

## 5.0 Operation

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### 5.1 Infrared (I/R) Technician Remote

The IR remote has a maximum line of sight range of 50'. For distances 50', an optional IR Repeater and cables 100' or 150' are available (refer to Parts List in Section 9.0). Note that the remote is not capable of transmitting effectively through a rear-screen window.

Figure 5-1 shows the I/R Technician Remote Control keys with number callouts. Table 5-1 shows the functions and usage of each of the I/R Technician's Remote keys with reference to the number callouts from Figure 5.1. Where necessary, notes about key usage have been provided.

**NOTE on using MULTIPLE REMOTES with MULTIPLE PROJECTORS:** When using multiple IR remotes with multiple projectors, the IR remotes must be configured to individualize each projector to respond to only one remote. This is accomplished by the use of DIP switches on the inside of the IR remotes. These DIP switches must be changed to correspond to the projector address the remote is controlling. Refer to Section 5.8 to accomplish this.

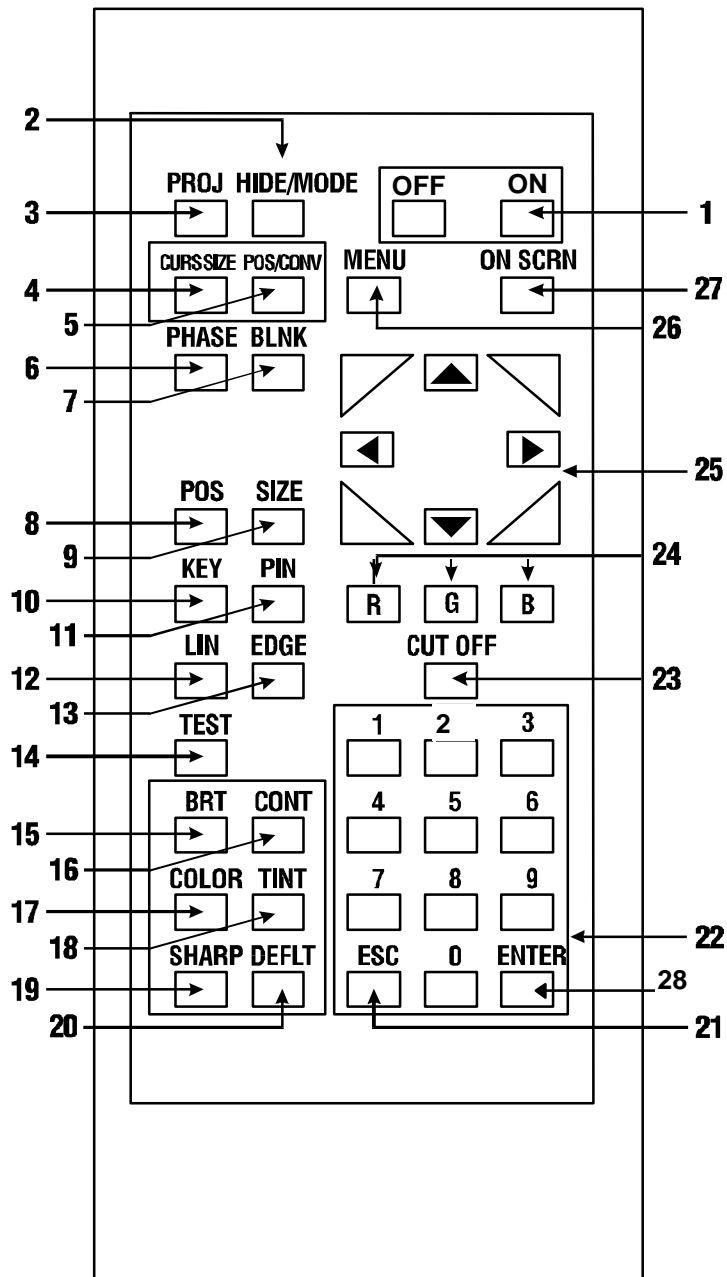


Figure 5-1. I/R Technician Remote Control. Number callouts refer to Table 5-1 for description of key functions.

Table 5-1. I/R Technician Remote Control Key Functions

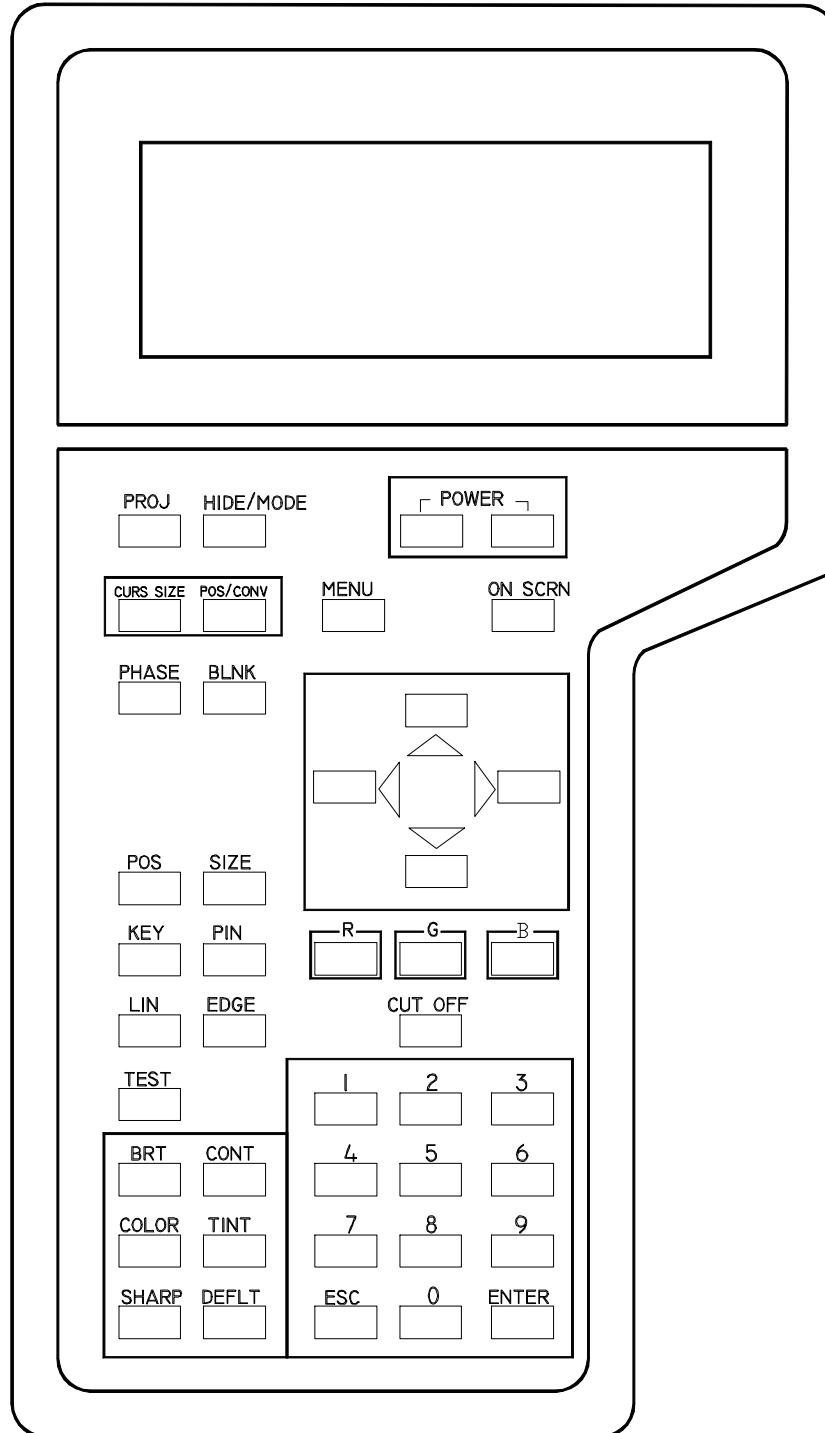
KEY	FUNCTION	USAGE
<b>1 POWER</b>	Press ON to turn projector power on, and OFF to turn power off.	
<b>2 HIDE/MODE</b>	Dual-function key. In <i>Normal mode</i> , mutes video. In <i>Convergence mode</i> , toggles through convergence modes (X/Y Convergence, Threshold and Sensitivity).	
<b>3 PROJ</b>	No current function.	Reserved for future use.
<b>4 CURS SIZE</b>	Select Convergence cursor size. <i>Note: Convergence data from smaller cursor is lost when larger cursor size is selected.</i>	Press <b>CURS SIZE</b> + direction arrows to toggle through available cursor sizes.
<b>5 POS/CONV</b>	Position/Convergence data key. Change cursor position or display convergence data.	Press key once to enter <i>Position</i> mode. Press key second time to enter <i>Data</i> display mode.
<b>6 PHASE</b>	Horizontal and vertical Phase adjustment of the input image on the CRT raster.	Press <b>PHASE</b> + Left/Right arrow keys to set phase.
<b>7 BLNK</b>	Blanking. Adjusts blanking levels at image edges.	Press <b>BLNK</b> + arrow keys to alter blanking position. Each press of <b>BLNK</b> key changes the active edge (top, bottom, left, right).
<b>8 POS</b>	Position. Adjusts image raster horizontally and vertically on the screen.	Press <b>POS</b> + Left/Right or Up/Down arrow keys to adjust raster horizontal and vertical position on screen.
<b>9 SIZE</b>	Adjusts projected image height and width on screen.	Press <b>SIZE</b> + direction arrows to adjust picture height and width.
<b>10 KEY</b>	Keystone. Horizontal and vertical keystone correction for grid line distortion at the sides or top and bottom of an image with respect to the center line.	Press <b>KEY</b> + Left/Right or Up/Down arrow keys to correct for horizontal and vertical keystone.
<b>11 PIN</b>	Pincushion. Vertical and horizontal pincushion correction for distortion at the sides or top and bottom of an image.	Press <b>PIN</b> + direction arrows to correct both vertical and horizontal pincushion distortion.
<b>12 LIN</b>	Linearity. Horizontal linearity correction for improper horizontal grid spacing on an image.	Press <b>LIN</b> + Left/Right direction arrows to correct for horizontal linearity distortion.
<b>13 EDGE</b>	Edge Linearity. Horizontal edge linearity correction for improper grid spacing at the sides of an image.	Press <b>EDGE</b> + Left/Right direction arrows to correct for edge linearity distortion.
<b>14 TEST</b>	Displays test pattern selection menu.	Press <b>TEST</b> + Number of test pattern to select.

<b>15 BRT</b>	Brightness. Adjust the brightness level until the black portions of a projected image are black, but detail in color balanced areas is not lost.	Press <b>BRT</b> + Up/Down direction arrows to set brightness level.
<b>16 CONT</b>	Contrast. Change the amount of image intensity. If image defocusing or loss of detail occurs, decrease either contrast or brightness, or both.	Press <b>CONT</b> + Up/Down direction arrows to set contrast level.
<b>17 COLOR</b>	Controls the color intensity of the video image. If the image appears <i>too pale</i> or <i>weak</i> , increase color level. If <i>flushed</i> or <i>too bright</i> , decrease color level.	Press <b>COLOR</b> + Up/Down direction arrows to set color level. Active only when the input is Composite or S-Video.
<b>18 TINT</b>	Controls the hue of the video image. If facial tones or objects appear <i>too green</i> , increase tint. If <i>too purple</i> , decrease tint.	Press <b>TINT</b> + Up/Down direction arrows to set tint level. Active only when the input is Composite or S-Video.
<b>19 SHARP</b>	Sharpness. Controls the sharpness of the video picture. If the image appears <i>soft</i> , increase sharpness. If <i>grainy</i> , decrease sharpness.	Press <b>SHARP</b> + Up/Down direction arrows to set sharpness level. Active only when the input in Composite or S-Video.
<b>20 DEFLT</b>	Default. Returns all picture control to technician-set default values.	
<b>21 ESC</b>	Cancels last command and retreats one menu level.	
<b>22</b> Input <b>0 - 9</b> keys	Selects the input signal channel and makes Menu selections.	
<b>23 CUT OFF</b>	Cuts off color channel, one color at a time. To cut off all three colors, use <b>HIDE/MODE</b>	Press <b>CUTOFF + R, B, or G</b> .
<b>24 RGB</b> keys	Color channel selection.	If color is cut off, press CUTOFF and color key.
<b>25</b> Direction arrows	Used for increasing and decreasing control levels, cursor movement and convergence adjustments.	
<b>26 MENU</b>	Toggles on/off Main Menu display.	Press once to display Main Menu, second time to hide Main Menu.
<b>27 ON SCRN</b>	Toggles on/off the "on screen" information display.	
<b>28 ENTER</b>	Implements commands.	

## 5.2 Tethered Technician Remote

The Tethered Technician Remote is almost identical to the I/R technician remote, with the addition of a 20 X 4 character display at the top of the unit (refer to *Figure 5-2*). Power on/off for the tethered remote is toggled by pressing **both** power buttons simultaneously. The Tethered Remote comes with a 25' cable. Optional 50' or 75' cables are also available.

Use the Tethered remote in the same manner as the I/R Technician remote to control the projector.



**Figure 5-2.** The optional Tethered Technician Remote has the same key function and orientation as the I/R Technician Remote except for the requirement of pressing both ON and OFF keys together to turn power on and off, and the addition of a display.

### 5.3 Infrared (I/R) Executive Remote

Use the I/R Executive Remote to control the Model 370SC Projector during presentations (*Figure 5-3*).

With the Executive remote, a user can **temporarily** override the following picture settings:

- Brightness
- Contrast
- Tint
- Sharpness
- Color

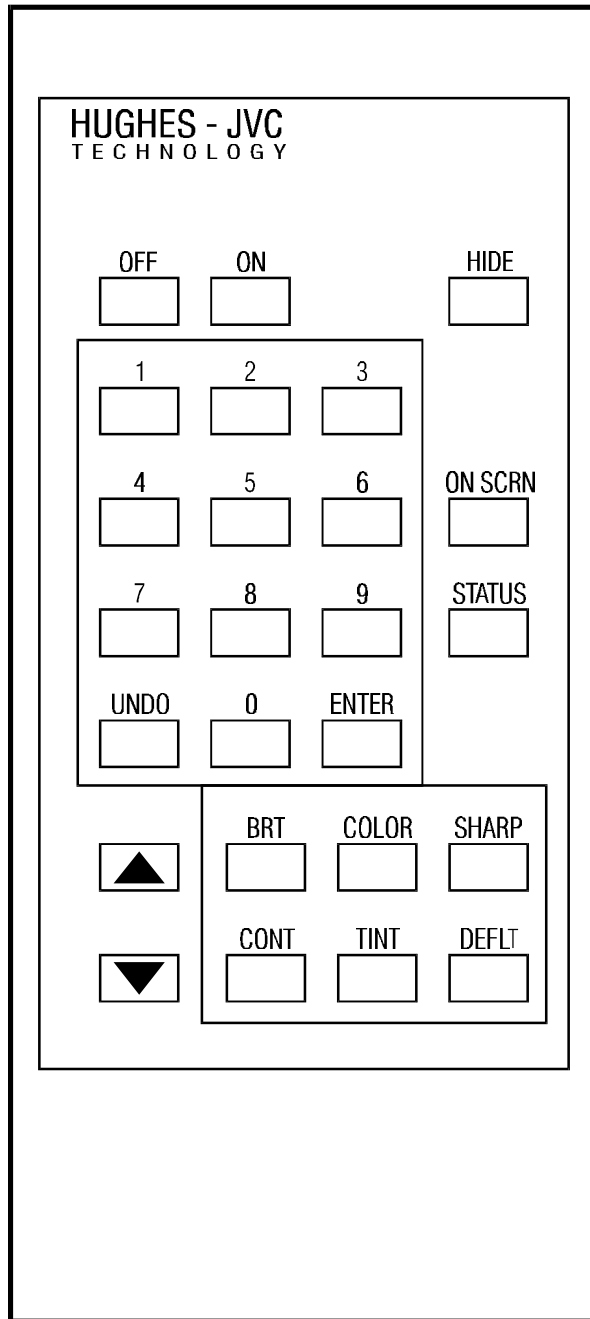
The technician-set default settings for the picture setting values are instantly restored when the **DEFLT** key is pressed on the remote.

Using the Executive remote, the user cannot access any of the menus, electronic image adjustments or convergence settings. These values are set by a technician at projector checkout and cannot be altered during normal projector use.

To select a channel with the Executive remote, press the number of the channel and then, press **ENTER**.

The Up/Down arrow keys are used with the picture setting values. Arrow keys will not change the channel selection.

Figure 5-3 shows the I/R Executive Remote keys, and Table 5-2 provides a description of the key functions.



**Figure 5-3.** The I/R Executive Remote Control. See Table 5-2 for a description of the key functions.

Table 5-2. Executive Remote Control Key Functions

KEY	FUNCTION	USAGE
<b>OFF/ON</b>	Turns projector power on and off.	
Input <b>0 - 9</b> buttons	Input channel selection.	Press channel # + <b>ENTER</b> .
<b>UNDO</b>	Undo command. Cancels channel selection.	
<b>Up/Down</b> arrows	Increases and decreases picture setting values. Not used for channel selection.	
<b>CONT</b>	Contrast. Temporarily changes the amount of image intensity. If image defocusing or loss of detail occurs, decrease either contrast or brightness, or both.	Press <b>CONT</b> + Up/Down direction arrows to set contrast level.
<b>BRT</b>	Brightness. Temporarily adjusts the brightness level until the black portions of a projected image are black, but detail in color balanced areas is not lost.	Press <b>BRT</b> + Up/Down direction arrows to set brightness level.
<b>TINT</b>	Temporarily controls the hue of video image. If facial tones or objects are <i>too green</i> , increase tint. If <i>too purple</i> , decrease tint.	Press <b>TINT</b> + Up/Down direction arrows to set tint level. Active only for Composite or S-Video.
<b>COLOR</b>	Temporarily controls the color intensity of video image. If the image appears <i>too pale</i> or <i>weak</i> , increase color level. If <i>flushed</i> or <i>too bright</i> , reduce color level.	Press <b>COLOR</b> + Up/Down direction arrows to set color level. Active only for Composite or S-Video.
<b>DEFLT</b>	Default. Returns all picture settings to technician-set default values.	
<b>SHARP</b>	Sharpness. Temporarily controls the sharpness of the video picture. If the image appears <i>soft</i> , increase sharpness. If <i>grainy</i> , decrease sharpness.	Press <b>SHARP</b> + Up/Down direction arrows to set sharpness level. Active only for Composite or S-Video.
<b>ENTER</b>	Enters input channel selection.	Press channel # + <b>ENTER</b> .
<b>STATUS</b>	Provides a quick look at input channel information (i.e., scan frequency, channel name, etc.)	
<b>ON SCRN</b>	Toggles on/off the "on-screen" information display.	
<b>HIDE</b>	Video mute.	

## 5.4 Keyboard Command Equivalents

The Model 370SC can be controlled by a VT-100 terminal or PC using Windows 3.1. Table 5-3 shows keyboard equivalents. Access Windows Program Manager, select Terminal, then Settings menu. Select Terminal Emulation, DEC VT-100(ANSI). Use a Null Modem cable to connect the projector to a terminal. See Appendix A for more details.

**Table 5-3. Keyboard Command Equivalents**

ACTION	KEYBOARD INPUT	EXECUTIVE REMOTE KEY EQUIVALENT	TECHNICIAN AND **TETHERED REMOTE KEY EQUIVALENT	HEX
Power ON/OFF	CTRL-P	ON/OFF	BOTH Power Keys	10
Electronics Power only	CTRL + E			05
Arc Lamp Power only	CTRL + L			0C
Power ON	CTRL + U	Power ON		15
Power OFF	CTRL + F	Power OFF		06
Video Mute/ Convergence Mode	V	HIDE	HIDE/MODE	56
Change Channel	Channel # + ENTER*	Channel # + ENTER*	Channel # + ENTER*	30-39 +OD
Convergence Mode Cursor Size	M		CURS SIZE	4D
Convergence Mode Position/Data	D		POS/CONV	44
Phase adjustment	H		PHASE	48
Picture Blanking	Z		BLNK	5A
Position adjustment	P		POS	50
Size adjustment	S		SIZE	53
Keystone correction	K		KEY	4B
Pincushion correction	N		PIN	4E
Linearity correction	L		LIN	4C
Edge linearity	E		EDGE	45
Test pattern display	T		TEST	54
Picture Brightness	I	BRT	BRT	49
Picture Contrast	C	CONT	CONT	43
Picture Color	A	COLOR	COLOR	41
Picture Tint	U	TINT	TINT	55
Picture Sharpness	X	SHARP	SHARP	58
Picture Setting defaults	CTRL+D	DEFLT	DEFLT	04
Back out of menu	ESC	UNDO	ESC	1B
Hide R, G or B	F		CUT OFF	46
RGB selection	R,G,B		R,G,B	R=52 B=42 G=47
UP Arrow	Up Arrow		Up Arrow	1B,5B, 41***
DOWN Arrow	DOWN Arrow		DOWN Arrow	1B,5B, 42***
RIGHT Arrow	RIGHT Arrow		RIGHT Arrow	1B,5B, 43***
LEFT Arrow	LEFT Arrow		LEFT Arrow	1B,5B, 44***
Access Main Menu	SPACEBAR		MENU	20
Screen display on/off	O	ON SCRN	ON SCRN	
Status	?	STATUS	MENU	3F

\*For channels with two numbers, pressing ENTER is not necessary.

\*\*Tethered remote keys are same as I/R remote except for requirement of pressing both POWER keys to turn power on/off, and the addition of a display.

\*\*\*The arrow keys are a sequence of Escape, Left Bracket, and A,B,C, or D depending on the arrow key pressed. The first number represents the Escape key, the second number the left bracket, and the third number represents the letter corresponding to the Arrow key pressed.

## 5.5 Menu Structure

The Menu Structure is multi-level and allows access to commands for checking out and operating the Model 370SC.

To display the Main Menu, press MENU on the remote control or press the spacebar on a terminal or PC. (**NOTE:** If another menu is already displayed on the screen, press ESC until the Main Menu appears.) The Main Menu is displayed on the terminal monitor and on the projected screen image. If using a PC to run the Model 370SC Projector, use a terminal emulation program such as ProComm or Windows terminal. *Refer to Appendix A, Communications Spec for more information.*

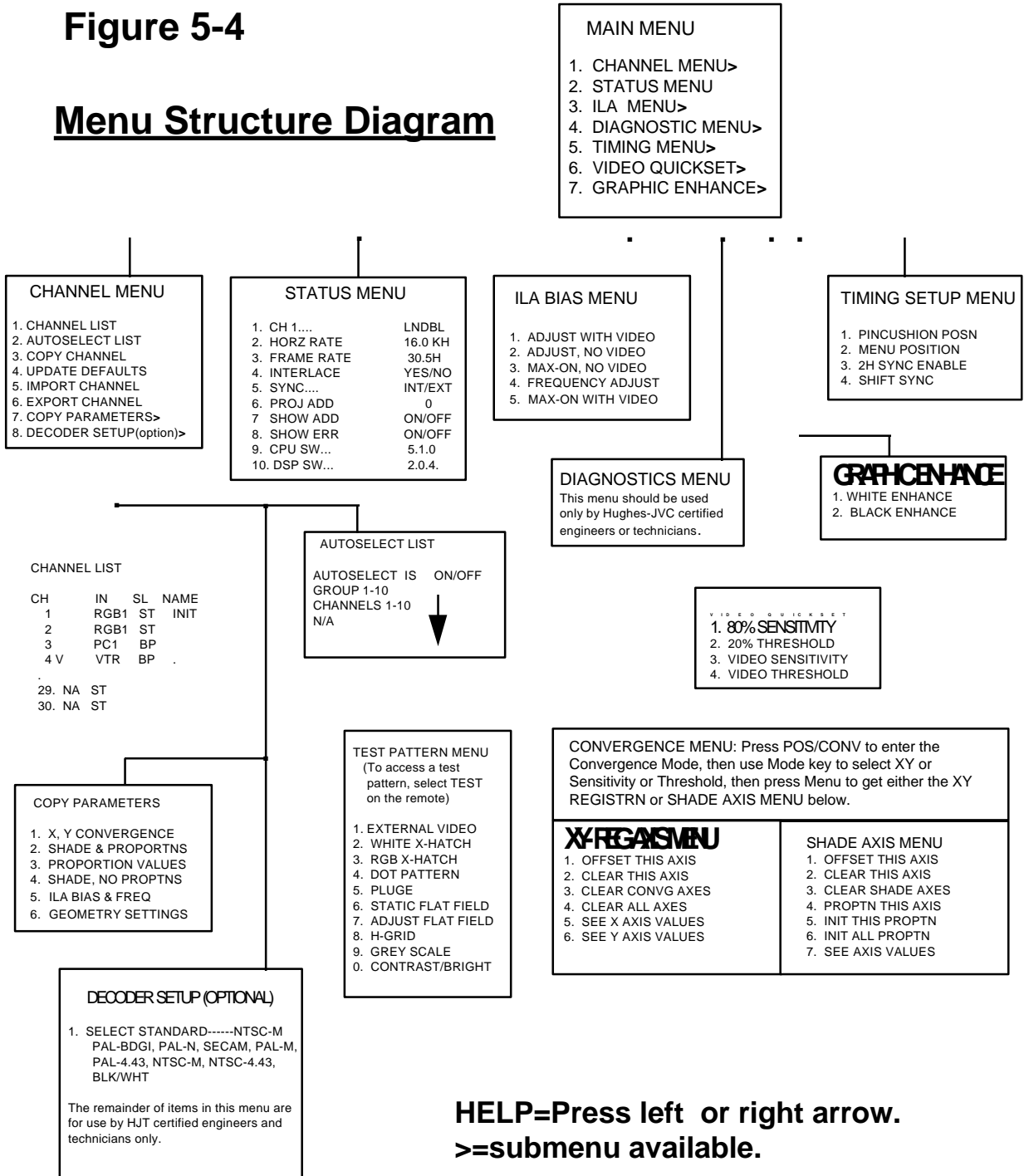
Menu screens remain active for 30 seconds, then "time out" and are cleared from the screen. To issue a command, access the Menu (press MENU) and type selection number or use the arrow keys to highlight the desired number, and press ENTER.

Figure 5-4 shows the Main Menu Structure and the sub-menus.

*For a description of each menu item see Section 5.6.*

Figure 5-4

**Menu Structure Diagram**



**HELP=Press left or right arrow.**  
**>=submenu available.**

**MENU STRUCTURE**

The above menu structure is for use with projector software 5.1.0. Software versions are indicated on the Status menu above and will be supplemented in Field Service Bulletins.

## 5.6 Menu Item Definitions

This section defines the menu items available through the Main Menu and submenus.

### MAIN MENU

1. CHANNEL MENU---Displays the Channel Menu.
2. STATUS MENU---Displays the current status of the projector.
3. **ILA**<sup>®</sup> BIAS MENU---Displays **ILA**<sup>®</sup> Bias Menu.
4. DIAGNOSTIC MENU---Displays the Diagnostic Menu.
5. TIMING SETUP MENU---Displays the Timing Setup Menu.
6. VIDEO QUICKSET---
  - 80% SENSITIVITY---Automatically selects the ADJUST FLAT FIELD test pattern set at 80% and the Sensitivity Data mode for Sensitivity adjustments.
  - 20% THRESHOLD---Automatically selects the ADJUST FLAT FIELD test pattern set at 20% and the Threshold Data mode for Threshold adjustments.
  - VIDEO SENSITIVITY---Allows the operator to perform Proportional or Offset adjustments for Sensitivity. Select a test pattern (Grey Scale is recommended), then select this item, then select the color to adjust. Can also adjust Sensitivity with video on the screen instead of a test pattern by selecting this item directly.
  - VIDEO THRESHOLD---Allows operator to adjust Threshold in the same manner as VIDEO SENSITIVITY above.
7. GRAPHIC ENHANCE---Provides for black or white graphic enhancement when needed for high resolution graphics.

### CHANNEL MENU

1. VIEW CHANNEL LIST---Displays status of all active channels.
 

CH	=	Channel number
I/P	=	Input (RGB1, RGB2, Video, S-Video)
SL	=	BP:backporch, ST:sync-tip, TL:Tri-level
NAME	=	User-set channel name.
2. AUTOSELECT LIST---Displays the current status of the AUTOSELECT function and allows operator to set up an AUTOSELECT group.
3. COPY CHANNEL---Copies setup and convergence data from current channel to another channel. Shortens convergence and setup time for multiple sources.
4. UPDATE DEFAULTS---Updates Picture settings defaults.
5. IMPORT CHANNEL---Imports setup data from computer to projector. Useful when servicing the projector. Store setup data in computer and import the data during setup. *Refer to Appendix A.*
6. EXPORT CHANNEL---Exports setup data from projector to computer. Useful when servicing the projector. *Refer to Appendix A.*

7. COPY PARAMETERS---Allows operator to copy any of six setup parameters selectable from the submenu.
8. DECODER SETUP---Displays the optional Decoder Setup Menu.
  - SELECT STANDARD---NTSC-M, PAL-B/G, PAL-N, SECAM, PAL-M, PAL-4.43, NTSC-M, NTSC-4.43, BLK/WHT.
  - Remainder of items in this menu should be used by HJT certified engineers or technicians.

### **STATUS MENU**

1. CH. ##--Displays the current channel number and channel name.
2. HORZ RATE.--Displays horizontal scan frequency of input signal.  $\pm 5\%$  accuracy.
3. FRAME RATE--Displays vertical scan frequency of input signal if non-interlaced, 1/2 vertical scan frequency if interlaced.
4. INTERLACE---Shows if source is interlaced. If not, projected image is progressive scan.
5. SYNC---Indicates whether internal or external sync is active.
6. PROJ. ADD.---Projector address designation. Used to select a specific projector when several are in use. See Section 5.8 for specifics on how to use this feature.
7. SHOW ADD.---Toggles adjustment data display on/off screen.
8. SHOW ERR.---Toggles on/off display of error codes on screen.
9. CPU SW---Displays the CPU software version. Uses two Eproms.
10. DSP SW---Displays Digital Signal Processing software version. Uses three Eproms.

### **ILA<sup>®</sup> BIAS MENU**

1. ADJUST WITH VIDEO---Sets **ILA<sup>®</sup>** bias *with* video on the screen.
2. ADJUST NO VIDEO---Sets **ILA<sup>®</sup>** bias with video *cut off*.
3. MAX-ON NO VIDEO---Sets the RGB **ILA<sup>®</sup>** biases to 100% *without* video for easier projector positioning and lateral lens adjustment. Resets to original setting after pressing any key.
4. FREQUENCY ADJUST---Sets the **ILA<sup>®</sup>** bias frequency *with* video on screen. A frequency of 2 kHz is acceptable for general video viewing. A lower frequency (as low as 1.5kHz) provides a brighter image with lower image burn-in. A higher bias frequency results in higher resolution. For HDTV a frequency of 2.5-3 kHz provides higher resolution with less image lag.
5. MAX-ON WITH VIDEO---Displays maximum bias setting *with* video on screen. Resets to original setting after pressing any key.

### **VIDEO QUICKSET**

1. 80% Sensitivity---Used to adjust Sensitivity shading. Automatically selects the ADJUST FLAT FIELD test pattern set at 80%, and the Sensitivity data adjust mode. Operator goes directly to arrow keys to adjust.
2. 20% Threshold---Used to adjust Threshold shading. Automatically selects the ADJUST FLAT FIELD test pattern set at 20%, and the Threshold data adjust mode. Operator goes directly to arrow keys to adjust.
3. Video Sensitivity---Used to adjust Sensitivity Offset or Proportional Offset. Operator selects Grey Scale test pattern, then selects Video Sensitivity, then selects color to adjust and uses arrow keys to increase or decrease Offset or Proportional. Can also be used to make small adjustments in Sensitivity or Threshold with video on screen instead of a test pattern. Select this item with external video on screen, after all shading adjustments have been made. If some incorrect coloration still exists in the video, use up/down arrow keys to increase or decrease any color that is dominant or deficient.
4. Video Threshold---Same as #3 for Threshold.

### **TIMING SETUP MENU**

1. PINCUSHION POSN---Centers pincushion correction to image.
2. MENU POSITION---Centers position of menus on the screen. Also centers Convergence and Shading correction position.
3. 2H SYNC ENABLE---Used to eliminate "flagwaving" seen at the top of the screen.
4. SHIFT SYNC---Used to eliminate unstable images due to unusual input sync from source.

### **TEST PATTERN MENU**

To select a test pattern with the remote, press TEST, followed by the test pattern number.

1. EXTERNAL VIDEO---Used for PHASE, SIZE, POSITION, and BLANKING.
2. WHITE-X-HATCH---Used for Convergence, Keystone, Pincushion, Pincushion Position, and Linearity.
3. RGB-X-HATCH---Used for Convergence final adjustments.
4. DOT PATTERN---Used to verify G2 setting for RGB.
5. PLUGE---Used to set Black/White scale.
6. STATIC FLAT FIELD---Used to set Contrast.
7. ADJUST FLAT FIELD---Used for Threshold and Sensitivity Shading adjustments.
8. H-GRID---Used for Focusing
9. GREY SCALE---Used for Color Balance, G2, and Menu Position adjustments.
10. CONTRAST/BRIGHT---Used as a reference for Brightness and Contrast.

**XY REGISTRN MENU**

1. OFFSET THIS AXIS---Adjusts all points on screen equally by setting in an offset for XY Registration. Also can be used as fine adjustment for position.
2. CLEAR THIS AXIS---Clears XY axis for and active color.
3. CLEAR CONV AXIS---Clears all convergence data from the active channel.
4. CLEAR ALL AXES---Clears ALL data for the active channel (XY Convergence, Sensitivity, and Threshold)
5. SEE X AXIS VALUES---Enables the operator to see the X axis values in each cell when the projector is connected to a VT-100 terminal using a program such as Procomm® with 40 or more lines of display.
6. SEE Y AXIS VALUES---Same as #5 for Y values.

**SHADE AXES MENU**

1. OFFSET THIS AXIS---Adjusts all points on the screen equally by setting in an offset for Sensitivity or Threshold for the selected color.
2. CLEAR THIS AXIS--- Clears Sensitivity or Threshold axis for the active color.
3. CLEAR SHADE AXES---Clears all shading data from the active channel.
4. PROPTN THIS AXIS---Enables the operator to offset all cells in one axis in proportion to their individual values.
5. INIT THIS AXIS---Resets current mode for current color to 230 default.
6. INIT ALL AXES---Resets Sens/Thres for all colors to 230 default level. Must be done when starting up with new System Cont Board or updating software.
7. SEE AXIS VALUES--- Enables operator to see Sensitivity or Threshold axis values in each cell when projector is connected to a VT-100 terminal using a program such as Procomm® with 40 or more lines of display.

**5.7 AUTOSELECT**

The Autoselect feature automatically selects a channel to match an incoming source when the incoming source changes. Channels are assigned by the operator to numbered Autoselect groups. When a source changes, the channels within the same Autoselect group are searched without operator knowledge or intervention. When a channel that matches the new source's parameters is found, that channel is switched to automatically.

**Need for Autoselect:** When the projector is operating in one channel and the incoming source changes, the current channel may not be set up to properly process the new source. The operator then must choose which channel is best suited to handle the new source, and change to that channel with the remote. The operator may not know which channel best matches the new source and a delay occurs in switching channels.

A similar situation exists when a switcher without RS-232 capability to control projector switching is connected to one of the projector inputs. This switcher can't send out a command to change projector channels when the switcher channel is

changed. The projector channel must be changed manually by the operator to the correct channel for the new switcher channel. Again, the operator must know which channel to switch to.

The Autoselect feature eliminates operator delays and confusion by automatically switching to the correct channel within an Autoselect group.

**Autoselect setup example :** A computer, capable of selecting between different scan rates, is being used as a source. Normally when the scan rate changes the operator manually changes channels to one that is set up properly for the new source. Because the computer provides sources at three different scan rates, the operator must change channels each time the source changes.

For example, a computer provides the following three sources set up as indicated:

- DOS @ 31.5kHz horizontal, 71.5Hz vertical on Channel 1.
- VGA @ 31.5kHz horizontal, 60Hz vertical on Channel 7
- SVGA @ 48kHz horizontal, 60Hz vertical on Channel 11.

**NOTE:** For easier viewing while editing, use Green menus (Select G, and cut off R and B).

To place three sources in an Autoselect group:

1. From the CHANNEL MENU, select AUTOSELECT LIST.

Initially the display is as follows:

<b>DISPLAY</b>	<b>DESCRIPTION</b>
AUTOSEL STATE: ON/OFF	<i>Global on/off state</i>
GROUP 1-10	<i>Group number/name, up to 10 groups</i>
CHANNELS 1-10	<i>Channel numbers and name-up to 10 channels per group</i>
↑ ↓	
N/A	<i>N/A=Not assigned</i>

2. Verify the AUTOSELECT STATE is OFF.
3. If the AUTOSELECT STATE is not OFF, use the UP/DOWN arrow keys to highlight the current state and press ENTER to select.
4. Use the UP/DOWN arrow keys to change the choice to OFF.
5. Press ENTER to save that state.
6. Use the UP/DOWN keys to highlight the **group** field.
7. Press ENTER to select.
8. Use the UP/DOWN keys to choose a group number.
9. Press ENTER to save that group number.
10. Press the right arrow key to highlight the group **name** field.

11. Press ENTER to highlight the first character, then scroll with the UP/DOWN keys and press ENTER to select the first letter for the group name. Repeat this process to select up to eight characters for the group name. **NOTE:** The group name is for convenience only and may be omitted if desired.
12. Move the highlight to the first channel field in the list and press ENTER.
13. Use the arrow keys and select Channel 1. Press ENTER to add Channel 1 to Group 1.

**NOTE 1:** A channel can be in one Autoselect group only. To move a channel to another group, first delete it from its current group by setting it to N/A.

**NOTE 2:** The order of channel assignment is not important. The Autoselect feature starts at the current channel when looking for a match and scans down the list and back to the beginning of the list. The first channel to match the incoming source is automatically selected.

14. Repeat Step 13 to add Channel 7 and 11 to Group 1.
15. Channels 1, 7, and 11, from the example, are now in AutoSelect Group #1. More channels can be added to this group, if needed. Other channels can be assigned to other groups as needed. One group can be for SUN workstations with different scan rates, and one for MACs, etc. Do not assign sources with very similar parameters to the same group (see Autoselect limitations below).
16. When finished adding channels to Autoselect groups, turn the Autoselect feature to ON as follows:
  - Select CHANNEL LIST from the MAIN MENU.
  - Select AUTOSELECT LIST from the CHANNEL LIST.
  - Use the arrow keys and highlight AUTOSEL STATE ON/OFF. Press ENTER to select it.
  - Select AUTOSEL STATE ON. Press ENTER to lock the Autoselect to ON.

Now, when the projector operates in one of the channels in Group # 1, and the incoming source changes to one of the other two, the projector automatically switches to the correct channel without any operator knowledge or intervention, just as though the operator selected the channel manually.

Also, when the operator selects a channel within a group and the incoming video doesn't match the selected channel's parameters, that group's channels are searched for a match to the incoming source. The channel that most closely matches is automatically switched to without any operator knowledge or intervention.

### **AUTOSELECT FEATURES AND LIMITATIONS**

**Similar Sources:** Autoselect cannot switch between two channels with very similar horizontal frequencies, vertical frequencies, and interlace modes. This occurs with Line-Doubled NTSC Video and VGA 480 Computer Graphics, and with PAL and SECAM video. If two sources with very similar video formats (within the deadband—see below) are located in the same group number, Autoselect

switches to the source listed first on the Autoselect channel list. Sources with very similar video formats should be placed in different Autoselect groups.

**Deadband (Sensitivity):** The deadband for distinguishing between different video formats is 20 horizontal lines and 3 Hz vertical frames.

**Adding/Deleting Channels:** To add a channel to any Autoselect group, the video source must be connected and active. The Autoselect feature must be OFF to add or delete a channel.

**Autoselect OFF:** If Autoselect is OFF the projector will not automatically switch to another channel.

**Unmatched Incoming Sources:** If the operator switches to an incoming source that does not match any channel in the Autoselect group, no autoselect switching occurs. The projecto remains on the current channel.

**Maximum Channels and Groups:** Up to 10 channels can be assigned to each group and there can be up to 10 groups, but there can only be a total of 30 group/channel combinations. Other channels can exist that are not assigned to any Autoselect group but the total number of channels cannot exceed 30.

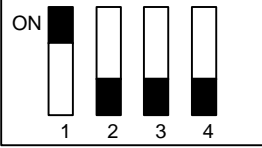

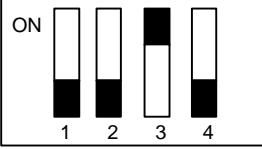
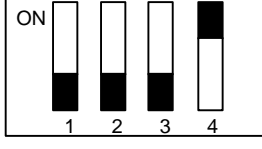
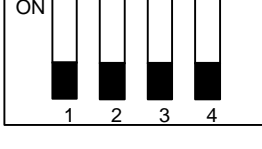
**Identical Autoselect Groups:** It may be useful to have two groups with identical basic parameters. This is feasible in situations where viewing will be in two different environments such as daytime and nighttime or light and dark rooms. One Autoselect group can have higher Brightness or Contrast than another group but otherwise be the same. The operator can switch between the two groups and retain the same Autoselecting between channels but for two different environmental situations. This saves the operator from having to adjust Brightness or Contrast every time the environment changes.

**Channels not in Autoselect Groups:** These channels are not included when Autoselect searches for matching channels.

## 5.8 Remote Control DIP Switch Settings

The IR Technician's Remote and IR Executive Remote contain switches in the battery cavity for address selection. The following provides a list of DIP switch settings associated with projector addresses.

**PROJECTOR ADDRESS:** The projector address is included in the STATUS MENU. The address can be changed as shown in Figure 5-5 which illustrates DIP switch settings associated with projector addresses.

DIP SWITCH SETTING	ILLUSTRATION	PROJECTOR ADDRESS
<b>1 UP UNIVERSAL</b>		<b>0</b>
<b>2 UP</b>		<b>1</b>
<b>3 UP</b>		<b>2</b>
<b>4 UP</b>		<b>3</b>
<b>ALL OFF/ DOWN</b>		<b>7</b>

**Figure 5-5.** DIP Switch Settings.

**NOTE: UNIVERSAL POSITION-**Operates all projector addresses, i.e., Address 0, 1, 2, 3, and 7.

1. Select MENU (press MENU key).
2. Select STATUS MENU (#2).
3. Select PROJ ADD (press #6) --"PASSCODE" appears on the screen.
4. Select and enter Passcode (1,2,3, Enter).
5. Select new address and enter. The new address number will appear in the status menu.
6. Change IR Remote Control DIP Switch Setting to correspond with the new address setting.

Figure 5-5.

