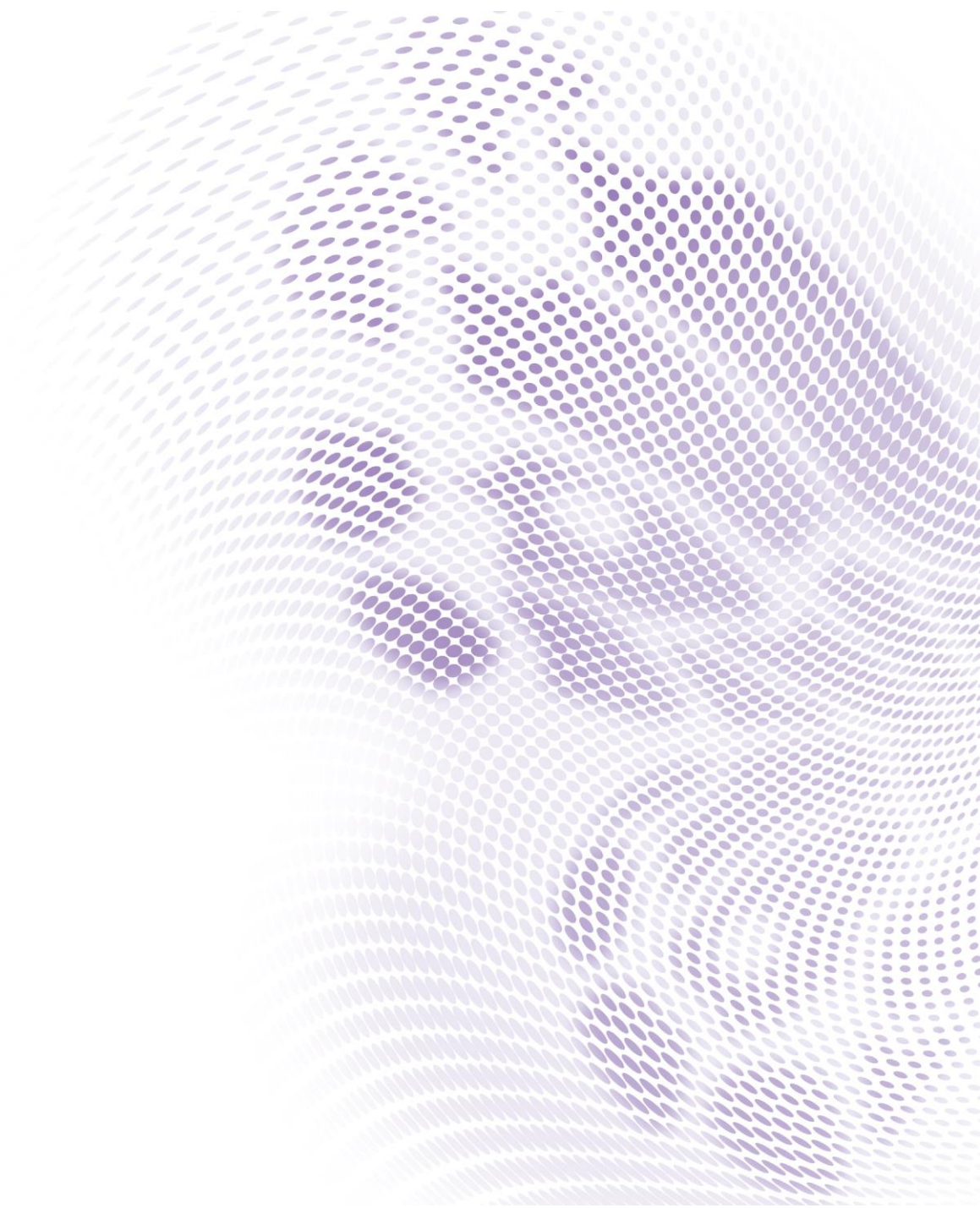




LW500ST

Projector RS232 Command Control  
Installation Guide



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# Introduction

The document describes how to control your BenQ projector via RS232 from a computer. Follow the procedures to complete the connection and settings first, and refer to the command table for RS232 commands.



Available functions and commands vary by model. Check the specifications and user manual of the purchased projector for product functions.

## Wire arrangement

| Wire Arrangement |            |      |
|------------------|------------|------|
| P1               | Color      | P2   |
| 1                | Black      | 1    |
| 2                | Brown      | 3    |
| 3                | Red        | 2    |
| 4                | Orange     | 4    |
| 5                | Yellow     | 5    |
| 6                | Green      | 6    |
| 7                | Blue       | 7    |
| 8                | Purple     | 8    |
| 9                | Gray       | 9    |
| Case             | Drain wire | Case |

## RS232 pin assignment

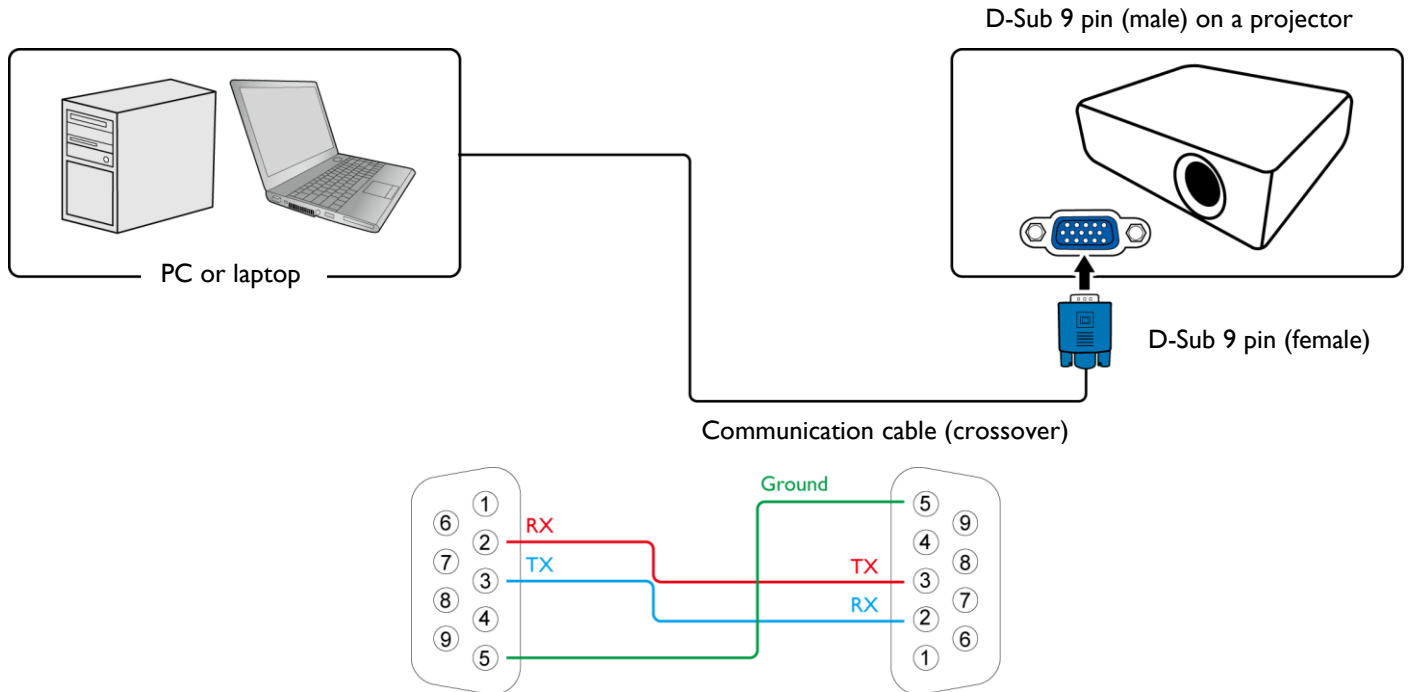


| Pin | Description | Pin | Description |
|-----|-------------|-----|-------------|
| 1   | NC          | 2   | RXD         |
| 3   | TXD         | 4   | NC          |
| 5   | GND         | 6   | NC          |
| 7   | RTS         | 8   | CTS         |
| 9   | NC          |     |             |

# Connections and communication settings

Choose one of the connections and set up properly before RS232 control.

## RS232 serial port with a crossover cable

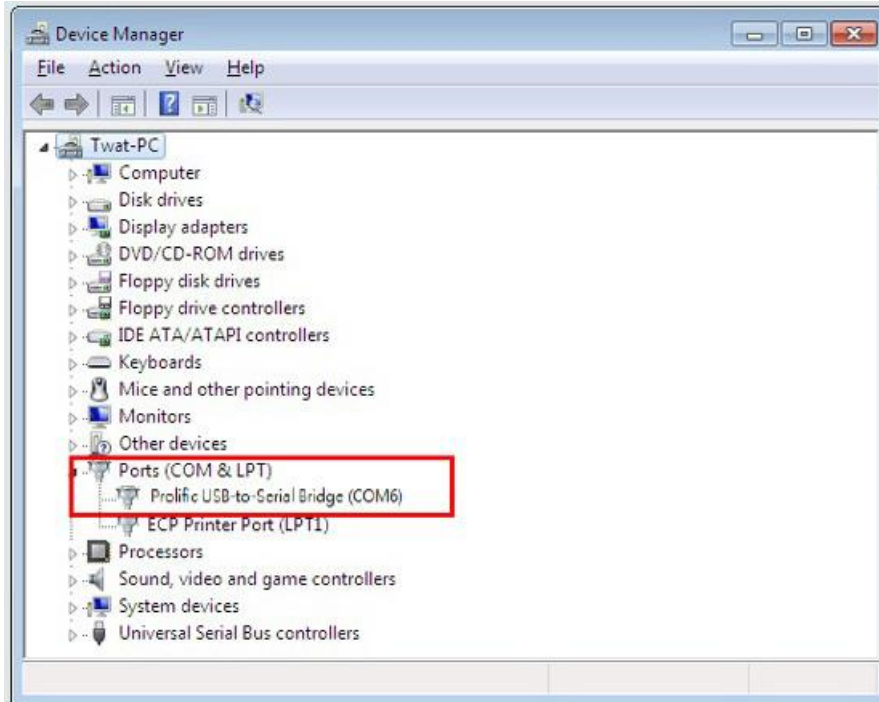


## Settings



On-screen images in this document are for reference only. The screens may vary depending on your Operating System, I/O ports used for connection, and the specifications of the connected projector.

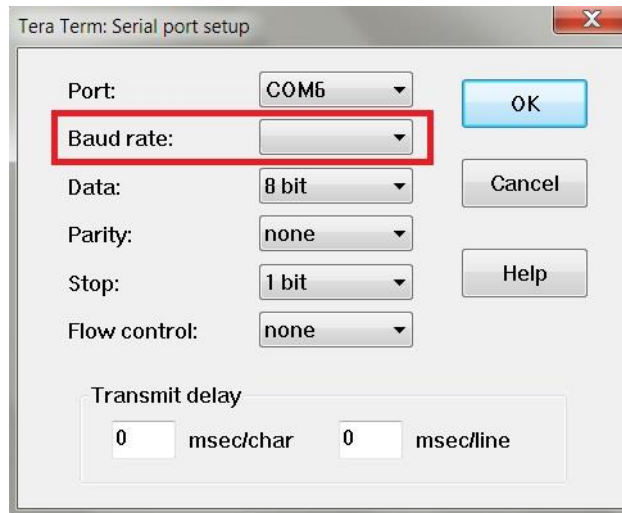
1. Determine the COM Port name used for the RS232 communications in **Device Manager**.



2. Choose **Serial** and the corresponding COM port as the communication port. In this given example, COM6 is selected.

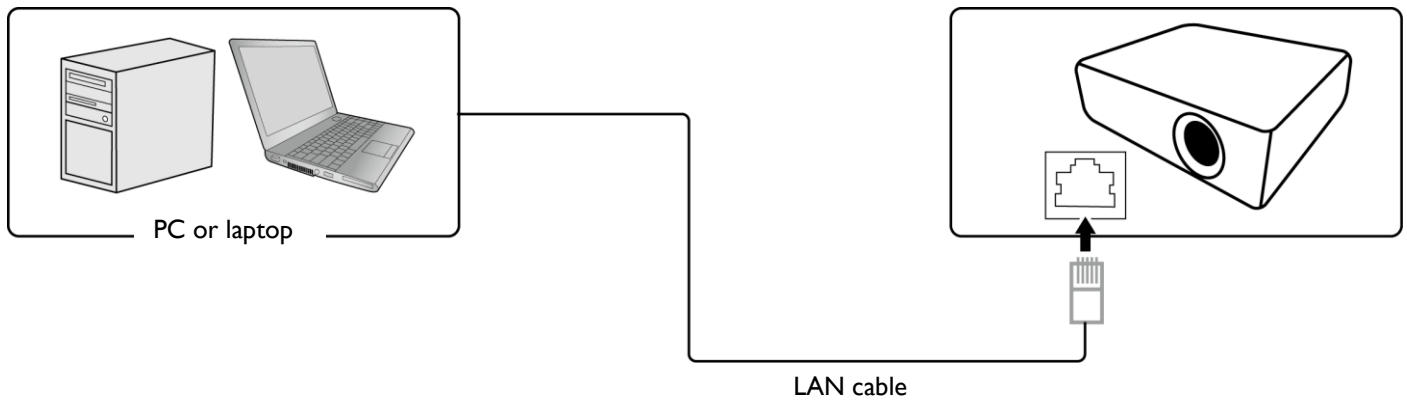


### 3. Finish **Serial port setup**.



|              |   |
|--------------|---|
| Baud rate    | 115200 bps (default) Changeable settings in User OSD<br>(9600/14400/19200/38400/57600/115200) |
| Data length  | 8 bit   |
| Parity check | None  |
| Stop bit     | 1 bit   |
| Flow control | None  |

## RS232 via LAN

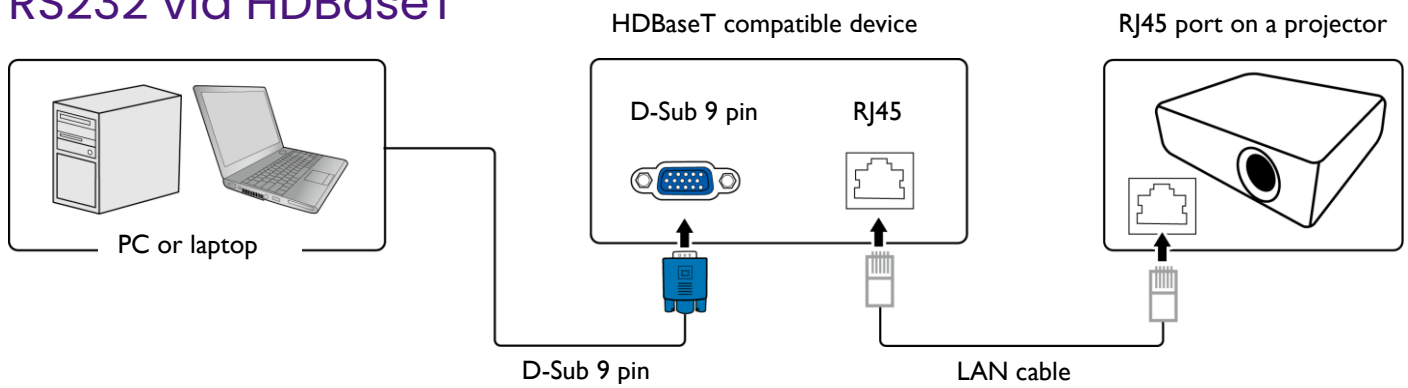


## Settings

1. Find the Wired LAN IP address of the connected projector from the OSD menu and make sure the projector and the computer are within the same network.
2. Input **8000** in the **TCP port #** field.



## RS232 via HDBaseT



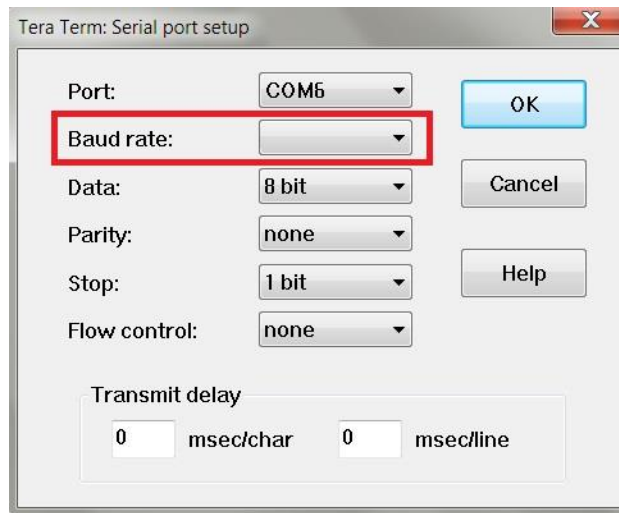
## Settings

1. Determine the COM Port name used for the RS232 communications in **Device Manager**.
2. Choose **Serial** and the corresponding COM port as the communication port. In this given example, COM6 is selected.





3. Finish **Serial port setup**.



|              |   |
|--------------|---|
| Baud rate    | 115200 bps (default) Changeable settings in User OSD<br>(9600/14400/19200/38400/57600/115200) |
| Data length  | 8 bit   |
| Parity check | None  |
| Stop bit     | 1 bit   |
| Flow control | None  |

# Command table



- Available features differ by projector specification, input sources, settings, etc..
- Commands are working if the standby power is 0.5W or a supported baud rate of the projector is set.
- Uppercase, lowercase, and a mixture of both types of characters are accepted for a command.
- If a command format is illegal, it will echo **Illegal format**.
- If a command with correct format is not valid for the projector model, it will echo **Unsupported item**.
- If a command with correct format cannot be executed under certain condition, it will echo **Block item**.
- If RS232 control is performed via LAN, a command works whether it starts and ends with **<CR>**. All the commands and behaviors are identical with the control through a serial port.

| Function         | Type             | Operation               | ASCII                      | support |
|------------------|------------------|-------------------------|----------------------------|---------|
| Power            | Write            | Power On                | <CR>*pow=on#<CR>           | YES     |
|                  | Write            | Power Off               | <CR>*pow=off#<CR>          | YES     |
|                  | Read             | Power Status            | <CR>*pow=?#<CR>            | YES     |
| Source Selection | Write            | COMPUTER/YPbPr          | <CR>*sour=RGB#<CR>         | NO      |
|                  | Write            | COMPUTER 2/YPbPr2       | <CR>*sour=RGB2#<CR>        | NO      |
|                  | Write            | COMPUTER 3/YPbPr3       | <CR>*sour=RGB3#<CR>        | NO      |
|                  | Write            | Component               | <CR>*sour=yubr#<CR>        | NO      |
|                  | Write            | Component2              | <CR>*sour=yubr2#<CR>       | NO      |
|                  | Write            | DVI-A                   | <CR>*sour=dviA#<CR>        | NO      |
|                  | Write            | DVI-D                   | <CR>*sour=dvid#<CR>        | NO      |
|                  | Write            | HDMI(MHL)               | <CR>*sour=hdmi#<CR>        | YES     |
|                  | Write            | HDMI 2(MHL2)            | <CR>*sour=hdmi2#<CR>       | YES     |
|                  | Write            | Composite               | <CR>*sour=vid#<CR>         | NO      |
|                  | Write            | S-Video                 | <CR>*sour=svid#<CR>        | NO      |
|                  | Write            | Network                 | <CR>*sour=network#<CR>     | NO      |
|                  | Write            | USB Display             | <CR>*sour=usbdisplay#<CR>  | NO      |
|                  | Write            | USB Reader              | <CR>*sour=usbreader#<CR>   | NO      |
|                  | Write            | HDBaseT                 | <CR>*sour=hdbaset#<CR>     | NO      |
|                  | Write            | DisplayPort             | <CR>*sour=dp#<CR>          | NO      |
|                  | Write            | 3G-SDI                  | <CR>*sour=sdi#<CR>         | NO      |
|                  | Write            | Smart System            | <CR>*sour=smartsystem#<CR> | NO      |
| Write            | Wireless Display | <CR>*sour=wireless#<CR> | NO                         |         |
| Read             | Current source   | <CR>*sour=?#<CR>        | YES                        |         |
| Audio Control    | Write            | Mute On                 | <CR>*mute=on#<CR>          | YES     |
|                  | Write            | Mute Off                | <CR>*mute=off#<CR>         | YES     |
|                  | Read             | Mute Status             | <CR>*mute=?#<CR>           | YES     |

|                     |       |                           |                                |     |
|---------------------|-------|---------------------------|--------------------------------|-----|
|                     | Write | Volume +                  | <CR>*vol=+#<CR>                | YES |
|                     | Write | Volume -                  | <CR>*vol=-#<CR>                | YES |
|                     | Write | Volume level for customer | <CR>*vol=value#<CR>            | YES |
|                     | Read  | Volume Status             | <CR>*vol=?#<CR>                | YES |
|                     | Write | Mic. Volume +             | <CR>*micvol=+#<CR>             | NO  |
|                     | Write | Mic. Volume -             | <CR>*micvol=-#<CR>             | NO  |
|                     | Read  | Mic. Volume Status        | <CR>*micvol=?#<CR>             | NO  |
| Audio source select | Write | Audio pass Through off    | <CR>*audiosour=off#<CR>        | YES |
|                     | Write | Audio-Computer1           | <CR>*audiosour=RGB#<CR>        | NO  |
|                     | Write | Audio-Computer2           | <CR>*audiosour=RGB2#<CR>       | NO  |
|                     | Write | Audio-Video/S-Video       | <CR>*audiosour=vid#<CR>        | NO  |
|                     | Write | Audio-Component           | <CR>*audiosour=ypbr#<CR>       | NO  |
|                     | Write | Audio-HDMI                | <CR>*audiosour=hdmi#<CR>       | YES |
|                     | Write | Audio-HDMI2               | <CR>*audiosour=hdmi2#<CR>      | YES |
|                     | Read  | Audio pass Status         | <CR>*audiosour=?#<CR>          | YES |
| Picture Mode        | Write | Dynamic                   | <CR>*appmod=dynamic#<CR>       | NO  |
|                     | Write | Presentation              | <CR>*appmod=preset#<CR>        | YES |
|                     | Write | sRGB                      | <CR>*appmod=srgb#<CR>          | YES |
|                     | Write | Bright                    | <CR>*appmod=bright#<CR>        | YES |
|                     | Write | Living Room               | <CR>*appmod=livingroom#<CR>    | NO  |
|                     | Write | Game                      | <CR>*appmod=game#<CR>          | NO  |
|                     | Write | Cinema                    | <CR>*appmod=cine#<CR>          | NO  |
|                     | Write | Standard/Vivid            | <CR>*appmod=std#<CR>           | NO  |
|                     | Write | Football                  | <CR>*appmod=football#<CR>      | NO  |
|                     | Write | Football Bright           | <CR>*appmod=footballbt#<CR>    | NO  |
|                     | Write | DICOM                     | <CR>*appmod=dicom#<CR>         | NO  |
|                     | Write | THX                       | <CR>*appmod=thx#<CR>           | NO  |
|                     | Write | Silence mode              | <CR>*appmod=silence#<CR>       | NO  |
|                     | Write | DCI-P3 mode               | <CR>*appmod=dcip3#<CR>         | NO  |
|                     | Write | Vivid                     | <CR>*appmod=vivid#<CR>         | NO  |
|                     | Write | Infographic               | <CR>*appmod=infographic#<CR>   | NO  |
|                     | Write | Sport                     | <CR>*appmod=sport#<CR>         | NO  |
|                     | Write | Spreadsheet               | <CR>*appmod= spreadsheet #<CR> | NO  |
|                     | Write | Bright Room               | <CR>*appmod=brightroom#<CR>    | NO  |

|                 |       |                             |                            |     |
|-----------------|-------|-----------------------------|----------------------------|-----|
|                 | Write | Golf                        | <CR>*appmod=golf#<CR>      | YES |
|                 | Write | Video                       | <CR>*appmod=video#<CR>     | YES |
|                 | Write | User1                       | <CR>*appmod=user1#<CR>     | YES |
|                 | Write | User2                       | <CR>*appmod=user2#<CR>     | YES |
|                 | Write | User3                       | <CR>*appmod=user3#<CR>     | NO  |
|                 | Write | ISF Day                     | <CR>*appmod=isfdays#<CR>   | NO  |
|                 | Write | ISF Night                   | <CR>*appmod=isfnights#<CR> | NO  |
|                 | Write | 3D                          | <CR>*appmod=3d#<CR>        | YES |
|                 | Read  | Picture Mode                | <CR>*appmod=?#<CR>         | YES |
| Picture Setting | Write | Contrast +                  | <CR>*con=+#<CR>            | YES |
|                 | Write | Contrast -                  | <CR>*con=-#<CR>            | YES |
|                 | Write | Set Contrast value          | <CR>*con=value#<CR>        | YES |
|                 | Read  | Contrast value              | <CR>*con=?#<CR>            | YES |
|                 | Write | Brightness +                | <CR>*bri=+#<CR>            | YES |
|                 | Write | Brightness -                | <CR>*bri=-#<CR>            | YES |
|                 | Write | Set Brightness value        | <CR>*bri=value#<CR>        | YES |
|                 | Read  | Brightness value            | <CR>*bri=?#<CR>            | YES |
|                 | Write | Color +                     | <CR>*color=+#<CR>          | YES |
|                 | Write | Color -                     | <CR>*color=-#<CR>          | YES |
|                 | Write | Set Color value             | <CR>*color=value#<CR>      | YES |
|                 | Read  | Color value                 | <CR>*color=?#<CR>          | YES |
|                 | Write | Sharpness +                 | <CR>*sharp=+#<CR>          | YES |
|                 | Write | Sharpness -                 | <CR>*sharp=-#<CR>          | YES |
|                 | Write | Set Sharpness value         | <CR>*sharp=value#<CR>      | YES |
|                 | Read  | Sharpness value             | <CR>*sharp=?#<CR>          | YES |
|                 | Write | Flesh Tone +                | <CR>*fleshtone=+#<CR>      | NO  |
|                 | Write | Flesh Tone -                | <CR>*fleshtone=-#<CR>      | NO  |
|                 | Write | Set Flesh Tone value        | <CR>*fleshtone=value#<CR>  | NO  |
|                 | Read  | Flesh Tone value            | <CR>*fleshtone=?#<CR>      | NO  |
|                 | Write | Color<br>Temperature-Warmer | <CR>*ct=warm#<CR>          | NO  |
|                 | Write | Color<br>Temperature-Warm   | <CR>*ct=warm#<CR>          | YES |
|                 | Write | Color<br>Temperature-Normal | <CR>*ct=normal#<CR>        | YES |
|                 | Write | Color                       | <CR>*ct=cool#<CR>          | YES |

|       |                                     |                  |                        |     |
|-------|-------------------------------------|------------------|------------------------|-----|
|       |                                     | Temperature-Cool |                        |     |
| Write | Color<br>Temperature-Cooler         |                  | <CR>*ct=cooler#<CR>    | NO  |
| Write | Color<br>Temperature-lamp<br>native |                  | <CR>*ct=native#<CR>    | YES |
| Read  | Color Temperature<br>Status         |                  | <CR>*ct=?#<CR>         | YES |
| Write | Aspect 4:3                          |                  | <CR>*asp=4:3#<CR>      | YES |
| Write | Aspect 16:6                         |                  | <CR>*asp=16:6#<CR>     | NO  |
| Write | Aspect 16:9                         |                  | <CR>*asp=16:9#<CR>     | YES |
| Write | Aspect 16:10                        |                  | <CR>*asp=16:10#<CR>    | YES |
| Write | Aspect 2.4:1                        |                  | <CR>*asp=2.4:1#<CR>    | NO  |
| Write | Aspect Auto                         |                  | <CR>*asp=AUTO#<CR>     | YES |
| Write | Aspect Real                         |                  | <CR>*asp=REAL#<CR>     | YES |
| Write | Aspect Letterbox                    |                  | <CR>*asp=LBOX#<CR>     | NO  |
| Write | Aspect Wide                         |                  | <CR>*asp=WIDE#<CR>     | NO  |
| Write | Aspect Anamorphic                   |                  | <CR>*asp=ANAM#<CR>     | NO  |
| Write | Aspect Anamorphic<br>2.35           |                  | <CR>*asp=ANAM2.35#<CR> | NO  |
| Write | Aspect Anamorphic<br>16:9           |                  | <CR>*asp=ANAM16:9#<CR> | NO  |
| Read  | Aspect Status                       |                  | <CR>*asp=?#<CR>        | YES |
| Write | Vertical Keystone +                 |                  | <CR>*vkeystone=+#<CR>  | YES |
| Write | Vertical Keystone -                 |                  | <CR>*vkeystone=-#<CR>  | YES |
| Read  | Vertical Keystone<br>value          |                  | <CR>*vkeystone=?#<CR>  | YES |
| Write | Horizontal Keystone<br>+            |                  | <CR>*hkeystone=+#<CR>  | YES |
| Write | Horizontal Keystone -               |                  | <CR>*hkeystone=-#<CR>  | YES |
| Read  | Horizontal Keystone<br>value        |                  | <CR>*hkeystone=?#<CR>  | YES |
| Write | Overscan<br>Adjustment +            |                  | <CR>*overscan=+#<CR>   | NO  |
| Write | Overscan<br>Adjustment -            |                  | <CR>*overscan=-#<CR>   | NO  |
| Read  | Overscan<br>Adjustment value        |                  | <CR>*overscan=?#<CR>   | NO  |

|       |  |                          |     |
|-------|--|--------------------------|-----|
| Write | 4 Corners Top-Left-X<br>Decrease       | <CR>*cornerfittlx=-#<CR> | YES |
| Write | 4 Corners Top-Left-X<br>Increase       | <CR>*cornerfittlx=+#<CR> | YES |
| Read  | 4 Corners Top-Left-X<br>Status         | <CR>*cornerfittlx=?#<CR> | YES |
| Write | 4 Corners Top-Left-Y<br>Decrease       | <CR>*cornerfittly=-#<CR> | YES |
| Write | 4 Corners Top-Left-Y<br>Increase       | <CR>*cornerfittly=+#<CR> | YES |
| Read  | 4 Corners Top-Left-Y<br>Status         | <CR>*cornerfittly=?#<CR> | YES |
| Write | 4 Corners<br>Top-Right-X<br>Decrease   | <CR>*cornerfittrx=-#<CR> | YES |
| Write | 4 Corners<br>Top-Right-X Increase      | <CR>*cornerfittrx=+#<CR> | YES |
| Read  | 4 Corners<br>Top-Right-X Status        | <CR>*cornerfittrx=?#<CR> | YES |
| Write | 4 Corners<br>Top-Right-Y<br>Decrease   | <CR>*cornerfittry=-#<CR> | YES |
| Write | 4 Corners<br>Top-Right-Y Increase      | <CR>*cornerfittry=+#<CR> | YES |
| Read  | 4 Corners<br>Top-Right-Y Status        | <CR>*cornerfittry=?#<CR> | YES |
| Write | 4 Corners<br>Bottom-Left-X<br>Decrease | <CR>*cornerfitblx=-#<CR> | YES |
| Write | 4 Corners<br>Bottom-Left-X<br>Increase | <CR>*cornerfitblx=+#<CR> | YES |
| Read  | 4 Corners<br>Bottom-Left-X Status      | <CR>*cornerfitblx=?#<CR> | YES |
| Write | 4 Corners<br>Bottom-Left-Y<br>Decrease | <CR>*cornerfitbly=-#<CR> | YES |
| Write | 4 Corners<br>Bottom-Left-Y<br>Increase | <CR>*cornerfitbly=+#<CR> | YES |

|                    |       |   |                          |     |
|--------------------|-------|---|--------------------------|-----|
|                    |       | Bottom-Left-Y<br>Increase               |                          |     |
|                    | Read  | 4 Corners<br>Bottom-Left-Y Status       | <CR>*cornerfitbly=?#<CR> | YES |
|                    | Write | 4 Corners<br>Bottom-Right-X<br>Decrease | <CR>*cornerfitbrx=-#<CR> | YES |
|                    | Write | 4 Corners<br>Bottom-Right-X<br>Increase | <CR>*cornerfitbrx=+#<CR> | YES |
|                    | Read  | 4 Corners<br>Bottom-Right-X<br>Status   | <CR>*cornerfitbrx=?#<CR> | YES |
|                    | Write | 4 Corners<br>Bottom-Right-Y<br>Decrease | <CR>*cornerfitbry=-#<CR> | YES |
|                    | Write | 4 Corners<br>Bottom-Right-Y<br>Increase | <CR>*cornerfitbry=+#<CR> | YES |
|                    | Read  | 4 Corners<br>Bottom-Right-Y<br>Status   | <CR>*cornerfitbry=?#<CR> | YES |
|                    | Write | Digital Zoom In                         | <CR>*zoomI#<CR>          | YES |
|                    | Write | Digital Zoom out                        | <CR>*zoomO#<CR>          | YES |
|                    | Write | Auto                                    | <CR>*auto#<CR>           | YES |
|                    | Write | Brilliant color on                      | <CR>*BC=on#<CR>          | NO  |
|                    | Write | Brilliant color off                     | <CR>*BC=off#<CR>         | NO  |
|                    | Read  | Brilliant color status                  | <CR>*BC=?#<CR>           | NO  |
|                    | Write | Reset picture<br>settings               | <CR>*rstpicsetting#<CR>  | YES |
| Operation Settings | Write | Projector<br>Position-Front Table       | <CR>*pp=FT#<CR>          | YES |
|                    | Write | Projector<br>Position-Rear Table        | <CR>*pp=RE#<CR>          | YES |
|                    | Write | Projector<br>Position-Rear Ceiling      | <CR>*pp=RC#<CR>          | YES |
|                    | Write | Projector<br>Position-Front Ceiling     | <CR>*pp=FC#<CR>          | YES |

|       |       |                                 |                               |                        |
|-------|-------|---------------------------------|-------------------------------|------------------------|
|       | Read  | Projector Position Status       | <CR>*pp=?#<CR>                | YES                    |
|       | Write | Quick cooling on                | <CR>*qcool=on#<CR>            | NO                     |
|       | Write | Quick cooling off               | <CR>*qcool=off#<CR>           | NO                     |
|       | Read  | Quick cooling status            | <CR>*qcool=?#<CR>             | NO                     |
|       | Write | Quick auto search               | <CR>*QAS=on#<CR>              | YES                    |
|       | Write | Quick auto search               | <CR>*QAS=off#<CR>             | YES                    |
|       | Read  | Quick auto search status        | <CR>*QAS=?#<CR>               | YES                    |
|       | Write | Menu Position - Center          | <CR>*menuposition=center#<CR> | NO                     |
|       | Write | Menu Position - Top-Left        | <CR>*menuposition=tl#<CR>     | NO                     |
|       | Write | Menu Position - Top-Right       | <CR>*menuposition=tr#<CR>     | NO                     |
|       | Write | Menu Position - Bottom-Right    | <CR>*menuposition=br#<CR>     | NO                     |
|       | Write | Menu Position - Bottom-Left     | <CR>*menuposition=bl#<CR>     | NO                     |
|       | Read  | Menu Position Status            | <CR>*menuposition=?#<CR>      | NO                     |
|       | Write | Direct Power On-on              | <CR>*directpower=on#<CR>      | YES                    |
|       | Write | Direct Power On-off             | <CR>*directpower=off#<CR>     | YES                    |
|       | Read  | Direct Power On-Status          | <CR>*directpower=?#<CR>       | YES                    |
|       |       | Write                           | Signal Power On-on            | <CR>*autopower=on#<CR> |
| Write |       | Signal Power On-off             | <CR>*autopower=off#<CR>       | NO                     |
| Read  |       | Signal Power On-Status          | <CR>*autopower=?#<CR>         | NO                     |
| Write |       | Standby Settings-Network on     | <CR>*standbynet=on#<CR>       | NO                     |
|       | Write | Standby Settings-Network off    | <CR>*standbynet=off#<CR>      | NO                     |
|       | Read  | Standby Settings-Network Status | <CR>*standbynet=?#<CR>        | NO                     |
|       | Write | Standby Settings-Microphone on  | <CR>*standbymic=on#<CR>       | NO                     |



|              |       |                                     |                            |     |
|--------------|-------|-------------------------------------|----------------------------|-----|
|              | Write | Standby Settings-Microphone off     | <CR>*standbymic=off#<CR>   | NO  |
|              | Read  | Standby Settings-Microphone Status  | <CR>*standbymic=?#<CR>     | NO  |
|              | Write | Standby Settings-Monitor Out on     | <CR>*standbymnt=on#<CR>    | NO  |
|              | Write | Standby Settings-Monitor Out off    | <CR>*standbymnt=off#<CR>   | NO  |
|              | Read  | Standby Settings-Monitor Out Status | <CR>*standbymnt=?#<CR>     | NO  |
| Baud Rate    | Write | 2400                                | <CR>*baud=2400#<CR>        | NO  |
|              | Write | 4800                                | <CR>*baud=4800#<CR>        | NO  |
|              | Write | 9600                                | <CR>*baud=9600#<CR>        | YES |
|              | Write | 14400                               | <CR>*baud=14400#<CR>       | YES |
|              | Write | 19200                               | <CR>*baud=19200#<CR>       | YES |
|              | Write | 38400                               | <CR>*baud=38400#<CR>       | YES |
|              | Write | 57600                               | <CR>*baud=57600#<CR>       | YES |
|              | Write | 115200                              | <CR>*baud=115200#<CR>      | YES |
|              | Read  | Current Baud Rate                   | <CR>*baud=?#<CR>           | YES |
| Lamp Control | Read  | Lamp                                | <CR>*ltim=?#<CR>           | YES |
|              | Read  | Lamp2 Hour                          | <CR>*ltim2=?#<CR>          | NO  |
|              | Write | Normal mode                         | <CR>*lampm=lnor#<CR>       | YES |
|              | Write | Eco mode                            | <CR>*lampm=eco#<CR>        | YES |
|              | Write | SmartEco mode                       | <CR>*lampm=seco#<CR>       | YES |
|              | Write | SmartEco mode 2                     | <CR>*lampm= seco2#<CR>     | NO  |
|              | Write | SmartEco mode 3                     | <CR>*lampm= seco3#<CR>     | NO  |
|              | Write | LampSave+ mode                      | <CR>*lampm= lampsave+#<CR> | NO  |
|              | Write | Dimming mode                        | <CR>*lampm=dimming#<CR>    | NO  |
|              | Write | Custom mode                         | <CR>*lampm=custom#<CR>     | NO  |
|              | Write | Light level for custom mode         | <CR>*lampcustom=value#<CR> | NO  |
|              | Read  | Light level status for custom mode  | <CR>*lampcustom=?#<CR>     | NO  |

|               |                          |                        |                              |     |
|---------------|--------------------------|------------------------|------------------------------|-----|
|               | Write(雙燈)                | Dual Brightest         | <CR>* lampm =dualbr#<CR>     | NO  |
|               | Write(雙燈)                | Dual Reliable          | <CR>* lampm =dualre#<CR>     | NO  |
|               | Write(雙燈)                | Single Alternative     | <CR>* lampm =single#<CR>     | NO  |
|               | Write(雙燈)                | Single Alternative Eco | <CR>* lampm =singleeco#<CR>  | NO  |
|               | Read                     | Lamp Mode Status       | <CR>*lampm=?#<CR>            | YES |
| Miscellaneous | Read                     | Model Name             | <CR>*modelname=?#<CR>        | YES |
|               | Read                     | System F/W Version     | <CR>*sysfwversion=?#<CR>     | YES |
|               | Read                     | Scaler F/W Version     | <CR>*scalerfwversion=?#<CR>  | YES |
|               | Read                     | Lan F/W Version        | <CR>*lanfwversion=?#<CR>     | NO  |
|               | Read                     | MCU F/W Version        | <CR>*mcufwversion=?#<CR>     | YES |
|               | Read                     | Ballast F/W Version    | <CR>*ballastfwversion=?#<CR> | NO  |
|               | Write                    | Blank On               | <CR>*blank=on#<CR>           | YES |
|               | Write                    | Blank Off              | <CR>*blank=off#<CR>          | YES |
|               | Read                     | Blank Status           | <CR>*blank=?#<CR>            | YES |
|               | Write                    | Freeze On              | <CR>*freeze=on#<CR>          | YES |
|               | Write                    | Freeze Off             | <CR>*freeze=off#<CR>         | YES |
|               | Read                     | Freeze Status          | <CR>*freeze=?#<CR>           | YES |
|               | Write                    | Menu On                | <CR>*menu=on#<CR>            | YES |
|               | Write                    | Menu Off               | <CR>*menu=off#<CR>           | YES |
|               | Read                     | Menu Status            | <CR>*menu=?#<CR>             | YES |
|               | Write                    | Up                     | <CR>*up#<CR>                 | YES |
|               | Write                    | Down                   | <CR>*down#<CR>               | YES |
|               | Write                    | Right                  | <CR>*right#<CR>              | YES |
|               | Write                    | Left                   | <CR>*left#<CR>               | YES |
|               | Write                    | Enter                  | <CR>*enter#<CR>              | YES |
|               | Write                    | Back                   | <CR>*back#<CR>               | YES |
|               | Write                    | Source Menu On         | <CR>*sourmenu=on#<CR>        | YES |
|               | Write                    | Source Menu Off        | <CR>*sourmenu=off#<CR>       | YES |
|               | Read                     | Source Menu Status     | <CR>*sourmenu=?#<CR>         | YES |
|               | Write                    | 3D Sync Off            | <CR>*3d=off#<CR>             | YES |
|               | Write                    | 3D Auto                | <CR>*3d=auto#<CR>            | YES |
|               | Write                    | 3D Sync Top Bottom     | <CR>*3d=tb#<CR>              | YES |
| Write         | 3D Sync Frame Sequential | <CR>*3d=fs#<CR>        | YES                          |     |

|       |                               |                            |     |
|-------|-------------------------------|----------------------------|-----|
| Write | 3D Frame packing              | <CR>*3d=fp#<CR>            | YES |
| Write | 3D Side by side               | <CR>*3d=sbs#<CR>           | YES |
| Write | 3D inverter disable           | <CR>*3d=da#<CR>            | YES |
| Write | 3D inverter                   | <CR>*3d=iv#<CR>            | YES |
| Write | 2D to 3D                      | <CR>*3d=2d3d#<CR>          | NO  |
| Write | 3D nVIDIA                     | <CR>*3d=nvidia#<CR>        | NO  |
| Read  | 3D Sync Status                | <CR>*3d=?#<CR>             | YES |
| Write | Remote Receiver On            | <CR>*rr=on#<CR>            | NO  |
| Write | Remote Receiver Off           | <CR>*rr=off#<CR>           | NO  |
| Write | Remote Receiver-front+rear    | <CR>*rr=fr#<CR>            | NO  |
| Write | Remote Receiver-front         | <CR>*rr=f#<CR>             | NO  |
| Write | Remote Receiver-rear          | <CR>*rr=r#<CR>             | NO  |
| Write | Remote Receiver-top           | <CR>*rr=t#<CR>             | NO  |
| Write | Remote Receiver-top+front     | <CR>*rr=tf#<CR>            | NO  |
| Write | Remote Receiver-top+rear      | <CR>*rr=tr#<CR>            | NO  |
| Read  | Remote Receiver Status        | <CR>*rr=?#<CR>             | NO  |
| Write | Instant On-on                 | <CR>*ins=on#<CR>           | NO  |
| Write | Instant On-off                | <CR>*ins=off#<CR>          | NO  |
| Read  | Instant On Status             | <CR>*ins=?#<CR>            | NO  |
| Write | Lamp Saver Mode-on            | <CR>*lpsaver=on#<CR>       | NO  |
| Write | Lamp Saver Mode-off           | <CR>*lpsaver=off#<CR>      | NO  |
| Read  | Lamp Saver Mode Status        | <CR>*lpsaver=?#<CR>        | NO  |
| Write | Projection Log In Code on     | <CR>*prjlogincode=on#<CR>  | NO  |
| Write | Projection Log In Code off    | <CR>*prjlogincode=off#<CR> | NO  |
| Read  | Projection Log In Code Status | <CR>*prjlogincode=?#<CR>   | NO  |
| Write | Broadcasting on               | <CR>*broadcasting=on#<CR>  | NO  |

|  |       |                                |                            |     |
|--|-------|--------------------------------|----------------------------|-----|
|  | Write | Broadcasting off               | <CR>*broadcasting=off#<CR> | NO  |
|  | Read  | Broadcasting Status            | <CR>*broadcasting=?<CR>    | NO  |
|  | Write | AMX Device<br>Discovery-on     | <CR>*amxdd=on#<CR>         | NO  |
|  | Write | AMX Device<br>Discovery-off    | <CR>*amxdd=off#<CR>        | NO  |
|  | Read  | AMX Device<br>Discovery Status | <CR>*amxdd=?#<CR>          | NO  |
|  | Read  | Mac Address                    | <CR>*macaddr=?#<CR>        | NO  |
|  | Write | High Altitude mode<br>on       | <CR>*Highaltitude=on#<CR>  | YES |
|  | Write | High Altitude mode<br>off      | <CR>*Highaltitude=off#<CR> | YES |
|  | Read  | High Altitude mode<br>status   | <CR>*Highaltitude=?#<CR>   | YES |

Note: The above function will be varied from model to model.

## FAQ Video

(1) How to use RS232 cable to do volume control and sound control on projector?

<https://youtu.be/P4F26kEv60U>

(2) How to use RS232 cable connection to power on & off projector?

<https://youtu.be/faGUvcDBmJE>

(3) How to set up RS232 cable connection?

<https://youtu.be/CYJRqyO6K1w>

(4) How to use RS232 command to request fan speed and temperature value?

<https://youtu.be/KBXEd-BCDKQ>