**V BOT**

## V BOT VISCA IP Commands

**Execution and Inquiry Command List**

|  |  |  |  |
| --- | --- | --- | --- |
| **Command Set** | **Command** | **Command Packet** | **Comments** |
| **Inquiry Command** | **Command Packet** | **Inquiry Packet** | **Comments** |
| CAM\_VersionInq | 8x 09 00 02 FF | y0 50 00 01 mn pq rs tu vw FF | mnpq: Model Code (0x11 0x20)  rstu: ROM version (0x00 0x01)  vw: Socket Number (0x01) |
| CAM\_Power | On | 8x 01 04 00 02 FF | Power ON/OFF |
| Off (Standby) | 8x 01 04 00 03 FF |
| CAM\_PowerInq | 8x 09 04 00 FF | y0 50 02 FF | On |
| y0 50 03 FF | Off (Standby) - at Visca Only On |
| CAM\_XF605\_Zoom XF605 | XF605 Direct | 8x 11 04 47 4z 0p 0q 0r 0s FF | ZOOM LOCATION PRECISE CONTROL at XF605 Only On  z: 1 (Slow) to 7 (Fast)  pqrs: Zoom Position (MIN 530,MAX 7300) |
| CAM\_XF605\_ZoomInq XF605 | 8x 29 04 47 FF | y0 50 0p 0q 0r 0s FF | pqrs: See the VBOT Command Setting Values (ZOOM) section |
| CAM\_XF605\_Focus XF605 | XF605 Direct | 8x 01 04 48 0p 0q 0r 0s FF | Direct XF605 (80~2000) at XF605 Only On |
| CAM\_XF605\_FocusInq XF605 | 8x 29 04 48 FF | |  |  | | --- | --- | | y0 50 0p 0q 0r 0s FF |  | | pqrs: See the VBOT Command Setting Values (FOCUS) section |
| CAM\_Zoom XF605 | VISCA Direct | 8x 11 04 47 2p 0p 0q 0r 0s FF | p: 1 (Slow) to 7 (Fast)  pqrs: Zoom Position (MIN 0x0000, MAX 0x4000) |
| CAM\_ZoomInq XF605 | 8x 09 04 47 FF | y0 50 0p 0q 0r 0s FF | pqrs: See the VISCA Command Setting Values (Zoom) section |
| CAM\_Focus XF605 | VISCA Direct | 8x 01 04 48 0p 0q 0r 0s FF | pqrs: See the VISCA Command Setting Values (FOCUS) section (Min 0x1000 Max0xC000) at XF605 Only On |
| CAM\_FocusInq XF605 | 8x 09 04 48 FF | y0 50 0p 0q 0r 0s FF | pqrs: See the VISCA Command Setting Values (FOCUS) section |
| CAM\_Zoom | Stop | 8x 01 04 07 00 FF | Zoom Control |
| 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=1 (Low) to 7 (High) |
| Wide (Variable) | 8x 01 04 07 3p FF |
| 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=1 (Low) to 7 (High) (Porstick 0x31/0x21) |
| Near (Variable) | 8x 01 04 08 3p FF |
| Auto Focus | 8x 01 04 38 02 FF | AF ON/OFF Toggle  pqrs: See the VISCA Command Setting Values (FOCUS) section  VISCA (0x2000 ~0xC000) |
| Manual Focus | 8x 01 04 38 03 FF |
| Auto/Manual | 8x 01 04 38 10 FF |
| EXPOSURE MODE | Full Auto | 8x 01 04 39 00 FF | IRIS=auto, Shutter =auto, Gain=auto |
| Manual | 8x 01 04 39 03 FF |  |
| EXPOSURE  AE Level (ISO)  XF605 | Up | 8x 01 04 0E 02 FF | pq: See the VISCA Command Setting Values (AE Level) 0x00~0x10 |
| Down | 8x 01 04 0E 03 FF |
| Direct | 8x 01 04 4E 00 00 0p 0q FF |
| CAM\_AE LevelInq XF605 | 8x 09 04 4E FF | y0 50 00 00 00 0p FF | p: See the VISCA Command Setting Values (AE Level) section |
| EXPOSURE  IRIS  XF605 | Up (OPEN) | 8x 01 04 0B 02 FF | Iris Setting  Up(-1), Down(+1)  pq: See the VISCA Command Setting Values (IRIS) section |
| Down (CLOSE) | 8x 01 04 0B 03 FF |
| Direct | 8x 01 04 4B 00 00 0p 0q FF |
| CAM\_AE IRISInq XF605 | 8x 09 04 4B FF | y0 50 00 00 0p 0q FF | pq: See the VISCA Command Setting Values (IRIS) section |

## V BOT VISCA IP Commands

**Execution and Inquiry Command List**

|  |  |  |  |
| --- | --- | --- | --- |
| **Command Set** | **Command** | **Command Packet** | **Comments** |
| **Inquiry Command** | **Command Packet** | **Inquiry Packet** | **Comments** |
| EXPOSUREShutter XF605 | Up | 8x 01 04 0A 02 FF | 1/4 steppe |
| Down | 8x 01 04 0A 03 FF |
| Direct | 8x 01 04 4A 00 00 0p 0q FF |
| CAM\_AE SHUTTERInq XF605 | 8x 09 04 4A FF | y0 50 00 00 0p 0q FF | pq: See the VISCA Command Setting Values (SHUTTER) section |
| EXPOSURE  Gain (ISO)  XF605 | Up | 8x 01 04 0C 02 FF | pq: See the VISCA Command Setting Values (GAIN) section |
|  | Down | 8x 01 04 0C 03 FF |  |
| CAM\_AE SHUTTERInq XF605 | Direct | 8x 01 04 4C 00 00 0p 0q FF | pq: See the VISCA Command Setting Values (SHUTTER) section |
| CAM\_Preset | Reset | 8x 01 04 3F 00 0p FF | p : preset 0 ~ 9  q r : Speed (0 ~23) |
| Set | 8x 01 04 3F 01 0p FF |
| Recall | 8x 01 04 3F 02 0p FF |
| CAM\_Preset  WB  RGAIN  XF605 | Speed | 8x 01 7E 01 0B 0p qr FF | p : preset 0 ~ 9  q r : Speed (0 ~23)  pq: See the VISCA Command Setting Values (AE Level) -50~50  0~100 XF605 1.0.3.1 No support(확인필요) |
| Up | 8x 01 04 03 02 FF |
| Down | 8x 01 04 03 03 FF |
| Direct | 8x 01 04 44 00 00 0p 0q FF |
| CAM\_WB RGAINInq  WB  BGAIN  XF605 | 8x 09 04 43 FF | y0 50 00 00 0p 0q FF | pq: See the VISCA Command Setting Values (R GAIN) section  pq: See the VISCA Command Setting Values (B Gain -50~50  0~100 XF605 1.0.3.1 No support(확인필요) |
| Up | 8x 01 04 04 02 FF |
| Down | 8x 01 04 04 03 FF |
| CAM\_WB RGAINInq | Direct | 8x 01 04 44 00 00 0p 0q FF | pq: See the VISCA Command Setting Values (R GAIN) section |
| CAM\_WB BGAINInq  WB MANUAL XF605 | 8x 09 04 44 FF | y0 50 00 00 0p 0q FF | pq: See the VISCA Command Setting Values (B GAIN) section  auto white balance  Executes auto white balance |
| AUTO | 8x 01 04 35 00 FF |
| One Push (Hold Off) | 8x 01 04 35 03 FF |
| CAM\_WB BGAINInq | One Push (Hold On) | 8x 01 04 10 05 FF | Stops auto white balance |
| WB MANUAL XF605 | kelvin | 8x 01 04 35 05 FF | 3510K |
| kelvin | 8x 01 04 35 11 FF | 3510K |
| daylight | 8x 01 04 35 12 FF | 5600K |
| tungsten | 8x 01 04 35 13 FF | 3200K |
| wb\_a | 8x 01 04 35 14 FF | 5600K |
| wb\_b | 8x 01 04 35 15 FF | 5600k |
| Up | 8x 01 04 35 16 FF | WB kelvin Setting  Up(-1), Down(+1)  pq: See the VISCA Command Setting Values (WB ) section |
| Down | 8x 01 04 35 17 FF |
| Direct | 8x 01 04 35 08 00 0p 0q FF |
| CAM\_WB GAINInq | 8x 09 04 45 FF | y0 50 00 00 0p 0q FF | pq: See the VISCA Command Setting Values (GAIN) section |

## V BOT VISCA IP Commands

**Execution and Inquiry Command List**

|  |  |  |  |
| --- | --- | --- | --- |
| **Command Set** | **Command** | **Command Packet** | **Comments** |
| **Inquiry Command** | **Command Packet** | **Inquiry Packet** | **Comments** |
| CAM Info Display | On/Off | 8x 01 06 06 10 FF | Turn On/Off Info screen (XF605 HDMI OSD on/off) |
| Pan\_tilt Drive | Up | 8x 01 06 01 VV WW 03 01 FF | VV: Pan speed 0x01 to 0x18 (00: Stop)  WW: Tilt Speed 0x01 to 0x17, (00: Stop)  YYYY: Pan Position  ZZZZ: Tilt Position (center 0000)  Refer to the section of the Pan/Tilt Position (for reference) of VISCA Command Setting Values. |
| 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 |
| UpRight | 8x 01 06 01 VV WW 02 01 FF |
| DownLeft | 8x 01 06 01 VV WW 01 02 FF |
| DownRight | 8x 01 06 01 VV WW 02 02 FF |
| Stop | 8x 01 06 01 VV WW 03 03 FF |
| 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 |  |
| Pan\_tilt PosInq | 8x 09 06 12 FF | y0 50 0w 0w 0w 0w 0z 0z 0z 0z FF | wwww = Pan Position  zzzz = Tilt Position |
| Camera Menu | Menu | 8x 01 06 06 02 FF | Please use it after Display On  CAM Info Display On (HDMI OUT On) |
| Up | 8x 01 7E 01 02 30 02 FF |
| Down | 8x 01 7E 01 02 30 03 FF |
| Left | 8x 01 7E 01 02 30 04 FF |
| Right | 8x 01 7E 01 02 30 05 FF |
| Exit/Cancel | 8x 11 06 06 03 FF |
| Enter | 8x 11 06 06 03 FF |  |

**Execution and Inquiry Command List**

|  |  |  |  |
| --- | --- | --- | --- |
| **Command Set** | **Command** | **Command Packet** | **Comments** |
| **Inquiry Command** | **Command Packet** | **Inquiry Packet** | **Comments** |
| CAM\_TallyLamp | On/Off | 8x 01 7E 01 0A 00 0p FF | p: 2h=On, 3h=Offf |
| CAM\_TallyLampInq | 8x 09 7E 01 0A FF | y0 50 02 FF | On |
| y0 50 03 FF | Off |

**Pan/Tilt Position (for reference) for VISCA Command Setting Values**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Pan**   |  |  |  | | --- | --- | --- | | **Angle (degrees)** | **Left** | **Right** | | **YYYY values** | **YYYY values** | | 0 | 0000 | 0000 | | 10 | 014D | FEB3 | | 20 | 029A | FD66 | | 30 | 03E7 | FC19 | | 40 | 0535 | FACB | | 50 | 0682 | F97E | | 60 | 07CF | F831 | | 70 | 091D | F6E3 | | 80 | 0A6A | F596 | | 90 | 0BB7 | F449 | | 100 | 0D05 | F2FB | | 110 | 0E52 | F1AE | | 120 | 0F9F | F061 | | 130 | 10ED | EF13 | | 140 | 123A | EDC6 | | 150 | 1387 | EC79 | | 160 | 14D5 | EB2B | | 170 | 1622 | E9DE | |  | **Tilt**   |  |  |  | | --- | --- | --- | | **Angle (degrees)** | **Up** | **Down** | | **ZZZZ values** | **ZZZZ values** | | 0 | 0000 | 0000 | | 5 | 00A6 | FF5A | | 10 | 014D | FEB3 | | 15 | 01F3 | FE0D | | 20 | 029A | FD66 | | 25 | - | FCBF | | 30 | - | FC19 | | 35 | - | FB72 | | 40 | - | FACB |   **[ Position Value = (Angle \* 8533) >> 8 ]** |

**Focus Position (for reference) for VISCA Command Setting Values**- XF605

|  |  |  |
| --- | --- | --- |
| **Focus Ratio** | **Focus Distance** | |
| 0x1000 | 2000 | ∞ |
| 0x2000 | 1460 | 14.6m |
| 0x3000 | 630 | 6.3m |
| 0x4000 | 3900 | 3.9m |
| 0x5000 | 280 | 2.8m |
| 0x6000 | 220 | 2.2m |
| 0x7000 | 170 | 1.7m |
| 0x8000 | 140 | 1.4m |
| 0x9000 | 120 | 1.2m |
| 0xA000 | 100 | 1.0m |
| 0xB000 | 90 | 0.9m |
| 0xC000 | 80 | 0.8m |
| 2000 | 2000 | ∞ |
| 1800 | 1800 | 1.8m |
| …. | … | … |
| 90 | 90 | 0.9m |
| 80 | 80 | 0.8m |

0x1000 이하값이면 Direct

**AE Shutter Position (for reference) for VISCA Command Setting Values**- XF605

|  |  |  |
| --- | --- | --- |
| **AE Shutter** | **AE Shutter Distance** | |
| 0x00 | 4 | 1/4 |
| 0x01 | 8 | 1/8 |
| 0x02 | 15 | 1/15 |
| 0x03 | 30 | 1/30 |
| 0x04 | 34 | 1/34 |
| 0x05 | 40 | 1/40 |
| 0x06 | 48 | 1/48 |
| 0x07 | 50 | 1/50 |
| 0x08 | 60 | 1/60 |
| 0x09 | 75 | 1/75 |
| 0x0A | 90 | 1/90 |
| 0x0B | 100 | 1/100 |
| 0x0C | 120 | 1/120 |
| 0x0D | 150 | 1/150 |
| 0x0E | 180 | 1/180 |
| 0x0F | 210 | 1/210 |
| 0x10 | 250 | 1/250 |
| 0x11 | 300 | 1/300 |
| 0x12 | 360 | 1/360 |
| 0x13 | 420 | 1/420 |
| 0x14 | 500 | 1/500 |
| 0x15 | 600 | 1/600 |
| 0x16 | 720 | 1/720 |
| 0x17 | 840 | 1/840 |
| 0x18 | 1000 | 1/1000 |
| 0x19 | 1200 | 1/1200 |
| 0x1A | 1400 | 1/1400 |
| 0x1B | 1700 | 1/1700 |
| 0x1C | 2000 | 1/2000 |

**AE Gain Position (for reference) for VISCA Command Setting Values**- XF605

|  |  |  |
| --- | --- | --- |
| **Gain Ratio** | **Gain Distance** | |
| 0 | -60 | -6dB |
| 1 | -30 | -3dB |
| 2 | 0 | 0dB |
| 3 | 30 | 3dB |
| 4 | 60 | 6dB |
| 5 | 90 | 9dB |
| 6 | 120 | 12dB |
| 7 | 150 | 15dB |
| 8 | 180 | 18dB |
| 9 | 210 | 21dB |

**AE GainLimit Position (for reference) for VISCA Command Setting Values**- XF605

|  |  |  |
| --- | --- | --- |
| **GainLimit Ratio** | **Gain Distance** | |
| 0x0F | -60 | -6dB |
| 0x0E | -30 | -3dB |
| 0x0D | 0 | 0dB |
| 0x0C | 30 | 3dB |
| 0x0B | 60 | 6dB |
| 0x0A | 90 | 9dB |
| 0x09 | 120 | 12dB |
| 0x08 | 150 | 15dB |
| 0x07 | 180 | 18dB |
| 0x06 | 210 | 21dB |

**AE IRIS Position (for reference) for VISCA Command Setting Values**- XF605

|  |  |  |  |
| --- | --- | --- | --- |
| **AE IRIS Ratio** | **IRIS Distance** | |  |
| 0x00 | 2000 | F20 |  |
| 0x01 | 1600 | F16 |  |
| 0x02 | 1500 | F15 |  |
| 0x03 | 1300 | F13 |  |
| 0x04 | 1200 | F12 |  |
| 0x05 | 1100 | F11 | XF605 Max |
| 0x06 | 1000 | F10 |  |
| 0x07 | 950 | F9.5 |  |
| 0x08 | 870 | F8.7 |  |
| 0x09 | 800 | F8.0 |  |
| 0x0A | 730 | F7.3 |  |
| 0x0B | 670 | F6.7 |  |
| 0x0C | 620 | F6.2 |  |
| 0x0D | 560 | F5.6 |  |
| 0x0E | 520 | F5.2 |  |
| 0x0F | 480 | F4.8 |  |
| 0x10 | 440 | F4.4 |  |
| 0x11 | 400 | F4.0 |  |
| 0x12 | 370 | F3.7 |  |
| 0x13 | 340 | F3.4 |  |
| 0x14 | 310 | F3.1 |  |
| 0x15 | 280 | F2.8 | XF605 Min |
| 0x16 | 260 | F2.6 |  |
| 0x17 | 240 | F2.4 |  |
| 0x18 | 220 | F2.2 |  |
| 0x19 | 190 | F1.9 |  |

**AE Level Position (for reference) for VISCA Command Setting Values**- XF605

|  |  |  |
| --- | --- | --- |
| **AE Level Ratio** | **AE Level Distance** | |
| 0 | -8 | AE -2 |
| 1 | -7 | AE -1.75 |
| 2 | -6 | AE -1.5 |
| 3 | -5 | AE -1.25 |
| 4 | -4 | AE -1 |
| 5 | -3 | AE -0.75 |
| 6 | -2 | AE -0.5 |
| 7 | -1 | AE -0.25 |
| 8 | 0 | AE 0 |
| 9 | 1 | AE 0.25 |
| 10 | 2 | AE 0.5 |
| 1 | 3 | AE 0.75 |
| 12 | 4 | AE 1 |
| 13 | 5 | AE 1.25 |
| 14 | 6 | AE 1.5 |
| 15 | 7 | AE 1.75 |
| 16 | 8 | AE 2 |

**WB Rgain/Bgain Position (for reference) for VISCA Command Setting Values**- XF605

|  |  |  |
| --- | --- | --- |
| **WB gain Ratio** | **WB gain Distance** | |
| 0 | -50 |  |
| 1 | -49 |  |
| 2 | -48 |  |
| … | … |  |
| 50 | 0 |  |
| 51 | 1 |  |
| … | … |  |
| 99 | 49 |  |
| 100 | 50 |  |

**WB kelvin Position (for reference) for VISCA Command Setting Values**- XF605

|  |  |  |
| --- | --- | --- |
| **WB kelvin Ratio** | **WB kelvin Distance** | |
| 0 | 2000 | 2000k |
| 1 | 2020 | 2020k |
| 2 | 2050 | 2050k |
| … | … |  |
| 50 | 4000 | 4000k |
| 51 | 4080 | 4080k |
| … | … |  |
| 86 | 14290 | 14290k |
| 87 | 15000 | 15000k |