PTZOptics HTTP-CGI Control Sheet

Control					*MID 2020-08-10*
Function	**Command**	**Variable**	**Values**		**Comments**
Pan & Tilt	http://**[camera ip]**/cgi-bin/ptzctrl.cgi?ptzcmd&**[action]**&**[pan speed]**&**[tilt speed]**	**[camera ip]**	*cameras current IP		
		[action]	UP		moves camera 'up'
			DOWN		moves camera 'down'
			LEFT		moves camera 'left'
			RIGHT		moves camera 'right'
			LEFTUP		moves camera 'left' & 'up'
			RIGHTUP		moves camera 'right' & 'up'
			LEFTDOWN		moves camera 'left' & 'down'
			RIGHTDOWN		moves camera 'right' & 'down'
			PTZSTOP		tells camera to 'stop' moving
		[pan speed]	1		slowest 'pan' speed
			...		ranges from 1 - 24
			24		fastest 'pan' speed
		[tilt speed]	1		slowest 'tilt' speed
			...		ranges from 1 - 20
			20		fastest 'tilt' speed
Zoom	http://**[camera ip]**/cgi-bin/ptzctrl.cgi?ptzcmd&**[action]**&**[zoom speed]**	**[camera ip]**	*cameras current IP		
		[action]	ZOOMIN		zooms camera in
			ZOOMOUT		zooms camera out
			ZOOMSTOP		stops zooming
		[zoom speed]	1		slowest 'zoom' speed
			...		ranges from 1 - 7
			7		fastest 'zoom' speed
Focus	http://**[camera ip]**/cgi-bin/ptzctrl.cgi?ptzcmd&**[action]**&**[focus speed]**	**[camera ip]**	*cameras current IP		
		[action]	FOCUSIN		focuses camera in
			FOCUSOUT		focuses camera out
			FOCUSSTOP		stops focusing
		[focus speed]	1		slowest 'focus' speed
			...		ranges from 1 - 7
			7		fastest 'focus' speed
Focus Lock	http://**[camera ip]**/cgi-bin/param.cgi?ptzcmd&**[action]**_mfocus	**[camera ip]**	*cameras current IP		
		[action]	LOCK		locks focus state
			UNLOCK		unlocks focus state
Home Position	http://**[camera ip]**/cgi-bin/ptzctrl.cgi?ptzcmd&home	**[camera ip]**	*cameras current IP		Moves camera to HOME
PT Reset	http://**[camera ip]**/cgi-bin/param.cgi?pan_tiltdrive_reset	**[camera ip]**	*cameras current IP		Performs pan / tilt reset "dance"
Preset	http://**[camera ip]**/cgi-bin/ptzctrl.cgi?ptzcmd&**[action]**&**[position number]**	**[camera ip]**	*cameras current IP		
		[action]	POSSET		position 'set'
			POSCALL		position 'call'
		[position number]	0		beginning of range 1
			...		range 1 from 0-89
			89		end of range 1
			100		beginning of range 2
			...		range 2 from 100-254
			254		end of range 2
Direct Position Recall	http://**[camera ip]**/cgi-bin/ptzctrl.cgi?ptzcmd&**[mode]**&**[pan speed]**&**[tilt speed]**&**[pan position]**&**[tilt position]**	**[camera ip]**	*cameras current IP		
		[mode]	ABS		Absolute Positioning
			REL		Relative Positioning
		[pan speed]	1		slowest 'pan' speed
			...		ranges from 1 - 24
			24		fastest 'pan' speed
		[tilt speed]	1		slowest 'tilt' speed
			...		ranges from 1 - 20
			20		fastest 'tilt' speed
		[pan position]	0000 or FFFF		home position
			0001		first step pan right
			...		range from 0000 to 0990 (HEX)
			0990		last step pan right
			FFFE		first step pan left
			...		range from FFFF to F670 (HEX)
			F670		last step pan left
		[tilt position]	0000 or FFFF		Home Position
			0001		first step tilt up
			...		range from 0000 to 0510 (HEX)
			0510		last step tilt up
			FFFE		first step tilt down
			...		range from FFFF to FE51 (HEX)
			FE51		last step tilt down
Direct Zoom Recall	http://**[camera ip]**/cgi-bin/ptzctrl.cgi?ptzcmd&zoomto&**[zoom speed]**&**[zoom position]**	**[camera ip]**	*cameras current IP		
		[zoom speed]	0		slowest zoom speed
			...		range from 0 - 7
			7		fastest zoom speed
		[zoom position]	0000		Full Wide
			...		range from 0 - 4000 (HEX)
			4000		Full Tele

Navigation

Function	Command	Variable	Values	Comments
OSD Access	http://**[camera ip]**/cgi-bin/param.cgi?navigate_mode&**[mode]**	**[camera ip]**	*cameras current IP	
		[mode]	OSD	Calls OSD Menu
			PTZ	P/T/Z Control Mode
OSD Menu Navigation	http://**[camera ip]**/cgi-bin/ptzctrl.cgi?ptzcmd&**[action]**	**[camera ip]**	*cameras current IP	
			UP	moves menu selection 'up'
			DOWN	moves menu selection 'down'
			LEFT	Adjusts OSD option left
			RIGHT	Adjusts OSD option right
	http://**[camera ip]**/cgi-bin/param.cgi?navigate_mode&**[mode]**	**[camera ip]**	*cameras current IP	
		[mode]	CONFIRM	Selects an OSD option
			OSD_BACK	Returns to previous menu

Image Adjustments

Function	Command	Variable	Values	Comments
Image Settings	http://**[camera ip]**/cgi-bin/param.cgi?post_image_value&**[mode]**&**[level]**	**[camera ip]**	*cameras current IP	
		[mode]	BRIGHT	adjust brightness
			SATURATION	adjust saturation
			CONTRAST	adjust contrast
			SHARPNESS	adjust sharpness
			HUE	adjust hue
		[level]	0	beginning of range
			...	ranges from 0 -14
			14	end of range
Image Orientation	http://**[camera ip]**/cgi-bin/param.cgi?post_image_value&**[mode]**&**[state]**	**[camera ip]**	*cameras current IP	
		[mode]	FLIP	flipped image adjustments
			MIRROR	mirrored image adjustments
		[state]	1	flip / mirror
			0	default
Default Image Settings	http://**[camera ip]**/cgi-bin/param.cgi?get_image_default_conf	**[camera ip]**	*cameras current IP	Defaults all image settings above

JPEG Snapshot

Function	Command	Variable	Values	Comments
Take Snapshot	http://**[camera ip]**/snapshot.jpg	**[camera ip]**	*cameras current IP	Takes a JPEG snapshot
Change Resolution	http://**[camera ip]**/cgi-bin/snapshot.cgi?post_snapshot_conf&resolution=**[size]**	**[camera ip]**	*cameras current IP	
		[size]	1920x1080	Sets JPEG resolution to 1920x1080
			960x600	Sets JPEG resolution to 960x600
			480x300	Sets JPEG resolution to 480x300

Photobooth Pictures

Function	Command	Variable	Values	Comments
Take Pictures	http://**[camera ip]**/cgi-bin/booth.cgi?0&4&**[delay]**&photo&0	**[camera ip]**	*cameras current IP	
		[delay]	1	shortest delay
			...	delay in seconds 1 - 9
			9	longest delay
Download Pictures	http://**[camera ip]**/photo**[num]**.jpg	**[num]**	1	
			...	
			4	

Photobooth Videos

Function	Command	Variable	Values	Comments
Take Video	http://**[camera ip]**/cgi-bin/booth.cgi?0&4&**[delay]**&video&**[length]**	**[camera ip]**	*cameras current IP	
		[delay]	1	shortest delay
			...	*delay in seconds 1 - 9*
			9	longest delay
		[length]	1	shortest length
			...	length in seconds 1 - 10
			10	longest length
Download Video	http://**[camera ip]**/video**[num]**.mp4	**[num]**	1	
			...	
			4	

Inquiries

Function	Command	Variable	Values	Comments
Video	http://**[camera ip]**/cgi-bin/param.cgi?get_media_video	**[camera ip]**	*cameras current IP	Network Video Configuration
Audio	http://**[camera ip]**/cgi-bin/param.cgi?get_media_audio	**[camera ip]**	*cameras current IP	Network Audio Configuration
Network	http://**[camera ip]**/cgi-bin/param.cgi?get_network_conf	**[camera ip]**	*cameras current IP	Network Configuration
Information	http://**[camera ip]**/cgi-bin/param.cgi?get_device_conf	**[camera ip]**	*cameras current IP	Camera Information
Serial Number	http://**[camera ip]**/cgi-bin/param.cgi?get_serial_number	**[camera ip]**	*cameras current IP	Serial Number *Not always accurate