PTR-10 VISCA Extension Command V0.6

MAY 24, 2022

Model: PTR-10,PTR-10T

**Menu function Command List**

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| **Command Set** | **Command** | **Command Packet** | **Comments** |
| **Set motor**  P/T Acceleration | reset | 8x 01 44 31 02 01 01 00 FF | 10=auto,  00=fast,  01=middle, (Default)  02=slow |
| up | 8x 01 44 31 02 01 01 02 FF |
| down | 8x 01 44 31 02 01 01 03 FF |
|  |  |
| **Set motor**  P/T speed mode | reset | 8x 01 44 31 02 02 01 00 FF | 0=normal, (Default)  1=Auto,  2=Sport |
| up | 8x 01 44 31 02 02 01 02 FF |
| down | 8x 01 44 31 02 02 01 03 FF |
|  |  |
| **Set motor**  PAN Torque ADJ. | reset | 8x 01 44 31 02 03 01 00 FF | 0=low,  1=+1, (Default)  2=+2,  3=+3 |
| up | 8x 01 44 31 02 03 01 02 FF |
| down | 8x 01 44 31 02 03 01 03 FF |
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| **Set motor**  PAN offset ADJ. | reset | 8x 01 44 31 02 03 02 00 FF | 00~06,  default=00  Offset=(p\*0.9) degree |
| up | 8x 01 44 31 02 03 02 02 FF |
| down | 8x 01 44 31 02 03 02 03 FF |
|  |  |
| **Set motor**  PAN \_MIN\_LIMIT | reset | 8x 01 44 31 02 03 03 00 FF | 0~175(DEC.) (-)  Default=170 (-) |
| up | 8x 01 44 31 02 03 03 02 FF |
| down | 8x 01 44 31 02 03 03 03 FF |
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| **Set motor**  PAN\_MAX\_LIMIT | reset | 8x 01 44 31 02 03 04 00 FF | 0~175(DEC.) (+)  Default=170 (+) |
| up | 8x 01 44 31 02 03 04 02 FF |
| down | 8x 01 44 31 02 03 04 03 FF |
|  |  |
| **Set motor**  TILT Torque ADJ. | reset | 8x 01 44 31 02 04 01 00 FF | 0=low,  1=+1, (Default)  2=+2,  3=+3 |
| up | 8x 01 44 31 02 04 01 02 FF |
| down | 8x 01 44 31 02 04 01 03 FF |
|  |  |
| **Set motor**  TILT offset ADJ. | reset | 8x 01 44 31 02 04 02 00 FF | 00~07,  default=03  Offset=(p\*0.9) degree |
| up | 8x 01 44 31 02 04 02 02 FF |
| down | 8x 01 44 31 02 04 02 03 FF |
|  |  |
| **Set motor**  TILT\_MIN\_LIMIT | reset | 8x 01 44 31 02 04 03 00 FF | 0~45(DEC.) (-)  Default=43 (-) |
| up | 8x 01 44 31 02 04 03 02 FF |
| down | 8x 01 44 31 02 04 03 03 FF |
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| **Set motor**  TILT\_MAX\_LIMIT | reset | 8x 01 44 31 02 04 04 00 FF | 0~45(DEC.) (+)  Default=43 (+) |
| up | 8x 01 44 31 02 04 04 02 FF |
| down | 8x 01 44 31 02 04 04 03 FF |
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| **Set memory**  **Group** play | **direct** | 8x 01 44 31 03 08 0x 47  pp qq 0r 0s 0t 0u 0v FF | x=group No.  =1~8,  pp=index No.=1~10H  qq=PST No.=1~4C,  r=off/on=0/1,  s=speed limit  =1~12H,  tu=waiting time  = 0~ffH SEC,  v=next position  =0=return |
|  | |

Examples:

1). Set GROUT-1 item-1 to PST-1, ON, speed 10, waiting 5 SEC, Next position=next item.

81 01 44 31 03 08 01 47 01 01 01 0A 00 05 00 FF

2). Set GROUT-1 item-2 to PST-2, ON, speed 12, waiting 9 SEC, Next position=return to item-1 .

81 01 44 31 03 08 01 47 02 02 01 0C 00 09 01 FF

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| **Set video mode**  Selection way | reset | 8x 01 44 31 04 01 01 00 FF | 0=select by the menu  1=select by the DIP switch  (Default) |
| up | 8x 01 44 31 04 01 01 02 FF |
| down | 8x 01 44 31 04 01 01 03 FF |
|  |  |
| **Set video mode** | reset | 8x 01 44 31 04 02 01 00 FF | 2=1280x720  6=1920x1080(Default)  8=2160p25/30 |
| up | 8x 01 44 31 04 02 01 02 FF |
| down | 8x 01 44 31 04 02 01 03 FF |
|  |  |
| **Set HDMI color space** | reset | 8x 01 44 31 04 03 01 00 FF | 0=YUV, (Default)  1=RGB |
| up | 8x 01 44 31 04 03 01 02 FF |
| down | 8x 01 44 31 04 03 01 03 FF |
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| **Set remote control**  Pan/Tilt reverse | reset | 8x 01 44 31 05 01 01 00 FF | p=0=off, (default)  1=pan reverse,  2=tilt reverse,  3=pan & tilt reverse |
| up | 8x 01 44 31 05 01 01 02 FF |
| down | 8x 01 44 31 05 01 01 03 FF |
| direct | 8x 01 44 31 05 01 01 47 0p FF |
| **Set remote control**  RS-422 VISCA ID mode | reset | 8x 01 44 31 05 03 01 00 FF | p=0=by DIP switch(default)  =1=by menu |
| up | 8x 01 44 31 05 03 01 02 FF |
| down | 8x 01 44 31 05 03 01 03 FF |
|  |  |
| **Set remote control**  RS-422 VISCA ID | reset | 8x 01 44 31 05 03 02 00 FF | p= ID=1~7 |
| up | 8x 01 44 31 05 03 02 02 FF |
| down | 8x 01 44 31 05 03 02 03 FF |
|  |  |
| **Set remote control**  RS-422 Baud Rate | reset | 8x 01 44 31 05 03 03 00 FF | RS-422 baud rate  0=9600, 1=19200,  2=38400, 3=115200  Default=2 |
| up | 8x 01 44 31 05 03 03 02 FF |
| down | 8x 01 44 31 05 03 03 03 FF |
|  |  |
| **Set remote control** response time of recall | reset | 8x 01 44 31 05 03 04 00 FF | 0=leader (default),  1= tailer |
| up | 8x 01 44 31 05 03 04 02 FF |
| down | 8x 01 44 31 05 03 04 03 FF |
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| **Set Remote-out** mode | reset | 8x 01 44 31 05 06 01 00 FF | 0=RS-422, 1=RS-232  3=BX-lens,  4=OK-Protocol(Canon)  5=LANC SONY  6=LANC Canon  7=LANC Panasonic  8=LANC JVC  0a=Panasonic-two-port |
| up | 8x 01 44 31 05 06 01 02 FF |
| down | 8x 01 44 31 05 06 01 03 FF |
|  |  |
| **Set remote-out** Baud rate | reset | 8x 01 44 31 05 06 02 00 FF | P=RS-422/232 baud rate  0=9600, 1=19200,  2=38400, 3=115200  Default=2 |
| up | 8x 01 44 31 05 06 02 02 FF |
| down | 8x 01 44 31 05 06 02 03 FF |
| direct | 8x 01 44 31 05 06 02 47 0p FF |
| **Set remote-out** VISCA ID | reset | 8x 01 44 31 05 06 03 00 FF | VISCA ID=1~7 |
| up | 8x 01 44 31 05 06 03 02 FF |
| down | 8x 01 44 31 05 06 03 03 FF |
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| **Set remote-out**  BX Zoom Lens Offset | reset | 8x 01 44 31 05 06 04 00 FF | p=0~5  0=>-3, 1=>-2, 2=>-1  3=>0 (DFT),  4=>+1, 5=>+2, 6=>+3 |
| up | 8x 01 44 31 05 06 04 02 FF |
| down | 8x 01 44 31 05 06 04 03 FF |
| direct | 8x 01 44 31 05 06 04 47 0p FF |
| **Set remote-out**  Zoom Encoder Mode | reset | 8x 01 44 31 05 06 05 00 FF | 0=off,  1=normal, 2=reverse  3=TILTA CTL,  4=TILTA reverse |
| up | 8x 01 44 31 05 06 05 02 FF |
| down | 8x 01 44 31 05 06 05 03 FF |
|  |  |
| **Set remote-out** TILTA TORQUE | reset | 8x 01 44 31 05 06 06 00 FF | 5~99  Default=25 |
| up | 8x 01 44 31 05 06 06 02 FF |
| down | 8x 01 44 31 05 06 06 03 FF |
|  |  |
| Set  PTZ INFO. Output | reset | 8x 01 44 31 05 07 01 00 FF | 0=off,  1= Continued PTZ information output on the Extended RS-422. |
| up | 8x 01 44 31 05 07 01 02 FF |
| down | 8x 01 44 31 05 07 01 03 FF |
|  |  |
| Append Zoom POS. to P/T INFO. (VISCA) | reset | 8x 01 44 31 05 07 02 00 FF | 0=off,  1= Append the Zoom POS. to P/T INFO. of the VISCA stream. |
| up | 8x 01 44 31 05 07 02 02 FF |
| down | 8x 01 44 31 05 07 02 03 FF |
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| **Set System**  TALLY LIGHT | reset | 8x 01 44 31 06 01 01 00 FF | p=tally light color  0=OFF, 1= RED  2=GREEN,  3=two tally: red & green |
| up | 8x 01 44 31 06 01 01 02 FF |
| down | 8x 01 44 31 06 01 01 03 FF |
| direct | 8x 01 44 31 06 01 01 47 0p FF |
| **Set System**  MODEL No. | reset | 8x 01 44 31 06 02 01 00 FF | 0010 (default)  Or 0150 |
| up | 8x 01 44 31 06 02 01 02 FF |
| down | 8x 01 44 31 06 02 01 03 FF |
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| **Set System**  DEBUG DISPLAY P/T OSD | direct | 8x 01 44 31 06 04 01 47 0p FF | p-bit0=1=pan OSD on (\*\*\*\*)  p-bit1=1=tilt OSD on (\*\*\*\*)  p-bit2=1=zoom OSD on (\*\*\*\*)  p-bit3=1=focus OSD on (\*\*\*\*) |
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| **Set System**  DEBUG DISPLAY OSD | direct | 8x 01 44 31 06 04 02 47 0p 0q FF | pp-bit0=IR OSD, (\*\*\*\*)  bit1=CAM. OSD (\*\*\*\*)  bit2=RMC-RX OSD (\*\*\*\*)  bit3=RMC-TX OSD (\*\*\*\*)  bit4= spare  qq-bit0=M\_CTL-RX OSD(\*\*\*\*)  bit1=M\_CTL-TX OSD (\*\*\*\*)  bit2=REG. OSD (\*\*\*\*)  bit3=VOUT TEST (\*\*\*\*) |
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| **Set System**  Reset all | reset | 8x 01 44 31 06 05 01 02 FF |  |
| **Set System**  SOFTWARE update with USB | Update all | 8x 01 44 31 06 06 01 6f FF | Update the MCPU & MCTL firmware from the USB drive. |

**\*\*\*\*: For Debug only.**

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| **Reset**  Pan/Tilt position | reset | 8x 01 44 31 07 01 01 02 FF |  |

**Menu function Inquiry Command List**

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| **Inquiry Command** | **Command Packet** | **Inquiry Packet** | **Comments** |
| **Motor**  P/T Acceleration Inq. | 8x 09 44 31 02 01 01 FF | y0 50 44 31 02 01 01 pp FF | pp=10=auto,  00=fast,01=middle,02=slow Default=middle |
| **motor**  P/T speed mode Inq. | 8x 09 44 31 02 02 01 FF | y0 50 44 31 02 02 01 0p FF | p=0=normal(default), 1=Auto  2=Sport |
| **motor**  PAN Torque ADJ. Inq. | 8x 09 44 31 02 03 01 FF | y0 50 44 31 02 03 01 0p 0q FF | pq=00=low,1=+1,2=+2,3=+3  Default=+1 |
| **motor**  PAN offset ADJ. Inq. | 8x 09 44 31 02 03 02 FF | y0 50 44 31 02 03 02 0p 0q FF | pq=00~06, default=00  Offset=(p\*0.9) degree |
| **motor** PAN\_MIN\_LIMIT Inq. | 8x 09 44 31 02 03 03 FF | y0 50 44 31 02 03 03 0p 0q FF | pq=0~175(DEC.) (-)  Default=170 (-) |
| **motor** PAN\_MAX\_LIMIT Inq. | 8x 09 44 31 02 03 04 02 FF | y0 50 44 31 02 03 04 0p 0q FF | pq=0~175(DEC.) (+)  Default=170 (+) |
| **motor**  TILT Torque ADJ. Inq. | 8x 09 44 31 02 04 01 FF | y0 50 44 31 02 04 01 0p 0q FF | pq=00=low,1=+1,2=+2,3=+3  Default=+1 |
| **motor**  TILT offset ADJ. Inq. | 8x 09 44 31 02 04 02 FF | y0 50 44 31 02 04 02 0p 0q FF | pq=00~07, default=03  Offset=(p\*0.9) degree |
| **motor** TILT\_MIN\_LIMIT Inq. | 8x 09 44 31 02 04 03 FF | y0 50 44 31 02 04 03 0p 0q FF | pq=0~45(DEC.) (-)  Default=43 (-) |
| **motor** TILT\_MAX\_LIMIT Inq. | 8x 09 44 31 02 04 04 FF | y0 50 44 31 02 04 04 0p 0q FF | pq=0~45(DEC.) (+)  Default=43 (+) |
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| **Memory**  preset position Inq. | 8x 09 44 31 03 01 pp FF | y0 50 44 31 03 01 pp qq 0r 0s 0t 0u 0v 0w 0x 0y 0z FF | pp=preset No.=01~3C  qq=speed=0~12  rstuv=pan position  wxyz=tilt position |
| 8x 09 44 31 03 02 pp FF | y0 50 44 31 03 02 pp 0g 0h 0i 0j 0k 0r 0s 0t 0u  0v 0x 0y FF | pp=preset No.=01~3C  ghij=zoom position(\* ZEK-1)  k=zoom speed  r= focus mode (\*\*)  stuv=focus position(\*\*)  x= IRIS mode (\*\*)  y= IRIS position (\*\*) |
| 8x 09 44 31 03 03 pp FF | y0 50 44 31 03 03 pp 0g 0h FF | pp=preset No.=01~3C  g= shutter (\*\*)  h= WB mode (\*\*) |
| **Memory**  Group play Inq. | 8x 09 44 31 03 08 0p qq FF | y0 50 44 31 03 08 0p qq rr 0s 0t 0u 0v 0w FF | p=group No.=1~8  qq=Index No.= 1~10  rr=preset No.=1~3C  s=ON/OFF=1,0  t=speed=1~12  uv=waiting time  w=next action=0~9,  0=Next item,  1=return,  2~9=group1~8 |
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**\*\*: Depend on the camera ability.**

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| **video mode**  selection way Inq. | 8x 09 44 31 04 01 01 FF | y0 50 44 31 04 01 01 0p FF | p=0=select by the menu (\*\*\*) =1=select by the DIP switch |
| video mode Inq. | 8x 09 44 31 04 02 01 FF | y0 50 44 31 04 02 01 0p FF | p=2=1280x720  6=1920x1080(Default)  8=2160p25/30 |
| HDMI color space Inq. | 8x 09 44 31 04 03 01 FF | y0 50 44 31 04 03 01 0p FF | p=0=YUV, (Default)  1=RGB |

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| **remote control**  PAN/TILT reverse Inq. | 8x 09 44 31 05 01 01 FF | y0 50 44 31 05 01 01 0p FF | p=0=off,1=pan reverse,  2=tilt reverse,  3=pan & tilt reverse |
| **Remote control**  remote source Inq. | 8x 09 44 31 05 02 01 FF | y0 50 44 31 05 02 01 0p FF | p=0~2  0=OFF, 1=RS-422, 2=DVIP |
| **Remote control**  RS422 VISCA ID mode Inq. | 8x 09 44 31 05 03 01 FF | y0 50 44 31 05 03 01 0p FF | p=0=by the DIP switch  =1=by the menu |
| **Remote control**  RS422 VISCA ID Inq. | 8x 09 44 31 05 03 02 FF | y0 50 44 31 05 03 02 0p FF | p=1~7 = VISCA ID |
| **Remote control**  RS422 Baud Rate Inq. | 8x 09 44 31 05 03 03 FF | y0 50 44 31 05 03 03 0p FF | p=RS-422 baud rate  0=9600, 1=19200,  2=38400, 3=115200  Default=2 |
| **Remote control**  Response Time of Recall Inq. | 8x 09 44 31 05 03 04 FF | y0 50 44 31 05 03 04 0p FF | p=response timing of recall PST  0=leader ,1= tailer  Default=0 |
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| **Remote control**  DVIP Inq. | 8x 09 44 31 05 04 01 FF | y0 50 44 31 05 04 01 0p FF | p=DVIP baud rate  0=9600, 1=19200,  2=38400, 3=115200  Default=3 |
| **Remote control**  IR ID Inq. | 8x 09 44 31 05 05 01 FF | y0 50 44 31 05 05 01 0p FF | p=IR ID=1~4  (Follow the VISCA ID) |
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| **Remote control**  Remote-Out mode Inq. | 8x 09 44 31 05 06 01 FF | y0 50 44 31 05 06 01 0p FF | P= Remote-Out mode  0=RS-422, 1=RS-232  3=BX-lens,  4=OK-Protocol(Canon)  5=LANC SONY  6=LANC Canon  7=LANC Panasonic  8=LANC JVC  0a=Panasonic-two-port |
| **Remote control**  Remote-Out Baud Rate Inq. | 8x 09 44 31 05 06 02 FF | y0 50 44 31 05 06 02 0p FF | p=DVIP baud rate  0=9600, 1=19200,  2=38400, 3=115200  Default=2 |
| **Remote control**  Remote-Out ID Inq. | 8x 09 44 31 05 06 03 FF | y0 50 44 31 05 06 03 0p FF | p=1~7 = VISCA ID  (RS-422/232) |
| **Remote control**  BX Zoom Lens Offset Inq. | 8x 09 44 31 05 06 04 FF | y0 50 44 31 05 06 04 0p FF | p=0~5  0=>-3, 1=>-2, 2=>-1  3=>0 (DFT),  4=>+1, 5=>+2, 6=>+3 |
| **Remote control**  Zoom Encoder Mode  Inq. | 8x 09 44 31 05 06 05 FF | y0 50 44 31 05 06 05 0p FF | p=0=off,  1=normal, 2=reverse  3=TILTA CTL,  4=TILTA reverse |
| **Remote control**  TILTA Torque Inq. | 8x 09 44 31 05 06 06 FF | y0 50 44 31 05 06 06 pp FF | p=TILTA torque=0~63 |
| **Remote control**  PTZ INFO. Output Inq. | 8x 09 44 31 05 07 01 FF | y0 50 44 31 05 07 01 0p FF | p=1= continued PTZ information output on the Extended RS-422.  0=off |
| **Remote control**  Append ZOOM POS. to P/T INFO. Inq. | 8x 09 44 31 05 07 02 FF | y0 50 44 31 05 07 02 0p FF | p=1= Append ZOOM POS. to P/T INFO. of the VISCA.  0= off; |

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| **System**  Tally Light Inq. | 8x 09 44 31 06 01 01 FF | y0 50 44 31 06 01 01 0p FF | P=tally light color  0=OFF, 1= RED  2=GREEN,  3=two tally, RED / GRREN |
| **System**  MODEL No. Inq. | 8x 09 44 31 06 02 01 FF | y0 50 44 31 06 02 01 0p 0q 0r 0s FF | pqrs=model No.: 0010 or 0150 |
| **System**  POWER-OUT VOLT.  Inq. | 8x 09 44 31 06 03 01 FF | y0 50 44 31 06 03 01 0p FF | p=0=7.4Volt  1=8.4V  2=10V  3=12V |
| **System**  Debug Display P/T OSD  Inq. | 8x 09 44 31 06 04 01 FF | y0 50 44 31 06 04 01 0p FF | p-bit0=1=pan OSD on (\*\*\*\*)  p-bit1=1=tilt OSD on (\*\*\*\*)  p-bit2=1=zoom OSD on (\*\*\*\*)  p-bit3=1=focus OSD on (\*\*\*\*) |
| **System**  Debug Display OSD Inq. | 8x 09 44 31 06 04 02 FF | y0 50 44 31 06 04 02 pp qq FF | pp-bit0=IR OSD, (\*\*\*\*)  bit1=CAM. OSD (\*\*\*\*)  bit2=RMC-RX OSD (\*\*\*\*)  bit3=RMC-TX OSD (\*\*\*\*)  bit4= spare  qq-bit0=M\_CTL-RX OSD(\*\*\*\*)  bit1=M\_CTL-TX OSD (\*\*\*\*)  bit2=REG. OSD (\*\*\*\*)  bit3=VOUT TEST (\*\*\*\*) |
| **System**  SOFTWARE Version Inq. | 8x 09 44 31 06 06 01 FF | y0 50 44 31 06 06 01 3p 3q 3r 3s 3t uu  3v 3w 3x 3y 3z FF | pqrst= MB firmware Version  vwxyz=MCTL firmware Version  (ASCII code) |
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**\*\*\*\*: For Debug only.**

**V0.4** Added the “Set video mode” commands. (Page 4)

**V0.5** Fixed the description of “Set video mode”. (Page 4,9)

Fixed the description of “BX Zoom Lens Offset”. (Page 6,11)

Fixed the description of “Remote source Inq.”. (Page 10)

**V0.6** Added the “SPORT”mode of P/T speed. (Page 2,8)