# **IN5312/IN5314 Control commands**

IMPORTANT: All commands must use UPPER CASE LETTERS otherwise the projector will not recognize the command.

# **Serial Communication Configuration**

Visit our website at 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 Port Settings						
Setting	Value					
Bits per second	19,200					
Data bits	8					
Parity	None					
Stop bits	1					
Flow control	None					
Emulation	VT100					

### **Command Format**

All commands consist of 3 alpha characters followed by a request, all enclosed in parentheses. The request can be a read request (indicated by a "?") or a write request (indicated by 1 to 4 ASCII digits).

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.

Function	Command	Read/Write	Min	Max	Default	Step	Parameter	Note
AC Power On	APO	RW	0	1	0		0: Disable; 1: Enable	
							0: Fill	
							1: 4:3	
							2: 16:9	
							3: Letterbox	
							4: Native	
Aspect Ratio	ARZ	RW	0	5	0	1	5: 16:10	
Auto Image	AIM	W	n/a	1	1	1	1: Perform Auto Image	
-							0: Never	
							1: 5 minutes	
							2: 10 minutes	
							3: 15 minutes	
							4: 20 minutes	
							5: 25 minutes	
Auto Off Time	AOT	RW	0	6	6	1	6: 30 minutes	
Auto Source	ASC	RW	0	1	1	1	0: Disable; 1: Enable	
Blank Screen	BLK	RW	0	1	0	1	0: Disable; 1: Enable	
								Only available when User
Brightness	BRT	RW	0	100	50	1		Preset is selected.
							0: Table Top	
							1: Ceiling	
							2: Rear	
Ceiling	CEL	RW	0	3	0	1	3: Ceiling Rear	
							0: Off	
							1: CC1	
Closed Captions: Non-Muted	CLC	RW	0	2	0	1	2: CC2	
								Only available when a
								Standard TV source is
								selected (Composite or S-
								Video) and User Preset is
Color	CLR	RW	0	100	50	1		selected.
							0: Auto	
							1: RGB	
							2: YCrCb	
							3: YPrPb	Only available when User
Color Space	CSM	RW	0	3	0	1		Preset is selected.
							0: Cold	
							1: Normal	
					Source		2: Warm	Only available when User
Color Temp	TMP	RW	0	2	Specific	2		Preset is selected.

Function	Command	Read/Write	Min	Max	Default	Step	Parameter	Note
								Only available when User
Contrast	CON	RW	0	100	50	1		Preset is selected.
							0: VGA1	
							1: VGA2	
							2: HDMI	
							3: DVI	
							4: RGBHV	
							5: Component	
							6: S-Video	
Current Source	SRC	RW	0	9	0	1	7: Composite	
							-10: 90%	
							to	
							10: 110%	
Digital Zoom	DZM	RW	-10	10	0	1		
							0: No error	
							1: Lamp not lit after 5	
							Attempts	
							3: Lamp went out	
							unexpectedly	
							4: Fan failure	
							5: Over-temperature	
							6: Low voltage	
Error Condition	ERR	R	0	6	0	1		
Factory Reset	RST	W	n/a	1	1	1	1: reset	
Freeze Screen	FRZ	RW	0	1	0	1	0: Disable; 1: Enable	
							0: PC	
							1: MAC	
							2: Video	
					Source		3: Chart	Only available when User
Gamma	GTB	RW	0	7	Specific	1	4: B&W	Preset is selected.
								Only available for
Horz. Position	HPS	RW	-5	5	0	1		computer sources
Lamp Hours in High Power Mode	LMO	R	0	9999	na	1		
Lamp Hours in Low Power Mode	LME	R	0	9999	na	1		
Lamp Life	LIF	R	n/a	1500				
Lamp Resets (Total number)	LMR	R	0	9999	0	1		
Lamp Low Power	IPM	RW	0	1	0	1	0: Disable; 1: Enable	

Function	Command	Read/Write	Min	Max	Default	Step	Parameter	Note
							0: English	
							1: French	
							2: German	
							3: Spanish	
							4: Portuguese	
							5: Simple Chinese	
							6: Traditional Chinese	
							7: Italian	
							8: Norwegian	
							9: Swedish	
							10: Dutch	
							11: Kazakh	
							12: Finnish	
							13: Korean	
							14: Arabic	
							15: Turkish	
							16: Japanese	
							17: Brazilian Portuguese	
							18: Russian	
							19: Vietnamese	
					0		20: Danish	
					(5 for China		21: Polish	
Language	LAN	RW	0	22	models)	1	22: Bahasa	
Menu	MNU	RW	0	1	0	1	0: Clear; 1: Display	
							0: Menu Key	
							1: Up Key	
							2: Down Key	
							3: Select Key	
							4: Left Key	
Menu Navigation	NAV	W	0	5	n/a	1	5: Right Key	
							0: 0%	
							1: 20%	
							2: 40%	
							3: 60%	
							4: 80%	
Menu Transparency	TOE	RW	0	90	0	5		
Mute	MTE	RW	0	1	0	1	0: Disable; 1: Enable	
Overscan	OVS	RW	0	1	0	1	0: Disable; 1: Enable	
								Only available for
Phase	MSS	RW	0	31	na	1		computer sources
							0: Turn Off	
Power	PWR	RW	0	1	0	1	1: Turn On	

Function	Command	Read/Write	Min	Max	Default	Step	Parameter	Note
							0: Presentation	
							1: Bright	
							2: Game	
							3: Movie	
							4: TV	
							5: sRGB	Cooresponds to Display
	B.C.T.	5144	•	_	source			Cooresponds to Display
Presets Projector Firmware Ver.	PST FVS	RW	0	6	Specific	1	6: User	Mode in menu.
•	LTO	R R	string	0000		1		
Projector High Power Hours	PRI	W	0	9999 1	na	1	1. Display Info	
Projector Info menu			-			1	1: Display Info	
Projector Low Power Hours	LTE	R	0	9999	na	1		_
Projector Model	MDL	R	string					_
Projector Resolution	NRS	R	string					
Projector Total Hours	LMT	R	0	9999	na	1	4.5	
Reset Lamp Hours	LRT	W		1	n/a	1	1: Reset Lamp Hours	
							0: Blue	
							1: Black	
							2: White	
							3: Red	
Search Screen	DSU	RW	0	4	0	1	4: Green	
								Only available when a
								Standard TV source is
								selected (Composite or S-
								Video) and User Preset is
Sharpness	SHP	RW	0	100	0	3		selected.
-							0: Off	
							2: Start Up	
							3: PIN	
							4: Search	
							7: Source Displayed	
							9: Blank Screen	
							12: Cool Down	
							13: Screen Save	
	6).5			4.5	_	_	17: Flash Update	
System State	SYS	R	1	18	7	1	18: Error	
								Only available when a
								Standard TV source is
								selected (Composite or S-
								Video) and User Preset is
Tint	TNT	RW	0	100	50	1		selected.
								Only available for
Tracking	MTS	RW	-5	5	0	1		computer sources

Function	Command	Read/Write	Min	Max	Default	Step	Parameter	Note
Vert. Keystone	DKV	RW	-30	30	0	1		
								Only available for
Vert. Position	VPS	RW	-5	2	0	1		computer sources
Volume	VOL	RW	0	8	4	1		

<sup>\*</sup>Under some conditions, this setting or command will return an error when used with CLI/CLX. Some examples:

- Writing to Brightness will fail unless the projector is displaying a source and user Display Mode is selected
- Writing to video only functions will fail when computer source is displayed.

For details, see the CLI/CLX Prefix section for the specific setting or command.