

PTZOptics Control over TCP/UDP

PTZOptics currently supports various PTZ control methods, including RS232, RS485, IR remote control, web interface, TCP /UDP protocol and HTTP CGI.

PTZOPTICS uses a built-in TCP server, port number is 5678, and a built in UDP Server, port number 1259. When a client and the server establish a connection, the client sends a PTZ command to server and the server will parse and execute the PTZ commands.

PTZ command format for RS232, 485, TCP / UDP control is based on the VISCA protocol.

Control Command Set

| Command | Function | Command Packet | Note |
|---------------|----------------------------|---|--|
| CAM_Zoom | Stop | 8x 01 04 07 00 FF | |
| | Tele(Standard) | 8x 01 04 07 02 FF | |
| | Wide(Standard) | 8x 01 04 07 03 FF | |
| | Tele(Variable) | 8x 01 04 07 2p FF | p = 0(low) - 7(high) |
| | Wide(Variable) | 8x 01 04 07 3p FF | |
| | Direct | 8x 01 04 47 0p 0q 0r 0s FF | pqrs: Zoom Position |
| CAM_Focus | Stop | 8x 01 04 08 00 FF | |
| | Far(Standard) | 8x 01 04 08 02 FF | |
| | Near(Standard) | 8x 01 04 08 03 FF | |
| | Far(Variable) | 8x 01 04 08 2p FF | p = 0(low) - 7(high) |
| | Near(Variable) | 8x 01 04 08 3p FF | |
| | Auto Focus | 8x 01 04 38 02 FF | |
| | Manual Focus | 8x 01 04 38 03 FF | AF On/Off |
| | Auto/Manual | 8x 01 04 38 10 FF | |
| Direct | 8x 01 04 48 0p 0q 0r 0s FF | pqrs: Focus Position | |
| Pan_tiltDrive | Up | 8x 01 06 01 VV WW 03 01 FF | |
| | Down | 8x 01 06 01 VV WW 03 02 FF | |
| | Left | 8x 01 06 01 VV WW 01 03 FF | |
| | Right | 8x 01 06 01 VV WW 02 03 FF | |
| | Upleft | 8x 01 06 01 VV WW 01 01 FF | VV: Pan speed 0x01 (low speed) to 0x18 (high speed) |
| | Upright | 8x 01 06 01 VV WW 02 01 FF | |
| | DownLeft | 8x 01 06 01 VV WW 01 02 FF | WW: Tilt speed 0x01 (low speed) to 0x14 (high speed) |
| | DownRight | 8x 01 06 01 VV WW 02 02 FF | |
| | Stop | 8x 01 06 01 VV WW 03 03 FF | YYYY: Pan Position ZZZZ: Tilt Position |
| | AbsolutePosition | 8x 01 06 02 VV WW 0Y 0Y 0Y 0Y 0Z 0Z 0Z 0Z FF | |
| | RelativePosition | 8x 01 06 03 VV WW 0Y 0Y 0Y 0Y 0Z 0Z 0Z 0Z FF | |
| | Home | 8x 01 06 04 FF | |
| CAM_Memory | Reset | 8x 01 04 3F 00 pp FF | |
| | Set | 8x 01 04 3F 01 pp FF | pp: Memory Number(=0 to 254) |
| | Recall | 8x 01 04 3F 02 pp FF | |

Enquire Command Set

| Inquiry Command List | | | |
|----------------------|----------------|-------------------------------------|--|
| Command | Command | Inquiry Packet | Comme |
| CAM_ZoomPosI | 8x 09 04 47 FF | y0 50 0p 0q 0r 0s FF | pqrs: Zoom Position |
| CAM_FocusPosI | 8x 09 04 48 FF | y0 50 0p 0q 0r 0s FF | pqrs: Focus Position |
| Pan-tiltPosInq | 8x 09 06 12 FF | y0 50 0w 0w 0w 0w 0z 0z 0z 0z FF | www: Pan Position zzzz: Tilt Position |

Note:

The [x] in the above table is the camera address, [y] = [x + 8]

PTZOptics Control over HTTP CGI

Pan and Tilt control URL format as below:

http://[Camera IP]/cgi-bin/ptzctrl.cgi?ptzcmd&[action]&[pan speed]&[tilt speed]

More descriptions:

[Camera IP]: PTZOPTICS IP address;

[action] including: up, down, left, right, ptzstop;

[pan speed] : 1(low speed) – 24(high speed);

[tilt speed]: 1(low speed) – 20(high speed).

Zoom control URLformat as below:

http://[Camera IP]/cgi-bin/ptzctrl.cgi?ptzcmd&[action]&[zoom speed]

More descriptions:

[Camera IP]: PTZOPTICS IP address;

[action] including: zoomin, zoomout, zoomstop;

[zoom speed]: 0(low speed) – 7(high speed)。

Focus control URLformat as below:

http://[Camera IP]/cgi-bin/ptzctrl.cgi?ptzcmd&[action]&[focus speed]

More descriptions:

[Camera IP]: PTZOPTICS IP address;

[action] including: focusin, focusout, focusstop;

[focus speed]: 0(low speed) – 7(high speed)

Preset Position control URL format as below:

http://[Camera IP]/cgi-bin/ptzctrl.cgi?ptzcmd&[action]&[position number]

More descriptions:

[Camera IP]: PTZOPTICS IP

address; [action] including:

posset, poscall; [position

number]: 0-89, 100-254