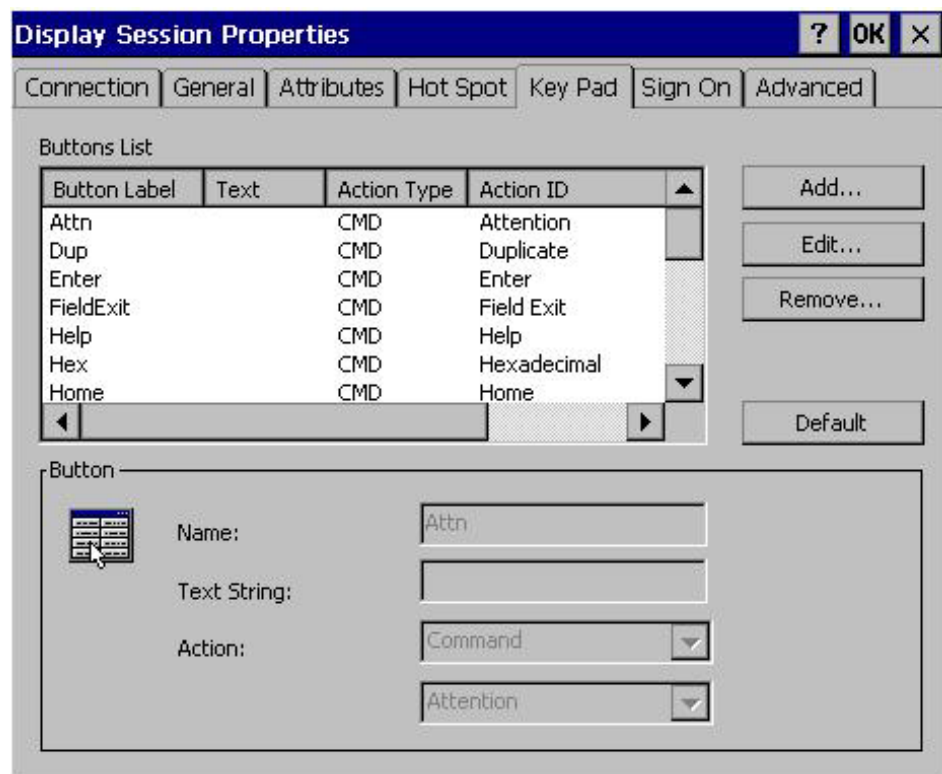
## Key Pad

A Key Pad is a small window with several customizable push buttons, each having an assigned function. You can make it visible on the screen by clicking on the **Key Pad** button on the Buttons toolbar, or selecting **View/Key Pad** from the Menu bar. You can choose a function from the Key Pad with your mouse instead of typing the equivalent command, pressing a key, or running a Recorded Sequence.



Emulation Screen with Key Pad

The Key Pad tab allows you to change the characteristics of the pop-up Key Pad. Changes made in this property sheet affect all sessions. There is only one Key Pad configuration per emulator, not one per session.



Key Pad Properties Sheet

To Edit a Key Pad button:

1. Select the Function Key you want to modify from the Button Label list.
2. Click on **Edit**.

3. If you want to send a Text String to the host every time you press the Function key, type it into the Text String field.
4. Select the Action from the Drop-Down list
5. Select the command or the Recorded sequence from the Drop-Down list that you want to associate to the Hot Spot key.
6. Click on **Accept**.
7. Click on **Apply**.

To Remove a Key Pad button:

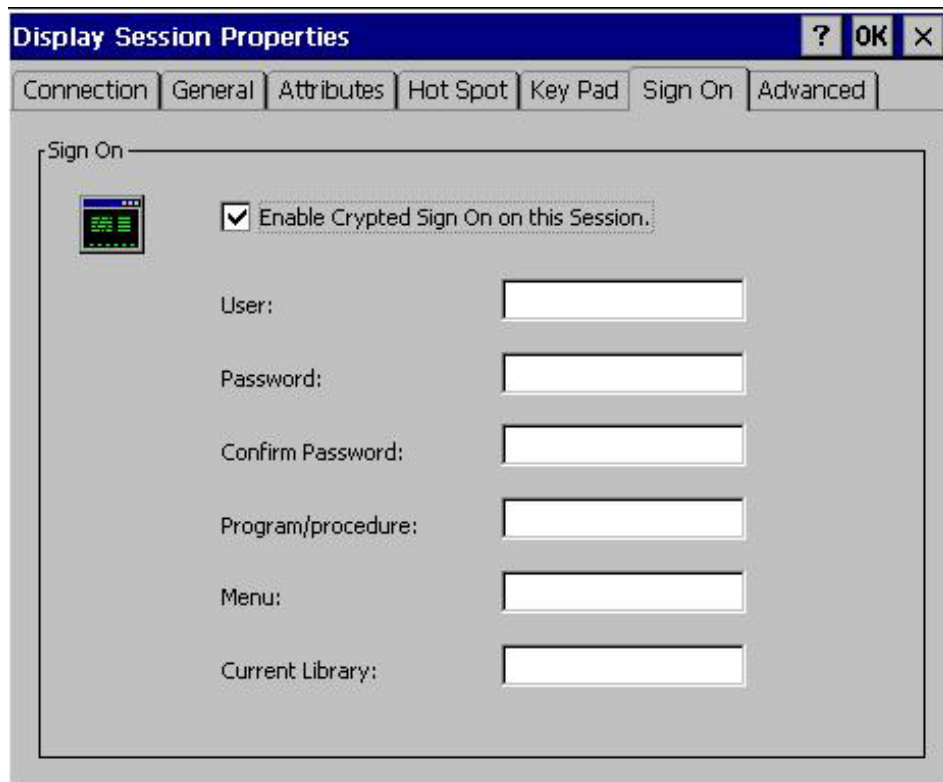
1. Select the Function Key you want to remove.
2. Click on **Remove**.

To Add a Key Pad button:

1. Click on **Add**.
2. In the Name field, type the text you want to associate to the button when you pop up the Key Pad.
3. If you want to add a Text String to be sent to the host, type it into the Text String field.
4. Select the Action from the Drop-Down List.
5. From the Drop-Down list, select the command or the Recorded sequence that you want to associate to the Key Pad button.
6. Click on **Accept**.
7. Click on **Apply**.

## Sign On

The Sign On feature of the emulator uses the "Enhanced Display Auto-Signon and Password Encryption" feature of the AS/400 to allow a secure connection to the AS/400 without using SSL.



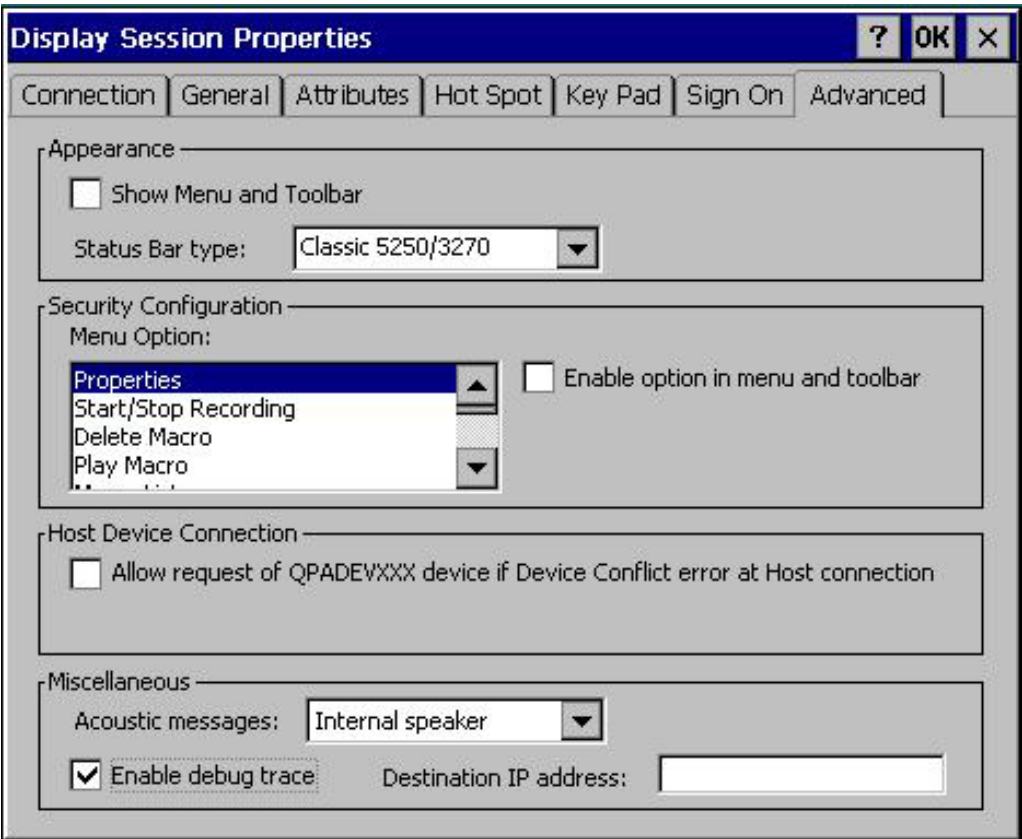
The screenshot shows a Windows-style dialog box titled "Display Session Properties". It has several tabs: "Connection", "General", "Attributes", "Hot Spot", "Key Pad", "Sign On", and "Advanced". The "Sign On" tab is currently selected. Inside the dialog, there is a "Sign On" section with a small icon of a terminal screen. To the right of the icon is a checkbox labeled "Enable Crypted Sign On on this Session." which is checked. Below this are six text input fields, each with a label to its left: "User:", "Password:", "Confirm Password:", "Program/procedure:", "Menu:", and "Current Library:". The dialog box has standard "OK" and "X" buttons in the top right corner.

Sign On Properties Sheet

For this feature to work to your benefit, the "Remote Signon" parameter of the AS/400 configuration should be enabled. To verify if this parameter is enabled, use the WRKSYSVAL command. To enable this parameter, you may use the following command:  
CHGSYSVAL SYSVAL(QRMTSIGN) VALUE(\*VERIFY)

# Advanced

The Advanced property sheet allows enabling/disabling of several useful features.



Advanced Properties Sheet

## Appearance

- **Show Menu and Toolbar.** *If you want to eliminate the “Windows” look, uncheck this box. In addition to changing the appearance, this will also prevent the user from using Hot Spots or Key Pad, and from viewing the keyboard mapping.*
- **Status Bar type.**
  - **Classic 5250.** *Provides the classic “green screen” look in the status bar.*



- **Graphic.** *Provides the “Windows” look to the status bar and displays the connection name.*



# Security Configuration

YES*term*/IP provides extreme flexibility in allowing, or prohibiting, the user to view and change the characteristics of the display screen. If you choose to show the Menu and Tool bars in Appearance above, you can choose to individually enable or hide every option item shown in the Menu bar, and its corresponding button in the Buttons bar. The default is that all options except Properties are enabled.

1. Select the appropriate item from the drop-down list
2. Click on the **Enable...** check box. to insert a check in the check box, or to remove one that is already there.

# Host Device Connection

When using named devices, careless name assignment or unusual session activation circumstances, such as a power failure/reconnect, can cause two sessions to request the same name. In such a case, the AS/400 will not open the second session. Checking the **Allow request of....** box will cause the emulator to request a virtual assignment for the second session if it is rejected because of name conflict. This doesn't fix the basic problem, but at least the session can be opened.

IBM recommends setting the AS/400 "Keep Alive Timeout" to 40 seconds in order to facilitate reconnection of named sessions. The AS/400 command CHGTELNA, executed from an AS/400 green screen, followed by the F4 key will display the screen that controls the setting of this parameter.

# Miscellaneous

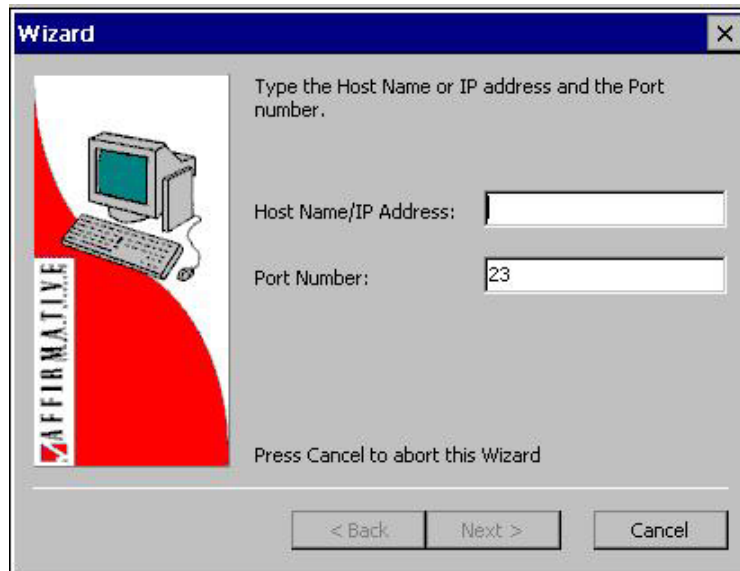
None of these items are applicable in the 7370.

# Finale

Don't forget to save the session and all these configuration properties by executing a [Registries Save](#) before your next [Cold Boot](#).

# Printer Session Setup

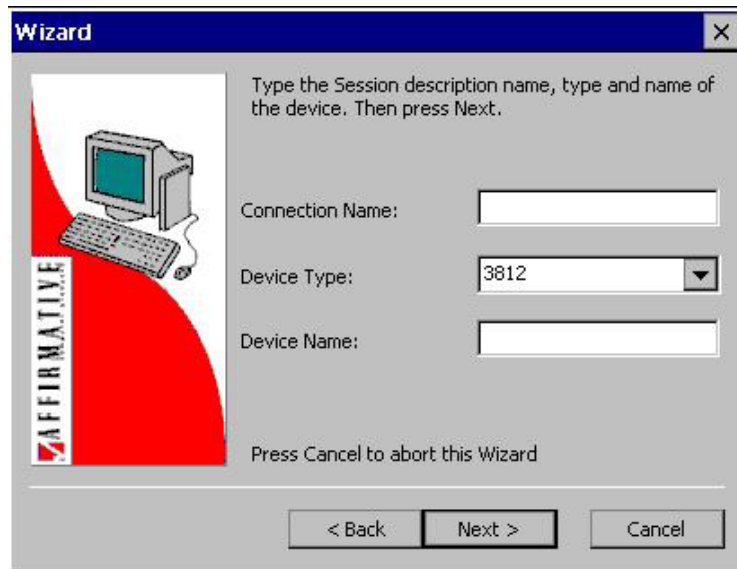
You can have multiple local printers, but you must create a printer session for each one. Setup and configuration are initiated from the YESTerm IP Administrator window. Click on **Add**. You are faced with a choice of four emulation types. After choosing **TN5250e Printer**, a wizard will guide you through setup. You can have a maximum of four emulation sessions, with any mixture of 5250 and 3270 emulations. A Setup Wizard will take you through three screens.



**Printer Setup Screen #1**

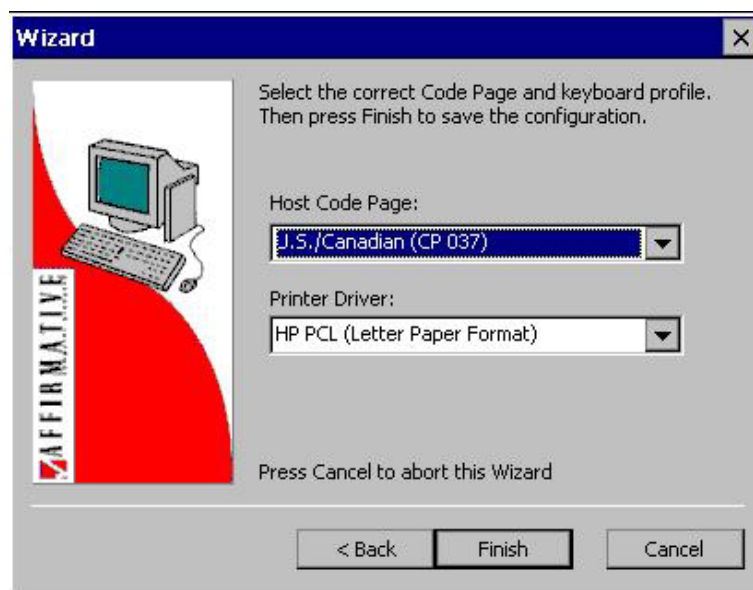
- **Host Name/IP Address:** If you have a local DNS server, you can type in the AS/400 host network name. Otherwise, type in the IP address of the AS/400 server. If you are creating this session for [Extended Local Printing](#), an IP address is irrelevant, but you must enter at least one character to satisfy the Wizard.
- **Port Number:** Use the default of **23**.





**Printer Screen #2**

- **Connection Name:** This is the friendly name that will appear in the Terminal Connection Manager screen.
- **Device Type:** Only **3812** is available for TCP/IP devices.
- **Device Name:** If you are using named sessions, enter the session name here.



**Final Printer Setup Screen**

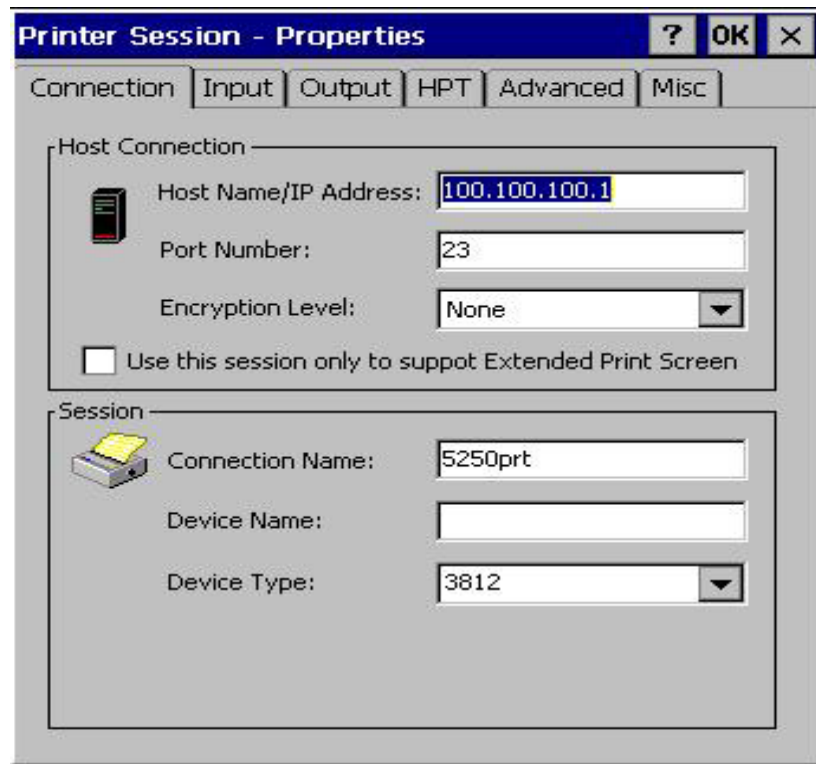
- **Host Code Page:** Choose the applicable country from the drop-down list.
- **Printer Driver:** If you are doing extended local Print Screens, or if you are not using the AS/400 Host Print Transform, choose a driver here that is compatible with the LAN printer. If you can't find one in the list, try **Empty Driver**.

This concludes the configuration parameters covered by the wizard. However, you can customize many more parameters in each Printer Session by highlighting the connection name in the YESterm IP Administrator and activating **Edit**. You will see the Printer Sessions Properties sub-window with six property sheet tabs



# Printer Session Configuration

Open YESTerm IP Administrator, highlight a printer session, and click on **Edit** to see a very close resemblance to the following window.



The screenshot shows a window titled "Printer Session - Properties" with a standard Windows-style title bar containing a question mark, "OK", and "X" buttons. Below the title bar are several tabs: "Connection", "Input", "Output", "HPT", "Advanced", and "Misc". The "Connection" tab is currently selected. The window is divided into two main sections. The top section, labeled "Host Connection" with a small server icon, contains the following fields: "Host Name/IP Address:" with the value "100.100.100.1", "Port Number:" with the value "23", "Encryption Level:" with a dropdown menu showing "None", and a checkbox labeled "Use this session only to support Extended Print Screen" which is currently unchecked. The bottom section, labeled "Session" with a small printer icon, contains the following fields: "Connection Name:" with the value "5250prt", "Device Name:" with an empty text box, and "Device Type:" with a dropdown menu showing "3812".

Connection Properties Sheet

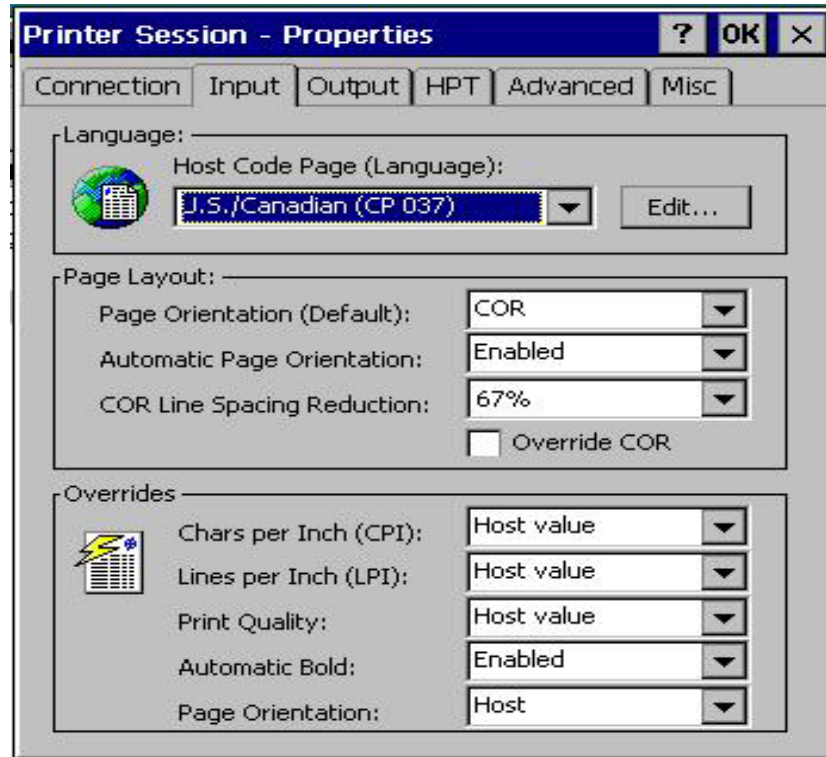
## Connection

Five of the eight parameters on this property sheet were already configured in the Setup Wizard, although you can change them here if you wish. The additional three parameters are:

- **Encryption Level.** If you want to encrypt the network traffic with the host, choose an appropriate encryption level from the drop-down list. Your AS/400 must also be configured for this encryption level.
- **Use this session to support....** If this session is used for [Extended Local Printing](#), check this box.
- **Automatic Startup** (not shown above). Check this square if you wish the session to automatically start after a [Cold Boot](#). But you may find this of little value, since typically the session will report a failed connection because it takes several seconds after bootup for the wireless adapter to connect to an access port.

# Input

The Input tab allows you to define specific parameters that affect the appearance of the printed page.



Input Properties Sheet

## Language

YES<sup>term</sup>/IP supports a number of different Code Pages. The Code Page selected here should be the same as that configured on the AS/400 for the specific device. Ignore the Code Page **Edit** button, since Code Page editing is not supported in the 7370.

## Page Layout

Set the Default Page layout. Parameters are:

- **Page Orientation.** Select from Portrait, Landscape, and COR (Computer Output Reduction). **Note:** If you are using an impact dot-matrix printer, **Portrait** is recommended.
- **Automatic Page Orientation.** This option is enabled by Default. **Note:** If you are using an impact dot-matrix printer, it is recommended that this be **Disabled**.
- **COR Line Spacing Reduction.** This feature solves the problem of nonprintable margin area on the printer. **Note:** It is recommended that this feature be used only with laser printers.
- **COR Override.** This function corresponds to the IBM 3812 configuration parameter and defines that a job with draft quality is printed in COR.

## Overrides

If you wish to override the host system output settings, you can do so here.

**Note:** If you are using an impact dot-matrix printer, it is recommended that you set Print Quality to **Force Draft**.

# Output



Output Properties Sheet

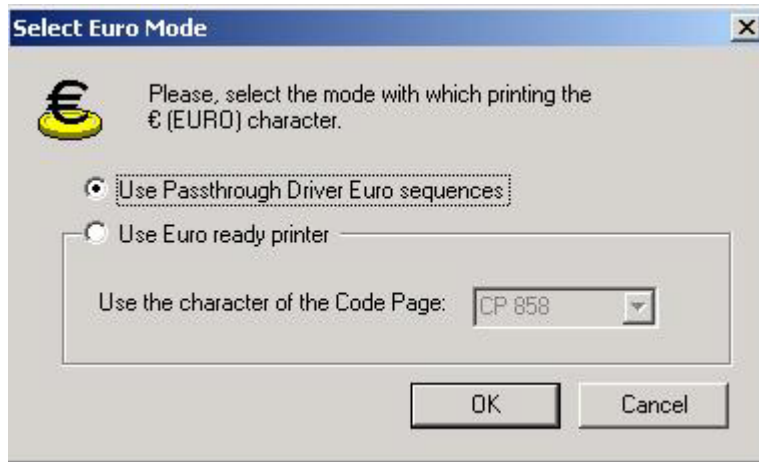
## Time Out

This parameter defines a timer (in seconds) that starts to count down every time, during a printing job, that the host system stops sending data. If no more data are received within the timeout value selected, the Printer Session will assume that the print job is finished, and a Form Feed command is sent to the printer.

## Printer Driver

The Passthrough Drivers offered here, specifically developed by Affirmative Computer Products, generate a standard text data stream. This means that everything is sent to the printer in text mode allowing better control of the printer and better performance.

- **Select a PassThrough Driver....** YESterm/IP provides a drop-down list of pre-configured Printer Profiles for your selection and use. Even if your printer is not on this list, it probably emulates one of the listed printers. **Note:** There are two HP PCL drivers. It is recommended that you use **HP PCL (Standard COR)** for U.S. operation and **HP PCL Laser Emulation** for European operation.
- **Euro.** If your printer is Euro ready, you may wish to bypass the PassThrough Euro sequence. To do so, activate the **Euro** button to bring up the Euro Mode dialog box. Make your selection and choose a Code Page character.

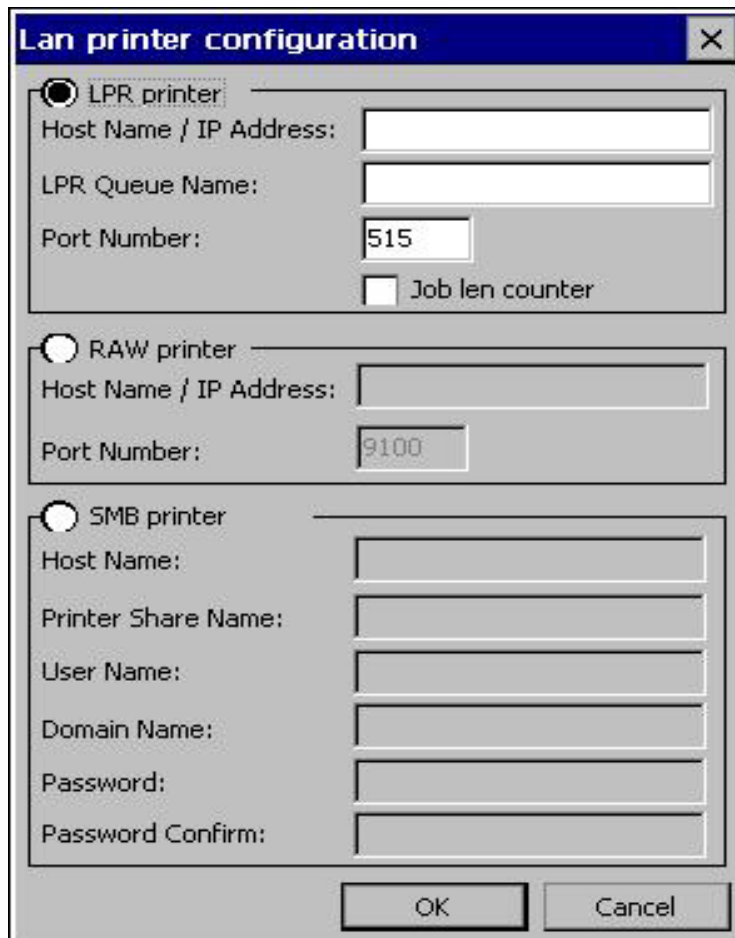


**Euro Mode Dialog Box**

- **Driver Configuration.** If you wish, you can modify parameters of a listed driver. For more information on how to customize or create a new Passthrough Printer Driver, refer to: [How To.....Modify the Passthrough Driver](#).

## Printer Port

Only a LAN printer can be used with the YES*tablet* 7370, since there are no LPT or COM ports. Activate the **LAN Configuration** button to open the LAN Printer Configuration dialog box.



**LAN Printer Configuration Dialog Box**

- **LPR printer.** If there is an LPD printer on your network, you can make this selection and enter the appropriate parameters.
- **RAW printer.** If you have a network printer that can take direct print stream input without being LPD-ready, make this selection and enter the appropriate parameters
- **SMB printer.** If your network printer is accessed through a print server, make this selection and enter the appropriate parameters.

## Hex Passthrough (HPT)

Hex Passthrough allows portions of a data stream to be sent directly from the host to the printer. There is no modification done to these portions by the emulator driver. In order for the emulator to recognize these inviolate data stream portions, they must be identified at the beginning and end by escape sequences – a combination of special characters that the emulator can identify.

**Printer Session - Properties** [?] [OK] [X]

Connection Input Output **HPT** Advanced Misc

The Hex Passthrough settings allow the user to send printer specific escape sequences from the host directly to the printer.

**Sequences**

Hex passthrough Leading Sequence: %&

Hex passthrough Trailing Sequence: %&

**HPT Mode**

☒ Don't print spaces and don't update column counter.

☐ Don't print spaces and update column counter.

☐ Print spaces and don't update column counter.

☐ Print spaces and update column counter.

Hex Passthrough Properties Sheet

- **Sequences.** Enter the Leading Sequence and the Trailing Sequence you want to use. The default sequences are %&, %&. You can enter up to 4 characters for each sequence.
- **HPT Mode.** Select one of four modes to define rather or not HPT prints spaces and rather or not it updates the column counter.

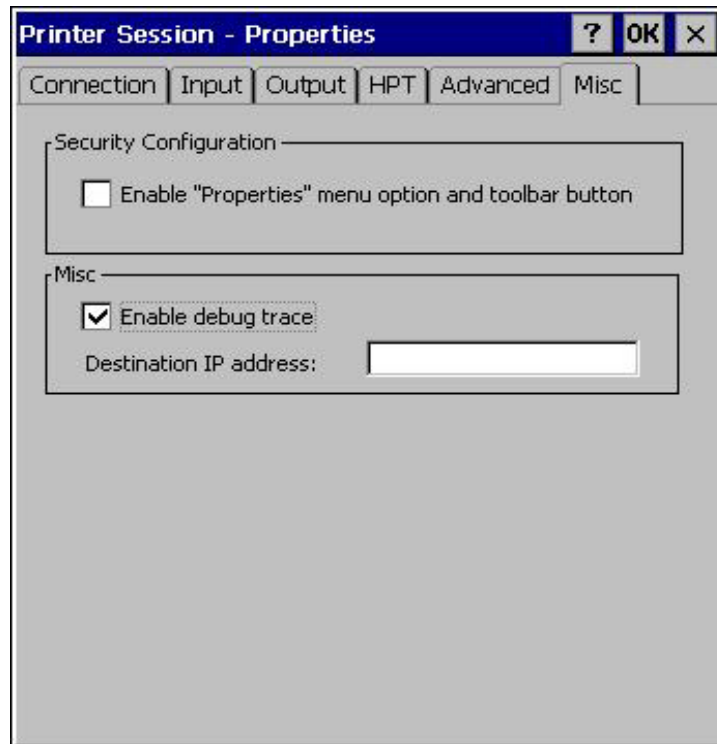
# Advanced

The Advanced Tab allows you to set Default parameters and enable the Host Transform feature.

Advanced Properties Sheet

- **Message Queue Name.** Default is **QSYSOPR**.
- **Message Queue Library.** Default is **\*LIBL**.
- **Default Font.** Default is **011**.
- **Host Transform.** When Host Print Transform is enabled, the host does the EBCDIC-to-ASCII conversion of the print stream, and the local Passthrough Driver is not used.
  - **Printer.** You must choose a compatible model from the drop-down list. Your AS/400 may have a more extensive list of compatible printers. If your printer is on the AS/400 list, but not on our list, you can type in the printer model here as it appears in the AS/400 list; be sure to put an asterisk in front of the model name.
  - **Drawer # 1.** Choose an input print media size if applicable.
  - **Drawer # 2.** Choose an input print media size if applicable.
  - **Envelope.** Choose an envelope size if applicable.
  - **Customizing Object Name.** Enter the object name here if you have chosen **\*WSCTS** from the Printer drop-down list.
  - **Customizing Object Library.** Enter the object library name here if you have chosen **\*WSCTS** from the Printer drop-down list.

# Miscellaneous



Miscellaneous Properties Sheet

- **Security Configuration.** Default mode is to hide the Properties entries from the Tool bar and the Menu bar so that the user cannot make configuration changes. Check this box if you wish to provide user access to the configuration parameters.
- **Debug Trace.** This is not applicable in the 7370.

## Finale

Don't forget to save the session and all these configuration properties by executing a [Registries Save](#) before your next [Cold Boot](#).

## Display Session Operation

### Menu Bar

Menu bar commands of the Display Session window consist of commands and functions that are unique for each window (session).



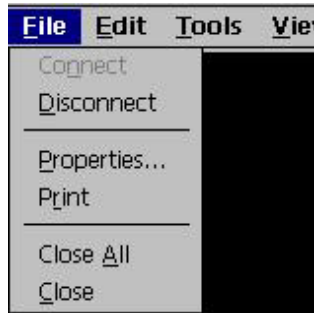
Display Session Menu Bar

The system administrator may disable any or all of the Menu bar commands. See [Display Session Configuration|Advanced|Security Configuration](#).

Open the desired menu by clicking on the menu name



## File (Alt)



Display File Menu

- **Connect (n).** A display session typically comes up in the connected state. But if, for some reason, the session is not connected, this command will attempt to connect the Display Session to the host.
- **Disconnect (d).** This command disconnects the Display Session from the host. It is recommended that you disconnect only from the Sign-On screen.
- **Properties (p)...** This command allows you to edit/modify the Properties of the Display Session in use. For more information on this function, please refer to [Display Session Configuration](#). When you change properties here, most changes are effective immediately. .
- **Print (r).** This command prints the contents of the display screen to the printer designated in [Display Session Configuration|General|Print Screen](#).
- **Close All (a).** This command closes all active sessions, including printer sessions.
- **Close (c).** This command closes the Display Session in use.

## Edit

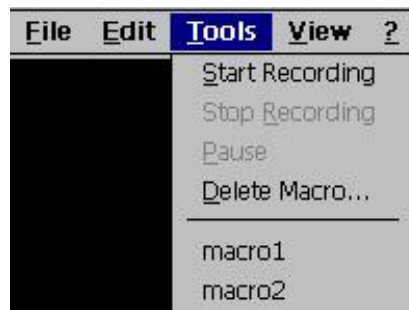


Display Edit Menu

- **Copy (c).** This command copies, into the Clipboard, data contained in the selected area without removing (clearing) it from the display. The copy process is:
  1. Use the mouse cursor to draw a box around the area to be copied. Be precise when you draw the box, or else the paste process may try to copy the data into a restricted area. The selected area will be highlighted in white.
  2. Open the **Edit** menu.
  3. Activate **Copy**. **Note:** Copy does not duplicate host attributes such as color and intensity.
  4. Return the mouse cursor to the green screen and click. The white highlight will disappear.
- **Paste (p).** This command pastes the current contents of the Clipboard onto the session window, starting at the current cursor position. If the contents of the clipboard are larger than the space available in the presentation space (screen), they may be clipped. Paste does not overlay the clipboard contents onto areas that are protected by the host application. **Note:** Copy and Paste only work within emulation sessions. You cannot move text between Windows applications and emulation sessions.



# Tools



Display Tools Menu

Tools commands allow you to work with the Record/Playback function. If you regularly do the same things when you work with a host system, it is convenient to record the keystrokes you make and have YESterm/IP play them back when you want to do the same job again. Record/Playback allows you to do this. All your keystrokes can be saved in a macro file; when you play the file back (Playback), everything that happened will be reproduced exactly. Any macro that you create is available in all display emulation sessions. For more information on how to work with Record/Playback, refer to: [How To...Record a Keystrokes Sequence](#).

- **Start Recording (s).** This command starts the Keystrokes Recording process.
- **Stop Recording (r).** This command stops the Keystrokes Recording process.



Macro Recording Dialog Box

When you Stop Recording, the Macro Recording dialog box will be displayed, allowing you to save the recorded keystrokes into a named file for subsequent playback.

- **Pause Recording (p).** Including a Pause command into a recorded sequence will cause the Playback operation to pause at this point in the sequence. This pause is typically used to enter variable data during Playback.

- **Delete Macro (d).** This command will bring up the Recorded Macro Delete dialog box.



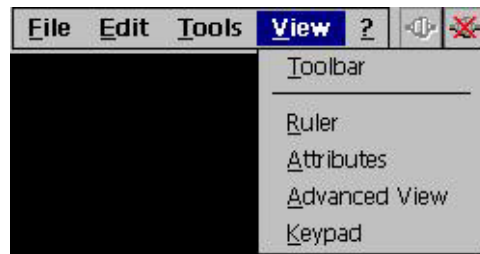
**Recorded Macro Delete Dialog Box**

In this box will be a list of the available macros for this session. Select the one to be deleted and activate **OK**. This macro will now be deleted from all display emulation sessions.

- **Playback.** No, you don't see an actual Playback command. But, at the bottom of the Tools menu below the line, you will see a list of the available macros. Click on the one to be played, and that macro will then be executed.

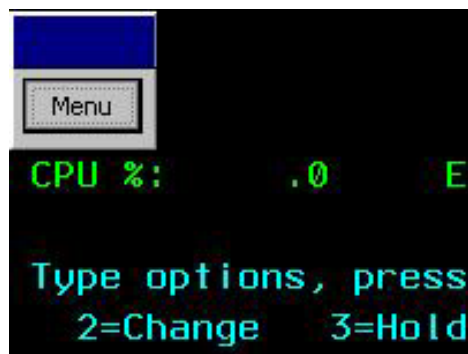
## View

Commands in the View menu are used to manipulate the Emulator display window.



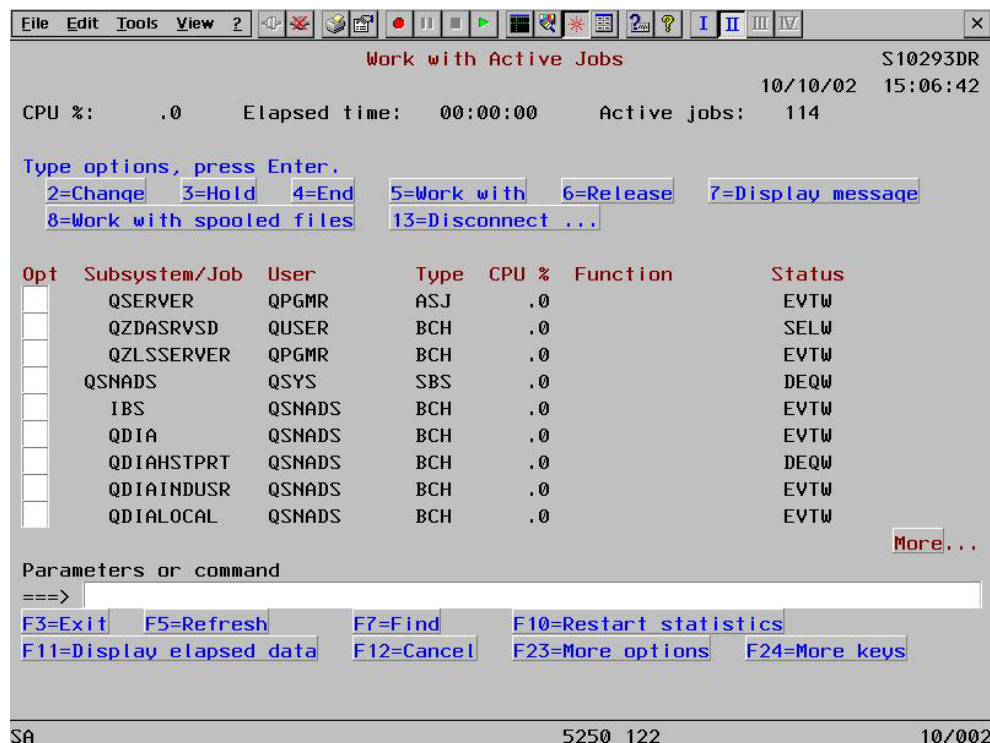
**View Menu**

- **Toolbar (t).** This toggle command hides or displays the Menu and Button toolbars. When the bars are hidden, you will see a Menu button in the upper left corner.



Click on this button to reveal the toolbars again.

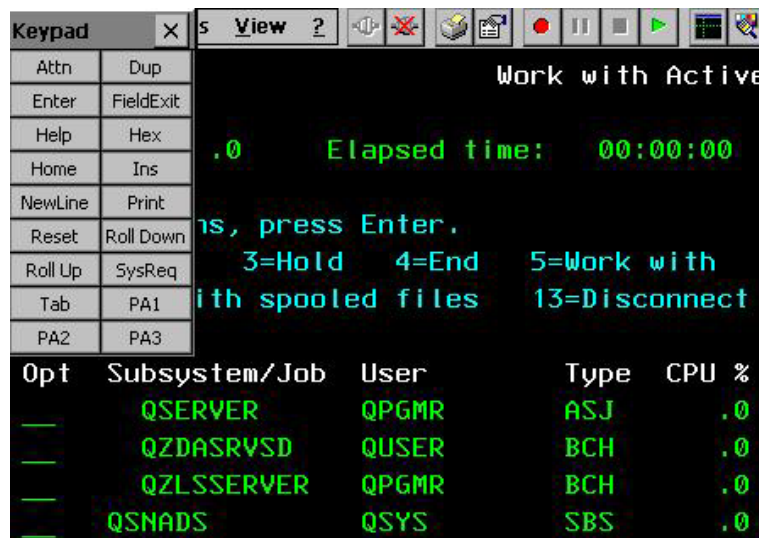
- **Ruler (r).** This toggle command hides or displays the crosshairs Ruler. When the command is checked, the Ruler is displayed.
- **Attributes (a).** This command is not applicable in the 7370.
- **Advanced View.** This toggle command activates/deactivates the graphics Windows look, with Hot Spots displayed as raised buttons if they have been enabled.



Emulation Screen with Advanced View and Hot Spots

For more information on the Hot Spot feature, refer to [Display Session Configuration/Hot Spot](#).

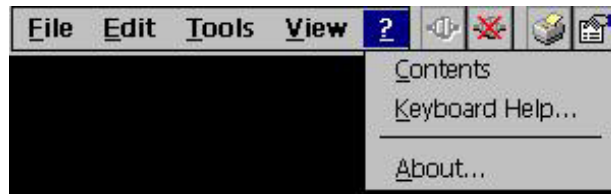
- **Keypad (k).** This toggle command hides or displays the Key Pad. The Key Pad can be repositioned as desired on the screen by dragging and dropping.



Partial Emulation Screen Showing Keypad

For more information on the Key Pad feature, refer to [Emulator Setup and Configuration/Display Emulation/Key Pad](#)

?



? Drop-Down Menu

- **Contents (c).** This command is not used in the 7370.
- **Keyboard Help...(k).** This command displays the keyboard map in use. You can see the mapping, but you cannot edit it from this screen. This display can be used in two ways:
  1. If you click on a key to which a command has been mapped, you will see that command highlighted in the List Box.
  2. If you highlight a command in the List Box, the key or key combination that executes that command will be highlighted on the keyboard graphic. Some commands can be executed from several different key combinations. In that case, you will see the notation (x of y), which indicates that this is the xth sequence out of y possibilities. To cycle through the combinations for that command, click on **Next Sequence**.
- **About... (a).** This command displays detailed information on the YESterm/IP program such as version, copyrights, and other useful information.

## Button Bar

The Button bar is displayed across the top of the application window to the right of the Menu bar. The Button bar provides quick access to commands you use on a regular basis. If you do not need it, you can hide it and the Menu bar to increase the size of your display window. When the toolbar is displayed, a check mark appears next to the Toolbar option in the View menu.



Display Emulation Screen Buttons Bar

The system administrator may disable any or all of the Menu bar commands. See [Display Session Configuration/Advanced/Security Configuration](#)

The command/button definitions are:



**Connect.** Duplicates the function of the menu [File|Connect](#) command.



**Disconnect.** Duplicates the function of the menu [File|Disconnect](#) command.



**Print.** Duplicates the function of the menu [File|Print](#) command.



**Properties.** Duplicates the function of the menu [File/Properties](#) command.



**Start Recording.** Duplicates the function of the menu [Tools/Start Recording](#) command. In fact, if you use the menu version, you will see that this button is also depressed.



**Pause.** Duplicates the function of the menu [Tools/Pause](#) command. If you use the menu version, you will see that this button is also depressed.



**Stop Recording.** Duplicates the function of the menu [Tools/Stop Recording](#) command. Play. When this button is pressed, a list of recorded macros is shown. Click on the desired macro to execute the corresponding recorded key sequence.



**Playback.** Displays a list of available macros. Click on the one to be played, and that macro will then be executed.



**Ruler.** Duplicates the function of the menu [View/Ruler](#) command.



**Attributes.** Duplicates the non-function of the menu [View/Attributes](#) command.



**Hot Spots.** Duplicates the function of the menu [View/Advanced View](#) command.



**Keypad.** Duplicates the function of the menu [View/Keypad](#) command.



**Keyboard Help.** Duplicates the function of the menu [?/Keyboard Help](#) command.



**Contents.** Duplicates the function of the menu [?/Contents](#) command.



**I, II, III, IV.** These buttons correspond to the emulation sessions shown in order in the YESTerm IP Administrator window. Inactive sessions will have corresponding grayed-out buttons, while buttons for active sessions will not be grayed-out. To jump to another active session, just click on the button for that session.

## Printer Session Operation

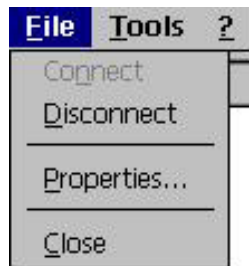
### Menu Bar

Menu commands of the Printer Session window consist of commands and functions that are unique for each printer window (session). Open the desired menu by clicking on the menu name. You can also view the File menu by pressing and releasing the **Alt** key.



Printer Session Menu Bar

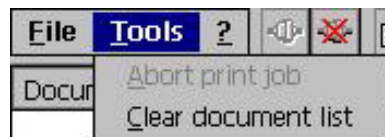
### File (Alt)



Printer File Menu

- **Connect (n).** A Printer Session typically comes up in the connected state. But if, for some reason, the session is not connected, this command will attempt to connect the Printer Session to the host.
- **Disconnect (d).** This command disconnects the Printer Session from the host.
- **Properties... (p).** This command allows you to view/edit/modify the Properties of the Printer Session in use. It will be grayed out and inactive unless it has been enabled in [Printer Session Configuration/Miscellaneous](#). For more information on Properties, please refer to [Printer Session Configuration](#). When you change properties here, most changes are effective immediately.
- **Close (c).** This command closes the Printer Session.

### Tools (Alt+t)



Printer Tools Menu

- **Abort Print Job (a).** This command aborts the print job in process.
- **Clear Document List (c).** This command clears the Document List. The Document List contains a history of all printed documents.

## ? (Alt+?)



Printer Help Menu

- **Contents (c).** This command is not used in the TBT.
- **About... (a).** This command displays detailed information on the YESTerm/IP program such as version, copyrights, and other useful information.

## Button Bar

The Button bar is displayed across the top of the application window to the right of the Menu bar. The Button bar provides quick access to commands you use on a regular basis.



The command/button definitions are:



**Connect.** Duplicates the function of the menu [File|Connect](#) command.



**Disconnect.** Duplicates the function of the menu [File|Disconnect](#) command.



**Properties.** Duplicates the function of the menu [File|Properties](#) command.



**Contents.** Duplicates the function of the menu [?|Contents](#) command.

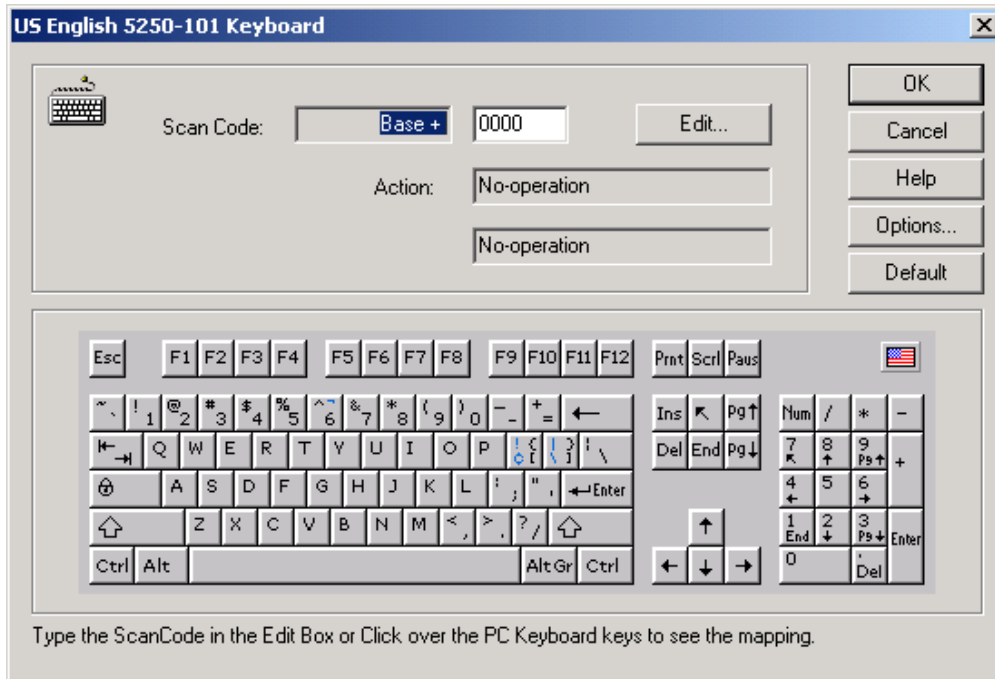


**I, II, III, IV.** These buttons correspond to the emulation sessions shown in order in the YESTerm IP Administrator window. Inactive sessions will have corresponding grayed-out buttons, while buttons for active sessions will not be grayed-out. To jump to another active session, just click on the button for that session.

# How To ....

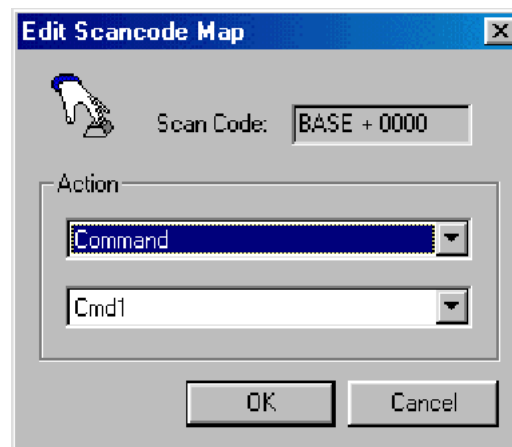
## Create a Custom Keyboard Map

To do this, select, in [Display Session Properties/General](#), one of the available Keyboard Layouts (the one that best matches the one you want to create) and click on **Edit**. Assuming that you chose the 101 terminal keyboard for U.S. English, the following screen will appear



101 Terminal Keyboard Map Page

Select the key, or key plus modifier (**Ctrl**, **Alt**, **Shift**) to which you want to associate a specific action. On the upper half of the window, you can see the keyboard Scan-Code and the default associated action. To modify the action, click on **Edit**. The following dialog box will appear:



Edit Scancode Map Dialog Box



From the Action drop-down list, you can select the action that you want to associate with the selected key from among the following options:

- **No operation.** No action will be performed when you press the key.
- **Command.** Choose the desired 5250 command function from the lower drop-down list.
- **Recorded Sequence.** If you have previously recorded one or more key sequences, you will see their names in the lower drop-down list. Choose the desired Recorded Sequence from this list.
- **EBCDIC Characters Sequence.** Enter the Scan-Code sequence you want to associate to the key. Although you can use this to enter multiple characters, like a Recorded Sequence, this option is typically used to access some special character not normally seen on a keyboard. See [Create a Custom Language Code Page](#) for a standard code page for EBCDIC.

## Record a Keystrokes Sequence (Macro)

If you regularly do the same things when you work with a host system, it is convenient to record the keystrokes you make and have YESterm/IP play them back when you want to do the same job again. Record/Playback allows you to do this. All your keystrokes can be saved in a file; when you play the file back (Playback), everything that happened will be reproduced. Any macro that you create is available in all display emulation sessions.

The procedure for creating a Keystroke sequence is:

1. Open a display session.
2. Place the cursor in the field where you wish to start the sequence.
3. Activate **Tools|Start Recording** or click on the corresponding button.
4. Key the data and cursor movements that you want to record.
5. Stop the Recording by activating **Tools|Stop Recording** or clicking on the corresponding button.
6. Name the recorded Keystroke sequence in the resulting **Macro Recording** window. There are no naming restrictions.

Example:

Assume you want to record the CL command to display the description of a specific device. The command is WRKDEVD PRTXXXX, where PRTXXXX identifies a specific Printer. So, the procedure is:

1. Place the cursor.
2. Activate **Start the Recording**.
3. Type WRKDEVD
4. Activate **Pause**.
5. Type PRTXXXX (the name of the device) and press **Enter**.
6. Activate **Stop the Recording**. When you stop, you will be prompted to save the recorded keystrokes to a file.

**Note:** The Pause function will automatically end when you press the Enter key.

# Play a Recorded Keystrokes Sequence (Macro)

In order to play a recorded keystrokes sequence in a graphics display session, you have to:

1. Place the cursor on the screen where you want to play the sequence.
2. Click on **Tools** in the **File** menu, or click on the **Playback** button.
3. You will see a list of available macros. Click on the one you wish, and the sequence will be executed.

If you have assigned a sequence to a key as part of a custom keyboard map, you can also play the sequence as follows:

1. Place the cursor on the screen where you want to play the sequence.
2. Press the designated key. The sequence will be executed.

## Modify a Printer Passthrough Driver

Any Passthrough Driver in the [Printer Session Configuration/Output/Printer Driver](#) drop-down list can be customized, and it is also possible to create a new Driver. To edit an existing Passthrough Driver, do the following:

1. Highlight the connection name in the Configure tab of Connection Manager and activate **Edit**.
2. Select the Driver from the drop-down list and activate **Driver Configuration** in the Output. You will see a screen with five tabs.

### General

The screenshot shows a dialog box titled "HP PCL (Letter Paper Format)" with standard Windows window controls (minimize, maximize, close). It features five tabs: "General", "Transcode Table", "Escape Sequences", "Euro", and "Font ID". The "General" tab is selected and contains two main sections. The "General Parameters" section includes a checked checkbox for "Variable Line Spacing", an "Inch fractions" field set to "48", and a "Default Tray" dropdown menu currently showing "Source Drawer #1". The "Permanent Driver Save" section contains a warning message: "WARNING! The present driver changes are permanently saved only if you set the 'Permanent Save' check box. Otherwise the changes are lost when the terminal is turned off." Below this is an unchecked checkbox for "Permanent Save" and a text field containing "User-HP PCL (Letter Paper Format)".

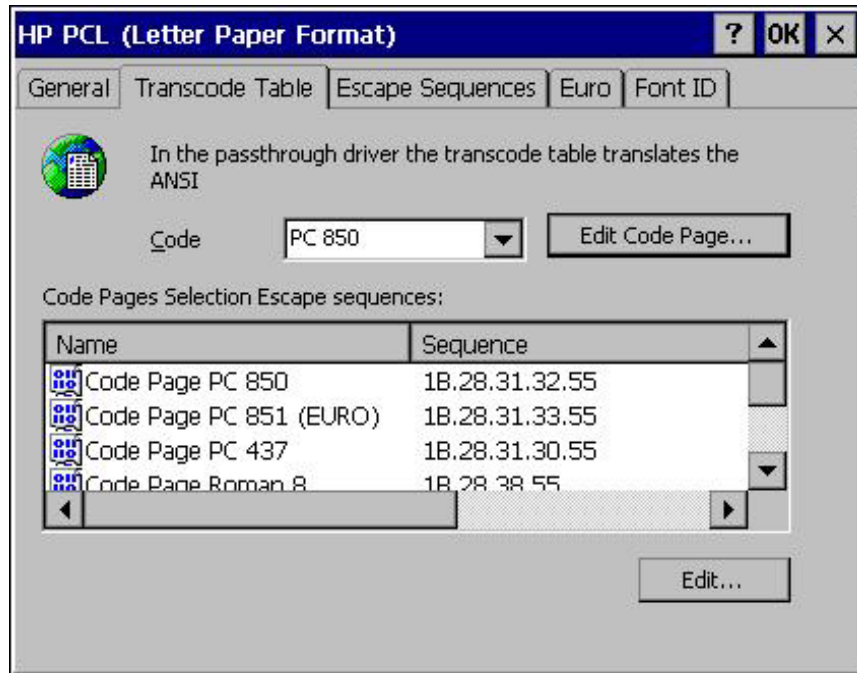
Driver General Properties Sheet

This sheet allows you to select:

- **Variable Line Spacing.** If you enable this function you must enter the Inch fractions.
- **Default Tray.**
- **Permanent Save.** You *must* check this box if you wish to save the driver changes.

- **New Driver Name.** This name will appear in the Passthrough Driver drop-down list *if* you check **Permanent Save**. The default new name is User- in front of the selected driver name. But you can enter a completely new name if you wish.

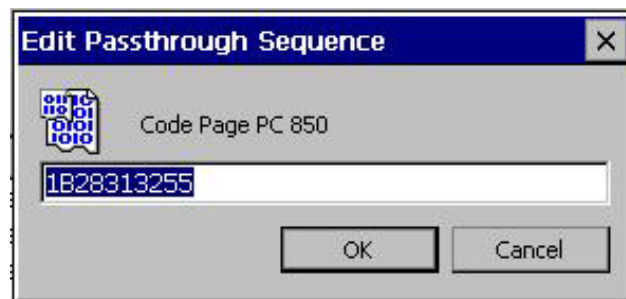
## Transcode Table



Driver Transcode Properties Sheet

This sheet allows you to:

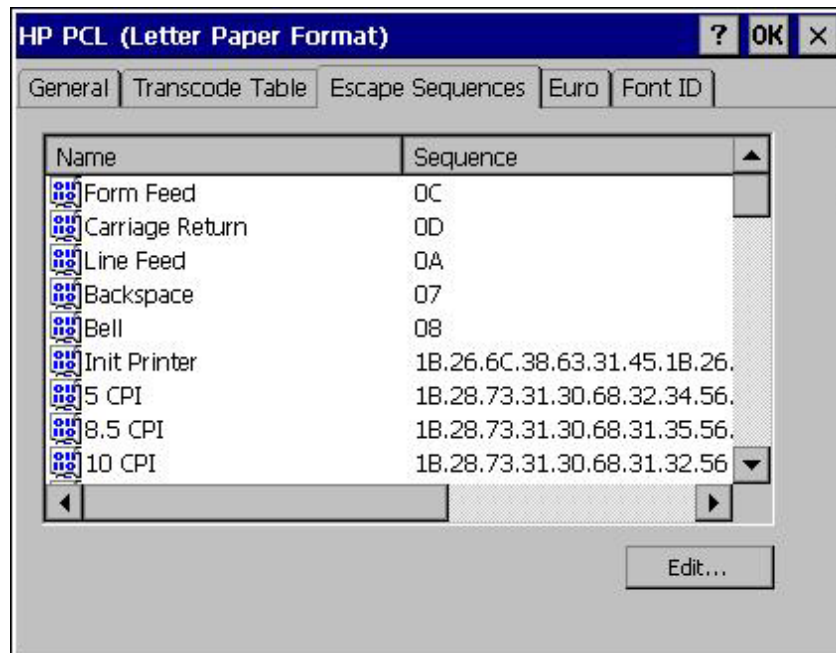
- **Define the Default Code Page.** Pick your desired code page from the **Code** drop-down list.
- **Customize the Escape sequence** used to call the Code Page. Select the **Code Page** from the list, activate **Edit**, and an Edit Passthrough Sequence dialog box will appear where you can enter the new value.



Transcode Edit Passthrough Sequence Dialog Box

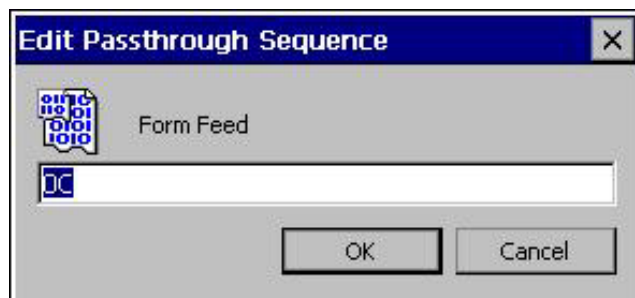
The **Edit Code Page** button is not applicable in the YES*tablet* 7370.

# Escape Sequences



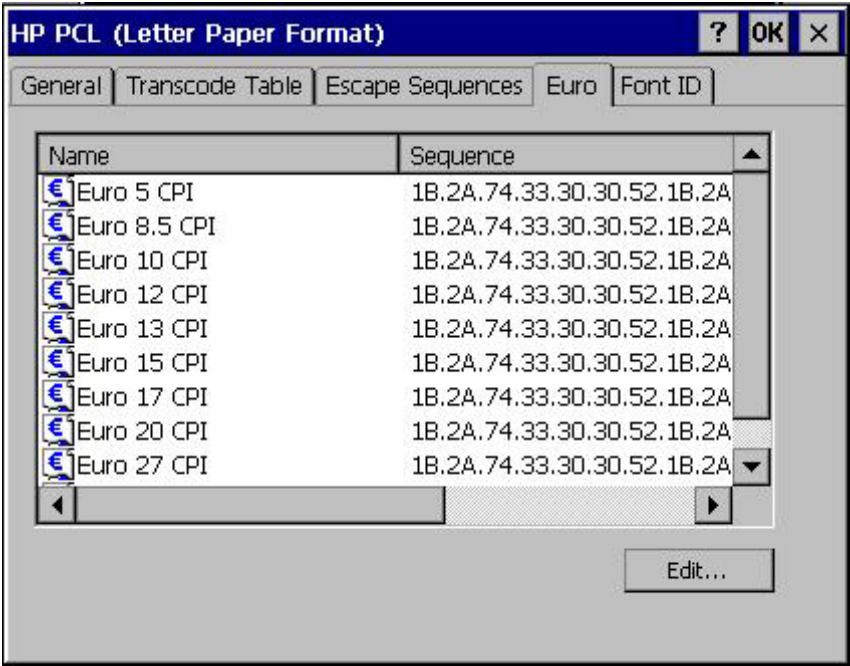
**Driver Escape Sequences Properties Sheet**

This sheet allows you to customize all the Escape commands used to perform specific functions. Select a function, activate **Edit**, and an Edit Passthrough Sequence dialog box will appear. Make your changes there.



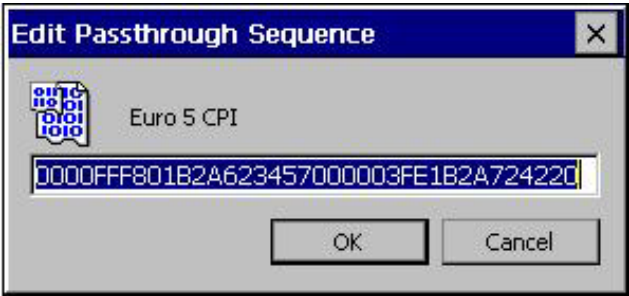
**Edit Passthrough Sequence Dialog Box**

# Euro



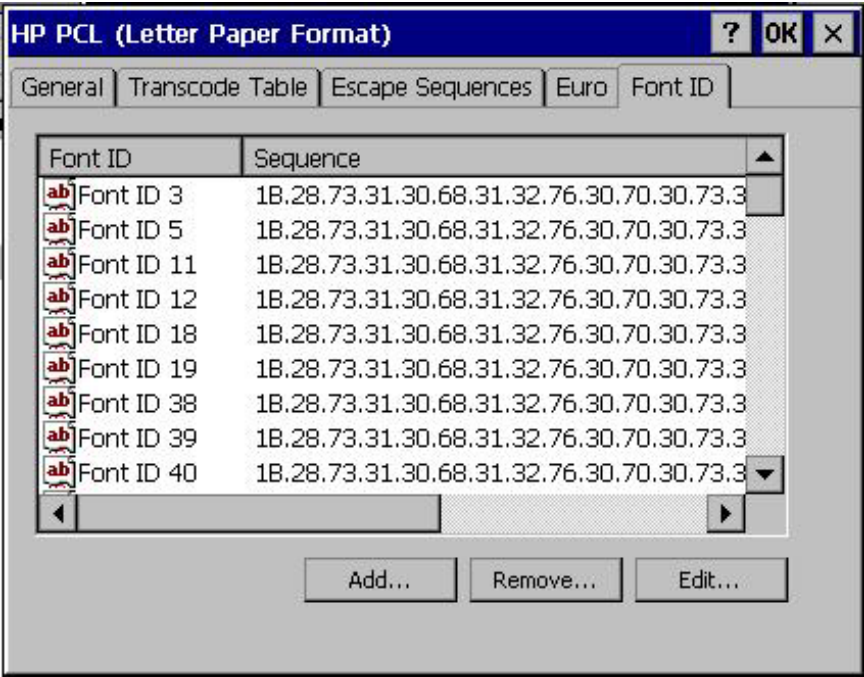
Driver Euro Properties Sheet

This sheet allows you to customize the Escape command used to print the EURO symbol. This special function allows you to print the EURO symbol even on those printers that are not EURO ready. Select the command you wish to customize, then activate **Edit**, and an Edit Passthrough Sequence dialog box will appear where you can enter the new value.



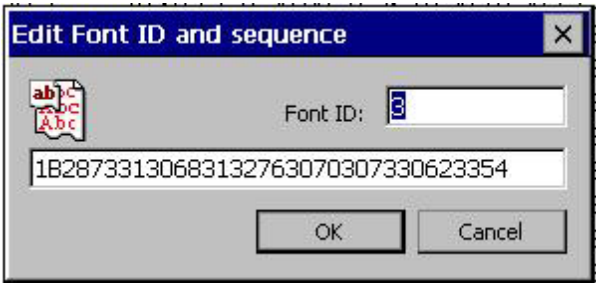
Edit Passthrough Sequence Dialog Box

# Font ID



Driver Font ID Properties Sheet

This sheet allows you to customize the Escape commands used to call a Printer Font that has been associated with a Host System Font ID. To edit a Font ID, select the item, activate **Edit**, and an Edit Font ID and Sequence dialog box will appear where you can enter the new value.



Edit Font ID and Sequence Dialog Box

You can also remove a font or add a new font to the list. If you activate **Add**, an Edit Font ID and Sequence dialog box will appear where you can enter the new values.

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## Troubleshooting

The following table provides some solutions to common problems that can occur during setting up or using your YESTablet 7370.

**Table 8. Troubleshooting Information**

<b>Problem</b>	<b>Solution</b>
The tablet screen stays black after you press the <b>Suspend/Resume</b> button to recover from the Suspend mode.	You may be in the Power Off mode. Press the <b>Reset</b> button.
The tablet screen stays black after you press the <b>Reset</b> button to do a Cold Boot.	You may be in the Suspend mode. Press the <b>Suspend/Resume</b> button.
The wireless LAN adapter status reports a good signal, but stays in the “Associating with xxx” condition indefinitely.	Do a <a href="#">Cold Boot</a> .
The wireless LAN adapter status reports a good signal, but then reports that it “Cannot associate with xxx”.	There is a mismatch in the security settings between the adapter and the xxx access point. Make sure that both are at the same level of security and are using the same encryption key. If you are using EAP security, make sure that the authorization server is operating on the network.
You made configuration changes to the YESTablet or to an application, but they are gone after a <a href="#">Cold Boot</a> .	You forgot to save them with the <a href="#">Control Panel Registries Save/Restore</a> utility.
You created some files and saved them, but they are gone after a <a href="#">Cold Boot</a> .	Files can only be saved permanently if they are saved to the <b>InternalStorage</b> folder or saved to external storage.
Screen and input response is very slow in ICA and RDP sessions.	You may be using a Cisco Aironet wireless LAN adapter connected to a non-Cisco access point. See <a href="#">Setup Wireless LAN Adapters Cisco</a> for more information.

# Support

Affirmative Computer Products offers Technical Support services for all the Affirmative products. You can access Affirmative Technical Support in one of the following ways:

- via Phone (6:00am to 6:00pm Mountain Time)
  - 480-946-1444
  - 888-353-5250 (Toll Free)
- via Fax
  - 480-946-9250
- via E-mail
  - [support@affirmative.net](mailto:support@affirmative.net)

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