

HX2 Control Panel v1.1.4

user's manual



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HX2 CONTROL PANEL VERSION 1.1.4 USER MANUAL

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All technical and operational information incorporated into this manual is believed accurate and reliable as of the time of publication. Changes are periodically added to the information contained herein. These changes will be incorporated into new editions of the publication. Hi*Tech reserves the right to make improvements to hardware, firmware, and software products at any time without public notice.

To view any last minute changes, always refer to the Software Version Release Notes. These release notes are the latest engineering notes regarding form, fit, and functionality.

Finally, the system platform encompasses hardware technology from many different sources. The operating system is Microsoft Windows[®], and your LED display control software, firmware, and hardware are both proprietary and licensed.

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Chapter 1

Installation

1.1 Introduction

HX2 Control Panel is a software program that controls the operation of a Hi*Tech video LED display. The application can perform the following functions:

- Turning the display on or off
- Controlling the display brightness
- Monitoring the temperature inside display modules
- Adjusting display capture window
- Adjusting display contrast

1.2 Installation

To install the application, place the HX2 Control Panel CD in your computer's CD-ROM drive, initiate the installation by browsing your installation disk and double-clicking on the Setup program. The HX2 Control Panel Setup window will appear (Figure 1-1).

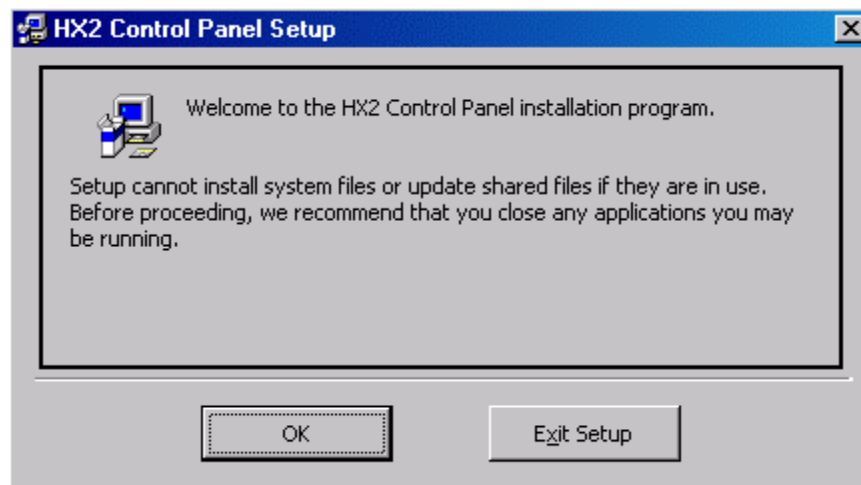


Figure 1-1. HX2 Control Panel Setup Window

The HX2 Control Panel Setup Wizard will guide you through the installation process. Click **OK** in the HX2 Control Panel Setup window to proceed. The Directory Folder window will display (Figure 1-2).

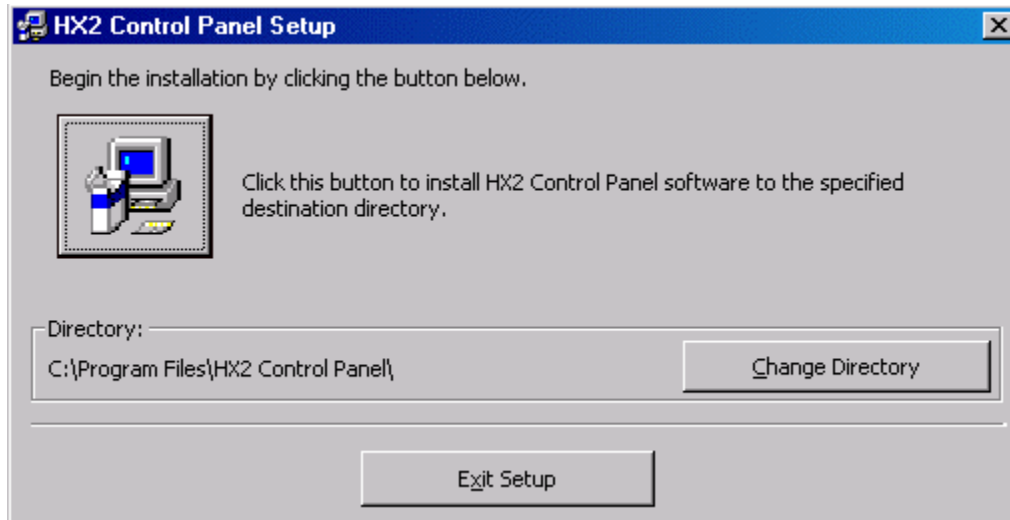


Figure 1-2. Directory Folder Window

The Directory Folder window displays where HX2 Control Panel is going to be installed on your computer. If you would like to install the application in a different folder, click **Change Directory** and specify a new location.

Click the install button at the top left of the window to continue on to the **Choose Program Group** dialog box (Figure 1-3).

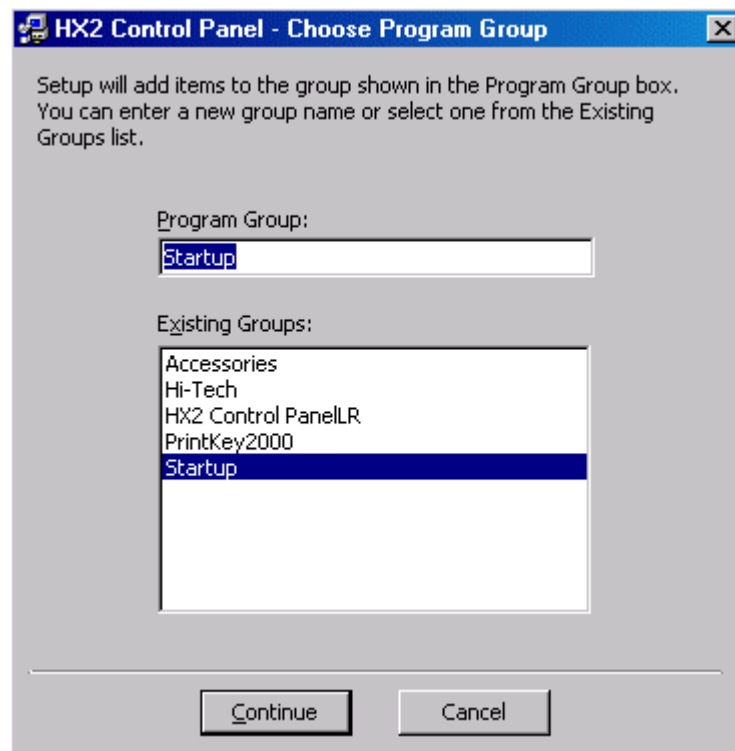


Figure 1-3. Choose Program Group Dialog Box

In the **Program Group** field, you can select to use the default option, enter a new group name, or select one from the **Existing Groups** list. Click **Continue** to proceed with the next **Choose Program Group** dialog box (Figure 1-4).

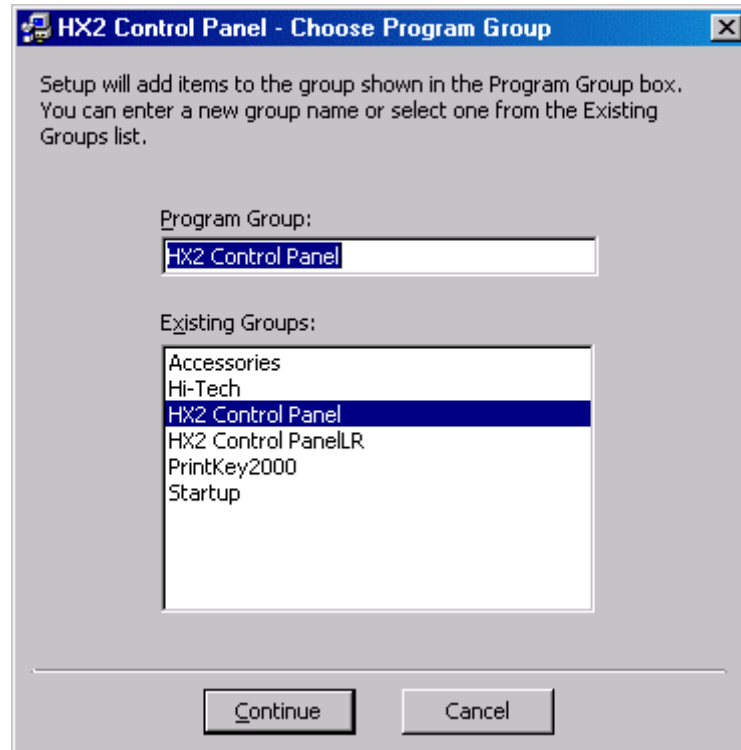


Figure 1-4. Choose Program Group Dialog Box

In the **Program Group** field, you can select to use the default option, enter a new group name, or select one from the **Existing Groups** list. Click **Continue** to proceed with the installation. The progress of the installation will display in the Installation Progress window (Figure 1-5).

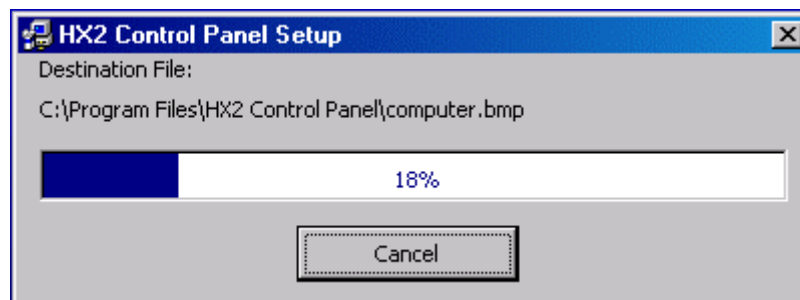


Figure 1-5. Installation Progress

When the installation is complete the Install Completion window will appear (Figure 1-6).



Figure 1-6. Install Completion Message

Click **OK** to exit the setup.

Chapter 2

Getting Started

2.1 Running the program

If there is an **HX2 Control Panel** icon on the taskbar or the desktop, you can start the program by double-clicking the icon. You can also start the program by selecting **Start>Programs> HX2 Control Panel>Control Panel** from the taskbar. Once the program starts, HX2 Control Panel the window displays (Figure 2-7).

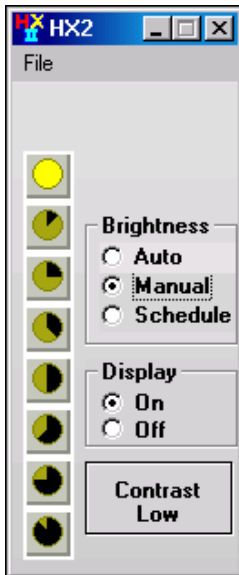


Figure 2-7. HX2 Control Panel Window

2.2 Menus and Toolbar

By default, the toolbar and some menu items are hidden. To show them, press **Ctrl+Alt+Z** (Figure 2-8). To hide the menus and toolbar buttons, repeat the same key stroke.



Figure 2-8. HX2 Control Panel Menus and Toolbar

Expand button



To expand or restore the operation window size, click the **Expand** button.

Serial Port button



To show or hide the serial port setting window, click the **Serial Port** button.

Testing Pattern button:



To open the testing pattern window, click the **Testing Pattern** button.

2.3 Serial Communication configuration

NOTE: *Please make sure that the VFC box is connected to an available serial port (RS232 port) of the control PC using the cable provided. You may need a USB-RS232 converter if the control PC is not equipped with a RS232 port.*



In the HX2 Control Panel window, click the **Serial Port** button to display the **Comm Port** drop-down list box (Figure 2-9). From the **Comm Port** list, select the serial port that you have connected to the VFC box.

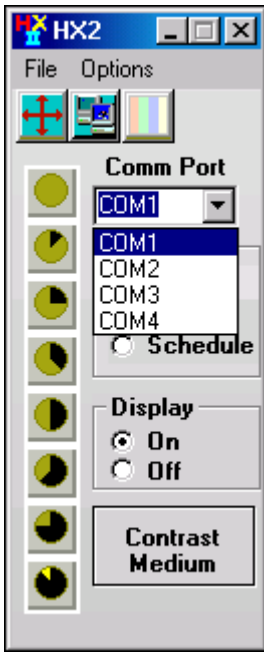


Figure 2-9. Comm Port Drop-Down List Box View

Once the serial port is set, click the **Serial Port** button to hide the **Comm Port** drop-down list box.

2.4 Turning the Display On/Off

To turn the power of the LED display on, select the **On** option button, and to turn the power to the LED display off, select the **Off** option button (Figure 2-10). This function is performed through a software switch for video data. Original video data is passed to the display when it is turned on, and if the display is turned off zeros are sent instead.



Figure 2-10. HX2 Control Panel→On/Off Controls

2.5 Controlling the Brightness

This overall display brightness can be set to one of the eight available levels. The brightness level can be controlled in three modes. (Figure 2-11)

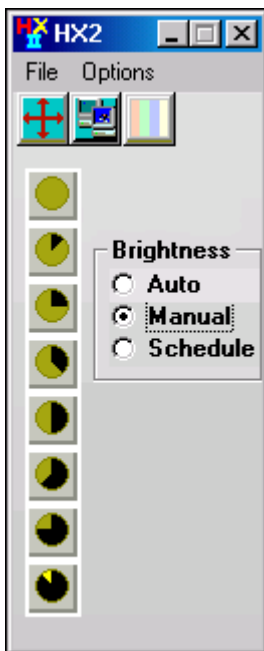


Figure 2-11. HX2 Control Panel→Brightness Controls

Auto

If you select the **Auto** option button, the brightness is controlled automatically by the reading of the ambient light sensor. In this mode, the operator doesn't have control over the brightness. *In order to use this mode, the ambient light sensor must be installed properly.*

Manual

If you select the **Manual** option button, the brightness is controlled manually. The display operator can select the appropriate brightness level by clicking the brightness level buttons on the left side of the window. The top button represents the maximum brightness level.

Schedule

If you select the **Schedule** option button, the brightness is controlled by a schedule. For more information on how to set the brightness schedule, see [Chapter 3—Advanced Options→3.2 Options Menu→3.2.2 Brightness Control→Show Brightness Schedule Page.](#)

2.6 Setting the Contrast

There are three contrast options: **Low**, **Medium**, and **Optimal** (Figure 2-12). Using **Optimal** is highly recommended when showing video images on the display.

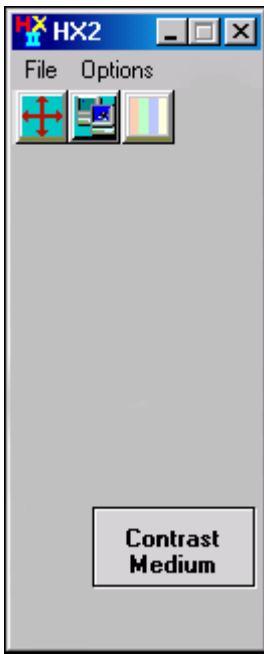


Figure 2-12. HX2 Control Panel→Contrast Controls

Double-clicking the **Contrast** button will switch the option to the next one in order.

2.7 Expanding the Application Window

The application window can be expanded to show all the information or restored to present a simplified interface (Figure 2-13). To switch between the two window sizes, click the **Expand** button.

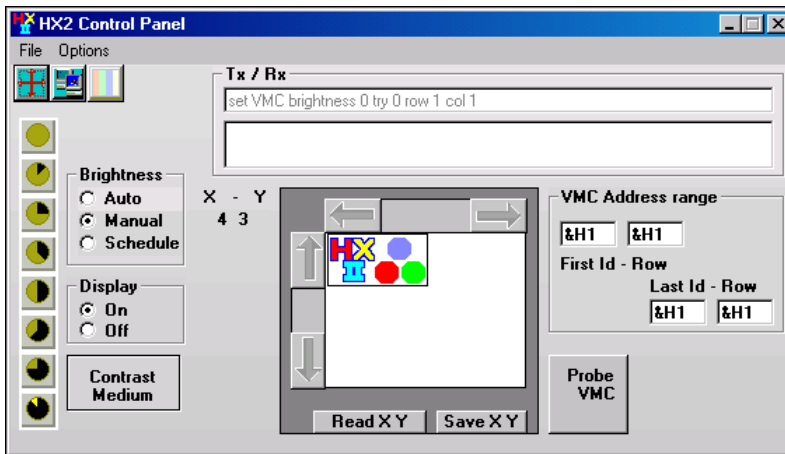


Figure 2-13. Expanded HX2 Control Panel Window

2.8 Displaying Test Patterns

This function provides a quick and convenient way of showing test patterns or images on an LED display. To display Test Pattern window, click the **Testing Pattern** button located on the toolbar (Figure 2-14).

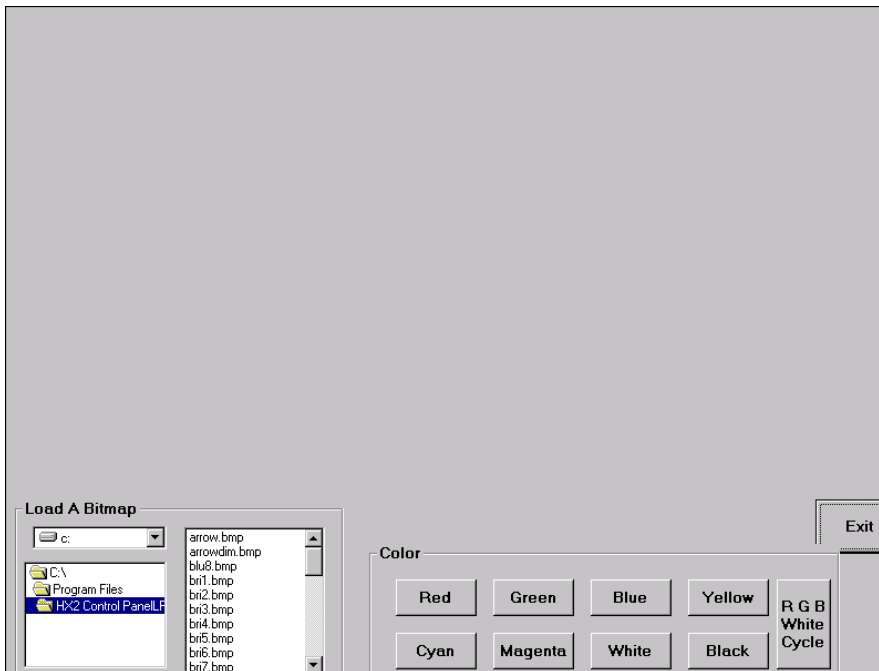


Figure 2-14. Test Pattern Window

To display a test pattern with the basic colors provided, click one of the color buttons. After you select one of the options, the color will display on your monitor. To display a test pattern by using a bitmap file, select the file to use from the file manager at the lower left corner of the window.

To close the Test Pattern window, click the **Exit** button

2.9 Adjusting the Capture Window

The LED display captures and shows part of the PC monitor. The capture window has been adjusted properly before being shipped. If readjustment is required during maintenance, please follow the instructions below.

Expand the control panel window by clicking the **Expand** button on the toolbar (Figure 2-15).

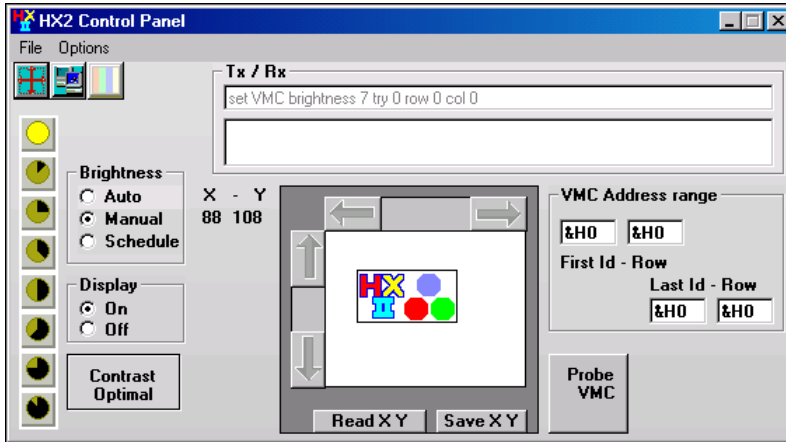


Figure 2-15. HX2 Control Panel→Capture Adjustment

To adjust the x- and y- coordinates of the capture window, use the left, right, up, or down arrow buttons. Once the LED display captures the intended area of the PC monitor, click the **Save X Y** button to save the x- and y- coordinate values into non-volatile memory in the VFC. If the x- and y- coordinate values have been changed accidentally but not yet saved, clicking the **Read X Y** button can restore the old ones.

The maximum x- and y- coordinate adjustment range is 255 pixels.

Chapter 3

Advanced Options

3.1 File Menu

The **File** menu (Figure 3-16) enables you to open an existing configuration file or save a modified one. With the **File** menu, you can also view the software version or exit the program.

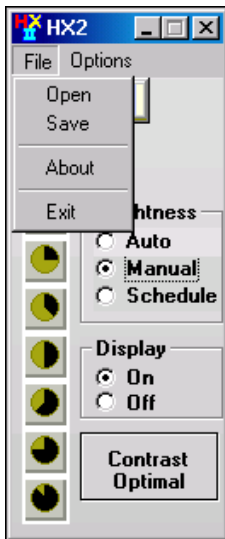


Figure 3-16. HX2 Control Panel → File Menu

Open

To open an existing configuration file, select **File>Open**. If there is a file currently opened and has not been saved, you will be prompted to save it.

Save

To save the current configuration file in its default location, select **File>Save**. If the current file has not been previously saved, you will be prompted to input a file name.

About

To view the version number of the HX2 Control Panel installed on your computer, select **File>About** (Figure 3-17).

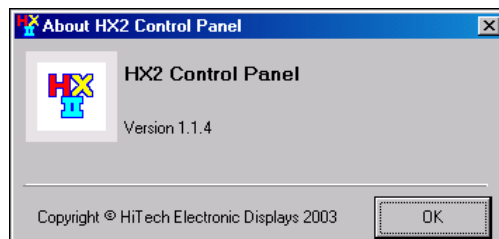


Figure 3-17. HX2 Control Panel Version Information

Exit

To quit the HX2 Control Panel program, click the close button or select **File>Exit**. Another way to quit the program is using the **Control** menu.

3.2 Options Menu

The **Option** menu (Figure 3-18) allows the user to configure various settings.

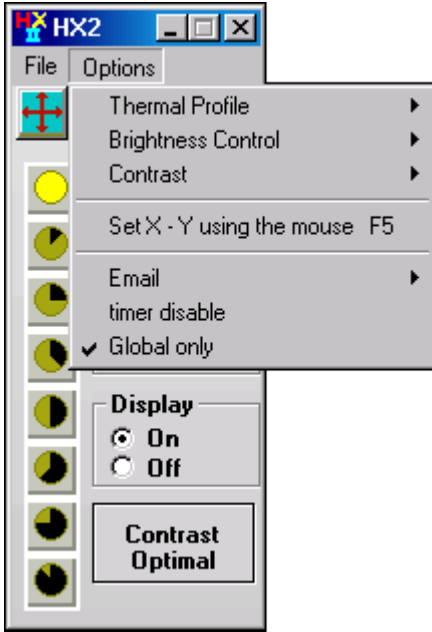


Figure 3-18. HX2 Control Panel→Options Menu

3.2.1 Thermal Profile

Show Thermal Profile

If you would like to view the thermal profile of the display, select **Options> Thermal Profile>Show Thermal Profile**. The Thermal Monitor window will display (Figure 3-19).

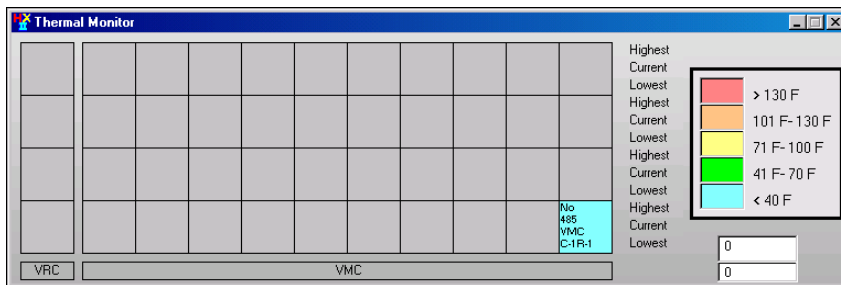


Figure 3-19. Thermal Monitor

To avoid interfering with the display, this window should normally be minimized or closed.

3.2.2 Brightness Control

Show Brightness Value Page

To view the HX2 brightness values and threshold level, select **Options>Brightness Control> Show Brightness Value Page**. The **HX2 Light Values** dialog box will display (Figure 3-20).

NOTE: *Unless advised by Hi*Tech, changing these values is not recommended. If the values have been changed accidentally, click the **Restore Factory Settings** button to go back to the original settings.*

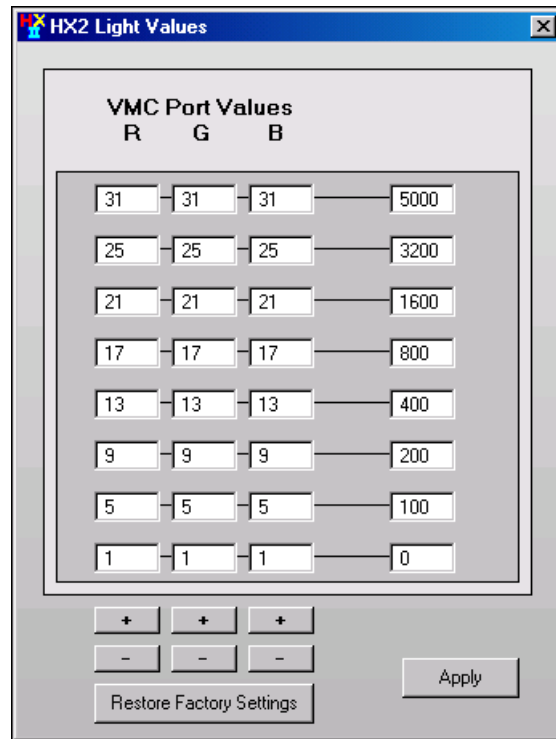


Figure 3-20. HX2 Light Values Dialog Box

To return to the HX2 Control Panel window, click the **Close** button.

Show Brightness Schedule Page

To set or review the brightness schedule, select **Options> Brightness Control>Show Brightness Schedule Page**. The **HX2 Schedule Brightness Page** dialog box displays (Figure 3-21).

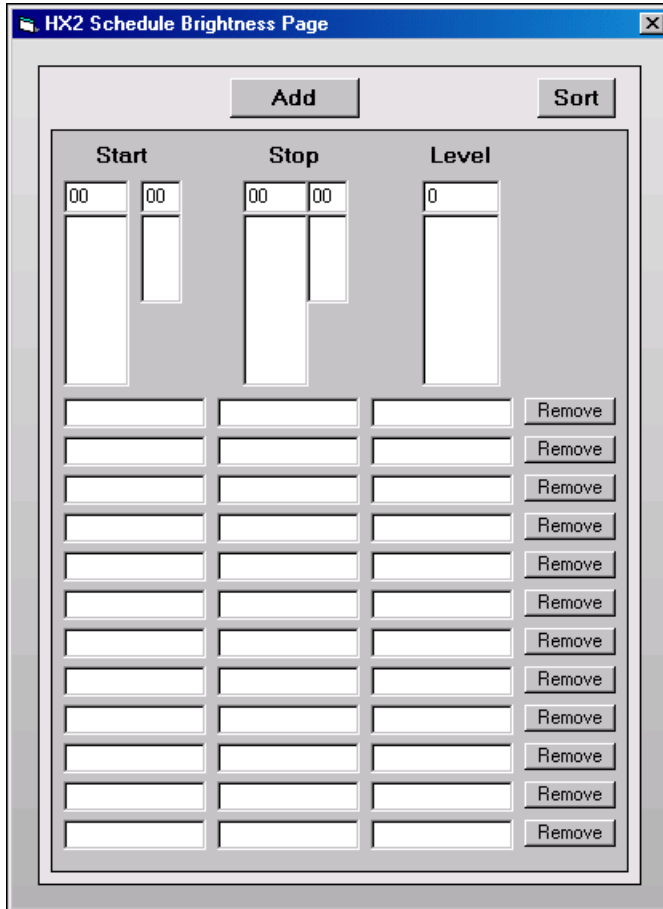


Figure 3-21. HX2 Schedule Brightness Page Dialog Box

To create or modify the brightness schedule, specify the start time, stop time, and brightness level. Once you have selected the start and end time and the brightness level, click **Add** to add the information to the list. To place the times in the correct schedule order, click **Sort**.

If you would like to remove any of the scheduled items from the list, click the **Remove** button next to the selected item.

To return to the HX2 Control Panel window, click the **Close** button.

3.2.3 Contrast

Use this menu item to set the contrast to low, medium or optimal. Setting the contrast to optimal is recommended when playing video programs on the LED display.

3.2.5 Set X–Y using the mouse

The **Set X-Y using the mouse** feature allows you to quickly adjust the display capture window position. Press **F5** or select **Options>Set X-Y using the mouse** to display the X-Y Coordinate window (Figure 3-22).

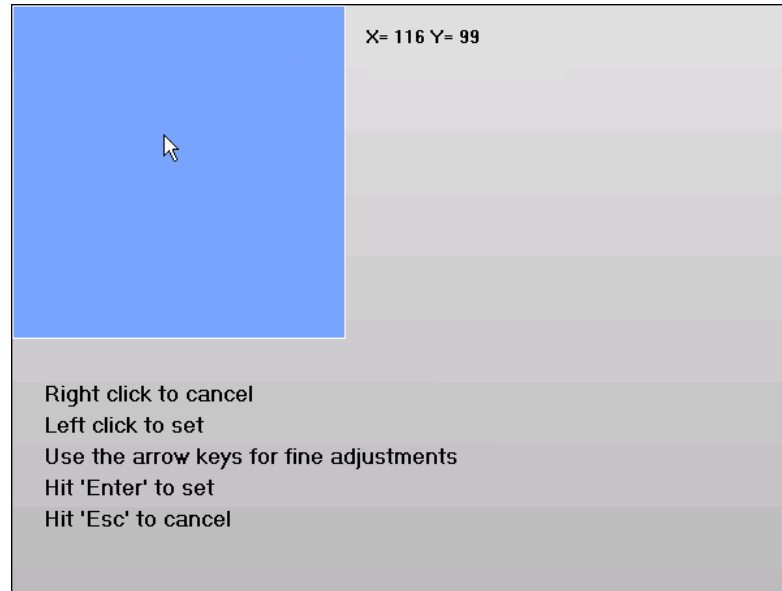


Figure 3-22. X – Y Coordinate Window

Place the pointer in the display window to select the coordinates. Once you have placed the cursor in the video playing window, you can use the arrow keys to position the window at the exact coordinates.

To set the coordinates, left click in the display or press **Enter**.

If you decide not to set the new coordinates, right click in the display window or press to **Esc** to close the X – Y Coordinate window.

3.2.5 Email

E-mail

The program can be set up to send e-mails to a list of people to report the status of the LED display. Select **Options>Email>E-Mail** and a check mark (✓) will appear on the menu item indicating that the **Email** option is enabled.

E-mail Addresses

The **E-mail Addresses** menu item allows you to set up a list of email recipients for the system status notification. Select **Options>Email>E-mail Addresses**, the **E-mail Addresses** dialog box displays (Figure 3-23).

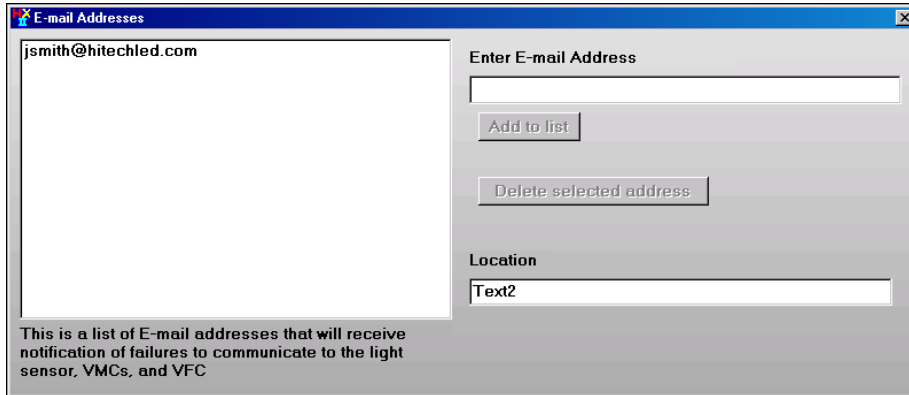


Figure 3-23. E-mail Addresses Dialog Box

If you would like to add an e-mail to the list, enter the e-mail address in the **Enter E-Mail Address** field and click **Add to List**. The e-mail address will appear in the list box on the left of the window.

To remove an e-mail address from the list box, select the address and click **Delete selected address**. To return to the main program window, click the **Close** button.

3.2.6 Timer Disable

The **Timer Disable** option stops all transmission to the sign until communication is established once again with the sign. To enable the **Timer Disable** option, select **Options>Timer Disable**.

3.2.7 Global Only

Enabling the **Global Only** option will make the PC broadcast communication commands, rather than talking to each module controllers individually. To enable the **Global Only** option, select **Options>Global Only**.

Glossary

CD

See *Compact Disc*

COM

See *Communication Port*

Communication Port

A connector for a communications interface, usually, a serial port.

Compact Disc

Optical disc used for storing digital data.

EIA-232

Standard for serial binary data interchange between a DTE (Data terminal equipment) and DCE (Data communication equipment). It is commonly used in personal computer serial ports.

HX2

Hi*Tech Video LED Display System

LED

See *Light Emitting Diode*

Light Emitting Diode

A semiconductor device that emits light when a current passes through it.

PC

See *Personal Computer*

Personal Computer

A computer with its own operating system and wide selection of software intended to be used by one person.

Read Only Memory

Memory whose contents can be accessed and read but cannot be changed.

ROM

See *Read Only Memory*

RS-232

See *EIA-232*

Serial Port

An interface that transmits data a bit at a time.

Universal Serial Bus

Provides a serial bus standard for connecting devices to a computer.

USB

See *Universal Serial Bus*

VFC

Hi*Tech Video Format Converter

VMC

Hi*Tech Video Module Controller

VRC

Hi*Tech Video Row Controller

