

## IN5316HD/IN5318 Control commands

IMPORTANT: When formatting commands sent from a control system or computer, enclose commands in parentheses "(" and ")".

### Serial Communication Configuration

Visit our website at [www.infocus.com/support](http://www.infocus.com/support) for additional RS-232 settings and information.

To control this projector via RS-232, connect a null modem cable and set the control system serial port settings to match the following communication configuration.

RS-232 is not available when Network is selected in the Installation II >> Advanced menu. RS-232 must be selected. If Network is selected, these commands are accessible via Telnet port 23.

| RS-232          |        |
|-----------------|--------|
| Setting         | Value  |
| Bits per second | 19,200 |
| Data bits       | 8      |
| Parity          | None   |
| Stop bits       | 1      |
| Flow control    | None   |
| Emulation       | VT100  |

### Command Format

A read request example: (AAA?) where

( starts the command  
AAA denotes the command  
? Denotes the read request  
) ends the command

A read command returns the range and the current setting, for example:

| Read Command Examples |         |             |
|-----------------------|---------|-------------|
| Function              | Command | Response    |
| Brightness            | (BRT?)  | (0-100,50)  |
| Volume                | (VOL?)  | (0-8,4)     |
| Lamp Hours            | (LMP?)  | (0-9999,42) |

A write request example: (AAA####) where

( starts the command  
AAA denotes the command  
#### denotes the value to be written (leading zeros not necessary)  
) ends the command

Some commands have ranges, while others are absolute. If a number greater than the maximum range is received, it is automatically set to the maximum number for that function. If a command is received that is not understood, a "?" is returned. With absolute settings, "0" is off, 1-9999 is on. The one exception is the Power command, where 0 is off and 1 is on.

| Write Command Examples |          |                        |
|------------------------|----------|------------------------|
| Function               | Command  | Response               |
| Brightness             | (BRT100) | Sets brightness to 100 |
| Power                  | (PWR0)   | Turns power off        |
| Power                  | (PWR1)   | Turns power on         |

### Error Conditions

Not all commands are supported for all projectors. If an unsupported command is issued, the command will be ignored. If a command is received that is not understood, a '?' character will be returned indicating the command was not understood.

### Limitations

See delay limitations below:

- 10 second delay after lamp ignition
- 3 second delay after changing sources
- 10 second delay after a power down
- 25ms Inter-command delay
- 10ms Inter-character delay

The Step column refers to increasing or decreasing the menu bar position since the On-screen Display is not an exact match of values. For example, Step 2 changes the data by 2 through the CLI (Command Line Interface). The menu bar is up (or down) by 1.

## RS232 commands

| No | Function                          | Command | RW | Min | Max | Default | Step | Parameter   |
|----|-----------------------------------|---------|----|-----|-----|---------|------|---|
| 1  | AC Power On<br>(Auto power on)    | APO     | RW | 0   | 1   | 0       | 1    | 0: Disable; 1: Enable   |
| 2  | Aspect Ratio                      | ARZ     | RW | 0   | 5   | 0       | 1    | Delta:<br>0:Auto<br>1:Native<br>2:4:3<br>3:16:9<br>4:Letterbox<br>5:16:10                                     |
| 3  | Auto Image                        | AIM     | W  | n/a | 1   | 1       | 1    | 1: Enable   |
| 4  | Auto Off Time                     | AOT     | RW | 0   | 6   | 6       | 1    | 0: Never<br>1: 5 minutes<br>2: 10 minutes<br>3: 15 minutes<br>4: 20 minutes<br>5: 25 minutes<br>6: 30 minutes |
| 5  | Auto Source                       | ASC     | RW | 0   | 1   | 1       | 1    | 0: Disable; 1: Enable   |
| 6  | Blank Screen                      | BLK     | RW | 0   | 1   | 0       | 1    | 0: Disable; 1: Enable   |
| 7  | Brightness                        | BRT     | RW | 0   | 100 | 50      | 1    | Display Mode=User only  |
| 8  | Ceiling<br>(Projection mode)      | CEL     | RW | 0   | 3   | 0       | 1    | 0:Front<br>1:Rear<br>2:Ceiling<br>3:Ceiling+Rear  |
| 9  | Closed Captions:<br>Non-<br>Muted | CLC     | RW | 0   | 1   | 0       | 1    | Delta :<br>Off<br>On (CC1)  |
| 10 | Color                             | CLR     | RW | 0   | 100 | 50      | 1    | Video SVideo only   |
| 11 | Color Space                       | CSM     | RW | 0   | 3   | 0       | 1    | Display Mode=User only<br>0:Auto<br>1:RGB<br>2:YCbCr<br>3:YPbPr   |

|    |                 |     |    |     |     |                 |   |   |
|----|-----------------|-----|----|-----|-----|-----------------|---|---|
| 12 | Color Temp      | TMP | RW | 0   | 2   | Source Specific | 1 | Display Mode=User only<br>0:Warm<br>1:Normal<br>2:Cool<br>3:Cooler<br>4:High Cool   |
| 13 | Contrast        | CON | RW | 0   | 100 | 50              | 1 | Display Mode=User only  |
| 14 | Current Source  | SRC | RW | 0   | 7   | 0               | 1 | Delta:<br>0 = VGA1<br>1 = VGA2<br>2 = HDMI<br>3 = DisplayPort<br>4 = RGBHV<br>5 = Component<br>6 = S-Video<br>7 = Composite   |
| 15 | Digital Zoom    | DZM | RW | -10 | 10  | 0               | 5 | Delta:<br>-10~10  |
| 16 | Error Condition | ERR | R  | 0   | 6   | 0               | 1 | Delta:<br>0: No error<br>1: Lamp not lit after 5 Attempts<br>3: Lamp went out unexpectedly<br>4: Fan failure<br>5: Over-temperature<br>8: DMD error<br>9: Color wheel |
| 17 | Factory Reset   | RST | W  | n/a | 1   | 1               | 1 | 1: reset  |
| 18 | Freeze Screen   | FRZ | RW | 0   | 1   | 0               | 1 | 0: Disable  |
| 19 | Gamma           | GTB | RW | 0   | 6   | Source Specific | 1 | Display Mode=User only  |
| 20 | Horz. Position  | HPS | RW | 0   | 100 | x               | 1 | RGB source only<br>(HPS?) to get range  |

|    |                               |     |    |     |      |   |   |  |
|----|-------------------------------|-----|----|-----|------|---|---|--|
| 21 | Lamp Hours in High Power Mode | LMO | R  | 0   | 9999 |   |   | This Read only query tells how many hours the lamp has been operated in Normal   |
| 22 | Lamp Hours in Low Power Mode  | LME | R  | 0   | 9999 |   |   | This Read only query tells how many hours the lamp has been operated in Eco  |
| 23 | Lamp Life                     | LIF | R  | n/a | 1500 |   |   | Delta:<br>330W lamp life 1500  |
| 24 | Lamp Resets (Total number)    | LMR | R  | 0   | 9999 | 0 | 1 | This Read only query tells how many times the lamp hours have been reset.  |
| 25 | Lamp Low Power                | IPM | RW | 0   | 1    | 0 | 1 | This Read/Write command sets the lamp to low power 0 = Normal, 1 = Eco   |
| 26 | Language                      | LAN | RW | 0   | 18   | 0 | 1 | Delta:<br>0: English<br>1: French<br>2: German<br>3: Italian<br>5: Korean<br>6: Norwegian<br>7: Portuguese<br>8: Russian<br>9: Simp Chinese<br>10: Spanish<br>11: Trad Chinese<br>12: Swedish<br>13: Dutch<br>14: Polish<br>15: Turkish<br>16: Danish<br>17: Finnish<br>18: Bahasa |
| 27 | Menu                          | MNU | RW | 0   | 1    | 0 | 1 | 0: Clear; 1: Display   |

|    |                               |     |    |        |      |                    |   |   |
|----|-------------------------------|-----|----|--------|------|--------------------|---|---|
| 28 | Menu Navigation               | NAV | W  | 0      | 5    | n/a                | 1 | 0: Menu Key<br>1: Up Key<br>2: Down Key<br>3: Select Key<br>4: Left Key<br>5: Right Key   |
| 29 | Mute                          | MTE | RW | 0      | 1    | 0                  | 1 | 0: disable; 1: enable   |
| 30 | Overscan                      | OVS | RW | 0      | 1    | 0                  | 1 | Delta :<br>On / Off   |
| 31 | Phase(Frequency)              | MSS | RW | 0      | 100  | x                  | 1 | RGB source only   |
| 32 | Power                         | PWR | RW | 0      | 1    | 0                  | 1 | 0: Turn Off<br>1: Turn On   |
| 33 | Presets                       | PST | RW | 0      | 17   | source<br>Specific | 1 | Delta :Display mode<br>1: User<br>10: Bright<br>14: Movie<br>15: Normal<br>16: User 2<br>17: User 3   |
| 34 | Projector Firmware<br>Ver.    | FVS | R  | string |      |                    |   | PWDxx   |
| 35 | Projector High Power<br>Hours | LTO | R  | 0      | 9999 |                    |   | This Read Only query<br>will return the total<br>amount of hours the<br>projector has run in<br>Normal power with all<br>lamps, total projection<br>time in high power. |
| 36 | Projector Info menu           | PRI | W  |        | 1    |                    | 1 | 1: Display<br>Status Menu   |

|    |                           |     |    |        |      |     |   |   |
|----|---------------------------|-----|----|--------|------|-----|---|---|
| 37 | Projector Low Power Hours | LTE | R  | 0      | 9999 |     |   | This Read Only query will return the total amount of hours the projector has run in Eco power with all lamps, total projection time in low power.                               |
| 38 | Projector Model           | MDL | R  | string |      |     |   | IN5316HD / IN5318   |
| 39 | Projector Resolution      | NRS | R  | string |      |     |   | 1920x1080<br>1920x1200[RB]  |
| 40 | Projector Total Hours     | LMT | R  | 0      | 9999 |     | 1 |   |
| 41 | Reset Lamp Hours          | LRT | RW | 1      | 2    | n/a | 1 | Delta:<br>Reset Lamp Hour   |
| 42 | Search Screen             | DSU | RW | 0      | 7    | 0   | 1 | Delta OSD tree:<br>1: Blue<br>3: Black<br>7: Purple   |
| 43 | Sharpness                 | SHP | RW | 0      | 100  | 0   | x | If Delta is going to use a scale then that scale should go to 100 with a step size of 3<br>(0,3,6,9,12,15.....100)  |
| 44 | System State              | SYS | R  | 0      | 18   | 0   | 1 | Delta:<br>1 = Off<br>2 = Startup<br>4 = Search (Lamp is lighted, no input displayed)<br>7 = Source Displayed (Lamp is lighted, input displayed)<br>12 = Cool Down<br>18 = Error |
| 45 | Tint                      | TNT | RW | 0      | 100  | 50  | 1 |   |

|    |                |     |    |   |     |    |    |  |
|----|----------------|-----|----|---|-----|----|----|--|
| 46 | Tracking       | MTS | RW | 0 | 100 | 50 | 1  | RGB source only  |
| 47 | Vert. Keystone | DKV | RW | 0 | 100 | 50 | 1  |  |
| 48 | Vert. Position | VPS | RW | 0 | 100 | 50 | 1  | RGB source only<br>(VPS?) to get range<br>(VPS+)<br>(VPS-) |
| 49 | Volume         | VOL | RW | 0 | 100 | 50 | 10 |  |