

Winterm™ 3650XE Thin Client Hardware Reference Guide

Issue: 042804



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Ordering Information

For availability, pricing, and ordering information in the United States and Canada, call 1-800-GET-WYSE (1-800-438-9973) or visit us at <http://www.wyse.com>. In all other countries, contact your sales representative.

FCC Statement

This equipment has been tested and found to comply with the limits for either Class A or Class B digital devices (refer to "Thin Client Requirements Compliance"), pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.



Caution

Changes or modifications not covered in this manual must be approved in writing by the manufacturer's Regulatory Engineering department. Changes or modifications made without written approval may void the user's authority to operate the equipment.

Thin Client Requirements Compliance

FCC Compliance

The Model 3650XE Thin Client meets Class B requirements.

IEC/EN Compliance

The Model 3650XE Thin Client meets Class B requirements.

Canadian DOC Notices

Refer to the previous section, "Thin Client Requirements Compliance," to find out to which thin client model each of the statements below refers.

Class A

This digital apparatus does not exceed the Class A limits for radio noise emissions from digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications.

Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de la classe A prescrites dans le Règlement sur le brouillage radioélectrique édicté par le Ministère des Communications du Canada.

Class B

This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications.

Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de la classe B prescrites dans le Règlement sur le brouillage radioélectrique édicté par le Ministère des Communications du Canada.

IEC/EN Notice

These products conform to the requirements of IEC950 and EN60950.

These products conform to requirements of EN55022 for Class A equipment or EN55022 for Class B equipment (refer to "Thin Client Requirements Compliance").

Cable Notice

The use of shielded I/O cables is required when connecting this equipment to any and all optional peripheral or host devices. Failure to do so may cause interference and violate FCC and international regulations for electromagnetic interference.

Noise Suppressor

A noise suppressor (ferrite bead) must be installed on the network cable of your thin client. This installation is necessary to maintain compliance with U.S. FCC B limits and European CISPR B EN55022 Class B limits. The noise suppressor is supplied by the manufacturer and is packed in your thin client's shipping carton.

Device Power Supply



Caution

Replace power supply with the same or equivalent type as recommended by the manufacturer.

Model 3650XE Thin Client

For use with External Power Supply Li Shin Model LSE0219B1280 or certified equivalent model supplied by the manufacturer, rated +12V/6.67A.

Battery Information

The 3650XE Thin Client contains a replaceable battery.



Warning

There is a risk of explosion if the battery is replaced by an incorrect type. Always dispose of used batteries according to the instructions accompanying the battery.

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Winterm™ 3650XE Thin Client Hardware Reference Guide

The Winterm™ 3650XE is the newest flat panel Thin Client in the Winterm 3000 Series family of Thin Clients. Winterm 3000 Series Thin Clients use the Windows™ CE .NET operating system. These Thin Clients provide access to applications, files, and network resources made available on machines hosting Citrix™ ICA and Microsoft™ RDP session services. Only the keyboard, mouse, audio/video, and display data are transmitted over the network between the Thin Clients and session servers.

Terminal emulation software may be installed locally on special order. Other locally installed software permits remote administration of the Thin Clients and provides local maintenance functions.

About This Guide

This hardware reference guide supplements the Winterm™ 3000 Series Quick Reference Guide. This guide provides information on the Model 3650XE hardware, including hardware precautions, Thin Client control buttons, and detailed instructions for customizing your Thin Client's display. In addition, it provides a troubleshooting section with solutions to Thin Client display warning messages and issues you may encounter while using the 3650XE Thin Client.

Hardware Precautions

Precautions for the Model 3650XE hardware include installation and power connection precautions.

Installation

- Do not cover or block the ventilation ports on the rear of the Thin Client.
- Do not install the Thin Client close to heat sources such as radiators or air ducts, or in a location exposed to direct sunlight, excessive dust, mechanical vibration, or shock.



Note

The Winterm 3650XE has 75mm VESA mounting holes for mounting on vertical surfaces. To mount flush on a wall, the base of the 3650XE can fold backward until it is parallel to the back of the unit. The mounting holes are sized for M4 x 8mm screws.

Power connection

- Use the correct power cord for your local voltage.
- Use an accessible outlet close to the Thin Client.
- Do not allow anything to rest on the power cable.
- Disconnect the power cable from the power supply if:
 - You will not use the Thin Client for an extended period.
 - The cable is damaged or frayed.
 - The Thin Client has been dropped or the cabinet damaged.
 - A distinct change in performance indicates a need for servicing.

Tilt Use

- Use the Thin Client's tilt capability to adjust its vertical orientation to an appropriate position. Grasp the top corners of the Thin Client with both hands and tilt to the desired angle.

Maintenance

- Clean the cabinet and controls with a soft cloth lightly moistened with a mild detergent solution. Do not use any abrasive materials or solvents such as alcohol or benzene.
- Do not rub, touch, or tap the surface of the screen with sharp or abrasive items such as pens or screwdrivers, as the screen may scratch.
- Do not insert objects or spill liquids into the ventilation ports on the Thin Client's rear, as fire, electric shock, and/or unit failure may result.

Transportation

- When transporting the Thin Client for repair or shipment, use the original carton and packing materials.

Thin Client Control Buttons

The front panel of the Thin Client contains the control buttons you use to setup and customize your Thin Client's display (see Figure 1).

Figure 1 Thin Client Control Buttons

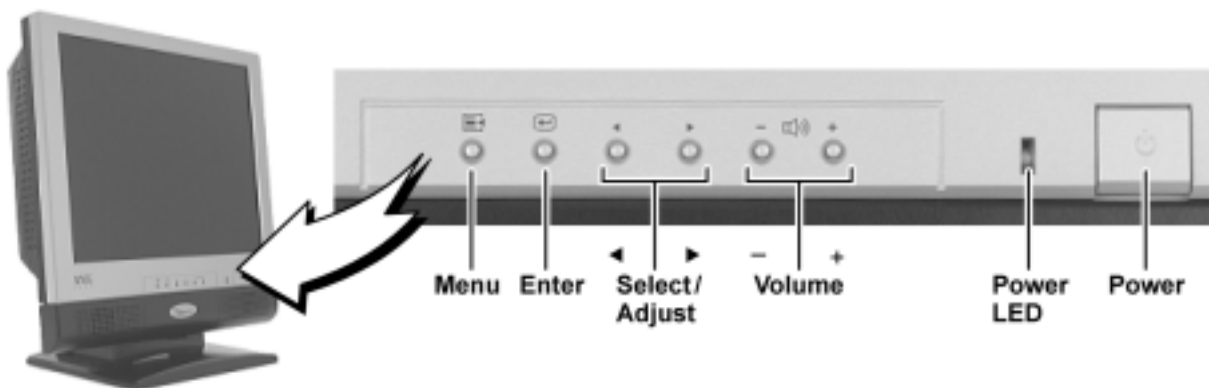


Table 1 contains information on the Thin Client's control buttons and their function.

Table 1 Model 3650XE Thin Client Control Buttons

Control Buttons	Function
Menu	Opens the On-Screen Display (OSD) window or exits a function menu.
Enter	Selects a function or saves a setting change.
Select/Adjust (◀ or ▶)	Navigates within a display and adjusts control levels.
Volume (+ or -)	Adjusts audio volume when the OSD is off.
Power	Turns the Thin Client power on or off. The Power LED is green when the Thin Client is on.

Customizing Your Thin Client

To adjust the Thin Client's display and customize your Thin Client, use the LCD Thin Client's On-Screen Display (OSD) and front panel control buttons. The LCD Thin Client features a menu-driven OSD. You can access the OSD any time that the power is on. If the Thin Client is in power saving mode or is powered down, the OSD is inaccessible.



Note

While full customization is available, it is highly recommended to use the AUTO settings which are preset to fully optimize your Thin Client's performance. Select the AUTO function to engage the AUTO settings. It is also recommended that you execute the AUTO function following any change made to your computer display properties.

The OSD system provides a full range of customizable tools to optimize your display. OSD functions are represented by seven icons across the top of the OSD display. From left to right, the OSD icons are: Auto Config, Brightness, Contrast, Color, Position, Image, and Misc Menu.

To use the OSD system, follow these general steps:

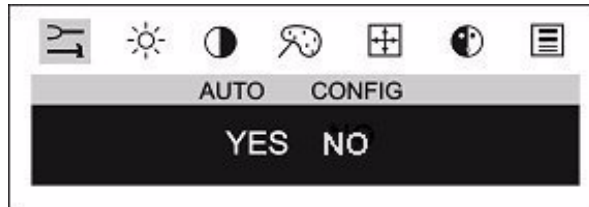
1. Push the Menu control button on the front panel to open the OSD window.
2. Scroll through the OSD menu by pushing the ◀ or ▶ control buttons until the desired OSD icon is highlighted.
3. Push the Enter control button on the front panel to select the icon (the icon function settings are displayed).
4. (Optional) If more than one setting is listed under the icon, scroll through the settings by pushing the ◀ or ▶ control buttons until the desired setting is highlighted in red and push the Enter control button on the front panel to select the setting.
5. Adjust the setting you want by using the ◀ or ▶ control buttons until the desired setting is highlighted.
6. Push the Enter control button on the front panel to save the settings.
7. Push the Menu control button on the front panel to exit the OSD window.

Auto Config

Use the Auto Config setting to engage the Thin Client's auto settings (you can also select AUTO in the Auto Config screen to engage this setting) by following these guidelines:

1. Use the ◀ or ▶ control buttons until the Auto Config icon is highlighted.
2. Push the Enter control button to open the Auto Config screen (see Figure 2).

Figure 2 Auto Config screen



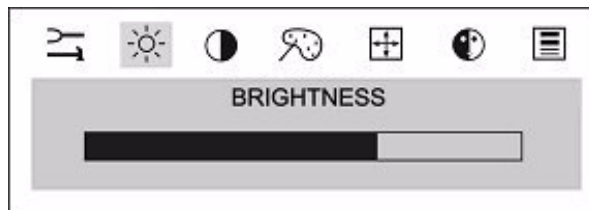
3. Use the ◀ or ▶ control buttons to toggle between YES and NO to turn the Thin Client's auto settings on or off respectively.
4. Push the Enter control button to save the settings.
5. Push the Menu control button to exit.

Brightness

Use the Brightness setting to adjust the Thin Client's brightness by following these guidelines:

1. Use the ◀ or ▶ control buttons until the Brightness icon is highlighted.
2. Push the Enter control button to open the Brightness screen (see Figure 3).

Figure 3 Brightness screen



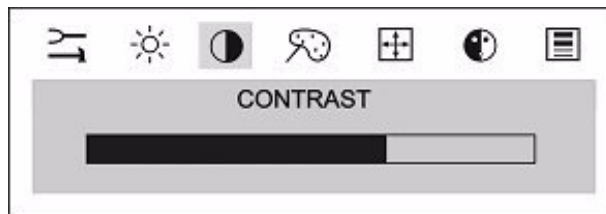
3. Use the ◀ or ▶ control buttons to adjust the display's brightness on the scale (range is 0 to 100).
4. Push the Enter control button to save the settings.
5. Push the Menu control button to exit.

Contrast

Use the Contrast setting to adjust the Thin Client's contrast by following these guidelines:

1. Use the ◀ or ▶ control buttons until the Contrast icon is highlighted.
2. Push the Enter control button to open the Contrast screen (see Figure 4).

Figure 4 Contrast screen



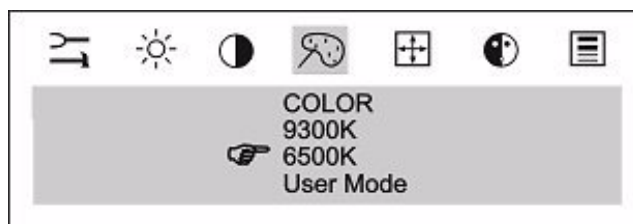
3. Use the ◀ or ▶ control buttons to adjust the display's contrast on the scale (range is 0 to 100).
4. Push the Enter control button to save the settings.
5. Push the Menu control button to exit.

Color

Use the Color setting to adjust the Thin Client's color by following these guidelines:

1. Use the ◀ or ▶ control buttons until the Color icon is highlighted.
2. Push the Enter control button to open the Color screen (see Figure 5).

Figure 5 Color screen



3. Use the ◀ or ▶ control buttons to select the display's color (either 9300K or 6500K) or User Mode.



Note

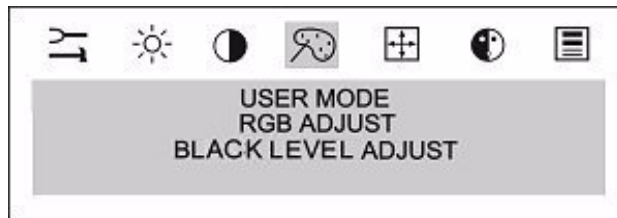
User Mode allows you to adjust the red, green, and blue values according to your preference or specific application

4. Depending on your selection, complete one of the following:
 - If you selected either 9300K or 6500K, push the Enter control button to save the settings and then push the Menu control button to exit.
 - If you selected User Mode, continue with the procedures in "User Mode."

User Mode

1. After selecting User Mode, push the Enter control button to open the User Mode screen (see Figure 6).

Figure 6 User Mode screen



2. Use the ◀ or ▶ control buttons to select either of the RGB ADJUST or BLACK LEVEL ADJUST options.
3. Push the Enter control button to open the RGB ADJUST or BLACK LEVEL ADJUST screen (see Figure 7 and Figure 8).

Figure 7 RGB ADJUST screen

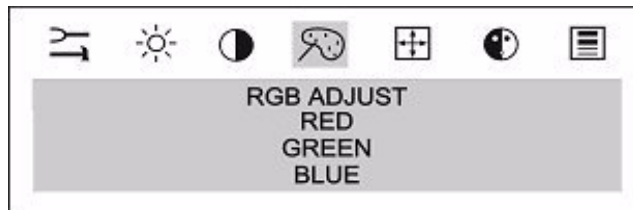
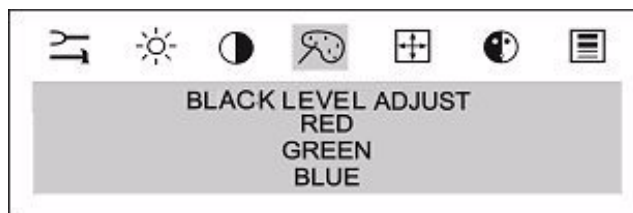


Figure 8 BLACK LEVEL ADJUST screen



4. Use the ◀ or ▶ control buttons to select one of the color options (RED, GREEN, or BLUE).

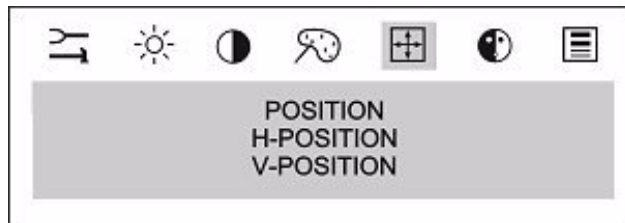
5. Push the Enter control button to open the color's scale.
6. Use the ◀ or ▶ control buttons to adjust the color on the scale (range is 0 to 100).
7. Push the Enter control button to save the settings.
8. (Optional) Push the Menu control button to return to the color option menu and repeat steps 4 to 7 to adjust another color.
9. When you are finished adjusting the colors, push the Menu control button to exit.

Position

Use the Position setting to adjust the display's position on the Thin Client screen by following these guidelines:

1. Use the ◀ or ▶ control buttons until the Position icon is highlighted.
2. Push the Enter control button to open the Position screen (see Figure 9).

Figure 9 Position screen



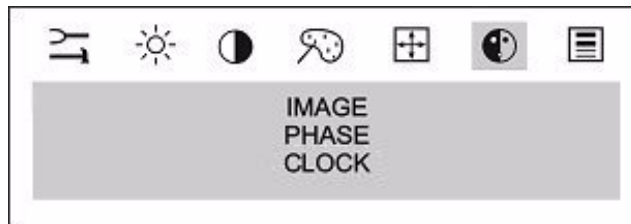
3. Use the ◀ or ▶ control buttons to select the horizontal position (H-POSITION) or vertical position (V-POSITION) adjustment option.
4. Push the Enter control button to open the adjustment scale for your selected option.
5. Use the ◀ or ▶ control buttons to adjust the display's position on the scale (range is 0 to 100).
6. Push the Enter control button to save the settings.
7. (Optional) Push the Menu control button to return to the Position screen, and then repeat steps 3 to 6 to adjust another position.
8. When you are finished adjusting the positions, push the Menu control button to exit.

Image

Use the Image setting to adjust the sharpness and white balance, and to fine tune picture performance to compensate for drifts in the computer signal by following these guidelines:

1. Use the ◀ or ▶ control buttons until the Image icon is highlighted.
2. Push the Enter control button to open the Image screen (see Figure 10).

Figure 10 Image screen



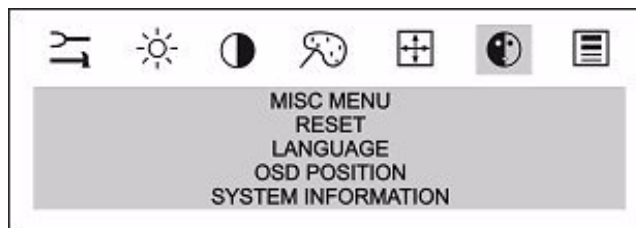
3. Use the ◀ or ▶ control buttons to select the sharpness and white balance (PHASE) or fine tune picture performance (CLOCK) adjustment option.
4. Push the Enter control button to open the adjustment scale for your selected option.
5. Use the ◀ or ▶ control buttons to adjust the option on the scale (range is 0 to 100).
6. Push the Enter control button to save the settings.
7. (Optional) Push the Menu control button to return to the Image screen, and then repeat steps 3 to 6 to adjust another option.
8. When you are finished adjusting the Image options, push the Menu control button to exit.

Misc Menu

Use the Misc Menu setting to adjust the sub-menus of Reset, Language, and OSD Position and to view the sub-menu of System Information by following these guidelines:

1. Use the ◀ or ▶ control buttons until the Misc Menu icon is highlighted.
2. Push the Enter control button to open the Misc Menu screen (see Figure 11).

Figure 11 Misc Menu screen



3. Use the ◀ or ▶ control buttons to select the option you want to adjust from the following options:
 - **RESET**—This option allows you to return the Thin Client's settings to the factory defaults.
 - **LANGUAGE**—This setting allows you to select the language for the OSD (Japanese, English, German, French, Italian, or Spanish)
 - **OSD POSITION**—This setting allows you to change where the OSD system window appears on your Thin Client.
 - **SYSTEM INFORMATION**—This setting allows you to view the system information of the Thin Client's current settings for System Version, Horizontal Frequency, Vertical Frequency, and Resolution.
4. Push the Enter control button to open the sub-menu for the option you selected and, depending on the option, continue with the procedures in either "RESET," "LANGUAGE," "OSD POSITION," or "SYSTEM INFORMATION."

RESET

1. Use the ◀ or ▶ control buttons to toggle between YES and NO to reset the Thin Client's settings to the factory defaults or not respectively.
2. Push the Enter control button to save the setting.
3. Push the Menu control button to exit.

LANGUAGE

1. Use the ◀ or ▶ control buttons to select one of the supported languages (Japanese, English, German, French, Italian, or Spanish).
2. Push the Enter control button to save the setting.
3. Push the Menu control button to exit.

OSD POSITION

1. Use the ◀ or ▶ control buttons to select the horizontal position (H-POSITION) or vertical position (V-POSITION) adjustment option.
2. Push the Enter control button to open the adjustment scale for your selected option.
3. Use the ◀ or ▶ control buttons to adjust the display's position on the scale (range is 0 to 100).
4. Push the Enter control button to save the settings.
5. (Optional) Push the Menu control button to return to the OSD POSITION screen, and then repeat steps 1 to 4 to adjust another position.
6. When you are finished adjusting the positions, push the Menu control button to exit.

SYSTEM INFORMATION

System Information is a display-only screen that contains the Thin Client's current settings for System Version, Horizontal Frequency, Vertical Frequency, and Resolution.

Troubleshooting

Table 2 provides you with solutions to Thin Client display warning messages and issues you may encounter while using the 3650XE Thin Client.

Table 2 Troubleshooting the Thin Client

Problem	Solution
CAN NOT DISPLAY THIS INPUT SIGNAL warning message.	The input signal is not acceptable by the Thin Client. Ensure that the video resolution and frequency range are within that specified for the Thin Client. For details of Thin Client's specifications refer to "LCD Panel Display Technical Features and Specifications."
WAIT FOR AUTOMATIC ADJUSTMENT warning message.	The Thin Client is detecting the input signal and automatically adjusting the Thin Client parameters accordingly. Wait for about 5 seconds for the process to finish. It is recommended that you auto adjust by using the Auto Config icon whenever you change the resolution or refresh rate.
There is no display on the Thin Client and the LED power indicator is not lit.	Ensure that the following is true: <ul style="list-style-type: none"> • The Thin Client's power switch is turned on. • The power adapter is properly connected to the Thin Client. • The power cord is properly connected to the power adapter. • The power cord is properly connected to the power outlet. • There is electrical power coming from the power outlet—use another device you know to be working to ensure that there is power.
There is no display on the Thin Client.	Ensure that your computer or video source power switch is in the ON position.
Text on the display screen is not solid.	Use the Image function to adjust PHASE and CLOCK to fine tune the picture performance (see "Image").
The display screen image is not centered properly or some lines are missing.	Complete the following: <ul style="list-style-type: none"> • Use the Auto Config function to run an automatic adjustment (see "Auto Config"). • Use the Position function to adjust the horizontal position (H-POSITION) and vertical position (V-POSITION) options (see "Position").
There are tiny red, green, blue, or black dots on the display screen.	Contact Wyse Technical Support.

LCD Panel Display Technical Features and Specifications

Table 3 contains the technical features and specifications of Model 3650XE.

Table 3 Technical Features and Specifications

Feature	Specification
Panel	Screen Size: 15 inch (381mm) diagonal Pixel Format: 1024 x 768 vertical strip Display Color: 16.8M
Input Signal	Horizontal Frequency: 30kHz - 60kHz Vertical Frequency: 55Hz - 75Hz Maximum Pixel Clock: 80MHz
Compatibility	Maximum to 1024 x 768 @ 75Hz
Connector	Analog: Connect to motherboard on inside Power: 3-Pin AC Plug
Tilt	Tilt Angle: $\sim 5^{\circ}$ $\sim +20^{\circ}$
Dimensions (W x H x D)	Net: 360 mm(W) x 370 mm(H) x 176 mm(D)
Weight	Net: 10.0Kg (22.04 lb.)
AC/DC Adapter	Input: AC 100 ~ 240V, 50 ~ 60Hz Output: +12V DC (Type: 4 pin dim)

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