MULTIMEDIA PROJECTOR
WUX5000 / WUX4000

User Commands

Revision 1
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<td>MODE</td>
<td>48</td>
</tr>
<tr>
<td>MUTE</td>
<td>49</td>
</tr>
<tr>
<td>NR</td>
<td>50</td>
</tr>
<tr>
<td>POWER</td>
<td>51</td>
</tr>
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<td>PRODCODE</td>
<td>52</td>
</tr>
<tr>
<td>RC</td>
<td>53</td>
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<tr>
<td>RGBGAIN</td>
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</tr>
<tr>
<td>RGBOFFSET</td>
<td>55</td>
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<td>ROMVER</td>
<td>56</td>
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<tr>
<td>SAT</td>
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<td>SAVEIMGPROF</td>
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<td>SCRNASPECT</td>
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</tbody>
</table>
1. Overview

These specifications describe the methods of controlling both the Projector WUX ID00 and WUX4000 from the PC over an RS-232C connection or LAN. Virtually all operations possible with the remote control can be controlled from the PC.

The following symbols are used in these specifications:

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>( )</td>
<td>Space(20h) with 0 or more characters, or other separator.</td>
</tr>
<tr>
<td>( )</td>
<td>Space(20h) with 1 or more characters, or other separator.</td>
</tr>
<tr>
<td>( )</td>
<td>Separator between parameters.</td>
</tr>
<tr>
<td>( , )</td>
<td>(comma enclosed in more than 0 space) or (1 or more space)</td>
</tr>
<tr>
<td>[ ]</td>
<td>Data in [ ] can be omitted.</td>
</tr>
<tr>
<td>|</td>
<td>Same as OR.</td>
</tr>
<tr>
<td>: =</td>
<td>Definition name is on the left side of this mark, and definition description is on the right side.</td>
</tr>
</tbody>
</table>
## 2. Communication Specifications

### Communication Specifications

The projector can be controlled via RS-232C or LAN connection.

**PC - Projector connection configuration**

<table>
<thead>
<tr>
<th>Item</th>
<th>Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connection system</td>
<td>PC and projector connected on a &quot;1:1&quot; basis</td>
</tr>
<tr>
<td>Connection signal line</td>
<td>3-line connection of SD, RD, and SG</td>
</tr>
<tr>
<td>Connection cable</td>
<td>9-pin RS-232C Cable (Cross)</td>
</tr>
<tr>
<td>Send Data</td>
<td>SD</td>
</tr>
<tr>
<td>Receive Data</td>
<td>RD</td>
</tr>
<tr>
<td>Signal Ground</td>
<td>SG</td>
</tr>
</tbody>
</table>

**PC**

- LAN PORT
- Network
- SERVICE

**PROJECTOR**

- LAN PORT
- SERVICE

**Dedicated cable**

**COM**

**Service**

**Network**

TCP / IP Connection

<table>
<thead>
<tr>
<th>Item</th>
<th>Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connection system</td>
<td>TCP / IP Connection</td>
</tr>
<tr>
<td>Connection signal line</td>
<td>Straight when connecting via network</td>
</tr>
<tr>
<td>Connection cable</td>
<td>LAN Cable</td>
</tr>
<tr>
<td>LAN</td>
<td>100BASE-TX / 10BASE-T</td>
</tr>
</tbody>
</table>

* Signal lines other than the three SD, RD, and SG lines are not used in the projector.
* Loop back its own signals on the PC side as necessary.
Usable Character Codes

Use ASCII codes in the red and blue areas.
No distinction is made between double-byte characters and single-byte characters. Do not use double-byte or triple-byte characters. They will all be recognized as single-byte characters. Uppercase and lowercase versions of the same alphabetic characters will be recognized as the same character (case insensitive).

<table>
<thead>
<tr>
<th>Item</th>
<th>Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delimiters</td>
<td>CR(0Dh), LF(0Ah), null (00h)</td>
</tr>
<tr>
<td></td>
<td>Characters usable as delimiters. These characters alone (single characters) or CR+LF (0D0Ah) can be used as delimiters.</td>
</tr>
<tr>
<td>General Characters</td>
<td>20h to 7Eh</td>
</tr>
<tr>
<td></td>
<td>Characters usable in commands.</td>
</tr>
<tr>
<td>Invalid Characters</td>
<td>Do not use the codes in regions other than the red and blue areas.</td>
</tr>
<tr>
<td></td>
<td>When I used it, and they are handled in the same way as SP(20h).</td>
</tr>
</tbody>
</table>
## Communication System (Serial)

<table>
<thead>
<tr>
<th>Item</th>
<th>Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication system</td>
<td>RS-232-C Start-stop synchronization Semi-duplex communication</td>
</tr>
<tr>
<td>Transmission speed</td>
<td>19.2 Kbps</td>
</tr>
<tr>
<td>Character length</td>
<td>8 bits / character</td>
</tr>
<tr>
<td>Stop bit</td>
<td>2 bits</td>
</tr>
<tr>
<td>Parity</td>
<td>None</td>
</tr>
<tr>
<td>Transmission format</td>
<td>Variable-length records with terminals as delimiters</td>
</tr>
<tr>
<td>Maximum transmission length</td>
<td>Maximum of 256 characters (bytes) including delimiters.</td>
</tr>
<tr>
<td>Delimiters</td>
<td>Delimiters are one of the following: CR, LF, CR+LF, Null (0). Response delimiters are identical to command delimiters.</td>
</tr>
<tr>
<td>Transmission codes</td>
<td>ASCII code (General-purpose characters: 20h to 7Fh) (Codes other than those above and delimiters are considered “other separator codes”)</td>
</tr>
<tr>
<td>Communication procedure</td>
<td>No procedure</td>
</tr>
<tr>
<td>Flow control</td>
<td>None</td>
</tr>
<tr>
<td>Error control</td>
<td>None</td>
</tr>
<tr>
<td>Break signal</td>
<td>Not supported</td>
</tr>
<tr>
<td>Timeout</td>
<td>Tc Between characters: 5s (Timeout between CR and LF is 10ms.)</td>
</tr>
<tr>
<td></td>
<td>Tr Between command / response interval: 15s</td>
</tr>
</tbody>
</table>

* For information about timeouts, refer to “3. Communication Flow” on P. 8.

## Communication System (LAN)

<table>
<thead>
<tr>
<th>Item</th>
<th>Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication system</td>
<td>Uses the TCP / IP protocol. Port: 33336</td>
</tr>
</tbody>
</table>
# Commands

Transmissions sent from the PC to the projector.

## Transmission format

- `<Command character strings> [Delimiter]`<br>
  - `<Command character strings>`: Character strings consisting of 0 or more alphanumeric characters.<br>
  - `<Delimiters>`: One of CR (0Dh), LF (0Ah), CR+LF (0Dh+0Ah), Null (00h)

## Type

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Null Commands</strong></td>
<td>Commands with a command character string length of 0. No command processing is performed.</td>
<td></td>
</tr>
<tr>
<td>Character string</td>
<td><code>&lt;Null command character string&gt;</code>&lt;br&gt; := <code>&lt;Character string with length 0&gt;</code></td>
<td></td>
</tr>
<tr>
<td><strong>Control command</strong></td>
<td>Projector control command. The format is shown below.</td>
<td></td>
</tr>
<tr>
<td>Character string</td>
<td><code>&lt;Control command character string&gt;</code>&lt;br&gt; := `&lt;Control name&gt;[</td>
<td>&lt;Parameter value&gt;]`</td>
</tr>
<tr>
<td><strong>Setting command</strong></td>
<td>Command that sets values for each parameter. The format is shown below.</td>
<td></td>
</tr>
<tr>
<td>Character string</td>
<td><code>&lt;Setting command character strings&gt;</code>&lt;br&gt; := <code>&lt;Parameter name&gt;=&lt;Parameter value&gt;</code></td>
<td></td>
</tr>
<tr>
<td>For the definition of <code>&lt;Parameter value&gt;</code>, refer to the parameter definitions.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Reference command</strong></td>
<td>Requests current value of each parameter. The format is shown below.</td>
<td></td>
</tr>
<tr>
<td>Character string</td>
<td><code>&lt;Reference command character string&gt;</code>&lt;br&gt; :=?</td>
<td>&lt;Parameter name&gt;</td>
</tr>
<tr>
<td></td>
<td>OK</td>
<td></td>
</tr>
<tr>
<td></td>
<td>BUSY</td>
<td></td>
</tr>
<tr>
<td></td>
<td>WARN</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ERR</td>
<td></td>
</tr>
</tbody>
</table>
Response

Transmissions sent from the Projector to the PC in response to commands from the PC.

### Transmission format

\[ \text{<Response character string> <Delimiter}> \]

**<Response character string>**

Character strings consisting of one or more ASCII characters. The first two characters are always one lowercase letter and a : (colon). The first character indicates the response type.

<table>
<thead>
<tr>
<th>Response type</th>
<th>Meaning</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>i</td>
<td>State response</td>
<td>i:OK \ i:BUSY etc.</td>
</tr>
<tr>
<td>w</td>
<td>Warning</td>
<td>w:USER_COMMAND..</td>
</tr>
<tr>
<td>e</td>
<td>Error</td>
<td>e:000B INVALID..</td>
</tr>
<tr>
<td>g</td>
<td>Reference command response</td>
<td>g:AVOL=10</td>
</tr>
</tbody>
</table>

**<Delimiter>**

Delimiters for commands sent from the PC.

### Type

**OK response**

After the processing of each command is completed, a response is sent indicating that the next command can be received.

\[ \text{<OK response character string>} := \text{i:OK} \]

Example:

> IMAGE=STANDARD  
< i:BUSY

* Commands are indicated by ">" and responses are indicated by "<".

**BUSY response**

This response is sent when a command cannot be received during processing. Wait for a few moments, and then try sending the command again.

\[ \text{<BUSY response character string>} := \text{i:BUSY} \]

**WARN response**

This response is sent when warning information is issued. Note that the command is not executed in this case.

\[ \text{<Warning response character string>} := \text{w:<Warning description>} \]

Example:

> IMAGE=STANDARD  
< w:USER_COMMAND_VERSION_IS_UPDATED

**ERR response**

An error message is output.

\[ \text{<Error response character string>} := \text{e:<Error code> <Error message>} \]

* <Error code> is expressed as a four-digit hexadecimal number.
* Refer to "Error List"!

Example:

> abcdefg  
< e:0002 INVALID_COMMAND

**GET response**

Request response for each parameter.

\[ \text{<GET response character string>} := \text{g<Parameter name>=<Value>} \]

Example:

> GET LANG or ? LANG  
< g:LANG=JPN
Transmission recognition

On the receiving side (the Projector), the data that is able to be received within the character interval of $T_c$ is held, and the transmission is considered received when the delimiter is received. If the character interval received exceeds the $T_c$ or if a delimiter is not received within 256 characters, all data already received is lost, and the mode is reset to standby to receive commands again.
3. Communication Flow

Transmission sent
At the PC, the transmission is sent within character intervals of Tc (character interval timeout).

Transmission received
At the Projector, the data that is able to be received within the character interval of Tc is held, and the transmission is considered received when the delimiter is received.
If the character interval received exceeds the Tc or if a delimiter is not received within 256 characters, all data already received is lost, and the mode is reset to standby to receive commands again.

Command / Response
One response is always returned for each command sent from the PC.

* The timeout interval between command and response (Tr) is 15 seconds.

Response Reception Timeout
If a response is not received within the Tr (timeout interval between command and response) while standing by a waiting response after sending a command from the PC, it is deemed to have exceeded the “response reception timeout.” Please resend the command.

Control Mode
“LOCAL mode” and “REMOTE mode” on previous models (SX50, SX6, SX60, X600, SX7, X700) have been removed. You do not need to be aware of which mode it is in (no need to use “REMOTE” and “LOCAL” commands) to send user commands.

Other
If AC power is supplied to the projector, communication is possible regardless of whether the power is on or off.
The PC side cannot send the next user command before a response for the first command is returned.
If more than 2 user commands arrive at one port, “BAD_SEQUENCE” will be returned in response to the second user command.
For procedures which return “BAD_SEQUENCE”, change the procedure, and do not send the next user command on the PC side before a response for the first command is returned.
### 4. Command System

#### Screen Control

<table>
<thead>
<tr>
<th>Setting</th>
<th>Option</th>
</tr>
</thead>
<tbody>
<tr>
<td>Input select</td>
<td>INPUT</td>
</tr>
<tr>
<td>Aspect</td>
<td>ASPECT</td>
</tr>
<tr>
<td>Input signal settings</td>
<td></td>
</tr>
<tr>
<td>Input signal selection</td>
<td>SEL</td>
</tr>
<tr>
<td>Auto PC</td>
<td>AUTOPRO</td>
</tr>
<tr>
<td>HDMI input only</td>
<td>HDMI IN ONLY</td>
</tr>
<tr>
<td>HDMI overscan</td>
<td>HDMI OVS CAN</td>
</tr>
<tr>
<td>HDMI reset</td>
<td>HDMI RES SET</td>
</tr>
<tr>
<td>Progressive</td>
<td>PROGRESSIVE</td>
</tr>
<tr>
<td>Aspect display position setting</td>
<td>ASPECT SET</td>
</tr>
<tr>
<td>Screen color correction</td>
<td>SCREEN CORR</td>
</tr>
<tr>
<td>Flip display</td>
<td>IMAGE UP</td>
</tr>
<tr>
<td>User cursor setting</td>
<td>USER CURSOR</td>
</tr>
<tr>
<td>Screen Aspect</td>
<td>SCREEN ASPECT</td>
</tr>
</tbody>
</table>

#### Image Adjustment

<table>
<thead>
<tr>
<th>Setting</th>
<th>Option</th>
</tr>
</thead>
<tbody>
<tr>
<td>Image mode setting</td>
<td>IMAGE</td>
</tr>
<tr>
<td>Color temperature</td>
<td>COLOR TEMP</td>
</tr>
<tr>
<td>Color adjustment</td>
<td>COLOR ADJ</td>
</tr>
<tr>
<td>Contrast setting</td>
<td>CONTR</td>
</tr>
<tr>
<td>Sharpness setting</td>
<td>SHARP</td>
</tr>
<tr>
<td>Gamma adjustment</td>
<td>GAMMA</td>
</tr>
<tr>
<td>Advanced adjustment</td>
<td></td>
</tr>
<tr>
<td>Color saturation setting</td>
<td>SAT</td>
</tr>
<tr>
<td>Use setting</td>
<td>USE</td>
</tr>
<tr>
<td>Gamma correction</td>
<td>GAMMA COR</td>
</tr>
<tr>
<td>Resonant color adjustment</td>
<td>RESONANT</td>
</tr>
<tr>
<td>Reset</td>
<td>RESET</td>
</tr>
<tr>
<td>Lamp mode setting</td>
<td>LAMP</td>
</tr>
<tr>
<td>Reset</td>
<td>RESET IMAGE</td>
</tr>
</tbody>
</table>

#### System Setting

<table>
<thead>
<tr>
<th>Setting</th>
<th>Option</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power management mode</td>
<td>POWER MANAGEMENT</td>
</tr>
<tr>
<td>Electronic sound</td>
<td>ELECTRONIC S.</td>
</tr>
<tr>
<td>Key lock</td>
<td>KEY LOCK</td>
</tr>
<tr>
<td>Remote control setting</td>
<td>REMOTE CONTROL</td>
</tr>
<tr>
<td>Languages</td>
<td>LANGAUGE</td>
</tr>
<tr>
<td>Auto</td>
<td>AUTO</td>
</tr>
<tr>
<td>Input data display</td>
<td>INPUT DATA D.</td>
</tr>
<tr>
<td>HDMI input</td>
<td>HDMI IN</td>
</tr>
<tr>
<td>Other settings</td>
<td></td>
</tr>
<tr>
<td>Password setting</td>
<td>PASSWORD</td>
</tr>
<tr>
<td>Password authentication</td>
<td>PASSWORD AUTH</td>
</tr>
<tr>
<td>Lamp operation lock</td>
<td>LAMP OPE LOCK</td>
</tr>
<tr>
<td>Lamp preset</td>
<td>LAMP PRESET</td>
</tr>
<tr>
<td>Lamp display</td>
<td>LAMP DISPLAY</td>
</tr>
<tr>
<td>Lamp temperature display</td>
<td>LAMP TEMP D.</td>
</tr>
<tr>
<td>Lamp</td>
<td></td>
</tr>
<tr>
<td>Lamp time inquiry</td>
<td>LAMP Q.U.R.</td>
</tr>
<tr>
<td>Lamp counter reset</td>
<td>LAMP COUNTER R.</td>
</tr>
<tr>
<td>Reset to factory default settings</td>
<td></td>
</tr>
</tbody>
</table>

#### Network Setting

<table>
<thead>
<tr>
<th>Setting</th>
<th>Option</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change network setting</td>
<td>CHANGE NET</td>
</tr>
<tr>
<td>Network slot</td>
<td>NET SLOT</td>
</tr>
<tr>
<td>IP address</td>
<td>IP ADDRESS</td>
</tr>
<tr>
<td>Subnet mask</td>
<td>SUBNET MASK</td>
</tr>
<tr>
<td>Initialize network setting</td>
<td>NET INIT</td>
</tr>
</tbody>
</table>

*User commands use only automatic selection of input signals.
*Running of Auto PC will change the values set in 'Input signal settings'.

<table>
<thead>
<tr>
<th>Remote Control Key</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>POWER</td>
<td>POWER</td>
</tr>
<tr>
<td>ASPECT</td>
<td>ASPECT</td>
</tr>
<tr>
<td>INPUT</td>
<td>INPUT</td>
</tr>
<tr>
<td>AUTO PC</td>
<td>AUTO PC</td>
</tr>
<tr>
<td>FOCUS (WIDE)</td>
<td>FOCUS (WIDE)</td>
</tr>
<tr>
<td>CANCEL (WIDE)</td>
<td>CANCEL (WIDE)</td>
</tr>
<tr>
<td>KEYSTONE</td>
<td>KEYSTONE</td>
</tr>
<tr>
<td>MENU</td>
<td>MENU</td>
</tr>
<tr>
<td>ZOOM +</td>
<td>ZOOM +</td>
</tr>
<tr>
<td>ZOOM –</td>
<td>ZOOM –</td>
</tr>
<tr>
<td>COLD</td>
<td>COLD</td>
</tr>
<tr>
<td>MUTE</td>
<td>MUTE</td>
</tr>
<tr>
<td>IMAGE</td>
<td>IMAGE</td>
</tr>
<tr>
<td>P-TIMER</td>
<td>P-TIMER</td>
</tr>
<tr>
<td>LAMP</td>
<td>LAMP</td>
</tr>
<tr>
<td>GAMMA</td>
<td>GAMMA</td>
</tr>
</tbody>
</table>

### Remote Control button emulation

<table>
<thead>
<tr>
<th>Remote Control button emulation</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>POWER</td>
<td>POWER</td>
</tr>
<tr>
<td>MENU</td>
<td>MENU</td>
</tr>
<tr>
<td>KEYSTONE</td>
<td>KEYSTONE</td>
</tr>
<tr>
<td>FOCUS</td>
<td>FOCUS</td>
</tr>
<tr>
<td>ZOOM</td>
<td>ZOOM</td>
</tr>
<tr>
<td>SHFT</td>
<td>SHFT</td>
</tr>
<tr>
<td>INPUT</td>
<td>INPUT</td>
</tr>
<tr>
<td>AUTO PC</td>
<td>AUTO PC</td>
</tr>
<tr>
<td>ASPECT</td>
<td>ASPECT</td>
</tr>
<tr>
<td>IMAGE</td>
<td>IMAGE</td>
</tr>
<tr>
<td>BLANK</td>
<td>BLANK</td>
</tr>
<tr>
<td>MUTE</td>
<td>MUTE</td>
</tr>
<tr>
<td>VOL +</td>
<td>VOL +</td>
</tr>
<tr>
<td>VOL –</td>
<td>VOL –</td>
</tr>
<tr>
<td>FREEZE</td>
<td>FREEZE</td>
</tr>
<tr>
<td>P-TIMER</td>
<td>P-TIMER</td>
</tr>
<tr>
<td>LAMP</td>
<td>LAMP</td>
</tr>
<tr>
<td>ZOOM +</td>
<td>ZOOM +</td>
</tr>
<tr>
<td>ZOOM –</td>
<td>ZOOM –</td>
</tr>
<tr>
<td>GAMMA</td>
<td>GAMMA</td>
</tr>
<tr>
<td>UP</td>
<td>UP</td>
</tr>
<tr>
<td>DOWN</td>
<td>DOWN</td>
</tr>
<tr>
<td>LEFT</td>
<td>LEFT</td>
</tr>
<tr>
<td>RIGHT</td>
<td>RIGHT</td>
</tr>
<tr>
<td>OK</td>
<td>OK</td>
</tr>
</tbody>
</table>

* Indicates functions that are available in the menu but not available in the user commands.
## 5. Command List

<table>
<thead>
<tr>
<th>Item</th>
<th>Commands</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>6AXADJ</td>
<td>6-axis adjustment ON / OFF</td>
</tr>
<tr>
<td>2</td>
<td>6AXR-Y</td>
<td>6-axis correction R-Y hue / saturation settings</td>
</tr>
<tr>
<td>3</td>
<td>AMBADJ</td>
<td>Ambient light correction adjustment ON / OFF</td>
</tr>
<tr>
<td>4</td>
<td>AMBLEVEL</td>
<td>Ambient light level settings</td>
</tr>
<tr>
<td>5</td>
<td>AMBTYPE</td>
<td>Ambient light type settings</td>
</tr>
<tr>
<td>6</td>
<td>ASPECT</td>
<td>Screen settings</td>
</tr>
<tr>
<td>7</td>
<td>AUTOPC</td>
<td>Auto PC</td>
</tr>
<tr>
<td>8</td>
<td>AUTOSETXE</td>
<td>Auto setup</td>
</tr>
<tr>
<td>9</td>
<td>AVOL</td>
<td>Audio volume adjustment</td>
</tr>
<tr>
<td>10</td>
<td>BLANK</td>
<td>BLANK function</td>
</tr>
<tr>
<td>11</td>
<td>BRI</td>
<td>Brightness setting</td>
</tr>
<tr>
<td>12</td>
<td>COLOR_TEMP</td>
<td>Color temperature setting</td>
</tr>
<tr>
<td>13</td>
<td>COMVER</td>
<td>User command version inquiry</td>
</tr>
<tr>
<td>14</td>
<td>CONT</td>
<td>Contrast setting</td>
</tr>
<tr>
<td>15</td>
<td>DGAMMA</td>
<td>Dynamic gamma</td>
</tr>
<tr>
<td>16</td>
<td>DZOOM_POS</td>
<td>DZOOM position setting</td>
</tr>
<tr>
<td>17</td>
<td>DZOOM_RAT</td>
<td>DZOOM ratio setting</td>
</tr>
<tr>
<td>18</td>
<td>ERR</td>
<td>Error information inquiry</td>
</tr>
<tr>
<td>19</td>
<td>FINE_GAMMA_B</td>
<td>Fine gamma (B) adjustment</td>
</tr>
<tr>
<td>20</td>
<td>FINE_GAMMA_G</td>
<td>Fine gamma (G) adjustment</td>
</tr>
<tr>
<td>21</td>
<td>FINE_GAMMA_R</td>
<td>Fine gamma (R) adjustment</td>
</tr>
<tr>
<td>22</td>
<td>FREEZE</td>
<td>Freeze status</td>
</tr>
<tr>
<td>23</td>
<td>GAMMA</td>
<td>Gamma adjustment</td>
</tr>
<tr>
<td>24</td>
<td>HDMI_IN</td>
<td>HDMI input setting</td>
</tr>
<tr>
<td>25</td>
<td>HDMI_OVSCAN</td>
<td>HDMI overscan setting</td>
</tr>
<tr>
<td>26</td>
<td>HUE</td>
<td>Hue setting</td>
</tr>
<tr>
<td>27</td>
<td>IMAGE</td>
<td>Image mode setting</td>
</tr>
<tr>
<td>28</td>
<td>IMAGEFLIP</td>
<td>Flip display</td>
</tr>
<tr>
<td>29</td>
<td>INPUT</td>
<td>Input selection</td>
</tr>
<tr>
<td>30</td>
<td>LAMP</td>
<td>Lamp output setting</td>
</tr>
<tr>
<td>31</td>
<td>LAMPCOUNTER</td>
<td>Lamp ON time inquiry</td>
</tr>
<tr>
<td>32</td>
<td>MAIN</td>
<td>Front panel operation emulation</td>
</tr>
<tr>
<td>33</td>
<td>MEMCADJ</td>
<td>Memory color adjustment</td>
</tr>
<tr>
<td>34</td>
<td>MODE</td>
<td>Control mode switch</td>
</tr>
<tr>
<td>35</td>
<td>MUTE</td>
<td>Mute control</td>
</tr>
<tr>
<td>Item</td>
<td>Commands</td>
<td>Description</td>
</tr>
<tr>
<td>------</td>
<td>----------</td>
<td>----------------------------------</td>
</tr>
<tr>
<td>36</td>
<td>NR</td>
<td>Noise reduction</td>
</tr>
<tr>
<td>37</td>
<td>POWER</td>
<td>This controls the power supply</td>
</tr>
<tr>
<td>38</td>
<td>PRODCODE</td>
<td>Product information inquiry</td>
</tr>
<tr>
<td>39</td>
<td>RC</td>
<td>Remote control operation emulate</td>
</tr>
<tr>
<td>40</td>
<td>RGBGAIN</td>
<td>RGB gain adjustment</td>
</tr>
<tr>
<td>41</td>
<td>RGBOFFSET</td>
<td>RGB offset adjustment</td>
</tr>
<tr>
<td>42</td>
<td>ROMVER</td>
<td>ROM version inquiry</td>
</tr>
<tr>
<td>43</td>
<td>SAT</td>
<td>Color saturation setting</td>
</tr>
<tr>
<td>44</td>
<td>SAVEIMGPROF</td>
<td>Create user memory</td>
</tr>
<tr>
<td>45</td>
<td>SCRNASPECT</td>
<td>Screen aspect setting</td>
</tr>
<tr>
<td>46</td>
<td>SEL</td>
<td>Input signal selection</td>
</tr>
<tr>
<td>47</td>
<td>SHARP</td>
<td>Sharpness setting</td>
</tr>
<tr>
<td>48</td>
<td>SIGNAL_INFO</td>
<td>Input signal information inquiry</td>
</tr>
<tr>
<td>49</td>
<td>SIGNALSTATUS</td>
<td>Signal status inquiry</td>
</tr>
<tr>
<td>50</td>
<td>TEMP</td>
<td>Temperature sensor value inquiry</td>
</tr>
</tbody>
</table>
6. Details of Commands

Descriptions of each command are provided starting from the next page.
The command descriptions have the format shown below.

**Alphabetic command name**
This briefly describes the command function.

<table>
<thead>
<tr>
<th>Format</th>
<th>This indicates the command format.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Environment</th>
<th>This defines the environments that support the command (power supply state, input signal state).</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Power*1</th>
<th>Input</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFF</td>
<td>ON</td>
</tr>
<tr>
<td>*2</td>
<td>*3</td>
</tr>
</tbody>
</table>

*1 Power Executable regardless of power supply state when marked by "-".
*2 OFF "O" if enabled in a power OFF state.
*3 ON "O" if enabled in a power ON state.
*4 PM "O" if enabled while the power management state is in standby state.
*5 Input The command is enabled in states marked by "O".
The command is executable regardless of input when marked by "-".

<table>
<thead>
<tr>
<th>Response</th>
<th>This describes the command response.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Description</th>
<th>This includes the command function, conditions, and notes.</th>
</tr>
</thead>
</table>

| Example | This provides command usage examples. |
6AXADJ
6-axis adjustment ON / OFF

Format

6AXADJ=<6-axis adjustment parameter:ID>
GET [] 6AXADJ / ? [] 6AXADJ

<6-axis adjustment parameter:ID>
ON This sets the 6-axis adjustment to ON.
OFF This sets the 6-axis adjustment to OFF.

Environment

<table>
<thead>
<tr>
<th>Power</th>
<th>Input</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFF</td>
<td>ON</td>
</tr>
<tr>
<td>X</td>
<td>O</td>
</tr>
</tbody>
</table>

Response
"i:OK" is returned if the parameter was set properly.
For 'GET 6AXADJ' or '?6AXADJ', current 6-axis adjustment state is returned in
'g:6AXADJ=<6-axis adjustment parameter:ID>'
For details on other responses, refer to the "Error List".

Description
(1) This command is used to select ON or OFF for the 6-axis adjustment.
(2) This command functions in the same way as when "Image adjustments" - "Advanced adjustments" - "6-axis adjustment" are selected on the menu.
(3) In the case of "6-axis adjustment," set the hue and color saturation of each axis using the 6AXR to Y "6-axis correction R to Y hue / color saturation setting" commands.
(4) This sets the currently selected input signal and image mode.
(5) The current 6-axis adjustment setting can be obtained using the GET command. ("GET 6AXADJ")

Example

Control
> 6AXADJ=ON The 6-axis adjustment is set to ON.
< i:OK

Reference
> GET 6AXADJ or ?6AXADJ The 6-axis adjustment ON or OFF setting is obtained.
< g:6AXADJ=ON

*Commands are indicated by ">", and responses are indicated by "<".
### 6AXR-Y

6-axis correction R-Y hue / saturation settings

#### Format

<table>
<thead>
<tr>
<th>Command</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>6AXR=&lt;R hue:Number&gt; ˜&lt;R saturation:Number&gt; ˜&lt;R brightness:Number&gt;</td>
<td>6-axis R-axis correction R-Y hue / saturation settings.</td>
</tr>
<tr>
<td>6AXB=&lt;B hue:Number&gt; ˜&lt;B saturation:Number&gt; ˜&lt;B brightness:Number&gt;</td>
<td>6-axis B-axis correction R-Y hue / saturation settings.</td>
</tr>
<tr>
<td>6AXC=&lt;C hue:Number&gt; ˜&lt;C saturation:Number&gt; ˜&lt;C brightness:Number&gt;</td>
<td>6-axis C-axis correction R-Y hue / saturation settings.</td>
</tr>
</tbody>
</table>

#### Environment

<table>
<thead>
<tr>
<th>Power</th>
<th>Input</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFF</td>
<td>D-RGB</td>
</tr>
<tr>
<td>ON</td>
<td>A-RGB</td>
</tr>
<tr>
<td>PM</td>
<td>COMP</td>
</tr>
<tr>
<td>X</td>
<td>HDMI</td>
</tr>
<tr>
<td>O</td>
<td>None</td>
</tr>
</tbody>
</table>

#### Response

"i:OK" is returned if the parameter was set properly.

For `GET 6AX*` or `?6AX*`, current 6-axis correction R-Y hue/saturation/brightness settings are returned as

```
g:6AX*=<*hue: Number>,<*saturation:Number>,<*brightness:Number>
```

For details on other responses, refer to the "Error List".

#### Description

1. This sets the 6-axis correction of the hue and color saturation for R to Y.
2. This command functions in the same way as when "Image adjustments" - "Advanced adjustments" - "6-axis color adjustment" are selected on the menu.
3. If numerical parameters are outside the range, "e:0801 INVALID_VALUE" is returned.
4. These commands take effect when they have been set to valid using the 6-axis adjustment command (6AXADJ), and they can be set separately.
5. This sets the currently selected input signal and image mode.
6. The current 6-axis color correction can be obtained using the GET command. ("GET 6AXR/G/B/C/M/Y")

#### Example

**Setting**

```
> 6AXR=-8, 5, 3
```

The R hue is set to -8, the color saturation is set to 5, and the brightness is set to 3.

```
< i:OK
```

**Reference**

```
> GET 6AXR or ?6AXR
```

This retrieves the R hue, color saturation, and brightness.

```
< g:6AXR=12, -8, 4
```

* Commands are indicated by ">", and responses are indicated by "<".
**AMBADJ**

Ambient light correction adjustment ON / OFF

**Format**

```
AMBADJ=<Ambient light correction adjustment parameter:ID>
GET AMBADJ / ? AMBADJ
```

<Ambient light correction adjustment parameter:ID>

- **ON**: This sets the ambient light correction adjustment to ON.
- **OFF**: This sets the ambient light correction adjustment to OFF.

**Environment**

<table>
<thead>
<tr>
<th>Power</th>
<th>Input</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFF</td>
<td>ON</td>
</tr>
<tr>
<td>X</td>
<td>O</td>
</tr>
</tbody>
</table>

**Response**

"i:OK" is returned if ON / OFF of ambient light correction adjustment was set properly.

For `GET AMBADJ` or `? AMBADJ`, current ambient light correction adjustment setting is returned as `g:AMBADJ=<Ambient light correction adjustment parameter:ID>`.

For details on other responses, refer to the "Error List".

**Description**

1. This command is used to select ON or OFF for the ambient light correction adjustment.
2. This command functions in the same way as when "Image adjustment" - "Advanced adjustment" - "Ambient light" are selected on the menu.
3. In the case of "Ambient light correction adjustment", set the level using AMB_LEVEL of "Ambient light level" command, and set the type using AMB_TYPE of "Ambient light type" command.
4. This sets the currently selected input signal and image mode.
5. The current ambient light correction adjustment setting can be obtained using the GET command. ("GET AMBADJ")

**Example**

**Control**

```
> AMBADJ=ON
< i:OK
```

**Reference**

```
> GET AMBADJ or ? AMBADJ
< g:AMBADJ=ON
```

* Commands are indicated by ">"., and responses are indicated by "<".
### AMBLEVEL

**Ambient light level settings**

**Format**

```
AMBLEVEL=<Ambient light level settings parameter:ID>
GET AMBLEVEL / ? AMBLEVEL
```

**<Ambient light level settings parameter:ID>**

- **WEAK** This sets the ambient light level to WEAK.
- **MIDDLE** This sets the ambient light level to MIDDLE.
- **STRONG** This sets the ambient light level to STRONG.

**Environment**

<table>
<thead>
<tr>
<th>Power</th>
<th>Input</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFF</td>
<td>PM</td>
</tr>
<tr>
<td>ON</td>
<td>D-RGB</td>
</tr>
<tr>
<td>PM</td>
<td>A-RGB</td>
</tr>
<tr>
<td>OFF</td>
<td>COMP</td>
</tr>
<tr>
<td>ON</td>
<td>HDMI</td>
</tr>
<tr>
<td>OFF</td>
<td>None</td>
</tr>
</tbody>
</table>

**Response**

"\textlt; \textgreater i:OK\textlt;" is returned if ambient light level was set properly.

For \textlt; \textgreater \text{GET AMBLEVEL} or \textlt; ?AMBLEVEL\textlt; current ambient light level is returned as

\textlt; g:AMBLEVEL=<ambient light level settings parameter:ID>\textlt;"

For details on other responses, refer to the "Error List".

**Description**

1. This sets the ambient light level.
2. This command functions in the same way as when "Image adjustment" - "Advanced adjustment" - "Ambient light" - "Level" are selected on the menu.
3. This sets the currently selected input signal and image mode.
4. The current ambient light level setting can be obtained using the GET command. (\textlt; \textgreater \text{GET AMBLEVEL}"

**Example**

**Setting**

\textlt; \textgreater AMBLEVEL=MIDDLE\textlt; This sets the ambient light level to MIDDLE.

\textlt; i:OK\textlt;"

**Reference**

- \textlt; \textgreater \text{GET AMBLEVEL} or ?AMBLEVEL\textlt; This retrieves the ambient light level.
- \textlt; g:AMBLEVEL=MIDDLE\textlt;"

* Commands are indicated by "\textlt; \textgreater ", and responses are indicated by "\textlt; \textless \textlt;".
**AMBTYPE**

Ambient light type settings

### Format

```
AMBTYPE=<Ambient light type settings parameter:ID>
GET AMBTYPE / ? AMBTYPE
```

<Ambient light type settings parameter:ID>

- **TG** This sets the ambient light type to Tungsten.
- **FL** This sets the ambient light type to Fluorescent.
- **FL_H** This sets the ambient light type to Fluorescent H.

### Environment

<table>
<thead>
<tr>
<th>Power</th>
<th>Input</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFF</td>
<td>ON</td>
</tr>
<tr>
<td>X</td>
<td>O</td>
</tr>
</tbody>
</table>

### Response

"i:OK" is returned if ambient light type was set properly.

For 'GET AMBTYPE' or '?AMBTYPE', current ambient light type is returned as

```
g:AMBTYPE=<Ambient light type settings parameter:ID>
```

For details on other responses, refer to the "Error List".

### Description

1. This sets the ambient light type.
2. This command functions in the same way as when "Image adjustment" - "Advanced adjustment" - "Ambient light" - "Type" are selected on the menu.
3. This sets the currently selected input signal and image mode.
4. The current ambient light type setting can be obtained using the GET command. ("GET AMBTYPE")

### Example

**Setting**

```
> AMBTYPE=FL
< i:OK
```

**Reference**

```
> GET AMBTYPE or ?AMBTYPE
< g:AMBTYPE=FL
```

* Commands are indicated by ">" and responses are indicated by "<".
ASPECT

Screen settings

Format

```
ASPECT=<Screen setting parameters:ID>
GET() ASPECT / ?() ASPECT

ASPECT=<Screen setting parameters:ID>
AUTO Auto
4:3 4:3
16:9 16:9
ZOOM Zoom
TRUE Real
FULL Full screen
```

Environment

<table>
<thead>
<tr>
<th>Power</th>
<th>Input</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFF</td>
<td>Parameter</td>
</tr>
<tr>
<td>X</td>
<td>AUTO</td>
</tr>
<tr>
<td>X</td>
<td>4:3</td>
</tr>
<tr>
<td>X</td>
<td>16:9</td>
</tr>
<tr>
<td>X</td>
<td>ZOOM</td>
</tr>
<tr>
<td>X</td>
<td>TRUE</td>
</tr>
<tr>
<td>X</td>
<td>FULL</td>
</tr>
</tbody>
</table>

*1 Valid when screen aspect (16:9 or 16:9 DIS) and SD signals
*2 Progressive allowable (however, 1080p is non-allowable)
*3 Allowable / Non-Allowable differs according to selected input signal
*4 Settable when screen aspect (16:10)

Response

"i:OK" is returned if the parameter was set properly.
For 'GET ASPECT' or 'ASPECT', current screen display mode is returned as
'g:ASPECT=<Screen setting parameters:ID>'
For details on other responses, refer to the "Error List".

Description

(1) This sets the screen sizes.
(2) This command functions in the same way as when "Display settings" - "Aspect" are selected on the menu.
(3) If the command cannot be supported, 'INVALID_SOURCE' is returned as an error response.
(4) If the necessary signals are not input, 'NO_SIGNAL' is returned.
(5) The final screen settings are retained even when the power is turned off. However, the screen settings may be different if the input terminal or input signal is changed.
(6) The GET command can be used to retrieve the current screen display mode. ("GET ASPECT")
Example

Setting

> ASPECT=16:9
< i:OK

This sets the screen size to 16:9.

Reference

> GET ASPECT or ?ASPECT
< g:ASPECT=TRUE

This retrieves the screen size.

* Commands are indicated by "">", and responses are indicated by "<".
AUTOPC
Auto PC

Format
AUTOPC

Environment

<table>
<thead>
<tr>
<th>Power</th>
<th>Input</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFF</td>
<td>X</td>
</tr>
<tr>
<td>ON</td>
<td>O</td>
</tr>
<tr>
<td>PM</td>
<td>X</td>
</tr>
<tr>
<td>D-RGB</td>
<td>X</td>
</tr>
<tr>
<td>A-RGB</td>
<td>O</td>
</tr>
<tr>
<td>COMP</td>
<td>X</td>
</tr>
<tr>
<td>HDMI</td>
<td>X</td>
</tr>
<tr>
<td>None</td>
<td>X</td>
</tr>
</tbody>
</table>

Response
"i:OK" is returned if the control was executed properly.
For details on other responses, refer to the "Error List".

Description
(1) This executes Auto PC.
(2) This command is identical to pressing the "AUTOPC" button on the remote control.
(3) If the input is not "A-RGB", 'e:200X INVALID_SOURCE(***)' is returned as an error response.
(4) If signals are not input, "e:2010 NO_SIGNAL" is returned.
(5) Execution of this command may modify the following setting values.
   - Total number of dots
   - Tracking
   - Horizontal / vertical positions
   - Number of horizontal / vertical display dots

Example
> AUTOPC
< i:OK

* Commands are indicated by ">", and responses are indicated by "<".
AUTOSETEXE

Auto setup

Format
AUTOSETEXE <Auto set parameter:ID>

INPUT Automatic signal sensing execution

Environmental Conditions

<table>
<thead>
<tr>
<th>Power</th>
<th>Input</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFF</td>
<td>X</td>
</tr>
<tr>
<td>ON</td>
<td>O</td>
</tr>
<tr>
<td>PM</td>
<td>X</td>
</tr>
</tbody>
</table>

Response

"i:OK" is returned when the automatic processing was completed successfully. For details on other responses, refer to the "Error List".

Description

1. This command is used to execute auto setup.
2. One of the following responses is returned if auto setup cannot be executed due to projector settings.

<table>
<thead>
<tr>
<th>Projector settings</th>
<th>Type</th>
<th>Error response</th>
</tr>
</thead>
<tbody>
<tr>
<td>set to BLANK</td>
<td>☐</td>
<td>'e:1006 NOW_BLANK'</td>
</tr>
<tr>
<td>set to FREEZE</td>
<td>☐</td>
<td>'e:1009 NOW_FREEZE'</td>
</tr>
<tr>
<td>set to D.ZOOM</td>
<td>☐</td>
<td>'e:100A NOW_D.ZOOM'</td>
</tr>
<tr>
<td>set to DIS</td>
<td>☐</td>
<td>'e:1008 INVALID_SCREEN_ASPECT'</td>
</tr>
</tbody>
</table>

3. If the input signal cannot be detected using the automatic signal sensing, "i:INPUT_NOT_FOUND" is returned.

Example

Setting

> AUTOSETEXE INPUT  Automatic signal sensing is executed.
<i:OK

* Commands are indicated by ">", and responses are indicated by "<".
AVOL
Audio volume adjustment

Format

\[
\text{AVOL=\langle Audio volume level: Number\rangle} \\
\text{GET \[ AVOL \] / \ ? \ AVOL}
\]

Setting values for <Audio volume level: Number> are 0 to 20.

Environment

<table>
<thead>
<tr>
<th>Power</th>
<th>Input</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFF</td>
<td>D-RGB</td>
</tr>
<tr>
<td>ON</td>
<td>X</td>
</tr>
</tbody>
</table>

Response

"i:OK" is returned if the parameter was set properly.
For 'GET AVOL' or '?AVOL', current audio volume level is returned as 'g:AVOL=\langle Audio volume level: Number\rangle'.
For details on other responses, refer to the "Error List".

Description

(1) This adjusts the volume.
(2) This command is identical to pressing the "VOL+" and "VOL-" button on the remote control or the "VOL" on the front panel.
(3) If numerical parameters are outside the range, "e:0801 INVALID_VALUE" is returned.
(4) The volume level can be set even while the sound is muted.
(5) The GET command can be used to retrieve the current volume. ("GET AVOL")

Example

Setting

\[
> \text{AVOL=18} \\
< \text{i:OK}
\]

Reference

\[
> \text{GET AVOL or ?AVOL} \\
< \text{g:AVOL=18}
\]

* Commands are indicated by ">", and responses are indicated by "<".
BLANK

BLANK function

Format

```
BLANK=<BLANK parameter:ID>
GET[]BLANK / ?[]BLANK
```

<BLANK parameter:ID>

<table>
<thead>
<tr>
<th>Power</th>
<th>Input</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFF</td>
<td>ON</td>
</tr>
<tr>
<td>X</td>
<td>O</td>
</tr>
</tbody>
</table>

Environment

Response

"i:OK" is returned if the parameter was set properly.
For 'GET BLANK' or '?BLANK', current BLANK status is returned as
'g:BLANK=ON'
'g:BLANK=OFF'
For details on other responses, refer to the "Error List".

Description

(1) This command is used to set the BLANK function.
(2) This command is identical to pressing the "BLANK" button on the remote control.
(3) Executing this command in a FREEZE status will cancel the FREEZE status and become BLANK.
(4) The current BLANK settings can be obtained using the GET command. ("GET BLANK")

Example

Setting

```
>BLANK=ON
<i:OK
```

Setting to "User" screen when screen is BLANK.

Reference

```
>GET BLANK or ?BLANK
<g:BLANK=ON
```

The current BLANK status is referenced.

* Commands are indicated by ">", and responses are indicated by "<".
BRI

Brightness setting

Format

BRI=<Brightness setting:Number>

GET[]BRI / ?[]BRI

Setting values for <Brightness setting:Number> are -20 to 20.

Environment

<table>
<thead>
<tr>
<th>Power</th>
<th>D-RGB</th>
<th>A-RGB</th>
<th>COMP</th>
<th>HDMI</th>
<th>None</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFF</td>
<td>X</td>
<td>O</td>
<td>X</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>ON</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PM</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Response

"i:OK" is returned if the parameter was set properly.
For 'GET BRI' or '?BRI', current brightness is returned as
"g:BRI=<Brightness setting:Number>"
For details on other responses, refer to the "Error List".

Description

(1) This sets the screen brightness.
(2) This command functions in the same way as when "Image adjustments" - "Brightness" are
selected on the menu.
(3) If numerical parameters are outside the range, "e:0801 INVALID_VALUE" is returned.
(4) This sets the currently selected input signal and image mode.
(5) The current brightness can be acquired using the applicable GET command. ("GET BRI")

Example

Setting

> BRI=-10
< i:OK

This sets the brightness to -10.

Reference

> GET BRI or ?BRI
< g:BRI=-10

This retrieves the brightness.

* Commands are indicated by ">", and responses are indicated by "<".
**COLOR_TEMP**

Color temperature setting

<table>
<thead>
<tr>
<th>Format</th>
<th>COLOR_TEMP=&lt;Color temperature setting:Number&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>GET COLOR_TEMP / ? COLOR_TEMP</td>
</tr>
</tbody>
</table>

Setting values for <Color temperature setting:Number> are -17 to 21.

<table>
<thead>
<tr>
<th>Environment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Power</strong></td>
</tr>
<tr>
<td>OFF</td>
</tr>
<tr>
<td>X</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Input</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>D-RGB</td>
</tr>
<tr>
<td>-</td>
</tr>
</tbody>
</table>

**Response**

"i:OK" is returned if color temperature was set properly.

For 'GET COLOR_TEMP' or '?COLOR_TEMP', current color temperature setting is returned as

`g:COLOR_TEMP=<Color temperature setting:Number>`

For details on other responses, refer to the "Error List".

**Description**

1. This sets the color temperature of the screen.
2. This command functions in the same way as when "Image adjustment" - "Color adjustment" - "Color temperature" are selected on the menu.
3. If numerical parameters are outside the range, "e:0801 INVALID_VALUE" is returned.
4. This sets the currently selected input signal and image mode.
5. The current color temperature can be obtained using the GET command. ("GET COLOR_TEMP")

**Example**

**Setting**

```
> COLOR_TEMP=3
< i:OK
```

**Reference**

```
> GET COLOR_TEMP or ?COLOR_TEMP
< g:COLOR_TEMP=3
```

* Commands are indicated by ">", and responses are indicated by "<".
**COMVER**

User command version inquiry

<table>
<thead>
<tr>
<th>Format</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET COMVER / ? COMVER</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Environment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Power</strong></td>
</tr>
<tr>
<td>OFF</td>
</tr>
<tr>
<td>-----</td>
</tr>
<tr>
<td>-</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Returns the user command version as</td>
</tr>
<tr>
<td>g:COMVER=&quot;&lt;User command version:Character string&gt;&quot;</td>
</tr>
</tbody>
</table>

For details on other responses, refer to the "Error List".

<User command version>:=99.9999

<table>
<thead>
<tr>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) This inquires about the user command version of the projector.</td>
</tr>
<tr>
<td>(2) This inquiry can be executed in any status provided that AC power is supplied to the projector.</td>
</tr>
<tr>
<td>(3) The user command version consists of a 2-digit number followed by a 4-digit number. Question marks may appear in place of the numerals if the firmware has not been upgraded correctly. (Example &quot;??:????&quot;)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt; GET COMVER or ? COMVER</td>
</tr>
<tr>
<td>&lt; g:COMVER=&quot;01.0000&quot;</td>
</tr>
</tbody>
</table>

* Commands are indicated by ">", and responses are indicated by "<".*
CONT

Contrast setting

Format

```
CONT=<Contrast setting:Number>
GET ¥ CONT / ? ¥ CONT
```

Setting values for <Contrast setting:Number> are -20 to 20.

Environment

<table>
<thead>
<tr>
<th>Power</th>
<th>Input</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFF</td>
<td>X</td>
</tr>
<tr>
<td>ON</td>
<td>O</td>
</tr>
<tr>
<td>PM</td>
<td>X</td>
</tr>
<tr>
<td>D-RGB</td>
<td>-</td>
</tr>
<tr>
<td>A-RGB</td>
<td>-</td>
</tr>
<tr>
<td>COMP</td>
<td>-</td>
</tr>
<tr>
<td>HDMI</td>
<td>-</td>
</tr>
<tr>
<td>None</td>
<td>-</td>
</tr>
</tbody>
</table>

Response

"i:OK" is returned if the parameter was set properly.

For 'GET cont' or 'c:cont', current contrast setting is returned as

```
g:CONT=<Contrast setting:Number>
```

For details on other responses, refer to the "Error List".

Description

1. This sets the screen contrast.
2. This command functions in the same way as when "Image adjustment" - "Contrast setting"
   are selected on the menu.
3. If numerical parameters are outside the range, "e:0801 INVALID_VALUE" is returned.
4. This sets the currently selected input signal and image mode.
5. The current contrast can be acquired using the applicable GET command. ("GET cont")

Example

Setting

```
> CONT=3
< i:OK
```

This sets the contrast to +3.

Reference

```
> GET CONT or ?CONT
< g:CONT=3
```

This retrieves the contrast.

* Commands are indicated by ">", and responses are indicated by "<".
DGAMMA

Dynamic gamma

Format

```
DGAMMA=<Dynamic gamma setting parameter:ID>
GET DGAMMA / ?DGAMMA
```

<Dynamic gamma setting parameter:ID>

<table>
<thead>
<tr>
<th>Power</th>
<th>Input</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFF</td>
<td>D-RGB</td>
</tr>
<tr>
<td>ON</td>
<td>A-RGB</td>
</tr>
<tr>
<td>PM</td>
<td>COMP</td>
</tr>
<tr>
<td>X</td>
<td>HDMI</td>
</tr>
<tr>
<td>O</td>
<td>None</td>
</tr>
</tbody>
</table>

Response

"i:OK" is returned if the parameter was set properly.

For 'GET DGAMMA' or '?DGAMMA', current dynamic gamma setting is returned as

`g:DGAMMA=<Dynamic gamma setting parameter:ID>`

For details on other responses, refer to the "Error List".

Description

(1) The command is used to set the dynamic gamma function.
(2) This command functions in the same way as when "Image adjustment" - "Advanced adjustment" - "Dynamic gamma" are selected on the menu.
(3) This sets the currently selected input signal and image mode.
(4) The current dynamic gamma function status can be acquired using the applicable GET command. ("GET DGAMMA")

Example

Setting

```
> DGAMMA=WEAK
< i:OK
```

Reference

```
> GET DGAMMA or ?DGAMMA
< g:DGAMMA=WEAK
```

* Commands are indicated by ">", and responses are indicated by "<".
**DZOOM_POS**

DZOOM position setting

**Format**

```
DZOOM_POS=<DZOOM position X:Number>,<DZOOM position Y:Number>
GET[DZOOM_POS] / ?DZOOM_POS
```

<DZOOM position X/Y:Number> is a signed integer indicating the central position of the enlarged input image.

**Environment**

<table>
<thead>
<tr>
<th>Power</th>
<th>Input</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFF</td>
<td>X</td>
</tr>
<tr>
<td>ON</td>
<td>O</td>
</tr>
<tr>
<td>PM</td>
<td>O</td>
</tr>
<tr>
<td>D-RGB</td>
<td>O</td>
</tr>
<tr>
<td>A-RGB</td>
<td>O</td>
</tr>
<tr>
<td>COMP</td>
<td>O</td>
</tr>
<tr>
<td>HDMI</td>
<td>O</td>
</tr>
<tr>
<td>None</td>
<td>X</td>
</tr>
</tbody>
</table>

**Response**

"i:OK" is returned when the DZOOM position setting was completed successfully.

For 'GET DZOOM_POS' or '?DZOOM_POS', the current DZOOM position is returned as

```
g:DZOOM_POS=<DZOOM position X:Number>,<DZOOM position Y:Number>
```

For details on other responses, refer to the "Error List".

**Description**

1. This command is used to set the DZOOM position (center position of the displayed enlarged input image).
2. This command is identical to pressing the arrow keys to move while DZOOM is enabled, however, the position can be specified in more detail.
3. If a position outside the range is specified, the position is automatically moved to the nearest position within the range.
4. 0 for <DZOOM position X/Y:Number> indicates the center position of the input image.
5. Positive direction for <DZOOM position X/Y:Number> corresponds to RIGHT and UP keys, and negative direction corresponds to LEFT and DOWN keys.
6. The numerical value for <DZOOM position X/Y:Number> represents units in pixels of the input image.

For example, in a case where an input image of XGA (1024 x 768) size is enlarged twice the size (range of 512 x 384 is displayed), up to ±256 for <DZOOM position X:Number>, and up to ±192 for <DZOOM position Y:Number> can be specified.

**Example**

**Control**

```
> DZOOM_POS=100,200
< i:OK
```

This sets the DZOOM position shifted 100 right and 200 up.

**Reference**

```
> GET DZOOM_POS or ?DZOOM_POS
< g:DZOOM_POS=100,200
```

This retrieves the total number of dots.

* Commands are indicated by ">", and responses are indicated by "<".
**DZOOM_RAT**

DZOOM ratio setting

Format

```
DZOOM_RAT=<DZOOM ratio parameter:ID>
GET DZOOM_RAT / ? DZOOM_RAT
```

`<DZOOM ratio parameter:ID>`

1 same size (DZOOM disabled)
1.5 1.5x
2 2x
3 3x
4 4x
5 5x
6 6x
8 8x
10 10x
12 12x

Environment

<table>
<thead>
<tr>
<th>Power</th>
<th>Input</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFF</td>
<td>ON</td>
</tr>
<tr>
<td>PM</td>
<td>D-RGB</td>
</tr>
<tr>
<td>COMP</td>
<td>HDMI</td>
</tr>
<tr>
<td>X</td>
<td>O</td>
</tr>
<tr>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>O</td>
<td>X</td>
</tr>
</tbody>
</table>

Response

"i:OK" is returned if DZOOM ratio was set properly.

For 'GET DZOOM_RAT' or '?'DZOOM_RAT', current DZOOM ratio is returned as

`'g:DZOOM_RAT=<DZOOM ratio parameter:Number>'`

For details on other responses, refer to the "Error List".

Description

(1) This sets the DZOOM ratio.
(2) This command is identical to pressing the "DZOOM +" and "DZOOM -" button to set the desired ratio.
(3) The SET command can be used when DZOOM is disabled and set to other than "1", to enable DZOOM and display the ratio on the screen.
(4) The SET command can be used when DZOOM is enabled and set to "1", to disable DZOOM and hide the ratio from the screen.
(5) The GET command can be used to obtain current DZOOM ratio. ("GET DZOOM_RAT")

Example

Control

```
> DZOOM_RAT=12
< i:OK
```

Reference

```
> GET DZOOM_RAT or ?DZOOM_RAT
< g:DZOOM_RAT=12
```

* Commands are indicated by ">", and responses are indicated by "<".
**ERR**

Error information inquiry

### Format

```
GET ERR / ? ERR
```

### Environment

<table>
<thead>
<tr>
<th>Power</th>
<th>Input</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFF</td>
<td>ON</td>
</tr>
<tr>
<td>PM</td>
<td>D-RGB</td>
</tr>
<tr>
<td>A-RGB</td>
<td>COMP</td>
</tr>
<tr>
<td>HDMI</td>
<td>None</td>
</tr>
</tbody>
</table>

### Response

Returns the current error information as 'g:ERR=ErrorID:Character string'.

For details on other responses, refer to the "Error List".

**<ErrorID:Character string>**

- **NO_ERROR**: No error
- **ABNORMAL_TEMPERATURE**: Temperature error
- **FAULTY_LAMP**: Lamp error
- **FAULTY_LAMP_COVER**: Lamp cover error
- **FAULTY_COOLING_FAN**: Cooling fan error
- **FAULTY_POWER_SUPPLY**: Power supply error
- **FAULTY_AIR_FILTER**: Air filter error
- **FAULTY_POWER_ZOOM**: Zoom error
- **FAULTY_POWER_FOCUS**: Focus error
- **FAULTY_POWER_LENS_SHIFT**: Lens shift error
- **FAULTY_LENS_CONNECTOR**: Lens connector error

### Description

1. This inquires about the current error information.
2. This inquiry can be executed in any status provided that AC power is supplied to the projector.
3. Information when the warning LED of the projector is flashing can be obtained. "NO_ERROR" is returned when the warning LED is not lighted.

### Example

```
> GET ERR or ? ERR
< g:ERR=FAULTY_LAMP
```

* Commands are indicated by ">", and responses are indicated by "<".*
FINE_GAMMA_R

Fine gamma (R) adjustment

Format

\[
\text{FINE_GAMMA_R}=\langle \text{Fine gamma (R) adjustment point 1 adjustment value: Number} \rangle, \\
\langle \text{Fine gamma (R) adjustment point 2 adjustment value: Number} \rangle, \\
\cdots, \langle \text{Fine gamma (R) adjustment point n adjustment value: Number} \rangle
\]

\[
\text{GET} \rangle \text{FINE_GAMMA_R} \quad / \quad ? \langle \text{FINE_GAMMA_R}
\]

Adjustment values for \langle \text{Fine gamma (R) adjustment point n adjustment value: Number} \rangle are 0 to 1024.

Environment

<table>
<thead>
<tr>
<th>Power</th>
<th>Input</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFF</td>
<td>X</td>
</tr>
<tr>
<td>ON</td>
<td>O</td>
</tr>
<tr>
<td>PM</td>
<td>X</td>
</tr>
<tr>
<td>D-RGB</td>
<td>-</td>
</tr>
<tr>
<td>A-RGB</td>
<td>-</td>
</tr>
<tr>
<td>COMP</td>
<td>-</td>
</tr>
<tr>
<td>HDMI</td>
<td>-</td>
</tr>
<tr>
<td>None</td>
<td>-</td>
</tr>
</tbody>
</table>

Response

"i:OK" is returned if the fine gamma (R) adjustment was set properly.

For 'GET FINE_GAMMA_R' or '?FINE_GAMMA_R', current fine gamma (R) adjustment value is returned as

\[
\langle g: \text{FINE_GAMMA_R}=\langle \text{Number of adjustment points} \rangle : \langle \text{Fine gamma (R) adjustment point 1 adjustment value: Number} \rangle, \langle \text{Fine gamma (R) adjustment point 2 adjustment value: Number} \rangle, \\
\cdots, \langle \text{Fine gamma (R) adjustment point n adjustment value: Number} \rangle \rangle
\]

For details on other responses, refer to the "Error List".

Description

(1) This executes the fine gamma (R) adjustment.
(2) This command functions in the same way as when "Image adjustment" - "Advanced adjustment" - "Fine gamma adjustment" are selected on the menu.
(3) If numerical parameters are outside the range, "e:0801 INVALID_VALUE" is returned.
(4) This sets the currently selected input signal and image mode.
(5) The current fine gamma setting can be acquired using the applicable GET command. ("GET FINE_GAMMA_R")

Example

Setting

\[
> \text{FINE_GAMMA_R}=0,128,256,384,512,640,768,896,1024
\]

This executes the fine gamma (R) adjustment.

< i:OK

Reference

\[
> \text{GET FINE_GAMMA_R} \quad \text{or} \quad ? \text{FINE_GAMMA_R}
\]

This retrieves the fine gamma (R) adjustment value.

\[
< \langle g: \text{FINE_GAMMA_R}=9:0,128,256,384,512,640,768,896,1024 \rangle
\]

* Commands are indicated by ">"., and responses are indicated by "<".
FINE_GAMMA_G
Fine gamma (G) adjustment

Format

FINE_GAMMA_G=<Fine gamma (G) adjustment point 1 adjustment value:Number>,
   <Fine gamma (G) adjustment point 2 adjustment value:Number>,
   ...,
   <Fine gamma (G) adjustment point n adjustment value:Number>

GET[] FINE_GAMMA_G   /   ?[] FINE_GAMMA_G

Adjustment values for <Fine gamma (G) adjustment point n adjustment value:Number> are 0 to 1024.

Environment

<table>
<thead>
<tr>
<th>Power</th>
<th>Input</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFF</td>
<td>D-RGB</td>
</tr>
<tr>
<td>ON</td>
<td>A-RGB</td>
</tr>
<tr>
<td>PM</td>
<td>COMP</td>
</tr>
<tr>
<td>X</td>
<td>HDMI</td>
</tr>
<tr>
<td>O</td>
<td>None</td>
</tr>
</tbody>
</table>

Response

"i:OK" is returned if the fine gamma (G) adjustment was set properly.
For 'GET FINE_GAMMA_G' or '?FINE_GAMMA_G', current fine gamma (G) adjustment value is returned as

'g:FINE_GAMMA_G=<Number of adjustment points>:<Fine gamma (G) adjustment point 1 adjustment value:Number>, <Fine gamma (G) adjustment point 2 adjustment value:Number>,
   ...,
   <Fine gamma (G) adjustment point n adjustment value:Number>

For details on other responses, refer to the "Error List".

Description

(1) This executes the fine gamma (G) adjustment.
(2) This command functions in the same way as when "Image adjustment" - "Advanced adjustment" - "Fine gamma adjustment" are selected on the menu.
(3) If numerical parameters are outside the range, "e:0801 INVALID_VALUE" is returned.
(4) This sets the currently selected input signal and image mode.
(5) The current fine gamma setting can be acquired using the applicable GET command. ("GET FINE_GAMMA_G")

Example

Setting

> FINE_GAMMA_G=0,128,256,384,512,640,768,896,1024
This executes the fine gamma (G) adjustment.
< i:OK

Reference

> GET FINE_GAMMA_G or ?FINE_GAMMA_G
This retrieves the fine gamma (G) adjustment value.
< g:FINE_GAMMA_G=9:0,128,256,384,512,640,768,896,1024

* Commands are indicated by ">", and responses are indicated by "<".
**FINE_GAMMA_B**

Fine gamma (B) adjustment

### Format

```
FINE_GAMMA_B=<Fine gamma (B) adjustment point 1 adjustment value:Number>,
  <Fine gamma (B) adjustment point 2 adjustment value:Number>,
  ...,<Fine gamma (B) adjustment point n adjustment value:Number>
```

```
GET [] FINE_GAMMA_B   /   ? [] FINE_GAMMA_B
```

Adjustment values for `<Fine gamma (B) adjustment point n adjustment value:Number>` are 0 to 1024.

### Environment

<table>
<thead>
<tr>
<th>Power</th>
<th>Input</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFF</td>
<td>D-RGB</td>
</tr>
<tr>
<td>ON</td>
<td>A-RGB</td>
</tr>
<tr>
<td>PM</td>
<td>COMP</td>
</tr>
<tr>
<td>X</td>
<td>HDMI</td>
</tr>
<tr>
<td>O</td>
<td>None</td>
</tr>
</tbody>
</table>

### Response

"i:OK" is returned if the fine gamma (B) adjustment was set properly.

For 'GET FINE_GAMMA_B' or '?FINE_GAMMA_B', current fine gamma (B) adjustment value is returned as

```
g:FINE_GAMMA_B=<Number of adjustment points>:<Fine gamma (B) adjustment point 1 adjustment value:Number>, <Fine gamma (B) adjustment point 2 adjustment value:Number>,
  ...,<Fine gamma (B) adjustment point n adjustment value:Number>
```

For details on other responses, refer to the "Error List".

### Description

1. This executes the fine gamma (B) adjustment.
2. This command functions in the same way as when "Image adjustment" - "Advanced adjustment" - "Fine gamma adjustment" are selected on the menu.
3. If numerical parameters are outside the range, "e:0801 INVALID_VALUE" is returned.
4. This sets the currently selected input signal and image mode.
5. The current fine gamma setting can be acquired using the applicable GET command. ("GET FINE_GAMMA_B")

### Example

**Setting**

```
> FINE_GAMMA_B=0,128,256,384,512,640,768,896,1024
```

This executes the fine gamma (B) adjustment.

```
<i:OK
```

**Reference**

```
> GET FINE_GAMMA_B or ?FINE_GAMMA_B
```

This retrieves the fine gamma (B) adjustment value.

```
< g:FINE_GAMMA_B=9:0,128,256,384,512,640,768,896,1024
```

* Commands are indicated by ">". and responses are indicated by "<".
**FREEZE**

Freeze status

### Format

```
FREEZE=<FREEZE parameter:ID>
GET FREEZE / ? FREEZE
```

<FREEZE parameter:ID>

<table>
<thead>
<tr>
<th>Power</th>
<th>Input</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFF</td>
<td>O</td>
</tr>
<tr>
<td>ON</td>
<td>O</td>
</tr>
<tr>
<td>PM</td>
<td>O</td>
</tr>
<tr>
<td>D-RGB</td>
<td>O</td>
</tr>
<tr>
<td>A-RGB</td>
<td>COMP</td>
</tr>
<tr>
<td>COMP</td>
<td>None</td>
</tr>
<tr>
<td>HDMI</td>
<td>None</td>
</tr>
</tbody>
</table>

### Environment

- **Power**: OFF, ON, PM
- **Input**: D-RGB, A-RGB, COMP, HDMI, None

### Response

"i:OK" is returned if the parameter was set properly.

For 'GET FREEZE' or '?FREEZE', current freeze status is returned as

- 'gFREEZE=ON'
- 'g:FREEZE=OFF'

For details on other responses, refer to the "Error List".

### Description

1. This command is used to freeze the image.
2. This command is identical to pressing the "FREEZE" button on the remote control.
3. The current freeze status can be obtained using the GET command. ("GET FREEZE")

### Example

**Setting**

```
> FREEZE=ON
Freezes image.
< i:OK
```

**Reference**

```
> GET FREEZE or ?FREEZE
The current freeze status is referenced.
< g:FREEZE=ON
```

* Commands are indicated by ">", and responses are indicated by "<".
### GAMMA

**Gamma adjustment**

#### Format

```plaintext
GAMMA=<Gamma adjustment:Number>
GET GAMMA / ?GAMMA
```

Setting values for `<Gamma adjustment: Number>` are -10 to 10.

#### Environment

<table>
<thead>
<tr>
<th>Power</th>
<th>Input</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFF</td>
<td>D-RGB</td>
</tr>
<tr>
<td>ON</td>
<td>PM</td>
</tr>
</tbody>
</table>

#### Response

"i:OK" is returned if the parameter was set properly.

For 'GET GAMMA' or '?GAMMA', current gamma adjustment is returned as 'g:GAMMA=<Gamma adjustment:Number>'

For details on other responses, refer to the "Error List".

#### Description

1. This performs the Gamma adjustment.
2. This command functions in the same way as when "Image adjustment" - "Gamma adjustment" are selected on the menu.
3. If numerical parameters are outside the range, "e:0801 INVALID_VALUE" is returned.
4. This sets the currently selected input signal and image mode.
5. The current gamma adjustment can be acquired using the applicable GET command. ("GET GAMMA")

#### Example

**Setting**

```
> GAMMA=-1
< i:OK
```

**Reference**

```
> GET GAMMA or ?GAMMA
< g:GAMMA=3
```

* Commands are indicated by ">", and responses are indicated by "<".
**HDMI_IN**

**HDMI input setting**

**Format**

HDMI_IN=<HDMI input setting parameter:ID>

GET HDMI_IN / ? HDMI_IN

Example:

HDMI_IN=AUTO

**Environment**

<table>
<thead>
<tr>
<th>Power</th>
<th>Input</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFF</td>
<td>D-RGB</td>
</tr>
<tr>
<td>ON</td>
<td>A-RGB</td>
</tr>
<tr>
<td>PM</td>
<td></td>
</tr>
<tr>
<td>X</td>
<td>O</td>
</tr>
</tbody>
</table>

**Response**

"i:OK" is returned if HDMI input was set properly. For 'GET HDMI_IN' or '?HDMI_IN', current HDMI input setting status is returned as 'g:HDMI_IN=<HDMI input setting parameter:ID>'

For details on other responses, refer to the "Error List".

**Description**

1. This switches the HDMI input setting to [AV input] / [PC input].
2. This command functions in the same way as when "System setting" - "HDMI input" are selected on the menu.
3. The current HDMI input setting can be acquired using the applicable GET command. ("GET HDMI_IN").

**Example**

Setting

> HDMI_IN=AUTO  This sets the HDMI input to AV source.

< i:OK

Reference

> GET HDMI_IN or ?HDMI_IN  This retrieves the setting status of the HDMI input setting.

< g:HDMI_IN=AUTO

* Commands are indicated by ">", and responses are indicated by "<".
HDMI_OVSCAN

HDMI overscan setting

Format

HDMI_OVSCAN=<HDMI overscan setting parameter:ID>

GET [] HDMI_OVSCAN / ? [] HDMI_OVSCAN

<HDMI overscan setting parameter:ID>
OFF Turns overscan to OFF
ON Forces overscan to ON

Environment

<table>
<thead>
<tr>
<th>Power</th>
<th>D-RGB</th>
<th>A-RGB</th>
<th>COMP</th>
<th>HDMI</th>
<th>None</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFF</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>O</td>
</tr>
<tr>
<td>ON</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>O</td>
<td>O</td>
</tr>
</tbody>
</table>

Response

"i:OK" is returned if HDMI overscan was set properly.
For 'GET HDMI_OVSCAN' or '?HDMI_OVSCAN', current HDMI overscan setting status is returned as
'g:HDMI_OVSCAN=<HDMI overscan setting parameter:ID>'
For details on other responses, refer to the "Error List".

Description

(1) This switches the HDMI overscan setting to [OFF] / [ON].
(2) This command functions in the same way as when "Display setting" - "HDMI overscan" are selected on the menu.
(3) The current HDMI overscan setting can be acquired using the applicable GET command ("GET HDMI_OVSCAN").
(4) The setting is fixed to [OFF] depending on the setting status of other functions or the status of the input signal.

Example

Setting

> HDMI_OVSCAN=ON
<i:OK

Reference

> GET HDMI_OVSCAN or ?HDMI_OVSCAN

This retrieves the setting status of the HDMI overscan setting.

< g:HDMI_OVSCAN=ON

* Commands are indicated by ">"., and responses are indicated by "<".
**HUE**

Hue setting

### Format

- Set:
  - `HUE=<Hue setting value:Number>`
  - `GET HUE / ? HUE`

Setting values for `<Hue setting value:Number>` are -20 to 20.

### Environment

<table>
<thead>
<tr>
<th>Power</th>
<th>Input</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFF</td>
<td>D-RGB</td>
</tr>
<tr>
<td>ON</td>
<td>COMP</td>
</tr>
<tr>
<td>PM</td>
<td></td>
</tr>
</tbody>
</table>

### Response

"i:OK" is returned if the parameter was set properly.
For 'GET HUE' or '?HUE', current hue setting is returned as `g:HUE=<Hue setting value:Number>`
For details on other responses, refer to the "Error List".

### Description

1. This sets the screen hue.
2. This command functions in the same way as when "Image adjustment" - "Color adjustment" - "Hue setting" are selected on the menu.
3. If numerical parameters are outside the range, "e:0801 INVALID_VALUE" is returned.
4. This sets the currently selected input signal and image mode.
5. The GET command can be used to retrieve the current hue. ("GET HUE")

### Example

#### Setting

```
>HUE=8
<i:OK
```

This sets the hue to +8.

#### Reference

```
>GET HUE or ?HUE
<g:HUE=1
```

This retrieves the hue.

* Commands are indicated by ">", and responses are indicated by "<".
**IMAGE**

**Image mode setting**

### Format

```
IMAGE=<Image mode setting parameter:ID>
GET [] IMAGE / ? [] IMAGE
```

<image mode setting parameter:ID>

- STANDARD: Standard
- PRESENTATION: Presentation
- VIVID_PHOTO: Vivid photo
- PHOTO_SRGB: Photo/sRGB
- DCM_SIM: DICOM Sim*
- DYNAMIC: Dynamic
- VIDEO: Video
- CINEMA: Cinema
- USER_1: User 1
- USER_2: User 2
- USER_3: User 3
- USER_4: User 4
- USER_5: User 5

* Only available on DICOM models.

### Environment

<table>
<thead>
<tr>
<th>Power</th>
<th>Input</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFF</td>
<td>ON</td>
</tr>
<tr>
<td>X</td>
<td>O</td>
</tr>
</tbody>
</table>

### Response

"i:OK" is returned if the parameter was set properly.

For 'GET IMAGE' or '?IMAGE', current image mode is returned as

```
g:IMAGE=<Image mode setting parameter:ID>
```

For details on other responses, refer to the "Error List".

### Description

1. This sets the image quality.
2. This command functions in the same way as when "Image adjustment" - "Image mode setting" are selected on the menu.
3. The final settings for the image mode are retained even when the power is turned off.
4. Changing the setting may modify the following setting values.

<table>
<thead>
<tr>
<th>Setting</th>
<th>Commands related to the settings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brightness</td>
<td>BRI</td>
</tr>
<tr>
<td>Contrast</td>
<td>CONT</td>
</tr>
<tr>
<td>Sharpness</td>
<td>SHARP</td>
</tr>
<tr>
<td>Gamma adjustment</td>
<td>GAMMA</td>
</tr>
<tr>
<td>Dynamic gamma</td>
<td>DGAMMA</td>
</tr>
<tr>
<td>Saturation / Hue</td>
<td>SAT / HUE</td>
</tr>
<tr>
<td>Memory color adjustment</td>
<td>MEMCADJ</td>
</tr>
<tr>
<td>RGB gain / offset adjustment</td>
<td>RGBGAIN / RGBOFFSET</td>
</tr>
<tr>
<td>Lamp mode</td>
<td>LAMP</td>
</tr>
<tr>
<td>Setting</td>
<td>Commands related to the settings</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>----------------------------------</td>
</tr>
<tr>
<td>6-axis adjustment</td>
<td>6AXADJ</td>
</tr>
<tr>
<td>6-axis color correction</td>
<td>6AXR→Y</td>
</tr>
</tbody>
</table>

(5) The current image quality can be acquired using the applicable GET command. ("GET IMAGE")

**Example**

**Setting**

> IMAGE=PRESENTATION

< i:OK

**Reference**

> GET IMAGE or ?IMAGE

< g:IMAGE=CINEMA

* Commands are indicated by ">"., and responses are indicated by "<<".
**IMAGEFLIP**

**Flip display**

**Format**

```
IMAGEFLIP=<Image flip setting parameters:ID>
GET[] IMAGEFLIP / ?[] IMAGEFLIP
```

*Image flip setting parameters:ID>*

- NONE: None
- CEILING: Ceiling
- REAR: Rear projection
- REAR_CEILING: Rear projection with ceiling

**Environment**

<table>
<thead>
<tr>
<th>Power</th>
<th>Input</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFF</td>
<td>D-RGB</td>
</tr>
<tr>
<td>ON</td>
<td>A-RGB</td>
</tr>
<tr>
<td>PM</td>
<td>None</td>
</tr>
</tbody>
</table>

**Response**

"i:OK" is returned if the parameter was set properly.

For `GET IMAGEFLIP` or `?IMAGEFLIP`, current flip display setting is returned as

'g:IMAGEFLIP=<Image flip setting parameters:ID>'

For details on other responses, refer to the "Error List".

**Description**

1. This command is used to flip the screen display in various ways (vertically or horizontally).
2. This command functions in the same way as when "Display setting" - "Flip display" are selected on the menu.
3. When the display is flipped, the "keystone distortion" settings are initialized.
4. The current flip display status can be acquired using the applicable GET command. ("GET IMAGEFLIP")

**Example**

**Setting**

```
> IMAGEFLIP=REAR
< i:OK
```

This displays the image in a rear projection (flip vertically).

**Reference**

```
> GET IMAGEFLIP or ?IMAGEFLIP
< g:IMAGEFLIP=REAR_CEILING
```

* Commands are indicated by ">", and responses are indicated by "<".
**INPUT**

Input selection

### Format

```
INPUT=<Input selection parameters:ID>
GET INPUT / ?INPUT
```

- `<Input selection parameters:ID>`
  - D-RGB: Digital PC
  - A-RGB: Analog PC
  - COMP: Component
  - HDMI: HDMI

### Environment

<table>
<thead>
<tr>
<th>Power</th>
<th>Input</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFF</td>
<td>D-RGB</td>
</tr>
<tr>
<td>ON</td>
<td>X</td>
</tr>
<tr>
<td>PM</td>
<td></td>
</tr>
</tbody>
</table>

### Response

"i:OK" is returned if the parameter was set properly.
For 'GET INPUT' or '?INPUT', current input selection is returned as
`
g:INPUT=<Input selection parameters:ID>`
For details on other responses, refer to the "Error List".

### Description

1. This controls the input selection.
2. This command is identical to pressing the "INPUT" button on the remote control.
3. The input can be selected automatically using the auto setup command (AUTOSETEXE=INPUT).
4. The current input can be acquired using the applicable GET command. ("GET INPUT")

### Example

**Setting**

```
> INPUT=HDMI
< i:OK
```

**Reference**

```
> GET INPUT or ?INPUT
< g:INPUT=A-RGB
```

* Commands are indicated by ">"., and responses are indicated by "<".*
LAMP

Lamp output setting

Format

LAMP=<Lamp output setting parameters:ID>

GET[]LAMP / ?[]LAMP

<Lamp output setting parameters:ID>

NORMAL Normal
SILENT Silent cooling

Environment

<table>
<thead>
<tr>
<th>Power</th>
<th>Input</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFF</td>
<td>ON</td>
</tr>
<tr>
<td>X</td>
<td>O</td>
</tr>
</tbody>
</table>

Response

"i:OK" is returned if the parameter was set properly.
For 'GET LAMP' or '?LAMP', current lamp output is returned as
'g:LAMP=<Lamp output setting parameters:ID>'
For details on other responses, refer to the "Error List".

Description

(1) This command is used to set the light quantity of the lamp to "NORMAL" or "SILENT" (reduced light quantity appropriate for silent cooling).
(2) This command functions in the same way as when "Image adjustment" - "Lamp mode setting" are selected on the menu.
(3) This sets the currently selected input signal and image mode.
(4) The current lamp output can be acquired using the applicable GET command. ("GET LAMP")

Example

Setting

LAMP=NORMAL

The lamp output is set to "NORMAL".

<:i:OK

Reference

GET LAMP or ?LAMP

This retrieves the lamp output.

<>gLAMP=SILENT

* Commands are indicated by ">"", and responses are indicated by "<".
LAMPCOUNTER
Lamp ON time inquiry

Format
GET LAMPCOUNTER / ? LAMPCOUNTER

Environment
<table>
<thead>
<tr>
<th>Power</th>
<th>Input</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFF</td>
<td>ON</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Response
Returns current lamp on time as 'g:LAMPCOUNTER="<Lamp ON time:Character string>"'
For details on other responses, refer to the "Error List".

<Lamp ON time:Character string>

<table>
<thead>
<tr>
<th>Lamp ON time</th>
<th>ON time:H</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;[G_______]&quot;</td>
<td>0-539</td>
</tr>
<tr>
<td>&quot;[GG_____]&quot;</td>
<td>540-1079</td>
</tr>
<tr>
<td>&quot;[GGG___]&quot;</td>
<td>1080-1619</td>
</tr>
<tr>
<td>&quot;[GGGG____]&quot;</td>
<td>1620-2159</td>
</tr>
<tr>
<td>&quot;[GGGGG___]&quot;</td>
<td>2160-2699</td>
</tr>
<tr>
<td>&quot;[GGGGGY__]&quot;</td>
<td>2700-2849</td>
</tr>
<tr>
<td>&quot;[GGGGGY_]&quot;</td>
<td>2850-2999</td>
</tr>
<tr>
<td>&quot;[GGGGGYR]&quot;</td>
<td>3000-</td>
</tr>
</tbody>
</table>

For all other responses, refer to "Error List."

Description
(1) This inquires about the current lamp ON time.
(2) This inquiry can be executed in any status provided that AC power is supplied to the projector.

Example
> GET LAMPCOUNTER or ? LAMPCOUNTER
< g:LAMPCOUNTER="[GG______]"

* Commands are indicated by ">", and responses are indicated by "<".
**MAIN**

Front panel operation emulation

Format

```
MAIN<Main unit panel emulation button parameters:ID>
```

<Main unit panel emulation button parameters:ID>

- **POWER** POWER button
- **POWER_OFF** POWER button pressed twice
- **MENU** MENU
- **LENS** LENS
- **INPUT** INPUT
- **UP** UP
- **UP+REP** Hold down the UP button
- **-*REP** Release the button
- **DOWN** DOWN
- **DOWN+REP** Hold down the DOWN button
- **-*REP** Release the button
- **LEFT** LEFT
- **LEFT+REP** Hold down the LEFT button
- **-*REP** Release the button
- **RIGHT** RIGHT
- **RIGHT+REP** Hold down the RIGHT button
- **-*REP** Release the button
- **OK** OK

* After setting the status of the button to be pressed down, send a command from the PC to release the pressed status after predetermined time.

Environment

<table>
<thead>
<tr>
<th>Power</th>
<th>Input</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFF</td>
<td>-</td>
</tr>
<tr>
<td>ON</td>
<td>-</td>
</tr>
<tr>
<td>PM</td>
<td>-</td>
</tr>
<tr>
<td>D-RGB</td>
<td>-</td>
</tr>
<tr>
<td>A-RGB</td>
<td>-</td>
</tr>
<tr>
<td>COMP</td>
<td>-</td>
</tr>
<tr>
<td>HDMI</td>
<td>-</td>
</tr>
<tr>
<td>None</td>
<td>-</td>
</tr>
</tbody>
</table>

Response

"i:OK" is returned when the button press request has been acknowledged successfully. (It does not indicate if the operation for the pressed button was executed properly.)

Description

(1) This emulates the pressing of the front panel buttons for controlling the projector.
(2) With the emulation of the front panel operations, the functions of the buttons corresponding to the parameters cannot necessarily be executed. Emulation simply consists in emulating the pressing of the buttons.
(3) A parameter with ‘+REP’ signifies “button press start.” (This is the same as the status in which the front panel button is held down.)

Be absolutely sure to send the ‘-*REP’ parameter, and end the button pressing last of all.

The button pressing is ended in the cases below as well.

- **<1>** When a panel or remote control button has been operated
- **<2>** When some command has been received

Example

Setting

```
> MAIN MENU
< i:OK
```

* Commands are indicated by “>”, and responses are indicated by “<”.

- 47 -
MEMCADJ
Memory color adjustment

Format
MEMCADJ=<Memory color adjustment parameter:ID>
GET MEMCADJ / ?MEMCADJ

<Memory color adjustment parameter:ID>
OFF No adjustment
MEM_L Memory color adjustment - light
MEM_M Memory color adjustment - medium
MEM_H Memory color adjustment - heavy

Environment

<table>
<thead>
<tr>
<th>Power</th>
<th>Input</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFF</td>
<td>ON</td>
</tr>
<tr>
<td>X</td>
<td>O</td>
</tr>
</tbody>
</table>

Response
i:OK’ is returned when memory color has been adjusted successfully.
For ‘GET MEMCADJ’ or ‘?MEMCADJ’, current memory color adjustment is returned as
’g:MEMCADJ=<Memory color adjustment parameter:ID>’
For details on other responses, refer to the “Error List”.

Description
(1) This command is used by selecting “No adjustment”, “Memory color adjustment - light” to
“Memory color adjustment - heavy”.
(2) This command functions in the same way as when ”Image adjustment“ - ”Advanced
adjustment“ - ”Memory color adjustment“ are selected on the menu.
(3) This sets the currently selected input signal and image mode.
(4) The current memory color adjustment setting can be obtained using the GET command. ("GET
MEMCADJ")

Example
Control
> MEMCADJ=MEM_M This sets the tone adjustment to "Memory color adjustment - medium".
< i:OK

Reference
> GET MEMCADJ or ?MEMCADJ This retrieves the memory color adjustment level.
< g:MEMCADJ=MEM_M

* Commands are indicated by “>”, and responses are indicated by “<”.
MODE

Control mode switch

Format

REMOTE
LOCAL
GET ?MODE / ??:MODE

Environment

<table>
<thead>
<tr>
<th>Power</th>
<th>Input</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFF</td>
<td>PM</td>
</tr>
<tr>
<td>ON</td>
<td>D-RGB</td>
</tr>
<tr>
<td></td>
<td>A-RGB</td>
</tr>
<tr>
<td></td>
<td>COMP</td>
</tr>
<tr>
<td></td>
<td>HDMI</td>
</tr>
<tr>
<td></td>
<td>None</td>
</tr>
</tbody>
</table>

Response

"i:OK" is always returned with the control mode switch setting.
For 'GET MODE' or '?MODE', current control mode is returned as

'g:MODE=REMOTE'
'g:MODE=LOCAL'

For details on other responses, refer to the "Error List".

Description

(1) There are no 'local' and 'remote' control modes with this version of the user commands, however, this command exists to maintain compatibility with previous versions of the user commands.

(2) The current control mode can be obtained using the GET command. ("GET MODE")

Example

Mode switch

> REMOTE
< i:OK

Mode reference

> GET MODE or ?MODE
< g:MODE=LOCAL

* Commands are indicated by ">", and responses are indicated by "<".
MUTE
Mute control

**Format**

```
MUTE=<Mute control parameter: ID>
GET MUTE / ?MUTE
```

<Mute control parameter: ID>

- **ON** This prohibits the audio/beep sound.
- **OFF** This permits the audio/beep sound.

**Environment**

<table>
<thead>
<tr>
<th>Power</th>
<th>Input</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFF</td>
<td>ON</td>
</tr>
<tr>
<td>X</td>
<td>O</td>
</tr>
</tbody>
</table>

**Response**

"i:OK" is returned if the parameter was set properly.
For 'GET MUTE' or 'MUTE', current mute setting is returned as
`g:MUTE=<Mute control parameter: ID>`
For details on other responses, refer to the "Error List".

**Description**

1. This command is used to set the sound output muting to ON or OFF.
2. Mute control enables simultaneous control of the audio and beep sound.
3. This command is identical to pressing the MUTE button on the remote control.
4. The mute setting is always "OFF" when the power has just been turned on.
5. The volume can be set even when it is on "MUTE".
6. The current muting status can be acquired using the applicable GET command. ("GET MUTE")

**Example**

**Setting**
```
> MUTE=ON
< i:OK
```

**Reference**
```
> GET MUTE or ?MUTE
< g:MUTE=ON
```

* Commands are indicated by ">"., and responses are indicated by "<".
NR
Noise reduction

Format
NR=<Noise reduction setting parameter:ID>
GET NR / ?NR

<Noise reduction setting parameter:ID>
OFF Off
WEAK Weak
MIDDLE Middle
STRONG Strong

Environment

<table>
<thead>
<tr>
<th>Power</th>
<th>D-RGB</th>
<th>A-RGB</th>
<th>COMP</th>
<th>HDMI</th>
<th>None</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFF</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>ON</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PM</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D-RGB</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Response
"i:OK" is returned if noise reduction was set properly.
For 'GET NR' or 'NR', current noise reduction setting is returned as
'g:NR=<Noise reduction setting parameter:ID>'
"FUNCTION_NOT_AVAILABLE" is returned if PC is selected for HDMI input.
For details on other responses, refer to the "Error List".

Description
(1) This sets the noise reduction function.
(2) This command functions in the same way as when "Image adjustment" - "Advanced adjustment" - "Noise reduction" are selected on the menu.
(3) This sets the currently selected input signal and image mode.
(4) The current noise reduction function status can be acquired using the applicable GET command ("GET NR").

Example
Setting
> NR=MIDDLE
This sets the noise reduction function to MIDDLE.
< i:OK

Reference
> GET NR or ?NR
This retrieves the noise reduction function status.
< g:NR=MIDDLE

* Commands are indicated by ">", and responses are indicated by "<".
**POWER**

This controls the power supply

* Format

```
POWER[<Parameter:ID>]
```

```
GET [POWER] / ?[POWER]
```

<Parameter:ID>

- ON
- OFF

* Environment

<table>
<thead>
<tr>
<th>Power</th>
<th>Input</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFF</td>
<td>ON</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Response

"i:OK" is returned if the parameter was set properly.

For 'GET POWER' or 'POWER', current power supply status is returned as shown in the table below.

<table>
<thead>
<tr>
<th>Response</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>'g:POWER=OFF'</td>
<td>OFF</td>
</tr>
<tr>
<td>'g:POWER=OFF2ON'</td>
<td>OFF -&gt; ON in transition</td>
</tr>
<tr>
<td>'g:POWER=ON'</td>
<td>ON</td>
</tr>
<tr>
<td>'g:POWER=PMM'</td>
<td>ON -&gt; Standby in transition</td>
</tr>
<tr>
<td>'g:POWER=PMM2ON'</td>
<td>Standby -&gt; ON in transition</td>
</tr>
<tr>
<td>'g:POWER=ON2OFF'</td>
<td>ON -&gt; OFF in transition</td>
</tr>
</tbody>
</table>

For details on other responses, refer to the "Error List".

* Description

1. This performs ON / OFF control of the power supply.
2. This command is identical to pressing the POWER button on the remote control.
3. Processing of other commands (including ZOOM / FOCUS) will be interrupted at "POWER OFF" when the power is ON.
4. 'i:BUSY' will be returned at "POWER ON" during power OFF transition. For other cases, 'i:OK' will always be returned.
5. The current power supply status can be referenced using the applicable GET command. ("GET POWER")
6. After sending this command, use GET POWER to obtain the power supply state at regular intervals, and check that it is in the controlled state (off or on).
7. Even when it is powered up by using this command, "Prepare for lamp replacement", "Lamp replacement warning", "Clean filter warning" will display for 10 seconds as usual.

* Example

Control

```
> POWER ON
< i:OK
```

Reference

```
> GET POWER or ?POWER
< g:POWER=OFF
```

* Commands are indicated by ">", and responses are indicated by "<".
**PRODCODE**

Product information inquiry

**Format**

```
GET PRODCODE / ? PRODCODE
```

**Environment**

<table>
<thead>
<tr>
<th>Power</th>
<th>Input</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFF</td>
<td>-</td>
</tr>
<tr>
<td>ON</td>
<td>-</td>
</tr>
<tr>
<td>PM</td>
<td>-</td>
</tr>
<tr>
<td>D-RGB</td>
<td>-</td>
</tr>
<tr>
<td>A-RGB</td>
<td>-</td>
</tr>
<tr>
<td>COMP</td>
<td>-</td>
</tr>
<tr>
<td>HDMI</td>
<td>-</td>
</tr>
<tr>
<td>None</td>
<td>-</td>
</tr>
</tbody>
</table>

**Response**

Product name is returned as

```
g:PRODCODE="<Product name:Character string>"
```

For details on other responses, refer to the "Error List".

```
<Product name:Character string>
WUX5000 / WUX4000
```

**Description**

1. This inquires about the product name of the projector.
2. This inquiry can be executed in any status provided that AC power is supplied to the projector.

**Example**

```
> GET PRODCODE or ? PRODCODE
< g:PRODCODE="WUX5000"
```

or

```
< g:PRODCODE="WUX4000"
```

* Commands are indicated by ">", and responses are indicated by "<".*
RC
Remote control operation emulate

Format
RC[]<Remote control emulation button parameters:ID>

<Remote control emulation button parameters:ID>
- POWER POWER button
- POWER_OFF POWER button pressed twice
- MENU MENU
- INPUT INPUT
- ASPECT ASPECT
- AUTOPC AUTOPC
- KEYSTONE KEYSTONE
- UP UP
- UP+REP Hold down the UP button
- *-REP Release the button
- DOWN DOWN
- DOWN+REP Hold down the DOWN button
- *-REP Release the button
- LEFT LEFT
- LEFT+REP Hold down the LEFT button
- *-REP Release the button
- RIGHT RIGHT
- RIGHT+REP Hold down the RIGHT button
- *-REP Release the button
- OK OK
- IMAGE IMAGE
- GAMMA GAMMA
- FREEZE FREEZE
- VOL_P VOL +
- VOL_P+REP Hold down the VOL + button
- *-REP Release the button
- VOL_M VOL -
- VOL_M+REP Hold down the VOL - button
- *-REP Release the button
- BLANK BLANK
- MUTE MUTE
- P-TIMER P_TIMER
- LAMP LAMP
- DZOOM_P DZOOM +
- DZOOM_P+REP Hold down the DZOOM + button
- *-REP Release the button
- DZOOM_M DZOOM -
- DZOOM_M+REP Hold down the DZOOM - button
- *-REP Release the button
- FOCUS FOCUS
- ZOOM ZOOM
- SHIFT SHIFT

* After setting the status of the button to be pressed down, send a command from the PC to release the pressed status after predetermined time.

Environment

<table>
<thead>
<tr>
<th>Power</th>
<th>Input</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFF</td>
<td>-</td>
</tr>
<tr>
<td>ON</td>
<td>-</td>
</tr>
<tr>
<td>PM</td>
<td>-</td>
</tr>
<tr>
<td>D-RGB</td>
<td>-</td>
</tr>
<tr>
<td>A-RGB</td>
<td>-</td>
</tr>
<tr>
<td>COMP</td>
<td>-</td>
</tr>
<tr>
<td>HDMI</td>
<td>-</td>
</tr>
<tr>
<td>None</td>
<td>-</td>
</tr>
</tbody>
</table>
Response
"i:OK" is returned when the button press request has been acknowledged successfully.
(It does not indicate if the operation for the pressed button was executed properly.)

Description
(1) This emulates pressing of the remote control buttons for controlling the projector.
(2) With the emulation of the remote control operations, the functions of the buttons
    corresponding to the parameters cannot necessarily be executed.
    Emulation simply consists in emulating the pressing of the buttons.
(3) A parameter with ‘+REP’ signifies “button press start”. (This is the same as the status in
    which the remote control button is held down.)
    Be absolutely sure to send the ‘*-REP’ parameter, and end the button pressing last of all.
    The button pressing is ended in the cases below as well.
    <1> When a panel or remote control button has been operated
    <2> When a command has been received

Example
Setting
    > RC POWER
    < i:OK

* Commands are indicated by ">", and responses are indicated by "<".
RGBGAIN
RGB gain adjustment

Format
RGBGAIN=<R gain setting:Number>†<G gain setting:Number>†<B gain setting:Number>
GET() RGBGAIN / ? RGBGAIN

Setting values for <R/G/B gain setting:Number> are -60 to 60.

Environment

<table>
<thead>
<tr>
<th>Power</th>
<th>Input</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFF</td>
<td>ON</td>
</tr>
<tr>
<td>X</td>
<td>O</td>
</tr>
</tbody>
</table>

Response
"i:OK" is returned if the parameter was set properly.
For 'GET RGBGAIN' or '?rgbgain', current RGB gain adjustment values are returned as
'g:RGBGAIN=<R gain setting:Number>,<G gain setting:Number>,<B gain setting:Number>'
For details on other responses, refer to the "Error List".

Description
(1) This command is used to adjust the gain of the R, G and B colors.
(2) This command functions in the same way as when "Image adjustment" - "Color adjustment" -
   "Gain adjustment" are selected on the menu.
(3) If numerical parameters are outside the range, "e:0801 INVALID_VALUE" is returned.
(4) This sets the currently selected input signal and image mode.
(5) The current RGB gain values can be obtained using the GET command. ("GET RGBGAIN")

Example
Setting
> RGBGAIN=10, 11, 12
< i:OK

Reference
> GET RGBGAIN or ?RGBGAIN
< g:RGBGAIN=-10, 0, 19

* Commands are indicated by ">", and responses are indicated by "<".
RGBOFFSET

RGB offset adjustment

Format

RGBOFFSET=<R offset setting:Number>,<G offset setting:Number>,<B offset setting:Number>

GET RGBOFFSET / ? RGBOFFSET

Setting values for <R/G/B offset setting:Number> are -60 to 60.

Environment

<table>
<thead>
<tr>
<th>Power</th>
<th>Input</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFF</td>
<td>PM</td>
</tr>
<tr>
<td>X</td>
<td>O</td>
</tr>
</tbody>
</table>

Response

"i:OK" is returned if the parameter was set properly.
For 'GET RGBOFFSET' or '?RGBOFFSET', current RGB offset adjustment values are returned as

'g:RGBOFFSET=<R offset setting:Number>,<G offset setting:Number>,<B offset setting:Number>'

For details on other responses, refer to the "Error List".

Description

(1) This command is used to adjust the offset of the R, G and B colors.
(2) This command functions in the same way as when "Image adjustment" - "Color adjustment" - "Offset adjustment" are selected on the menu.
(3) If numerical parameters are outside the range, "e:0801 INVALID_VALUE" is returned.
(4) This sets the currently selected input signal and image mode.
(5) The current RGB offset values can be obtained using the GET command ("GET RGBOFFSET")

Example

Setting

> RGBOFFSET=10, 11, 12
< i:OK

The R offset is set to 10, G offset to 11 and B offset to 12.

Reference

> GET RGBOFFSET or ?RGBOFFSET
< g:RGBOFFSET=-10, 0, 19

* Commands are indicated by ">", and responses are indicated by "<".
**ROMVER**

ROM version inquiry

### Format

```
GET ROMVER / ? ROMVER
```

### Environment

<table>
<thead>
<tr>
<th>Power</th>
<th>Input</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFF</td>
<td>D-RGB</td>
</tr>
<tr>
<td>ON</td>
<td>A-RGB</td>
</tr>
<tr>
<td>PM</td>
<td>COMP</td>
</tr>
<tr>
<td>-</td>
<td>HDMI</td>
</tr>
<tr>
<td>-</td>
<td>None</td>
</tr>
</tbody>
</table>

### Response

ROM version of the firmware is returned as

```
g:ROMVER="<ROM version:Character string>"
```

For details on other responses, refer to the "Error List".

<ROM version>=99.999999

### Description

1. This inquires about the version of the firmware.
2. This inquiry can be executed in any status provided that AC power is supplied to the projector.

### Example

```
> GET ROMVER or ? ROMVER
< g:ROMVER="01.030602"
```

* Commands are indicated by ">", and responses are indicated by "<".
### SAT

**Color saturation setting**

#### Format

<table>
<thead>
<tr>
<th>RGBGAIN=&lt;R gain setting:Number&gt;</th>
<th>&lt;G gain setting:Number&gt;</th>
<th>&lt;B gain setting:Number&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET() RGBGAIN</td>
<td>? RGBGAIN</td>
<td></td>
</tr>
</tbody>
</table>

Setting values for `<Color saturation setting value:Number>` are -20 to 20.

#### Environment

<table>
<thead>
<tr>
<th>Power</th>
<th>Input</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFF</td>
<td>ON</td>
</tr>
<tr>
<td>X</td>
<td>O</td>
</tr>
<tr>
<td>D-RGB</td>
<td>A-RGB</td>
</tr>
</tbody>
</table>

#### Response

"i:OK" is returned if the parameter was set properly.

For GET SAT or ?SAT, current saturation setting value is returned as

`g:SAT=<Color saturation setting value:Number>`

For details on other responses, refer to the "Error List".

#### Description

1. This sets the screen color saturation.
2. This command functions in the same way as when "Image adjustment" - "Color adjustment" - "Color saturation setting" are selected on the menu.
3. If numerical parameters are outside the range, "e:0801 INVALID_VALUE" is returned.
4. This sets the currently selected input signal and image mode.
5. The GET command can be used to retrieve the current color saturation. ("GET SAT")

#### Example

**Setting**

```
> SAT=-10
< i:OK
```

**Reference**

```
> GET SAT or ?SAT
< g:SAT=1
```

* Commands are indicated by ">", and responses are indicated by "<".
SAVEIMGPROF
Create, save, delete user memory / Create user memory status

Format
SAVEIMGPROF=<User memory save to parameter:ID>

<User memory save to parameter:ID>
USER_1 Save to User 1
USER_2 Save to User 2
USER_3 Save to User 3
USER_4 Save to User 4
USER_5 Save to User 5
DEL_ALL Delete all User memory

<User memory presence parameter:ID>
0 User memory not created
1 User memory created

Environment

<table>
<thead>
<tr>
<th>Power</th>
<th>Input</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFF</td>
<td>ON</td>
</tr>
<tr>
<td>PM</td>
<td>D-RGB</td>
</tr>
<tr>
<td>A-RGB</td>
<td>COMP</td>
</tr>
<tr>
<td>HDMI</td>
<td>None</td>
</tr>
<tr>
<td>X</td>
<td>O</td>
</tr>
<tr>
<td>X</td>
<td>O</td>
</tr>
<tr>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>O</td>
<td>O</td>
</tr>
</tbody>
</table>

Response
"i:OK" is returned if the user memory was saved properly.
For 'GET SAVEIMGPROF' or '?SAVEIMGPROF', presence of user memory can be confirmed as
'g:SAVEIMGPROF=<Number of user memories>:<User 1 present parameter>,
<User 2 present parameter>,<User 3 present parameter>,
<User 4 present parameter>,<User 5 present parameter>'
For details on other responses, refer to the "Error List".

Description
(1) This command is used to create user memory.
(2) This command functions in the same way as "Image adjustment" - "Create user memory " and
"Save user memory".
(3) The create user memory status can be confirmed using the GET SAVEIMGPROF command
("GET SAVEIMGPROF").

Example
Setting
> SAVEIMGPROF=USER_2 Saves the current image adjustment value to user memory 2.
< i:OK

Reference
> GET SAVEIMGPROF Confirms the create user memory status.
< g:SAVEIMGPROF=5:0,1,0,0,0 User memory 3 and user memory 3 have been created.

* Commands are indicated by ">". and responses are indicated by "<".
**SCRNASPECT**

Screen aspect setting

**Format**

\[
\begin{align*}
\text{SCRNASPECT} &= \langle \text{Screen aspect setting parameter:ID} \rangle \\
\text{GET SCRNASPECT} &= \text{? SCRNASPECT}
\end{align*}
\]

**<Screen aspect setting parameter:ID>**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>16:10</td>
<td>16:10 display</td>
</tr>
<tr>
<td>16:9</td>
<td>16:9 display</td>
</tr>
<tr>
<td>4:3</td>
<td>4:3 display</td>
</tr>
<tr>
<td>16:9_DIS</td>
<td>16:9 digital image shift</td>
</tr>
<tr>
<td>4:3_DIS</td>
<td>4:3 digital image shift</td>
</tr>
</tbody>
</table>

**Environment**

<table>
<thead>
<tr>
<th>Power</th>
<th>Input</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFF</td>
<td>D-RGB</td>
</tr>
<tr>
<td>ON</td>
<td>A-RGB</td>
</tr>
<tr>
<td>PM</td>
<td>COMP</td>
</tr>
<tr>
<td>X</td>
<td>HDMI</td>
</tr>
<tr>
<td>O</td>
<td>None</td>
</tr>
</tbody>
</table>

**Response**

"i:OK" is returned if the parameter was set properly.

For 'GET SCRNASPECT' or '?SCRNASPECT', current screen aspect setting is returned as

\[
\langle \text{g:SCRNASPECT} = \langle \text{Screen aspect setting parameter:ID} \rangle \rangle
\]

For details on other responses, refer to the "Error List".

**Description**

1. This sets the screen aspect.
2. This command functions in the same way as when "Display setting" - "Screen aspect" are selected on the menu.
3. The GET command can be used to retrieve the current screen aspect ("GET SCRNASPECT")
4. The final screen aspect settings are retained even when the power is turned off.

**Example**

Setting

\[
\begin{align*}
\text{> SCRNASPECT}=16:9 & \quad \text{This sets the screen aspect to 16:9.} \\
\text{> i:OK}
\end{align*}
\]

Reference

\[
\begin{align*}
\text{> GET SCRNASPECT or ?SCRNASPECT} & \quad \text{This retrieves the screen aspect.} \\
\text{< g:SCRNASPECT}=4:3
\end{align*}
\]

* Commands are indicated by ">"., and responses are indicated by "<".
SEL
Input signal selection

Format
SEL=<Input signal selection parameter:ID>
GET SEL / ? SEL

<Input signal selection parameter:ID>
AUTO -- Auto

Environment

<table>
<thead>
<tr>
<th>Power</th>
<th>Input</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFF</td>
<td>ON</td>
</tr>
<tr>
<td>PM</td>
<td>D-RGB</td>
</tr>
<tr>
<td>A-RGB</td>
<td>COMP</td>
</tr>
<tr>
<td>HDMI</td>
<td>None</td>
</tr>
<tr>
<td>X</td>
<td>O</td>
</tr>
<tr>
<td>X</td>
<td>O</td>
</tr>
<tr>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

Response
"i:OK" is returned if the parameter was set properly.
For 'GET SEL' or '?SEL', current input signal is returned as
'g:SEL=Detected input signal:ID'
(Refer to "Description".)
For details on other responses, refer to the "Error List".

Description
(1) This selects the input signal.
(2) This command functions in the same way as when "Display setting" - "Input signal selection" - "AUTO" are selected on the menu.
(3) If the input is not "COMP", 'e:200X INVALID_SOURCE(***)' is returned as an error response.
(4) If signals are not input, 'e:2010 NO_SIGNAL' is returned.
(5) The current input signal can be acquired using the applicable GET command. ("GET SEL")

List of signals which can be detected

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1080p</td>
<td></td>
</tr>
<tr>
<td>1080i</td>
<td>Includes 540p (1080i non-interlaced signal)</td>
</tr>
<tr>
<td>1035i</td>
<td></td>
</tr>
<tr>
<td>720p</td>
<td></td>
</tr>
<tr>
<td>576p</td>
<td></td>
</tr>
<tr>
<td>480p</td>
<td></td>
</tr>
<tr>
<td>576i</td>
<td></td>
</tr>
<tr>
<td>480i</td>
<td></td>
</tr>
</tbody>
</table>

Example
Setting
> SEL=AUTO
This sets the input signal selection to "AUTO".
< i:OK

Reference
> GET SEL or ?SEL
This retrieves the input signal.
< g:SEL=1080p

* Commands are indicated by ">". and responses are indicated by "<".
**SHARP**

**Sharpness setting**

- **Format**
  
  \[ \text{SHARP} = \langle \text{Sharpness setting: Number} \rangle \]
  
  \[ \text{GET} \n  \quad | \n  \quad \text{SHARP} \quad / \quad ? \n  \quad \text{SHARP} \]

  Setting values for \(<\text{Sharpness setting: Number}>\) are -10 to 10.

- **Environment**

<table>
<thead>
<tr>
<th>Power</th>
<th>Input</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFF</td>
<td>ON</td>
</tr>
<tr>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

- **Response**

  "i:OK" is returned if the parameter was set properly.
  
  For \(\text{GET SHARP}\) or \(\text{?SHARP}\), current sharpness setting is returned as
  
  \[ g: \text{SHARP} = \langle \text{Sharpness setting: Number} > \]

  For details on other responses, refer to the "Error List".

- **Description**

  1. This sets the screen sharpness.
  2. This command functions in the same way as when "Image adjustment" - "Sharpness setting" are selected on the menu.
  3. If numerical parameters are outside the range, "e:0801 INVALID_VALUE" is returned.
  4. This sets the currently selected input signal and image mode.
  5. The current sharpness can be acquired using the applicable GET command. ("\text{GET SHARP}\")

- **Example**

  **Setting**
  
  > \text{SHARP}=3  
  < i:OK

  **Reference**
  
  > \text{GET SHARP} or \text{?SHARP}  
  < g: SHARP=3

* Commands are indicated by ">", and responses are indicated by "<".
SIGNAL_INFO

Input signal information inquiry

Format

GET SIGNAL_INFO / ? SIGNAL_INFO

Environment

<table>
<thead>
<tr>
<th>Power</th>
<th>Input</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFF</td>
<td>X</td>
</tr>
<tr>
<td>ON</td>
<td>O</td>
</tr>
<tr>
<td>PM</td>
<td>-</td>
</tr>
<tr>
<td>D-RGB</td>
<td></td>
</tr>
<tr>
<td>A-RGB</td>
<td></td>
</tr>
<tr>
<td>COMP</td>
<td></td>
</tr>
<tr>
<td>HDMI</td>
<td></td>
</tr>
<tr>
<td>None</td>
<td></td>
</tr>
</tbody>
</table>

Response

Current input signal information is returned as

'g:SIGNAL_INFO="<Input signal information:Character string>"'

For details on other responses, refer to the "Error List".

Description

(1) This acquires the status of the input signal entering the projector.
(2) This functions in the same way as "Information" - "Input signal".

Example

> GET SIGNAL_INFO or ? SIGNAL_INFO
< g:SIGNAL_INFO="1920 x 1200 60"

* Commands are indicated by ">". and responses are indicated by "<".
SIGNALSTATUS
Signal status inquiry

Format
GET SIGNALSTATUS / ? SIGNALSTATUS

Environment
<table>
<thead>
<tr>
<th>Power</th>
<th>Input</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFF</td>
<td>ON</td>
</tr>
<tr>
<td>X</td>
<td>O</td>
</tr>
</tbody>
</table>

Response
Current image signal input status is returned as
'g:SIGNALSTATUS=<Signal status:ID>'
For details on other responses, refer to the "Error List".

<Signal status:ID>

<table>
<thead>
<tr>
<th>Signal status</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>NO_SIGNAL</td>
<td>Signal not detected</td>
</tr>
<tr>
<td>DISPLAYING</td>
<td>Image now displayed or display enable status</td>
</tr>
<tr>
<td>SETTING</td>
<td>Signal detection and display preparation in progress</td>
</tr>
</tbody>
</table>

Description
(1) This inquires about the current image signal input status.
(2) This returns the signal status of the selected input. Use INPUT command for the input selection.
(3) "e:1006:NOW_BLANK" is returned when it is set to BLANK.

Example
> GET SIGNALSTATUS or ? SIGNALSTATUS
< g:SIGNALSTATUS=NO_SIGNAL

* Commands are indicated by ">", and responses are indicated by "<".
TEMP
Temperature sensor value inquiry

Format
GET TEMP / ? TEMP

Environment

<table>
<thead>
<tr>
<th>Power</th>
<th>Input</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFF</td>
<td>-</td>
</tr>
<tr>
<td>ON</td>
<td>-</td>
</tr>
<tr>
<td>PM</td>
<td>-</td>
</tr>
<tr>
<td>D-RGB</td>
<td>-</td>
</tr>
<tr>
<td>A-RGB</td>
<td>-</td>
</tr>
<tr>
<td>COMP</td>
<td>-</td>
</tr>
<tr>
<td>HDMI</td>
<td>-</td>
</tr>
<tr>
<td>None</td>
<td>-</td>
</tr>
</tbody>
</table>

Response
For 'GET TEMP' or '? TEMP', temperature sensor value is returned as
TEMP=<Number of sensors>,<Sensor 1 value>,...<Sensor n value>

Description
(1) There are cases when number of sensors is 0. In this case, there will not be a comma.

Example
> GET TEMP or ? TEMP This retrieves the temperature sensor value.
< g:TEMP=1,80.5

* Commands are indicated by ">", and responses are indicated by "<".
## 7. Error List

<table>
<thead>
<tr>
<th>Item</th>
<th>Code</th>
<th>TYPE</th>
<th>Error character strings</th>
<th>Error</th>
<th>Remedy</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0001</td>
<td>e</td>
<td>BAD_SEQUENCE</td>
<td>Communication sequence error</td>
<td>Wait until a response is received before sending the next command.</td>
</tr>
<tr>
<td>2</td>
<td>0002</td>
<td>e</td>
<td>INVALID_COMMAND</td>
<td>Invalid (undefined) command.</td>
<td>Send a valid command.</td>
</tr>
<tr>
<td>3</td>
<td>0004</td>
<td>e</td>
<td>INVALID_FORMAT</td>
<td>Invalid command format.</td>
<td>Send the command in the valid format.</td>
</tr>
<tr>
<td>4</td>
<td>0005</td>
<td>e</td>
<td>NOT_POWER_SUPPLIED</td>
<td>The projector's power is off.</td>
<td>Turn on the power using the POWER ON command.</td>
</tr>
<tr>
<td>5</td>
<td>-</td>
<td>i</td>
<td>BUSY (POWER)</td>
<td>The projector is switching power modes.</td>
<td>Wait until the power mode is ON, OFF or PMM.</td>
</tr>
<tr>
<td>6</td>
<td>000A</td>
<td>e</td>
<td>INVALID_PARAMETER</td>
<td>The parameter (type) is invalid (undefined). Includes cases when the number of parameters is incorrect.</td>
<td>Use the correct parameters.</td>
</tr>
<tr>
<td>7</td>
<td>000B</td>
<td>e</td>
<td>JOB_TIMEOUT</td>
<td>Internal processing in the projector has timed out.</td>
<td>Resend the command.</td>
</tr>
<tr>
<td>8</td>
<td>-</td>
<td>i</td>
<td>BUSY (NETWORK)</td>
<td>Executing network related functions.</td>
<td>Wait until the network related functions have finished execution.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>i</td>
<td>BUSY (FOCUS)</td>
<td>The focus lens is being driven.</td>
<td>Wait until the projector has finished driving the focus lens.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>i</td>
<td>BUSY (ZOOM)</td>
<td>The zoom lens is being driven.</td>
<td>Wait until the projector has finished driving the zoom lens.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>i</td>
<td>BUSY (IMAGE)</td>
<td>Image mode switching is in progress.</td>
<td>Wait until the projector has switched the image mode.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>i</td>
<td>BUSY (NOW_SETTING)</td>
<td>Signal setting (detection) in progress.</td>
<td>Wait until the processing is completed.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>i</td>
<td>BUSY</td>
<td>Internal processing in the projector is in progress.</td>
<td>Wait until the current processing is complete.</td>
</tr>
<tr>
<td>9</td>
<td>-</td>
<td>i</td>
<td>BUSY (NOW_SETTING)</td>
<td>Signal setting (detection) in progress.</td>
<td>Wait until the processing is completed.</td>
</tr>
<tr>
<td>10</td>
<td>1006</td>
<td>e</td>
<td>NOW_BLANK</td>
<td>Cannot execute command since blanking operation is in progress.</td>
<td>Resend the command after canceling the blanking operation.</td>
</tr>
<tr>
<td>10</td>
<td>1009</td>
<td>e</td>
<td>NOW_FREEZE</td>
<td>Cannot execute command since freeze operation is in progress.</td>
<td>Resend the command after canceling the freeze operation.</td>
</tr>
<tr>
<td>10</td>
<td>100A</td>
<td>e</td>
<td>NOW_D.ZOOM</td>
<td>Cannot execute command since D. zooming is in progress.</td>
<td>Resend the command after canceling D. zooming.</td>
</tr>
<tr>
<td>10</td>
<td>100B</td>
<td>e</td>
<td>NOW_SPECIAL_MENU</td>
<td>Cannot execute command in current menu mode. (Password display, etc.)</td>
<td>Resend the command after exiting the current menu mode.</td>
</tr>
<tr>
<td>11</td>
<td>F001</td>
<td>e</td>
<td>SYSTEM (UNKNOWN)</td>
<td>Internal error has occurred.</td>
<td>Resend the command.</td>
</tr>
<tr>
<td>12</td>
<td>E0XX</td>
<td>e</td>
<td>COMMUNICATION_ERROR</td>
<td>A communication protocol violation has occurred in the projector.</td>
<td>Resend the command.</td>
</tr>
<tr>
<td>13</td>
<td>1008</td>
<td>e</td>
<td>INVALID_SCREEN_ASPECT</td>
<td>Cannot execute command under current screen aspect ratio setting.</td>
<td>Change the screen aspect ratio setting.</td>
</tr>
<tr>
<td>14</td>
<td>200X</td>
<td>e</td>
<td>INVALID_SOURCE (****)</td>
<td>Cannot execute command with current input source.</td>
<td>Change the input source.</td>
</tr>
<tr>
<td>15</td>
<td>2010</td>
<td>e</td>
<td>NO_SIGNAL</td>
<td>No input signal.</td>
<td>Supply the input signal.</td>
</tr>
<tr>
<td>15</td>
<td>201X</td>
<td>e</td>
<td>INVALID_SIGNAL (****)</td>
<td>Cannot execute command with current input signal. Current input signal is indicated in parentheses.</td>
<td>Change the input signal.</td>
</tr>
<tr>
<td>Item</td>
<td>Code</td>
<td>TYPE</td>
<td>Error character strings</td>
<td>Error</td>
<td>Remedy</td>
</tr>
<tr>
<td>------</td>
<td>-------</td>
<td>------</td>
<td>-------------------------</td>
<td>-------</td>
<td>--------</td>
</tr>
<tr>
<td>201F</td>
<td>e</td>
<td>201F</td>
<td>INVALID_SIGNAL</td>
<td>Cannot execute command with current input signal.</td>
<td>Change the input signal.</td>
</tr>
<tr>
<td>0801</td>
<td>e</td>
<td>0801</td>
<td>INVALID_VALUE</td>
<td>Numerical parameters are invalid or outside the specified range.</td>
<td>Set the parameters in the correct range.</td>
</tr>
<tr>
<td>1002</td>
<td>e</td>
<td>1002</td>
<td>NO_LOGO_CAPTURED</td>
<td>Cannot execute command because the user image is not registered.</td>
<td>Register the user image.</td>
</tr>
<tr>
<td>1003</td>
<td>e</td>
<td>1003</td>
<td>IP_NOT_AVAILABLE</td>
<td>Cannot execute PROGRESSIVE conversion.</td>
<td>Switch to the correct input signal.</td>
</tr>
<tr>
<td>1004</td>
<td>e</td>
<td>1004</td>
<td>POWER_MANAGEMENT_OFF</td>
<td>DPON=ON cannot be set when PMM=OFF.</td>
<td>Use a setting other than PMM=OFF.</td>
</tr>
<tr>
<td>1005</td>
<td>e</td>
<td>1005</td>
<td>DIRECT_POWER_ON</td>
<td>PMM=OFF cannot be set when DPON=ON.</td>
<td>Use the DPON=OFF setting.</td>
</tr>
<tr>
<td>1010</td>
<td>e</td>
<td>1010</td>
<td>INACTIVE_PARAMETER</td>
<td>Parameter is currently in a disabled state.</td>
<td>Set the parameter when it is enabled.</td>
</tr>
<tr>
<td>1011</td>
<td>e</td>
<td>1011</td>
<td>FUNCTION_NOT_AVAILABLE</td>
<td>Objective function is currently in a disabled state.</td>
<td>Set the function when it is enabled.</td>
</tr>
<tr>
<td>2020</td>
<td>e</td>
<td>2020</td>
<td>INVALID_IMAGE_MODE</td>
<td>Invalid input signal resolution. Additional information is indicated in parentheses.</td>
<td>Switch to an input signal with the correct resolution.</td>
</tr>
<tr>
<td>203X</td>
<td>e</td>
<td>203X</td>
<td>INVALID_RESOLUTION (***)</td>
<td>OVER_PANEL_RES: input signal resolution exceeds panel resolution.</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>i</td>
<td>19</td>
<td>INPUT_NOT_FOUND</td>
<td>Input was not switched since there is no input signal at AUTOSETEXE=INPUT.</td>
<td>Notification of status only; no particular measures needed.</td>
</tr>
</tbody>
</table>

* Error codes are 4-digit hexadecimal strings. X represents any character from 0 to 9 or from A to F.
* Items with lower numbers have a higher priority. (Even when multiple errors have occurred, the error with the highest rank is returned. However, errors of the same item number are ranked with the same priority.)
8. Error Processing
9. Other

Use the remote control emulation function (RC command) for the following functions.

<table>
<thead>
<tr>
<th>Function</th>
<th>PC command parameter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Presentation timer</td>
<td>P_TIMER</td>
</tr>
</tbody>
</table>