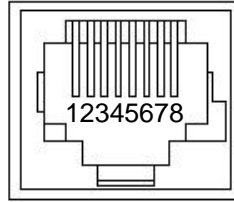


ClearVIEW™ HD-18 Command List



Communication Specification:

Communication Speed: 9600 bps (default)
 Start bit: 1
 Stop bit: 1
 Data bits: 8
 Parity: None
 No Flow control



Pin #	RJ-45 RS-232 and IR Out Pins
1)	Unused
2)	Unused
3)	IR Out (TTL level)
4)	IR Output (Diff Signal to HD-18 Quick-Connect)
5)	IR Ground (Diff Signal to HD-18 Quick-Connect)
6)	GND (GND of IR Short Range - Pin 3)
7)	RXD (from TXD of control source)
8)	TXD (to RXD of control source)

NOTE: The Vaddio ClearVIEW HD-18 Control Protocol is similar, but not identical to the Sony™ VISCA™ command set in order to be compatible with several popular control devices. Not all VISCA commands are supported and there are many HD-18 specific commands in the following Command and Inquiry Lists.

HD-18 Command List (1/2)

Command Set	V	Command	Command Packet	Comments
AddressSet	Y	Broadcast	88 30 01 FF	Address Set
IF_Clear	Y	Broadcast	88 01 00 01 FF	I/F Clear
CommandCancel	Y		8x 2p FF	p: Socket No(=1 to2)
CAM_Power	Y	On	8x 01 04 00 02 FF	Power On/Off
	Y	Off	8x 01 04 00 03 FF	
CAM_Zoom	Y	Stop	8x 01 04 07 00 FF	p:0(Slow) to 7(Fast) p:0(Slow) to 7(Fast) pqr: Zoom Position* V:(Speed) 0-7
	Y	Tele(Standard)	8x 01 04 07 02 FF	
	Y	Wide(Standard)	8x 01 04 07 03 FF	
	Y	Tele(Variable)	8x 01 04 07 2p FF	
	Y	Wide(Variable)	8x 01 04 07 3p FF	
	Y	Direct	8x 01 04 47 0p 0q 0r 0s FF	
CAM_Focus	Y	Direct(Variable)	8x 01 7E 01 4A 0V 0p 0q 0r 0s FF	Supported as 'Standard' Supported as 'Standard'
	Y	Stop	8x 01 04 08 00 FF	
	Y	Far(Standard)	8x 01 04 08 02 FF	
	Y	Near(Standard)	8x 01 04 08 03 FF	
	Y	Far(Variable)	8x 01 04 08 2p FF	
	Y	Near(Variable)	8x 01 04 08 3p FF	
	Y	AutoFocus	8x 01 04 38 02 FF	
	Y	ManualFocus	8x 01 04 38 03 FF	
CAM_WB	Y	Auto/Manual	8x 01 04 38 10 FF	
	Y	Auto	8x 01 04 35 00 FF	
CAM_WB	Y	Manual	8x 01 04 35 05 FF	
	Y	Reset	8x 01 04 03 00 FF	
CAM_RGain	Y	Up	8x 01 04 03 02 FF	pqr:000-1ff
	Y	Down	81 01 04 03 03 FF	
	Y	Direct	81 01 04 43 00 0p 0q 0r FF	
	Y	Reset	81 01 04 03 00 FF	
CAM_BGain	Y	Up	8x 01 04 04 02 FF	pqr:000-1ff
	Y	Down	81 01 04 04 03 FF	
	Y	Direct	81 01 04 44 00 0p 0q 0r FF	
	Y	Reset	8x 01 04 04 00 FF	
CAM_AE	Y	Full Auto	81 01 04 39 00 FF	Auto Exposure Mode Manual Control Mode
	Y	Manual	81 01 04 39 03 FF	
CAM_Iris	Y	Reset	81 01 04 0B 00 FF	pq(0x00-0x11)
	Y	Up	81 01 04 0B 02 FF	
	Y	Down	81 01 04 0B 03 FF	
	Y	Direct	81 01 04 4B 00 00 0p 0q FF	
CAM_Gain	Y	Reset	81 01 04 0C 00 FF	pq(0x00-0x1E)
	Y	Up	81 01 04 0C 02 FF	
	Y	Down	81 01 04 0C 03 FF	
	Y	Direct	81 01 04 4C 00 00 0p 0q FF	

HD-18 Command List (2/2)

Command Set	V	Command	Command Packet	Comments
CAM_Backlight	Y	On	81 01 04 33 02 FF	
	Y	Off	81 01 04 33 03 FF	
CAM_Aperture	Y	Reset	81 01 04 02 00 FF	
	Y	Up	81 01 04 02 02 FF	
	Y	Down	81 01 04 02 03 FF	
	Y	Direct	81 01 04 42 00 00 0p 0q FF	pp(0x00-0x3F)
CAM_Memory	Y	Reset	81 01 04 3F 00 0p FF	p:Memory No(=0-0xf)
	Y	Set	81 01 04 3F 01 0p FF	
	Y	Recall	81 01 04 3F 02 0p FF	
CAM_IDWrite	Y		81 01 04 22 0p 0q 0r 0s FF	pqrs:Camera ID(==0000 – FFFF)
IR_Receive	Y	On	81 01 06 08 02 FF	
	Y	Off	81 01 06 08 03 FF	
	Y	On/Off	81 01 06 08 10 FF	
IR_ReceiveReturn	N+	On	81 01 7D 01 03 00 00 FF	
	N+	Off	81 01 7D 01 13 00 00 FF	
Pan-tiltDrive	Y	Up	81 01 06 01 VV WW 03 01 FF	WW: Pan Speed (0x01-0x18) VV:Tilt Speed(0x01-0x14)
	Y	Down	81 01 06 01 VV WW 03 02 FF	
	Y	Left	81 01 06 01 VV WW 01 03 FF	
	Y	Right	81 01 06 01 VV WW 02 03 FF	
	Y	UpLeft	81 01 06 01 VV WW 01 01 FF	
	Y	UpRight	81 01 06 01 VV WW 02 01 FF	
	Y	DownLeft	81 01 06 01 VV WW 01 02 FF	
	Y	DownRight	81 01 06 01 VV WW 02 02 FF	
	Y	Stop	81 01 06 01 VV WW 03 03 FF	
	Y	Absolute Position	81 01 06 02 VV WW 0Y 0Y 0Y 0Y 0Z 0Z 0Z 0Z FF 0Y 0Y 0Y 0Y 0Z 0Z 0Z 0Z FF	YYYY: Pan Position* ZZZZ: Tilt Position*
	Y	Home Reset	81 01 06 04 FF 81 01 06 05 FF	
	Y			
	Tally	Y	On	81 01 7E 01 0A 00 02 FF
Y		Off	81 01 7E 01 0A 00 03 FF	
Preset Pan Speed	Y	Pan/Tilt Speed	81 01 7E 01 0B WW VV ZZ FF	WW: Pan Speed (0x01-0x18) VV:Tilt Speed(0x01-0x14) ZZ:Zoom Speed(0-7);
Motor Config	Y	Hard Motor Stops	81 01 7E 01 70 00 00 FF	
	Y	Soft Motor Stops	81 01 7E 01 70 00 01 FF	
BLK.Enhance	Y	Pedestal	81 01 7E 53 00 00 0p 0q FF	pp: Black Level (0x01-0xFD)
GMA.Enhance	Y	Gamma	81 01 7E 54 00 00 0p 0q FF	pp: Gamma (0x00-0x8F)
CRM.Enhance	Y	Chroma	81 01 7E 55 00 00 0p 0q FF	pp: Chroma (0x08-0x1F)
KNE.Enhance	Y	Knee	81 01 7E 55 00 00 0p 0q FF	pp: Knee (0x0-07F)

Additional Information:

Pan Range: 8044 – 7FBC (-32,700 to +32,700)

Tilt Range: E891 – 4C2B (-5,999 to +19,499)

+ Features supported in Future release

* Actual Pan/Tilt ranges defined in Inquiry list

HD-18 Inquiry List (1/1)

Inquiry Command	V	Command	Command Packet	Comments
CAM_PowerInq	Y	8x 09 04 00 FF	y0 50 02 FF y0 50 03 FF	On Off(Standby)
CAM_ZoomPosInq	Y	8x 09 04 47 FF	y0 50 0p 0q 0r 0s FF	pqr: Zoom Position
CAM_WBModelInq	Y	8x 09 04 35 FF	y0 50 00 FF y0 50 05 FF	Auto Manual
CAM_RGain	Y	8x 09 04 43 FF	y0 50 00 0p 0q 0r FF	pqr:000-1ff
CAM_BGain	Y	8x 09 04 44 FF	y0 50 00 0p 0q 0r FF	pqr:000-1ff
CAM_AEModelInq	Y	8x 09 04 39 FF	y0 50 00 FF y0 50 03 FF	Auto Exposure Mode Manual Control Mode
CAM_Iris	Y	81 09 04 4B FF	y0 50 00 00 0p 0q FF	pq(0x00-0x11)
CAM_Gain	Y	81 09 04 4C FF	y0 50 00 00 0p 0q FF	pq(0x00-0x1E)
CAM_BacklightModelInq	Y	81 09 04 33 FF	y0 50 02 FF y0 50 03 FF	On Off
CAM_ApertureInq	Y	81 09 04 42 FF	y0 50 00 00 0p 0q FF	pq(0x00-0x3F)
CAM_MemoryInq	Y	81 09 04 3F FF	y0 50 0p FF	p:Memory No(=0-0xf)
CAM_IDInq	Y	81 09 04 3F FF	y0 50 0p 0q 0r 0s FF	pqrs:(0000 – FFFF)
CAM_ReceiveInq	Y	81 09 06 08 FF	y0 50 02 FF y0 50 03 FF	On Off
Pan-TiltMaxSpeedInq	Y	81 09 06 11 FF	y0 50 WW VV FF	WW: Pan Speed (0x01-0x18) VV:Tilt Speed(0x01-0x14)
Pan-tiltPositionInq	Y	81 09 06 12 FF	y0 50 0Y 0Y 0Y 0Y 0Z 0Z 0Z 0Z FF	YYYY: Pan (0x0100-0x1800) ZZZZ:Tilt (0x0100-0x1400)
TallyInq	Y Y	81 09 7E 01 0A FF	y0 50 02 FF y0 50 03 FF	On Off
PresetSpeedInq	Y	81 09 7E 01 0B FF	y0 50 WW VV ZZ FF	WW: Pan Speed (0x01-0x18) VV:Tilt Speed(0x01-0x14) ZZ:Zoom Speed(0-7);
Motor Config	Y	81 09 7E 01 70 FF	y0 50 00 FF y0 50 01 FF	Hard Motor Stops Soft Motor Stops
BLK.Enhance	Y	81 01 7E 53 FF	y0 50 00 00 0p 0q FF	pq: Black Level (0x01-0xFD)
GMA.Enhance	Y	81 01 7E 54 FF	y0 50 00 00 0p 0q FF	pq: Gamma (0x00-0x8F)
CRM.Enhance	Y	81 01 7E 55 FF	y0 50 00 00 0p 0q FF	pq: Chroma (0x08-0x1F)
KNE.Enhance	Y	81 01 7E 56 FF	y0 50 00 00 0p 0q FF	pq: Knee (0x0-07F)