LP720 RS-232 Command Values

Communication Configuration

To control one of the above noted projectors from an RS-232 control system, connect the serial cable or a null modem cable and the <u>InFocus RS-232 Adapter (SP-CWRS232)</u> and set the control system serial port settings to match the following communication configuration*:

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

RS-232 Connection for LP720

The RS-232/serial connection for these projectors is located on the PC side of the CableWizard II connection hub. Use the <u>serial</u> <u>cable (IFS part # 210-0107-xx)</u> to connect the <u>CableWizard II</u> to the serial port of the computer source.

Note: CableWizard³ (p/n SP-CW3) does not support RS-232. You must Use CableWizard II (p/n SP-CW2) and the InFocus serial cable.

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?)	(0-22, 10)		
Volume	lume (VOL?) (0-80			
Lamp Hours	(LMP?)	(0-9999, 421)		

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.

To assure the projector can process a command, wait 3 seconds before entering the next command.

Write Command Examples				
Function	Command	Response		
Brightness	(BRT10)	Sets the brightness to 10		
Freeze	(FRZ1) or (FRZ8888)	Freezes the display		
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

The CLI cannot respond to commands coming in at a high-rate. Therefore, a delay must occur between commands to ensure that the command gets properly executed. To assure the projector can process a command, wait 3 seconds before entering the next command.

The following table lists the RS-232 command value ranges for controlling the LP720.

Note: Specified commands and values apply to the LP720 with version 3.04 software or higher. The version number of the software is the first number listed in the upper right corner of the on-screen menu. Command values for LP720s with earlier software versions may vary. If your LP720 does not have version 3.04 software or higher, go to the <u>Software/Downloads</u> page to download and upgrade the projector software.

For absolute command value ranges of 0 - 1, 0 = "Off" and 1-9999 = "On" unless otherwise noted.

Function	Command	Range		
		Data Source (Computer)	Video Source	
		Min-Max, Initial Value	Min-Max, Initial Value	
Power (write only)	("PWR")	N/A	N/A	
Brightness	("BRT")	0-22,11	0-255,129	
Tint	("TNT")	0-22,11	0-63,33	
Contrast	("CON")	0-22,11	0-127,63	
ColorTemp	("TMP")	N/A	N/A	
Saturation	("CLR")	N/A	0-63,37	
Optimize	("OPT")	N/A	N/A	
VideoFmt	("VSU")	N/A	0-4,0	
Volume	("VOL")	0-80,40	0-80,40	
Balance	("BAL")	0-31,16	0-31,16	
Treble	("TRB")	0-14,7	0-14,7	
Bass	("BAS")	0-14,7	0-14,7	
Fade	("FAD")	0-31,16	0-31,16	
Ambiance	("AMB")	0-37,19	0-37,19	
Mute	("MTE")	0-1,0	0-1,0	
Manual Tracking	("MTS")	0-63,32*	N/A	
Manual Sync	("MSS")	0-19,10*	N/A	
Horiz Position	("HPS")	0-63,32*	N/A	
Vertical Position	("VPS")	0-63,32*	N/A	
Auto Image	("AIM")	0-1,1	N/A	
Resize	("ARZ")	0-1,1	0-1,1	
Freeze	("FRZ")	0-1,0	0-1,0	
Language	("LAN")	0-3,0	0-3,0	
Ceiling	("CEL")	0-1,0	0-1,0	
Rear Project	("REA")	0-1,0	0-1,0	
Reset	("RST")	0-1,0	0-1,0	
Auto Source	("ASC")	0-1,0	0-1,0	
Default Source	("DSC")	0-1,0	0-1,0	
Blank Screen	("BSC")	0-1,0	0-1,0	
Menu Position	("MPS")	N/A	N/A	
Standby Time	("SBT")	N/A	N/A	
Display Messages	("DMG")	N/A	N/A	
Display Startup Screen	("DSU")	N/A	N/A	
Standby Mode	("STB")	0-1,0	0-1,0	
Source	("SRC")	0-1,0 0 = computer 1 = video	0-1,0 0 = computer 1 = video	
Bulb Clock (read only)	("LMP")	0-9999,0	0-9999,0	
*Software dynamically changes range based on the signal received.				