**E-Vision 6500 Series**

High Brightness Digital Video Projector
About This Document

Please follow the instructions in this manual carefully to ensure safe and long-lasting use of the projector.

Keep this manual handy for future reference.

Symbols used in this manual

Many pages in this document have a dedicated area for notes. The information in that area is accompanied by the following symbols:

⚠️ ELECTRICAL WARNING: this symbol indicates that there is a danger of electrical shock unless the instructions are closely followed.

⚠️ WARNING: this symbol indicates that there is a danger of physical injury to yourself and/or damage to the equipment unless the instructions are closely followed.

.erb; NOTE: this symbol indicates that there is some important information that you should read.

Product revision

Because we at Digital Projection continually strive to improve our products, we may change specifications and designs, and add new features without prior notice.

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Rev D July 2014
Digital Projection E-Vision 6500 Series

Introduction

Congratulations on your purchase of this Digital Projection product.

Your projector has the following key features:

- Swappable color wheels for high brightness and color critical applications.
- BrilliantColor™ for increased system brightness.
- DynamicBlack™ for improved black levels in dark scenes.
- Frame sequential 3D support at up to 120Hz with support for DLP® Link™ glasses synchronisation only.
- Independent control of hue, saturation and gain for primary and secondary colors.
- Vertical keystone correction.
- Control via LAN and RS232.
- Motorized lens mount.

A serial number is located on the back of the projector. Please record it here:

[Blank space for serial number]
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What's In The Box?

Make sure your box contains everything listed. If any pieces are missing, contact your dealer.

You should save the original box and packing materials, in case you ever need to ship your Projector.

Only one power cable - dependent on the destination territory - will be supplied with the projector.

Remote control (112-377)

User Manual on disc (115-759)

Important Information (114-759)

Lens cap

Color wheel

Power cable 10A, United Kingdom (102-180)

Power cable 10A, Europe (102-163)

Power cable 13A, North America (102-165)

Power cable, China (112-472)
Getting To Know The Projector

Front and rear views

The projector uses an infra-red remote control.
Some of the controls are duplicated on the projector control panel, as shown on the next page.

For full details of how to use the controls and the menu system, see the Operating Guide.

The air filters should be cleaned or changed regularly, depending on the installation environment.
The filters should be changed at the same time as the lamp is changed.

The projector lens is shipped separately.
### Control panel and indicators

Some of the controls from the remote control are duplicated on the projector control panel, as shown on the right.

*The CANCEL button has the same function as the RETURN button on the remote control.*

*The SOURCE and AUTO buttons have the same function as the INPUT and AUTO SYNC buttons on the remote control.*

The **Power** indicator will show amber when in standby and green when the projector is on, and will flash when the projector is warming up or cooling down.

The **Warning** indicator will flash to show any error situations.

The **Lamp** indicators will show which lamp is in use, and whether the projector is in Normal or Eco mode, and will flash to show lamp status.

*The chart below shows all possible combinations of indicator lamp color.*

<table>
<thead>
<tr>
<th>Standby (eco mode)</th>
<th>Standby (normal)</th>
<th>Power on (normal)</th>
<th>Power on (eco mode)</th>
<th>Warming up</th>
<th>Cooling down</th>
<th>Cover open</th>
<th>Over temperature</th>
<th>Power error</th>
<th>Fan fail</th>
<th>Keys locked</th>
<th>End of life approaching</th>
<th>Lamp life over</th>
<th>Lamp error</th>
<th>No lamp</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green</td>
<td>Green</td>
<td>Green</td>
<td>Amber</td>
<td>Green</td>
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<td>Green</td>
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</table>

**Notes**

For full details of how to use the controls and the menu system, see the *Operating Guide.*
Changing The Lens, Lamps And Color Wheel

Removing the lens
1. Remove the lens cap.
2. Push in the lens release lever, and turn the lens anti-clockwise.
3. Remove the lens.

Fitting the lens
1. Position the lens so that the label marked ‘O’ is at the top, push in the lens release lever and gently insert the lens all the way into the lens mount.
2. Turn the lens clockwise until it clicks into place.

Notes

Always allow the lamp to cool for 5 minutes before:
- disconnecting the power
- moving the projector

The projector lens is shipped separately.
Changing the lamp
1. Slide open the lamp compartment cover as shown in the picture.
2. Unscrew the two captive screws securing the lamp module.
3. Pull firmly upwards on the handle to remove the lamp module.
4. Insert a new lamp module.
5. Fasten the screws.
6. Replace the lamp compartment cover.

Notes

⚠️ Always allow the lamp to cool for 5 minutes before:
- disconnecting the power
- moving the projector

⚠️ The lamp must be changed only by suitably qualified personnel.

⚠️ The projector will shut down if the cover is opened whilst in operation.

⚠️ The filters should be changed at the same time as the lamp is changed.
Changing the color wheel

1. Slide open the lamp compartment cover as shown in the picture.
2. Unscrew the four captive screws securing the color wheel.
3. Remove the color wheel.
4. Insert a new color wheel.
5. Fasten the screws.
6. Replace the lamp compartment cover.

Notes

Always allow the lamp to cool for 5 minutes before:
- disconnecting the power
- moving the projector

The color wheel must be changed only by suitably qualified personnel.

The projector will shut down if the cover is opened whilst in operation.
Positioning The Screen And Projector

1. Install the screen, ensuring that it is in the best position for viewing by your audience.

2. Mount the projector, ensuring that it is at a suitable distance from the screen for the image to fill the screen. Set the adjustable feet so that the projector is level, and perpendicular to the screen.
   Alternatively, five M4 bolts (max length 12 mm [0.5 in]) can be used to attach the projector to a ceiling mount (optional accessory).

Notes

- Always allow the lamp to cool for 5 minutes before:
  - disconnecting the power
  - moving the projector

- Ensure that there is at least 50cm (20in) of space between the ventilation outlets and any wall, and 10cm (4in) on all other sides.

- If ceiling mounting, ensure there is 30cm (12in) of space between the projector and ceiling.

- Do not stack the projectors.

- Do not tilt the projector more than ±10° from side to side when in use, as this may cause serious lamp failure, damage the lamp module and cause extra cost on replacement.

- If you position the projector at an angle, remember to adjust the fan speed accordingly.
Switching the projector on

- Connect the power cable between the mains supply and the projector. Switch on at the switch next to the power connector.
- Wait until the self-test has completed and the Power indicator on the projector control panel shows amber. The lamp will be off and the projector will be in STANDBY mode.
- Press \( \text{on} \) on the control panel or POWER ON on the remote control.
  The Power indicator on the control panel will flash green for a few seconds whilst the lamp comes up to full brightness. When the projector is ready for use, the Power indicator will show steady green.

Selecting an input signal or test pattern

Input signal

- Connect an image source to the projector. The signal should be automatically detected by the projector, and should be displayed within a two or three seconds.
- If more than one signal is connected, then select the image you want to display:
  Press SOURCE on the control panel to cycle through the inputs,
  or press INPUT on the remote control, then \(<\) or \(>\) to cycle through the inputs.

Test pattern

If you have no image source connected to the projector, then you can display a test pattern instead:

Press TEST PATTERN on the remote control, then \(<\) or \(>\) to cycle through the patterns,
  or select a Test Pattern from the Installation menu.

Notes

⚠ Before switching on the projector for the first time, make sure the electric circuit is grounded. Poor grounding may damage the projector.

⚠ Always allow the lamp to cool for 5 minutes before:
- disconnecting the power
- moving the projector

For full details of how to connect an image source to the projector, see the Connection Guide.

For full details of how to use the controls and the menu system, see the Operating Guide.
Adjusting the lens

Zoom
• Use the ZOOM +/- buttons on the control panel or on the remote control to adjust the lens so that the image fills the screen.

Focus
• Use the FOCUS +/- buttons on the control panel or on the remote control to adjust the lens until the image is sharp.

Shift
• Use the LENS SHIFT buttons <, >, △ and ▽ on the control panel to adjust the position of the image,
  or press the LENS SHIFT button on the remote control then use <, >, △ and ▽ to adjust the position of the image.

Adjusting the image

Orientation
• Use the Projection Mode settings, in the Installation Menu.

Aspect ratio
• Press the ASPECT button on the remote control to cycle through all the available settings.
  or use the Aspect Ratio setting in the Setup Menu.

Picture
• Press PICTURE on the remote control or use the menu controls, to open the Picture Menu.
  Use the sliders in the Picture menu to adjust the brightness, contract etc.
Switching the projector off

- Press "" on the control panel or STANDBY on the remote control, then press the button a second time within 5 seconds to confirm your intention to switch off.

  The lamp will go off, and the Power indicator on the control panel will flash amber for a few seconds whilst the lamp cools. The Power indicator on the control panel will then show amber and the projector will be in Standby mode.

- Switch off at the switch next to the power connector. Disconnect the power cable from the projector.

Notes

Always allow the lamp to cool for 5 minutes before:
- disconnecting the power
- moving the projector
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**Signal Inputs And Outputs**

**Computer 1**
- Connect an analog computer (VGA) cable to the 15-pin D-type.

**Computer 2**
- Connect a set of RGsB, RGBHV or YCbCr cables to the BNC connectors.

**Computer 3**
- Connect a DVI-I cable to the DVI connector.

**Component**
- Connect a set of YPbPr or YCbCr cables to the RCA phono connectors.

**Video or S-Video**
- Connect a composite video cable to the single RCA phono connector, or an S-Video cable to the 4-pin mini-DIN.

**Monitor Out**
- Connect an analog monitor (VGA) cable to the 15-pin D-type.

---

**Notes**

For a complete listing of pin configurations for all signal and control connectors, see Wiring Details later in this Guide.

When Standby Mode is set to Eco: the Monitor Out connection is disabled.
### Supported Signal Input Modes

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<th>Signal</th>
<th>Resolution</th>
<th>Refresh Rate (Hz)</th>
<th>Total number of lines</th>
<th>Horizontal Frequency (kHz)</th>
<th>3D</th>
<th>VIDEO / S-VIDEO</th>
<th>COMPONENT</th>
<th>COMPUTER 1 (VGA)</th>
<th>COMPUTER 2 (RGB/YCbCr)</th>
<th>COMPUTER 3 (DVI-I)</th>
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*continued on next page*
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<th>Resolution</th>
<th>Refresh Rate (Hz)</th>
<th>Total number of lines</th>
<th>Horizontal Frequency (kHz)</th>
<th>3D</th>
<th>COMPUTER 1 (VGA)</th>
<th>COMPUTER 2 (RGB/YPbPr)</th>
<th>COMPUTER 3 (DV-I)</th>
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<tr>
<td>WXGA60</td>
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<td>SXGA+60</td>
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<td>60</td>
<td>1088</td>
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<td>1250</td>
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<td>915</td>
<td>68.7</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

...continued from previous page
Control Connections

Screen Trigger
The Trigger output can be connected to an electrically operated screen, automatically deploying the screen when the projector is switched on, and retracting the screen when the projector is switched to standby.

USB Service Port
The USB Service Port is used to download firmware updates, issued from time to time by Digital Projection.

Wired Remote Control
If infrared signals from the remote control cannot reach the projector due to excessive distance or obstructions such as walls or cabinet doors, you can connect an external IR repeater to the Remote Control input, and position its IR sensor within range of the operator.

Note that plugging in the remote control cable will disable the infra-red.

RS232
All of the projector’s features can be controlled via a serial connection, using the control strings described in the Remote Communications Guide.

LAN
- All of the projector’s features can be controlled via a LAN connection, using the industry standard PJLink commands. The PJLink specification can be downloaded from http://pjlink.jbmia.or.jp/english - click on the Specifications link.
- The LAN IP Address of the projector can be set by using the Network submenu, which can be found in the Advanced Setting submenu in the Installation menu.
- Once the LAN IP Address has been set, it is possible to assign a Host Name and Domain Name to the projector, and to set up an Alert Mail address and PJLink password.

For more information about these settings, see PJLink in the Remote Communications Guide.

- A number of basic picture and input settings can be controlled directly using the embedded LAN Control utility.

For full details of how to use this feature, see LAN Control Utility in the Remote Communications Guide.
Wiring Details

Signal inputs and outputs

Monitor video output (VGA)

Computer 1 video input: analog computer (VGA)

15 way D-type connector

<table>
<thead>
<tr>
<th>Pin</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>R</td>
</tr>
<tr>
<td>2</td>
<td>G</td>
</tr>
<tr>
<td>3</td>
<td>B</td>
</tr>
<tr>
<td>4</td>
<td>unused</td>
</tr>
<tr>
<td>5</td>
<td>Digital Ground (H Sync)</td>
</tr>
<tr>
<td>6</td>
<td>R Ground</td>
</tr>
<tr>
<td>7</td>
<td>B Ground</td>
</tr>
<tr>
<td>8</td>
<td>G Ground</td>
</tr>
<tr>
<td>9</td>
<td>+5v</td>
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<tr>
<td>10</td>
<td>Digital Ground (V Sync/DDC)</td>
</tr>
<tr>
<td>11</td>
<td>unused</td>
</tr>
<tr>
<td>12</td>
<td>SDA</td>
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</tr>
<tr>
<td>14</td>
<td>V Sync</td>
</tr>
<tr>
<td>15</td>
<td>SCL</td>
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</tbody>
</table>

Computer 2 video input: RGBHV, RGsB or YCbCr

5 x 75 ohm BNC

<table>
<thead>
<tr>
<th>Signal</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RGBHV</td>
<td>Green + Sync</td>
</tr>
<tr>
<td>Green</td>
<td>Green</td>
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<td>Blue</td>
<td>Blue</td>
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<tr>
<td>Red</td>
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<tr>
<td>Hsync</td>
<td>H Sync</td>
</tr>
<tr>
<td>Vsync</td>
<td>V Sync</td>
</tr>
</tbody>
</table>

For full details of all input settings, see the Advanced menu in the Operating Guide.

For details of the audio connections associated with these video connections, see later in this section.
**Computer 3 video input: DVI-D**

24 way D-type connector

1. TMDS Data 2-  
2. TMDS Data 2+  
3. TMDS Data 2 Shield  
4. unused  
5. unused  
6. DDC Clock  
7. DDC Data  
8. unused  
9. TMDS Data 1-  
10. TMDS Data 1+  
11. TMDS Data 1 Shield  
12. unused  
13. unused  
14. +5 V Power  
15. Ground  
16. Hot Plug Detect*  
17. TMDS Data 0-  
18. TMDS Data 0+  
19. TMDS Data 0 Shield  
20. unused  
21. unused  
22. TMDS Clock Shield  
23. TMDS Clock+  
24. TMDS Clock-

* Hot plug detect (HPD) is fully DVI compliant. DVI sources detect the presence of a display device by providing +5V on pin 14 and looking for +5V on pin 16. Whenever the projector is operational, and 5V is present on pin 14, pin 16 will be held at +5V.

EDID is available even when the projector is switched off.

Operational means that the projector is powered up. Non operational states are powered down and some self test and reprogramming modes.

High Definition Content Protection (HDCP) is supported on this input.
### Component video input

3 x RCA Phono

<table>
<thead>
<tr>
<th>YCbCr</th>
<th>YPbPr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cr</td>
<td>Pr</td>
</tr>
<tr>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Cb</td>
<td>Pb</td>
</tr>
</tbody>
</table>

- Y
- Pb/Cb
- Pr/Cr

**Notes**

For full details of all input settings, see the Advanced menu in the Operating Guide.
Video input
1 x RCA Phono
Composite Video

S-Video input
4 pin mini-DIN
1 Y Ground
2 C Ground
3 Luminance (Y)
4 Chrominance (C)

Notes
For full details of all input settings, see the Advanced menu in the Operating Guide.
Control connections

**Screen Trigger output**

*3.5mm mini jack*

- Tip  12V output
- Sleeve  Ground

**RS232 Serial control input**

1. unused
2. Received Data (RX)
3. Transmitted Data (TX)
4. unused
5. Signal Ground
6. unused
7. unused
8. unused
9. unused

**Null-modem cable**

(used to connect the projector to a computer)

| RX | 2 | --- | 3 | TX |
| TX | 3 | --- | 2 | RX |
| GND | 5 | --- | 5 | GND |

**Wired remote control connection**

*3.5mm mini jack*

- Tip  Not connected
- Ring  Signal
- Sleeve  Ground

Notes

- Only one remote connection can be used at any one time. For more information, see the Installation menu in the Operating Guide.

- The projector is a DTE, so use:
  - a straight cable to connect to a modem, or
  - a null-modem cable as shown here to connect to another DTE such as a computer.
LAN connection

10BaseT Unshielded Twisted Pair cable
The standard wire colors are as follows:
1  White / Orange stripe
2  Orange
3  White / Green stripe
4  Blue
5  White / Blue stripe
6  Green
7  White / Brown stripe
8  Brown

Crossed cable
(used to connect directly to a computer with no hub or network.)
(Note that only the green and orange pairs are crossed)

1  White / Orange stripe    White / Green stripe    1
2  Orange                   Green                   2
3  White / Green stripe     White / Orange stripe   3
4  Blue                     Blue                     4
5  White / Blue stripe      White / Blue stripe      5
6  Green                    Orange                   6
7  White / Brown stripe     White / Brown stripe     7
8  Brown                    Brown                    8

Notes

- Only one remote connection can be used at any one time. For more information, see the Installation menu in the Operating Guide.
- For information about how to set the LAN IP configuration, see the next page.
- Use:
  - a straight cable to connect to a hub or network, or
  - a crossed cable as shown here to connect ONLY to a computer directly.
E-Vision 6500 Series

High Brightness Digital Video Projector
Using The Remote Control

POWER controls

TEST PATTERN: select from a list of available test patterns

LENS controls

INPUT: select from the available video input signals

PICTURE: opens the Picture menu

AUTO SYNC: Projector will re-synchronise with the current input signal

ASPECT: select from a list of available aspect ratios

OVERSCAN: select from On or Off

FREEZE: freeze the current image frame

INPUT: select from the available video input signals

NETWORK: brings up the Network information page

3D MODE: opens the 3D Mode menu

ASPECT: select from a list of available aspect ratios

OVERSCAN: select from On or Off

INFO: opens the Information menu

LIGHT: illuminates the buttons on the remote control for 10 seconds

Notes

Some options and controls may not be available due to settings in the menus.

For full details of how to use the menu system, see later in this guide.
Using The Menus

Use the buttons on the projector control panel or on the remote control, to access the menu system.

- To open or close the on-screen display (OSD), press **MENU**.

Navigating the menus

- Select a menu using **<** and **>**, then open the menu by pressing **▼**. The first item in the menu is highlighted.

- Select an item in the menu using **△** and **▼**.

- To open another menu, first close the current menu by pressing **CANCEL/RETURN**.

**Notes**

Some menu options and controls may not be available due to settings in other menus. These will be shaded grey on the actual menu.
**Submenus**

- Select a submenu using ▲ and ▼.

- Then open the submenu by pressing ENTER.

  The name of the submenu is shown at the top of the menu.

- To close the submenu, press CANCEL/RETURN.

**Sliders**

- Use ◀ or ▶ to adjust the value.

---

**Notes**

Some menu options and controls may not be available due to settings in other menus. These will be shaded grey on the actual menu.
Selecting parameters
Most parameters are changed by selecting from a list:

- Select from the list using < and >.
- The change will be made immediately.

Some parameters are changed by selecting from a pop-up menu.

- Press ENTER to open the pop-up menu.
- The item that is currently selected is highlighted.
- Select from the list using ▲ and ▼.
- The change will be made when you press ENTER to confirm the selection.
**Commands**

- To use a command, press **ENTER**.

**Notes**

Some menu options and controls may not be available due to settings in other menus. These will be shaded grey on the actual menu.

**In this example,**

- use ◄ or ► to move the green highlight to No or Yes,
- then press **ENTER** to confirm your selection.

**Editing fields**

Some features require a text or numeric field to be edited.

- To edit a field, first use ◄ or ► to select the field to be changed,
- then use ▲ and ◄ to adjust it the value.
- then select the next digit or character.
- Press **ENTER** to accept the new value or CANCEL/RETURN to exit without changing.
A Tour Of The Menus

Picture menu

<table>
<thead>
<tr>
<th>Picture</th>
<th>Signal</th>
<th>Video</th>
<th>Setup</th>
<th>Installation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Picture Mode</td>
<td>Standard</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brilliant Color</td>
<td>1</td>
<td></td>
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<tr>
<td>Brightness</td>
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<tr>
<td>Contrast</td>
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<tr>
<td>Tint</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Sharpness</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Advance Setting</td>
<td>←/→</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reset</td>
<td>←/→</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Picture Mode**
- Select a picture mode as required.

**Brilliant Color**
- Select 0, 1 or 2, as required.

**Brightness, Contrast, Color, Tint, Sharpness**
- Adjust the sliders for these settings, as required.

**Reset**
- Press ENTER to restore all settings in the Picture Menu (except Picture Mode and Signal Type) to their factory defaults.
- When the warning message appears, use ← or → to move the green highlight to YES or NO, then press ENTER to confirm your selection.

---

**Notes**
- See also Using the Menus, earlier in this guide and Menu Map, later in this guide.
- Brilliant Color® allows for increased projector brightness and improved color saturation by enabling the yellow segments on the color wheel.
- Do NOT do this unless you are sure that you want to restore ALL the picture settings to their factory defaults.
**Picture menu continued**

### Advance Setting submenu

<table>
<thead>
<tr>
<th>Picture</th>
<th>Signal</th>
<th>Video</th>
<th>Setup</th>
<th>Installation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Advance Setting</strong></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Signal Type</strong></td>
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<td></td>
</tr>
<tr>
<td>Color Temperature</td>
<td>Standard</td>
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<td></td>
</tr>
<tr>
<td>Red</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blue</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Color Manager</td>
<td>➔/➔</td>
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</tr>
<tr>
<td>Film Mode</td>
<td>Auto</td>
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</tr>
<tr>
<td>Noise Reduction</td>
<td>Level 1</td>
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<td></td>
</tr>
<tr>
<td>Dynamic Black</td>
<td>Off</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Notes**

See also Using the Menus, earlier in this guide and Menu Map, later in this guide.

**Picture Menu Advance Setting Submenu**

**Signal Type**
- Set this to **Auto**, except when the projector has problems selecting between RGB, YCrCb and YPrPb.

**Color Temperature**
- Set this to suit the specification of the input source, or to improve the appearance of the projected image.

**Red, Blue**
- Set these to improve the appearance of the projected image.

**Color Manager**
- Press **ENTER** to open the Color Manager sub-menu.
- Select from Red, Green, Blue, Cyan, Magenta or Yellow and press **ENTER**.
- Use the sliders to adjust the **Hue, Saturation** and **Value** of each color as required.

*Increasing the Red content will make the image feel ‘warmer’, Blue will make it feel ‘colder’.*
Film Mode
- Set this to **Auto**, and the projector will automatically detect:
  - 3:2 pulldown for 60Hz signals
  - 2:2 pulldown for 50Hz signals
- Set this to **Off**, to disable automatic pulldown detection.

Noise Reduction
- Select a **Noise Reduction** level as required.

Dynamic Black
- Set this to **On** or **Off** as required.

Notes
- The **Film Mode** setting is available only for interlaced signals on the Video or S-Video inputs.
- **Dynamic Black** reduces the overall light output for images that contain a lot of black. This improves the perceived contrast ratio.
- See also **Using the Menus**, earlier in this guide and **Menu Map**, later in this guide.
Signal menu

- Horizontal and Vertical Position, Phase, Clock
  - Adjust the sliders for these settings, as required.

  **Reset**
  - Press ENTER to restore the four settings above their factory defaults.
  - When the warning message appears, use ▼ or ▲ to move the green highlight to YES or NO, then press ENTER to confirm your selection.

  **Resolution**
  - Set this to Auto, unless the projector has problems selecting between Wide and 4:3 with some signals on the Computer 1, Computer 2 and Component inputs.

  **Auto Sync**
  - Set this to On if you want the projector to automatically synchronise with the input signal.
  - Set this to Off if the settings are to be made manually, using the sliders above only.

---

Notes

- See also Using the Menus, earlier in this guide and Menu Map, later in this guide.

- These settings are used for VGA signals only.

- Do NOT do this unless you are sure that you want to restore the settings to their factory defaults.

- The Resolution setting is needed only for VESA 1024x768_60, VESA 1280x768_60, VESA 1400x1050_60 and VESA 1680x1050_60 signals on the Computer 1, Computer 2 and Component inputs.

- The Auto Sync setting is used for VGA signals only.
Video menu

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Picture</td>
<td>Signal</td>
<td>Video</td>
<td>Setup</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overscan</td>
<td>On</td>
<td>Video System</td>
<td>Auto</td>
</tr>
<tr>
<td>Video Setup</td>
<td>7.5IRE</td>
<td>Closed Caption</td>
<td>Off</td>
</tr>
</tbody>
</table>

Overscan
- Set this to On or Off as required.

Video System
- Set this to Auto, unless the projector has problems selecting between PAL, SECAM, NTSC4.43, NTSC3.58, PAL-M, PAL-N and PAL-60.

Video Setup
- Set this to 0IRE or 7.5IRE as required.

Closed Caption
- Set this to Off or CC1 as required.
**Setup menu**

<table>
<thead>
<tr>
<th>Picture</th>
<th>Signal</th>
<th>Video</th>
<th>Setup</th>
<th>Installation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auto Search</td>
<td>On</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Auto Power Off</td>
<td>On</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Auto Power On</td>
<td>On</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Standby Mode</td>
<td>Standard</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Background</td>
<td>Logo</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3D Mode</td>
<td></td>
<td>Normal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aspect Ratio</td>
<td></td>
<td></td>
<td>Advance Setting</td>
<td></td>
</tr>
</tbody>
</table>

Auto Search

- When this is set to On, the projector will search for an alternative input source when the current input source is disconnected.
- When this is set to Off, the projector will show the ‘background’ screen when the current input source is disconnected.

Auto Power Off

- Set this to On, if you want the projector to go into **Standby mode** when no input source is detected for 20 minutes.

Auto Power On

- Set this to On, if you want the projector to start up immediately when the mains is connected.
- Set this to Off, if you want the projector to go into **Standby mode** when the mains is connected. In this case, the projector will not start up until the **POWER** button is pressed on the control panel or the remote control.

Standby Mode

- Set this to **Standard** or **Eco** as required.

Notes

- See also **Using the Menus**, earlier in this guide and **Menu Map**, later in this guide.

- **To set the background screen, see the next page.**

- When **Standby Mode** is set to **Eco**: the **Monitor Out** signal is disabled, and the **RS232** connection is disabled, so it will not be possible to turn the projector **On** remotely, except via the **LAN** connection.
Setup menu continued

Background
• Set this to determine what appears on screen when the projector is searching for a valid input source.

3D Mode
• Use the 3D Mode Submenu to turn the DLPLink synchronisation signal On and Off, and to invert the signal if necessary.

Aspect Ratio
• Select from Normal, Full, 4:3, 16:9, and Native, as follows:
  • Normal: the image will be displayed at its intended aspect ratio, filling either the full height or width of the screen as appropriate.
  • Full: the image will fill the height and width of the screen, depending on the resolution of the projector.
  • 4:3: the image will be displayed with a 4:3 aspect ratio, fitting the full height and/or width of the screen, depending on the resolution of the projector.
  • 16:9: the image will be displayed with a 16:9 aspect ratio, fitting the full height and/or width of the screen, depending on the resolution of the projector.
  • Native: the image will be displayed pixel for pixel with no scaling. This could be smaller than full screen or cropped to full screen, depending on the resolutions of the image and projector.

Notes
To set a background image to be displayed when Custom is chosen, see the Advanced Setting Submenu on the next page.

The full height and width of the screen will depend on the projector model. For more information, see the Specification leaflet, or the Important Information.

See also Using the Menus, earlier in this guide and Menu Map, later in this guide.
Advance Setting submenu

**Security Lock**
- When the Security Lock is enabled, a security **Password** will need to be entered before the projector can be used, or before the lock can be **Disabled**.
- When setting the lock for the first time, the **Password** will need to be entered twice, to ensure that it has been entered correctly.

**Keypad Lock**
- To **lock** the control panel keys, use or to move the green highlight to **YES** or **NO**, then press ENTER to confirm your selection.
- To **unlock** the keys, press and hold for 5 seconds.

**Image Capture**
- To capture the current screen image for use as the **Custom** background, use **Save Image**. This will take approximately 2 minutes.
- To delete the currently saved image, use **Delete**.

**Wall Color**
- Set this to suit the projection screen.

**Digital Zoom**
- Enlarge a section of the image.

---

Notes

See also **Using the Menus**, earlier in this guide and **Menu Map**, later in this guide.

**Setup Menu**

Advance Setting Submenu

The **Password** is made of a combination of five presses on the , , and keys.

Image Capture is available only:
- for Component, Computer 1, Computer 2 and Computer 3 inputs;
- when Aspect Ratio is set to **Normal**;
- for native resolution images: (1280x800 for E-Vision WXGA, 1024x768 for E-Vision XGA)

There are two storage locations: one for the 4 segment color wheel and one for 6 segment color wheel.

If you change wheels you will need to recapture the image. If you change back, the image for the first wheel will still be in memory.
Setup menu Advance Setting submenu continued

### Messaging

<table>
<thead>
<tr>
<th>Picture</th>
<th>Signal</th>
<th>Video</th>
<th>Setup</th>
<th>Installation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Advance Setting

- **Security Lock**: Disable
- **Keypad Lock**: 
- **Image Capture**: 
- **Wall Color**: Off
- **Messaging**: On

**Notes**

See also Using the Menus, earlier in this guide and Menu Map, later in this guide.

- **Setup Menu**
  - **Advance Setting Submenu**

- **Set Messaging to Off** if you do not want projector status messages to be displayed.
**Installation menu**

<table>
<thead>
<tr>
<th>Picture</th>
<th>Signal</th>
<th>Video</th>
<th>Setup</th>
<th>Installation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Language</td>
<td>English</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lamp Control</td>
<td>Both, Lamp 1, Lamp 2 or Auto 1</td>
<td>Auto 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lamp Mode</td>
<td>Normal</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Projection Mode</td>
<td>Front</td>
<td>Ceiling+Front or Ceiling+Rear</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fan Mode</td>
<td>Normal</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Test Pattern</td>
<td>None</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Advance Setting</td>
<td>Auto 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reset</td>
<td>Auto 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Information</td>
<td>Auto 1</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Language**

- Select a language as required.

**Lamp Control**

- Set this to Both, Lamp 1, Lamp 2 or Auto 1 as required.

**Lamp Mode**

- Set this to Normal or Eco as required.

**Projection Mode**

- Set this to Front, Rear, Ceiling+Front or Ceiling+Rear as required.

**Fan Mode**

- Set this to Normal, High or Up & Down as required. Select High to compensate for reduced air density at higher altitudes. Select Up & Down if the projector is positioned at an upward or downward angle.

**Test Pattern**

- Select a Test Pattern from the list.

---

**Notes**

See also Using the Menus, earlier in this guide and Menu Map, later in this guide.

When Lamp Control is set to Auto 1, the projector will turn on using the lamp with the least hours of use.
**Advance Setting**

- **Keystone**
  - Set the slider to correct for any vertical keystone distortion.

- **Image Resizing**
  - Set this to correct for any image distortion when keystone correction is being used.

- **Filter Message**
  - Select a Filter Message time interval from the list, or select Off.

- **LAN/RS232C**
  - Select from LAN or RS232C as the remote connection used for external control of the projector.

- **Communication Speed**
  - Sets the Serial Port (RS232) baud rate. Longer cable connections may require lower speeds.

---

**Notes**

- See also Using the Menus, earlier in this guide and Menu Map, later in this guide.

- Only one remote connection can be used at any one time.
Installation menu, Advance Setting submenu continued

Network

<table>
<thead>
<tr>
<th>Picture</th>
<th>Signal</th>
<th>Video</th>
<th>Setup</th>
<th>Installation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Advance Setting \ Network</td>
</tr>
</tbody>
</table>

- **Link**: For information only: reports whether the projector detects a physical LAN connection. The LAN settings below should be made manually.

- **DHCP Client**: Set DHCP Client to **On** if the IP Address is to be assigned by a DHCP server, or **Off** if it is to be set here.

- **IP Address, Subnet Mask, Gateway and DNS**: If DHCP is set to **Off**:
  - Edit the settings as required.

- **Apply**: Press **ENTER** to apply the address settings.

*Notes*

- See also **Using the Menus**, earlier in this guide and **Menu Map**, later in this guide.

If **DHCP** is set to **On**, it will not be possible to edit the address settings.
Installation menu continued

- When the warning message appears, use ◀ or ▶ to move the green highlight to YES or NO, then press ENTER to confirm your selection.

Reset

All Reset
- Projector will ask for confirmation before restoring all settings to factory defaults.
- When the warning message appears, use ◀ or ▶ to select YES or NO, then press ENTER/SELECT to confirm your selection.

Filter Timer Reset
- Projector will ask for confirmation before resetting the timer to zero.
- When the warning message appears, use ◀ or ▶ to select YES or NO, then press ENTER/SELECT to confirm your selection.

Information
- The final submenu gives information about the projector, eg:

<table>
<thead>
<tr>
<th>Picture</th>
<th>Signal</th>
<th>Video</th>
<th>Setup</th>
<th>Installation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Information</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Input</strong></td>
<td>COMPUTER1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Signal Info</strong></td>
<td>1024 x 768 @ 60Hz</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Lamp 1 Timer</strong></td>
<td>[0000] h [00] min (100%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Lamp 2 Timer</strong></td>
<td>[0000] h [00] min (100%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Filter Timer</strong></td>
<td>[0000] h</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Model Name</strong></td>
<td>E-Vision 6500 WXGA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>S/N</strong></td>
<td>C202XXXXX00764</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Software Version</strong></td>
<td>E-Vision 6500 WXGA - PO2/4S</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

Notes

⚠️ Do NOT do this unless you are sure that you want to restore ALL settings to their factory defaults.

⚠️ Do NOT do this unless you are sure that you want to reset the Filter Timer to zero.

---

Installation Menu

Information submenu

MENU = END
### Menu Map

**Menu** | **Submenus and controls**
--- | ---
**PICTURE**

- **Picture Mode**  Presentation, Standard, Game, Movie, sRGB
- **BrilliantColor** 0, 1, 2
- **Brightness**
- **Contrast**
- **Color**
- **Tint**
- **Sharpness**

#### Advanced Setting
- **Signal Type**  Auto, RGB, YCrCb, YPrPb
- **Color Temperature**  Standard, Cold, Warm
- **Red**
- **Blue**
- **Color Manager**  Hue, Saturation and Value settings for: Red, Green, Blue, Cyan, Magenta and Yellow
- **Film Mode**
- **Noise Reduction**  Off, Level 1, Level 2, Level 3
- **Dynamic Black**  On, Off

**Reset**  Projector will ask for confirmation before restoring all settings in this menu (except Picture Mode and Signal Type) to factory defaults.

### SIGNAL

- **Horizontal Position**
- **Vertical Position**
- **Phase**
- **Clock**

**Reset**  Projector will ask for confirmation before restoring the four settings above to factory defaults.

- **Resolution**  Auto, Wide, 4:3
- **Auto Sync**  On, Off

---

**Notes**

- Some of the information in this menu map is summarised. See the actual menu on the projector for full detail.
- Some menu options and controls may not be available due to settings in other menus. These will be shaded grey on the actual menu.
- Where it would be helpful, some menu options are described in more detail earlier in this operating guide.
<table>
<thead>
<tr>
<th>Menu</th>
<th>Submenus and controls</th>
</tr>
</thead>
<tbody>
<tr>
<td>VIDEO</td>
<td></td>
</tr>
<tr>
<td><strong>Overscan</strong></td>
<td>On, Off</td>
</tr>
<tr>
<td><strong>Video System</strong></td>
<td>Auto, PAL, SECAM, NTSC4.43, NTSC3.58, PAL-M, PAL-N, PAL-60</td>
</tr>
<tr>
<td><strong>Video Setup</strong></td>
<td>0IRE, 7.5IRE</td>
</tr>
<tr>
<td><strong>Closed Caption</strong></td>
<td>Off, CC1</td>
</tr>
<tr>
<td>SETUP</td>
<td></td>
</tr>
<tr>
<td><strong>Auto Search</strong></td>
<td>On, Off</td>
</tr>
<tr>
<td><strong>Auto Power Off</strong></td>
<td>On, Off</td>
</tr>
<tr>
<td><strong>Auto Power On</strong></td>
<td>On, Off</td>
</tr>
<tr>
<td><strong>Standby Mode</strong></td>
<td>Standard, Eco</td>
</tr>
<tr>
<td><strong>Background</strong></td>
<td>Logo, Custom, Blue, None</td>
</tr>
<tr>
<td><strong>3D Mode</strong></td>
<td></td>
</tr>
<tr>
<td>DLP®Link™</td>
<td>On, Off</td>
</tr>
<tr>
<td>DLP®Link™ Invert</td>
<td></td>
</tr>
<tr>
<td><strong>Aspect Ratio</strong></td>
<td>Normal, Full, 4:3, 16:9, Native</td>
</tr>
<tr>
<td><strong>Advance Setting</strong></td>
<td></td>
</tr>
<tr>
<td>Security Lock</td>
<td>Disable, Password</td>
</tr>
<tr>
<td>Keypad Lock</td>
<td>Yes, No</td>
</tr>
<tr>
<td>Image Capture</td>
<td>Save image, Delete image</td>
</tr>
<tr>
<td>Wall Color</td>
<td>Off, Whiteboard, Blackboard</td>
</tr>
<tr>
<td>Digital Zoom</td>
<td></td>
</tr>
<tr>
<td>Messaging</td>
<td>On, Off</td>
</tr>
</tbody>
</table>

**Notes**

Some of the information in this menu map is summarised. See the actual menu on the projector for full detail.

Some menu options and controls may not be available due to settings in other menus. These will be shaded grey on the actual menu.

Where it would be helpful, some menu options are described in more detail earlier in this operating guide.
### INSTALLATION

<table>
<thead>
<tr>
<th>Submenus and controls</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Language</strong></td>
</tr>
<tr>
<td><strong>Lamp Control</strong></td>
</tr>
<tr>
<td><strong>Lamp Mode</strong></td>
</tr>
<tr>
<td><strong>Projection Mode</strong></td>
</tr>
<tr>
<td><strong>Fan Mode</strong></td>
</tr>
<tr>
<td><strong>Test Pattern</strong></td>
</tr>
</tbody>
</table>

### Advance Setting

- Keystone
- Image Resizing
- Filter Message | 100H, 200H, 500H, Off |
- LAN/RS232C | LAN, RS232C |
- Network | Link, DHP Client On/Off, IP Address, Subnet Mask, Gateway, DNS |
- Communication Speed | 38,400, 19,200, 9,600 |
- Apply | Projector will ask for confirmation before applying the above changes |

### Reset

- All Reset | Projector will ask for confirmation before restoring all settings to factory defaults |
- Filter Timer Reset | Projector will ask for confirmation before resetting the timer to zero |

### Information

- Input, Signal Info, Lamp 1 Timer, Lamp 2 Timer, Filter Timer, Model Name, SN, Software Version

---

**Notes**

- Some of the information in this menu map is summarised. See the actual menu on the projector for full detail.
- Some menu options and controls may not be available due to settings in other menus. These will be shaded grey on the actual menu.
- Where it would be helpful, some menu options are described in more detail earlier in this operating guide.
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High Brightness Digital Video Projector
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Introduction
The projector can be controlled by using an external control system in three different ways:

• All of the projector’s features can be controlled via a serial connection, using the control strings described in this guide.

• All of the projector’s features can be controlled via a LAN connection, using the industry standard PJLink commands.
  For more information about this, see PJLink later in this guide.

• A number of basic picture and input settings can be controlled directly using the embedded LAN Control utility.
  For more information about this, see LAN Control Utility later in this guide.
RS232 Control Commands

There are 2 types of command, Get commands and Set commands. The individual commands are described later in this guide. All commands consist of ascii text strings ending with an ascii carriage return character.

- Set commands:  `<header code> S <command> [CR]`
- Set commands with data:  `<header code> S <command> <data> [CR]`
- Get commands:  `<header code> G <command> [CR]`

The projector sends a reply string to each command.

Header code

The header code, comprises the following three ascii characters:

- ascii:  V99
- hex:  56 39 39

Examples

Set Power On:

- ascii:  V99 S 0001 [CR]
- hex:  56 39 39 53 30 30 31 0D

Projector return result in ascii:  P

Example:  Set brightness to 25:

- ascii:  V99 S 0101 25 [CR]
- hex:  56 39 39 53 30 31 30 31 32 35 0D

Projector return result in ascii:  P

Projector return result in hex:  50

Get brightness (brightness is 18 in this example):

- ascii:  V99 G 0101 [CR]
- hex:  56 39 39 47 30 31 30 31 30 31 0D

Projector return result in ascii:  P 18

Projector return result in hex:  50 31 38

Notes

- Serial port settings:
  - Baud rate  9,600 bps
  - Data length  8 bits
  - Stop bits  one
  - Parity  none
  - Flow control  none

The Communication speed (baud rate) can be adjusted. For details, see the Operating Guide.

Spaces are shown in the examples for clarity, but are NOT used in the actual commands or replies.

In the Return Result Strings:

- ‘P’ is returned for a successful Set command;
- ‘Pn’ is returned for a successful Get command;
- ‘F’ is returned for a failed command.
The commands

The commands are divided into five groups, the group number forming the first two characters of the command.

### Command Group 00

<table>
<thead>
<tr>
<th>Ascii</th>
<th>Hex</th>
<th>Function</th>
<th>Description</th>
<th>Return String</th>
</tr>
</thead>
<tbody>
<tr>
<td>V99S0001</td>
<td>56 39 39 53 30 30 30 30 31 0D</td>
<td>Power On</td>
<td></td>
<td>P/F</td>
</tr>
<tr>
<td>V99S0002</td>
<td>56 39 39 53 30 30 30 30 32 0D</td>
<td>Power Off</td>
<td></td>
<td>P/F</td>
</tr>
<tr>
<td>V99S0003</td>
<td>56 39 39 53 30 30 30 30 33 0D</td>
<td>Resync</td>
<td></td>
<td>P/F</td>
</tr>
<tr>
<td>V99G0004</td>
<td>56 39 39 47 30 30 30 30 34 0D</td>
<td>Get Lamp1 Hours</td>
<td></td>
<td>Pn/F</td>
</tr>
<tr>
<td>V99G0005</td>
<td>56 39 39 47 30 30 30 30 35 0D</td>
<td>Get Air filter timer</td>
<td>n=0~999999</td>
<td>Pn/F</td>
</tr>
<tr>
<td>V99S0006</td>
<td>56 39 39 53 30 30 30 30 36 0D</td>
<td>System Reset</td>
<td></td>
<td>P/F</td>
</tr>
<tr>
<td>V99G0007</td>
<td>56 39 39 47 30 30 30 30 37 0D</td>
<td>Get System Status</td>
<td>0: Reset</td>
<td>Pn/F</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1: Standby</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2: Operation</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3: Cooling</td>
<td></td>
</tr>
<tr>
<td>V99G0008</td>
<td>56 39 39 47 30 30 30 30 38 0D</td>
<td>Get F/W Version</td>
<td></td>
<td>Pn/F</td>
</tr>
<tr>
<td>V99G0010</td>
<td>56 39 39 47 30 30 30 31 30 0D</td>
<td>Get Lamp2 Hours</td>
<td></td>
<td>Pn/F</td>
</tr>
</tbody>
</table>

### Command Group 01

<table>
<thead>
<tr>
<th>Ascii</th>
<th>Hex</th>
<th>Function</th>
<th>Description</th>
<th>Return String</th>
</tr>
</thead>
<tbody>
<tr>
<td>V99G0101</td>
<td>56 39 39 47 30 31 30 31 31 0D</td>
<td>Get Brightness</td>
<td>n= -30~30</td>
<td>Pn/F</td>
</tr>
<tr>
<td>V99S0101n</td>
<td>56 39 39 53 30 31 30 31 31 n 0D</td>
<td>Set Brightness</td>
<td>n= -30~30</td>
<td>P/F</td>
</tr>
<tr>
<td>V99G0102</td>
<td>56 39 39 47 30 31 30 30 32 0D</td>
<td>Get Contrast</td>
<td>n= -30~30</td>
<td>Pn/F</td>
</tr>
<tr>
<td>V99S0102n</td>
<td>56 39 39 53 30 31 30 30 32 n 0D</td>
<td>Set Contrast</td>
<td>n= -30~30</td>
<td>P/F</td>
</tr>
<tr>
<td>V99G0103</td>
<td>56 39 39 47 30 31 30 30 33 0D</td>
<td>Get Color</td>
<td>n= -30~30</td>
<td>P/F</td>
</tr>
<tr>
<td>V99S0103n</td>
<td>56 39 39 53 30 31 30 30 33 n 0D</td>
<td>Set Color</td>
<td>n= -30~30</td>
<td>P/F</td>
</tr>
<tr>
<td>V99G0104</td>
<td>56 39 39 47 30 30 30 30 34 0D</td>
<td>Get Tint</td>
<td>n= -30~30</td>
<td>Pn/F</td>
</tr>
<tr>
<td>V99S0104n</td>
<td>56 39 39 53 30 30 30 30 34 n 0D</td>
<td>Set Tint</td>
<td>n= -30~30</td>
<td>P/F</td>
</tr>
<tr>
<td>V99G0105</td>
<td>56 39 39 47 30 30 30 30 35 0D</td>
<td>Get Sharpness</td>
<td>n= -30~30</td>
<td>Pn/F</td>
</tr>
<tr>
<td>V99S0105n</td>
<td>56 39 39 53 30 30 30 30 35 n 0D</td>
<td>Set Sharpness</td>
<td>n= -30~30</td>
<td>P/F</td>
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</table>

*Continued*
### Command Group 02

<table>
<thead>
<tr>
<th>ASCII</th>
<th>HEX</th>
<th>Function</th>
<th>Description</th>
<th>Return String</th>
</tr>
</thead>
<tbody>
<tr>
<td>V99G0201</td>
<td>56 39 39 53 30 32 30 31 0D</td>
<td>Select RGB</td>
<td></td>
<td>P/F</td>
</tr>
<tr>
<td>V99S0202</td>
<td>56 39 39 53 30 32 30 32 0D</td>
<td>Select BNC</td>
<td></td>
<td>P/F</td>
</tr>
<tr>
<td>V99S0203</td>
<td>56 39 39 53 30 32 30 33 0D</td>
<td>Select Component</td>
<td></td>
<td>P/F</td>
</tr>
<tr>
<td>V99S0204</td>
<td>56 39 39 53 30 32 30 34 0D</td>
<td>Select Video</td>
<td></td>
<td>P/F</td>
</tr>
<tr>
<td>V99S0205</td>
<td>56 39 39 53 30 32 30 35 0D</td>
<td>Select S-Video</td>
<td></td>
<td>P/F</td>
</tr>
<tr>
<td>V99S0206</td>
<td>56 39 39 53 30 32 30 36 0D</td>
<td>Select DVI</td>
<td></td>
<td>P/F</td>
</tr>
</tbody>
</table>

**Get Current Source**

0: RGB  
1: BNC  
2: Component  
3: Video  
4: S-Video  
5: DVI  

**Return Results:**  
- ‘P’ is returned for a successful Set command;  
- ‘Pn’ is returned for a successful Get command;  
- ‘F’ is returned for a failed command.

### Command Group 03

<table>
<thead>
<tr>
<th>ASCII</th>
<th>HEX</th>
<th>Function</th>
<th>Description</th>
<th>Return String</th>
</tr>
</thead>
<tbody>
<tr>
<td>V99G0301</td>
<td>56 39 39 47 30 33 30 31 0D</td>
<td>Get Scaling</td>
<td></td>
<td>Pn/F</td>
</tr>
<tr>
<td>V99S0301n</td>
<td>56 39 39 53 30 33 30 31 n 0D</td>
<td>Set Scaling</td>
<td></td>
<td>P/F</td>
</tr>
</tbody>
</table>

**Notes**

- **Note:** spaces are shown in the examples for clarity, but are NOT used in the actual commands or replies.

- **Ascii column:** the final [CR] has been omitted for clarity.

- **Command Strings and the Return Results:** ‘n’ represents a data string.

- **Return Result Strings:**  
  - ‘P’ is returned for a successful Set command;  
  - ‘Pn’ is returned for a successful Get command;  
  - ‘F’ is returned for a failed command.
### ASCII HEX Function Description Return String

<table>
<thead>
<tr>
<th>Command Group 04 (Remote Control buttons)</th>
</tr>
</thead>
</table>

<table>
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<th>ASCII</th>
<th>HEX</th>
<th>Function</th>
<th>Description</th>
<th>Return String</th>
</tr>
</thead>
<tbody>
<tr>
<td>V99G0302</td>
<td>56 39 39 47 30 33 30 32 0D</td>
<td>Get AV Mute</td>
<td>Pn/F</td>
<td></td>
</tr>
<tr>
<td>V99S0302n</td>
<td>56 39 39 53 30 33 30 32 n 0D</td>
<td>Set AV Mute</td>
<td>P/F</td>
<td></td>
</tr>
<tr>
<td>V99G0304</td>
<td>56 39 39 47 30 33 30 34 0D</td>
<td>Get Image Freeze</td>
<td>Pn/F</td>
<td></td>
</tr>
<tr>
<td>V99S0304n</td>
<td>56 39 39 53 30 33 30 34 n 0D</td>
<td>Set Image Freeze</td>
<td>P/F</td>
<td></td>
</tr>
<tr>
<td>V99S0308</td>
<td>56 39 53 30 33 30 38 0D</td>
<td>Get Projection Mode</td>
<td>0: Front 1: Rear 2: Ceiling + Front 3: Ceiling + Rear Pn/F</td>
<td></td>
</tr>
<tr>
<td>V99S0308n</td>
<td>56 39 53 30 33 30 38 n 0D</td>
<td>Set Projection Mode</td>
<td>0: Front 1: Rear 2: Ceiling + Front 3: Ceiling + Rear P/F</td>
<td></td>
</tr>
<tr>
<td>V99G0309</td>
<td>56 39 39 47 30 33 30 39 0D</td>
<td>Get Vertical Keystone</td>
<td>n= -80~80 Pn/F</td>
<td></td>
</tr>
<tr>
<td>V99S0309n</td>
<td>56 39 39 53 30 33 30 39 n 0D</td>
<td>Set Vertical Keystone</td>
<td>n= -80~80 P/F</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ASCII</th>
<th>HEX</th>
<th>Function</th>
<th>Description</th>
<th>Return String</th>
</tr>
</thead>
<tbody>
<tr>
<td>V99S0401</td>
<td>56 39 39 53 30 34 30 31 0D</td>
<td>ON</td>
<td>P/F</td>
<td></td>
</tr>
<tr>
<td>V99S0402</td>
<td>56 39 39 53 30 34 30 32 0D</td>
<td>OFF</td>
<td>P/F</td>
<td></td>
</tr>
<tr>
<td>V99S0403</td>
<td>56 39 39 53 30 34 30 33 0D</td>
<td>Focus+</td>
<td>P/F</td>
<td></td>
</tr>
<tr>
<td>V99S0404</td>
<td>56 39 39 53 30 34 30 34 0D</td>
<td>Focus-</td>
<td>P/F</td>
<td></td>
</tr>
<tr>
<td>V99S0405</td>
<td>56 39 39 53 30 34 30 35 0D</td>
<td>Zoom +</td>
<td>P/F</td>
<td></td>
</tr>
<tr>
<td>V99S0406</td>
<td>56 39 39 53 30 34 30 36 0D</td>
<td>Zoom -</td>
<td>P/F</td>
<td></td>
</tr>
<tr>
<td>V99S0408</td>
<td>56 39 39 53 30 34 30 38 0D</td>
<td>LENS SHIFT</td>
<td>P/F</td>
<td></td>
</tr>
<tr>
<td>V99S0409</td>
<td>56 39 39 53 30 34 30 39 0D</td>
<td>UP</td>
<td>P/F</td>
<td></td>
</tr>
<tr>
<td>V99S0410</td>
<td>56 39 39 53 30 34 31 30 0D</td>
<td>DOWN</td>
<td>P/F</td>
<td></td>
</tr>
<tr>
<td>V99S0411</td>
<td>56 39 39 53 30 34 31 31 0D</td>
<td>LEFT</td>
<td>P/F</td>
<td></td>
</tr>
<tr>
<td>V99S0412</td>
<td>56 39 39 53 30 34 31 32 0D</td>
<td>RIGHT</td>
<td>P/F</td>
<td></td>
</tr>
<tr>
<td>V99S0413</td>
<td>56 39 39 53 30 34 31 33 0D</td>
<td>ENTER</td>
<td>P/F</td>
<td></td>
</tr>
</tbody>
</table>

**Notes**

- **Note:** spaces are shown in the examples for clarity, but are NOT used in the actual commands or replies.
- **In the Ascii column, the final [CR] has been omitted for clarity.**
- **In the Command Strings and the Return Results, ‘n’ represents a data string.**
- **In the Return Result Strings:**
  - ‘P’ is returned for a successful Set command;
  - ‘Pn’ is returned for a successful Get command;
  - ‘F’ is returned for a failed command.
- **When Standby Mode is set to Eco:** the RS232 connection is disabled, so it will not be possible to turn the projector On remotely, except via the LAN connection.
<table>
<thead>
<tr>
<th>ASCII</th>
<th>HEX</th>
<th>Function</th>
<th>Description</th>
<th>Return String</th>
</tr>
</thead>
<tbody>
<tr>
<td>V99S0414</td>
<td>56 39 39 53 30 34 31 34 0D</td>
<td>MENU</td>
<td></td>
<td>P/F</td>
</tr>
<tr>
<td>V99S0415</td>
<td>56 39 39 53 30 34 31 35 0D</td>
<td>RETURN</td>
<td></td>
<td>P/F</td>
</tr>
<tr>
<td>V99S0416</td>
<td>56 39 39 53 30 34 31 36 0D</td>
<td>INPUT</td>
<td></td>
<td>P/F</td>
</tr>
<tr>
<td>V99S0417</td>
<td>56 39 39 53 30 34 31 37 0D</td>
<td>PICTURE</td>
<td></td>
<td>P/F</td>
</tr>
<tr>
<td>V99S0418</td>
<td>56 39 39 53 30 34 31 38 0D</td>
<td>AVMUTE</td>
<td></td>
<td>P/F</td>
</tr>
<tr>
<td>V99S0419</td>
<td>56 39 39 53 30 34 31 39 0D</td>
<td>AUTO SYNC</td>
<td></td>
<td>P/F</td>
</tr>
<tr>
<td>V99S0420</td>
<td>56 39 39 53 30 34 32 30 0D</td>
<td>ASPECT</td>
<td></td>
<td>P/F</td>
</tr>
<tr>
<td>V99S0423</td>
<td>56 39 39 53 30 34 32 33 0D</td>
<td>OVERSCAN</td>
<td></td>
<td>P/F</td>
</tr>
<tr>
<td>V99S0424</td>
<td>56 39 39 53 30 34 32 34 0D</td>
<td>FREEZE</td>
<td></td>
<td>P/F</td>
</tr>
<tr>
<td>V99S0425</td>
<td>56 39 39 53 30 34 32 35 0D</td>
<td>3D MODE</td>
<td></td>
<td>P/F</td>
</tr>
<tr>
<td>V99S0426</td>
<td>56 39 39 53 30 34 32 36 0D</td>
<td>INFO.</td>
<td></td>
<td>P/F</td>
</tr>
</tbody>
</table>

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- In the Ascii column, the final [CR] has been omitted for clarity.
- In the Command Strings and the Return Results, 'n' represents a data string.
- In the Return Result Strings:
  - 'P' is returned for a successful Set command;
  - 'Pn' is returned for a successful Get command;
  - 'F' is returned for a failed command.
The **LAN IP Address** of the projector can be set by using the **Network** submenu, which can be found in the **Advanced Setting** submenu in the **Installation** menu.

Once the LAN IP Address has been set, it is possible to assign a **Host Name** and **Domain Name** to the projector, and to set up an **Alert Mail** address and **PJLink** password:

- Point your browser at the projector by typing the url `http://<LAN IP Address>/lanconf.html` into the address bar, then press the **Enter** key.
- The embedded webpage shown here should appear.

**Settings**

**Host Name**

Up to 60 alpha-numeric characters can be entered. Press the **Apply** button to confirm the new name.

**Domain Name**

Up to 60 alpha-numeric characters. Press the **Apply** button to confirm the new name.

**Mail**

When enabled, an email will be sent to up to three specified addresses, when the lamp reaches the end of its useable life, or if an error occurs on the projector. Press the **Apply** button to confirm the new settings.

A test mail can be sent to check that the settings have been made correctly. Press the **Execute** button to send the test message.

**PJLink**

When enabled, a password can be set. Press the **Apply** button to confirm the new password.

The projector supports all the commands of PJLink Class 1.
LAN Control Utility

The LAN IP Address of the projector can be set by using the Network submenu, which can be found in the Advanced Setting submenu in the Installation menu.

Once the LAN IP Address has been set, it is possible to control some basic functions by using the emdedding LAN Control Utility:

- Point your browser at the projector by typing the url `http://<LAN IP Address>/index.html` into the address bar, then press the Enter key.
- The embedded webpage shown here should appear.

Power ON/STANDBY

Click on the buttons to turn the projector On or into Standby mode.

Picture controls

Click on the Δ and ∇ controls to adjust the settings as required.

Input Select

Click on the Input buttons to switch to the required input.

AV Mute

Click to switch video On or Off.

Status

The panel shows the status of the lamps and filters. Click on the Refresh button to update the readings.

Notes

For full details of how to use the menu system, see the Operating Guide.

The lamp life percentage shown here is based on expected lamp life in controlled laboratory conditions. Actual life may vary depending on installation environment, orientation and lamp mode (Normal or Eco).”