## VC-A51P_VC-A51PN RS-232 command set

<table>
<thead>
<tr>
<th>No</th>
<th>Issue Date</th>
<th>Description</th>
<th>Apply Firmware</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2021/10/05</td>
<td>First version.</td>
<td>VCAO100</td>
</tr>
<tr>
<td>2</td>
<td>2022/03/02</td>
<td>Add VC-A51PN</td>
<td>NA</td>
</tr>
<tr>
<td>3</td>
<td>2022/05/26</td>
<td>Correct invalid command</td>
<td>VCAO105</td>
</tr>
<tr>
<td>4</td>
<td>2022/07/27</td>
<td>Add Inquiry:</td>
<td>NA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1. CAM_Lens_Control_BlockInq</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. CAM_Camera_Control_BlockInq</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. CAM_Other_BlockInq</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>4. CAM_Extended_1_BlockInq</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>5. CAM_Extended_2_BlockInq</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>6. CAM_Extended_3_BlockInq</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>2022/09/16</td>
<td>Add Command:</td>
<td>NA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1. CAM_Memory(Preset) - Recall</td>
<td></td>
</tr>
</tbody>
</table>

*Notice:*
1. The RS-232 command list is for VC-A51P and VC-A51PN.
2. The yellow highlight means the latest update.
3. The blue highlight means the deleted item.
1. **Communication Protocol**
   Transmit Method: Asynchronous Interface Half Duplex Serial Communication
   - Transmit Speed: 9600bps or 38400bps
   - Start bit: 1Bit
   - Parity Check: NA
   - Data Bit: 8Bit
   - Stop Bit: 1Bit

2. **The wire diagram**
   The RS232 wire diagram between presenter and remote controller as below

   ![RS232 wire diagram](image)

<table>
<thead>
<tr>
<th>No</th>
<th>Pins</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>DTR IN</td>
</tr>
<tr>
<td>2</td>
<td>DSR IN</td>
</tr>
<tr>
<td>3</td>
<td>TXD IN</td>
</tr>
<tr>
<td>4</td>
<td>GND</td>
</tr>
<tr>
<td>5</td>
<td>RXD IN</td>
</tr>
<tr>
<td>6</td>
<td>GND</td>
</tr>
</tbody>
</table>

1. **ACK & Completion message**

<table>
<thead>
<tr>
<th>Ack</th>
<th>Reply Packet</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Completion (commands)</td>
<td>X0 5Y FF</td>
<td>Y = socket number</td>
</tr>
<tr>
<td>Completion (Inquiries)</td>
<td>X0 5Y ... FF</td>
<td>Y = socket number</td>
</tr>
</tbody>
</table>

X = 9 to F==>camera address + 8 , Y=1 to 2
2. **Error message**

<table>
<thead>
<tr>
<th>Error Packet</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>X0 60 02 FF</td>
<td>Syntax Error</td>
</tr>
<tr>
<td>X0 60 03 FF</td>
<td>Command buffer full</td>
</tr>
<tr>
<td>X0 6Y 04 FF</td>
<td>Command cancelled</td>
</tr>
<tr>
<td>X0 6Y 05 FF</td>
<td>No socket (to be cancelled)</td>
</tr>
<tr>
<td>X0 6Y 41 FF</td>
<td>Command not executable</td>
</tr>
</tbody>
</table>

X = 9 to F==>camera address + 8,  
Y = socket number, Y=0 to 2, 0: Inquiry not execution

3. **Command execution cancel**

<table>
<thead>
<tr>
<th>Cancel Packet</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cancel</td>
<td>8X 2Y FF</td>
</tr>
<tr>
<td>X = 1 to 7==&gt;camera address, Y = socket number, Y=1 to 2</td>
<td></td>
</tr>
</tbody>
</table>

4. **Network Change**

<table>
<thead>
<tr>
<th>Packet</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address</td>
<td>88 30 01 FF</td>
</tr>
<tr>
<td>Network Change</td>
<td>X0 38 FF</td>
</tr>
<tr>
<td>X = 9 to F==&gt;camera address + 8</td>
<td></td>
</tr>
</tbody>
</table>

5. **IF_Clear**

<table>
<thead>
<tr>
<th>Command</th>
<th>Reply Packet</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>IF_Clear</td>
<td>8X 01 00 01 FF</td>
<td>X0 50 FF</td>
</tr>
<tr>
<td>IF_Clear (broadcast)</td>
<td>88 01 00 01 FF</td>
<td>88 01 00 01 FF</td>
</tr>
<tr>
<td>X = 1 to 7==&gt;camera address (For inquiry packet)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>X = 9 to F==&gt;camera address +8 (For reply packet)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### 6. Zoom Focus Position Table

<table>
<thead>
<tr>
<th>Zoom Position</th>
<th>Wide end</th>
<th>Tele end</th>
</tr>
</thead>
<tbody>
<tr>
<td>0000</td>
<td>to</td>
<td>4000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Focus Position</th>
<th>Far end</th>
<th>Near end</th>
</tr>
</thead>
<tbody>
<tr>
<td>000</td>
<td>to</td>
<td>575</td>
</tr>
</tbody>
</table>

### 7. AE_Iris Table

<table>
<thead>
<tr>
<th>Iris</th>
<th>Index(pq)</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0F</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>0E</td>
<td>F 1.6</td>
</tr>
<tr>
<td></td>
<td>0D</td>
<td>F 2.0</td>
</tr>
<tr>
<td></td>
<td>0C</td>
<td>F 2.2</td>
</tr>
<tr>
<td></td>
<td>0B</td>
<td>F 2.7</td>
</tr>
<tr>
<td></td>
<td>0A</td>
<td>F 3.2</td>
</tr>
<tr>
<td></td>
<td>09</td>
<td>F 3.8</td>
</tr>
<tr>
<td></td>
<td>08</td>
<td>F 4.5</td>
</tr>
<tr>
<td></td>
<td>07</td>
<td>F 5.4</td>
</tr>
<tr>
<td></td>
<td>06</td>
<td>F 6.3</td>
</tr>
<tr>
<td></td>
<td>05</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>04</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>03</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>02</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>01</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>00</td>
<td>-</td>
</tr>
<tr>
<td>Index(pq)</td>
<td>60/30 mode</td>
<td>50/25 mode</td>
</tr>
<tr>
<td>----------</td>
<td>------------</td>
<td>------------</td>
</tr>
<tr>
<td>00</td>
<td>1/10000</td>
<td>1/10000</td>
</tr>
<tr>
<td>01</td>
<td>1/5000</td>
<td>1/5000</td>
</tr>
<tr>
<td>02</td>
<td>1/3000</td>
<td>1/3000</td>
</tr>
<tr>
<td>03</td>
<td>1/2500</td>
<td>1/2500</td>
</tr>
<tr>
<td>04</td>
<td>1/2000</td>
<td>1/1750</td>
</tr>
<tr>
<td>05</td>
<td>1/1500</td>
<td>1/1250</td>
</tr>
<tr>
<td>06</td>
<td>1/1000</td>
<td>1/1000</td>
</tr>
<tr>
<td>07</td>
<td>1/725</td>
<td>1/600</td>
</tr>
<tr>
<td>08</td>
<td>1/500</td>
<td>1/425</td>
</tr>
<tr>
<td>09</td>
<td>1/350</td>
<td>1/300</td>
</tr>
<tr>
<td>0A</td>
<td>1/250</td>
<td>1/215</td>
</tr>
<tr>
<td>0B</td>
<td>1/180</td>
<td>1/150</td>
</tr>
<tr>
<td>0C</td>
<td>1/120</td>
<td>1/120</td>
</tr>
<tr>
<td>0D</td>
<td>1/100</td>
<td>1/100</td>
</tr>
<tr>
<td>0E</td>
<td>1/90</td>
<td>1/75</td>
</tr>
<tr>
<td>0F</td>
<td>1/60</td>
<td>1/50</td>
</tr>
<tr>
<td>10</td>
<td>1/30</td>
<td>1/25</td>
</tr>
<tr>
<td>11</td>
<td>1/15</td>
<td>1/12</td>
</tr>
<tr>
<td>12</td>
<td>1/8</td>
<td>1/6</td>
</tr>
<tr>
<td>13</td>
<td>1/4</td>
<td>1/3</td>
</tr>
<tr>
<td>14</td>
<td>1/2</td>
<td>1/2</td>
</tr>
<tr>
<td>15</td>
<td>1/1</td>
<td>1/1</td>
</tr>
</tbody>
</table>
9. **AE_Iris Limit Table**

<table>
<thead>
<tr>
<th>Iris</th>
<th>Index(pq)</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0x07</td>
<td>F 1.6</td>
</tr>
<tr>
<td></td>
<td>0x06</td>
<td>F 2.2</td>
</tr>
<tr>
<td></td>
<td>0x05</td>
<td>F 3.2</td>
</tr>
<tr>
<td></td>
<td>0x04</td>
<td>F 4.5</td>
</tr>
<tr>
<td></td>
<td>0x03</td>
<td>F 6.3</td>
</tr>
</tbody>
</table>

10. **AE_Gain Table**

<table>
<thead>
<tr>
<th>Gain</th>
<th>Index(pq)</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0F</td>
<td>+45 dB</td>
</tr>
<tr>
<td></td>
<td>0E</td>
<td>+42 dB</td>
</tr>
<tr>
<td></td>
<td>0D</td>
<td>+39 dB</td>
</tr>
<tr>
<td></td>
<td>0C</td>
<td>+36 dB</td>
</tr>
<tr>
<td></td>
<td>0B</td>
<td>+33 dB</td>
</tr>
<tr>
<td></td>
<td>0A</td>
<td>+30 dB</td>
</tr>
<tr>
<td></td>
<td>09</td>
<td>+27 dB</td>
</tr>
<tr>
<td></td>
<td>08</td>
<td>+24 dB</td>
</tr>
<tr>
<td></td>
<td>07</td>
<td>+21 dB</td>
</tr>
<tr>
<td></td>
<td>06</td>
<td>+18 dB</td>
</tr>
<tr>
<td></td>
<td>05</td>
<td>+15 dB</td>
</tr>
<tr>
<td></td>
<td>04</td>
<td>+12 dB</td>
</tr>
<tr>
<td></td>
<td>03</td>
<td>+9 dB</td>
</tr>
<tr>
<td></td>
<td>02</td>
<td>+6 dB</td>
</tr>
<tr>
<td></td>
<td>01</td>
<td>+3 dB</td>
</tr>
<tr>
<td></td>
<td>00</td>
<td>0 dB</td>
</tr>
</tbody>
</table>
11. Others

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>R Gain</td>
<td>00 to 80</td>
</tr>
<tr>
<td>B Gain</td>
<td>00 to 80</td>
</tr>
</tbody>
</table>

12. Camera Command List

<table>
<thead>
<tr>
<th>Command Set</th>
<th>Command</th>
<th>Command Packet</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>AddressSet</td>
<td>Broadcast</td>
<td>88 30 01 FF</td>
<td>Address setting</td>
</tr>
<tr>
<td>IF_Clear</td>
<td>Broadcast</td>
<td>88 01 00 01 FF</td>
<td>I/F Clear</td>
</tr>
<tr>
<td>CommandCancel</td>
<td>–</td>
<td>8x 2p FF</td>
<td>p: Socket No. (=1 or 2)</td>
</tr>
<tr>
<td>CAM_Power</td>
<td>On</td>
<td>8x 01 04 00 02 FF</td>
<td>Power ON/OFF</td>
</tr>
<tr>
<td></td>
<td>Off (Standby)</td>
<td>8x 01 04 00 03 FF</td>
<td></td>
</tr>
<tr>
<td>CAM_AutoPowerOff</td>
<td>Direct</td>
<td>8x 01 04 40 0p 0q 0r 0s FF</td>
<td>Auto Power Off, pqrs: 0000 To FFFF pqrs: Power Off Timer 0000 (Timer Off) to FFFF (65535min) Initial value: 0000 The power automatically turns off if the camera does not receive any VISCA commands or any signals from the Remote Commander for the duration you set in the timer.</td>
</tr>
<tr>
<td>CAM_Zoom</td>
<td>Stop</td>
<td>8x 01 04 07 00 FF</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tele (Standard)</td>
<td>8x 01 04 07 02 FF</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Wide (Standard)</td>
<td>8x 01 04 07 03 FF</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tele Step</td>
<td>8x 01 04 07 04 FF</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Wide Step</td>
<td>8x 01 04 07 05 FF</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tele (Variable)</td>
<td>8x 01 04 07 2p FF</td>
<td>p=0 (Low) to 7 (High)</td>
</tr>
<tr>
<td>Command Set</td>
<td>Command</td>
<td>Command Packet</td>
<td>Comments</td>
</tr>
<tr>
<td>-------------</td>
<td>---------</td>
<td>----------------</td>
<td>----------</td>
</tr>
<tr>
<td></td>
<td>Wide (Variable)</td>
<td>8x 01 04 07 3p FF</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Direct</td>
<td>8x 01 04 47 0p 0q 0r 0s FF</td>
<td>pqrs: Zoom Position(0x0000~0x4000) , Optical Zoom Tele max position: 0x4000</td>
</tr>
<tr>
<td></td>
<td>Direct(Speed Variable)</td>
<td>8x 01 04 47 0p 0q 0r 0s 0t FF</td>
<td>pqrs: Zoom Position(0x0000<del>0x4000) , Optical Zoom Tele max position: 0x4000, t:0</del>7(0 :Low, 7:High)</td>
</tr>
<tr>
<td></td>
<td>VISCA_OPTICAL_ZOOM_LIMIT</td>
<td>8x 01 04 47 0p 0q FF</td>
<td>pq: 0 ~ 0x13(Ratio : x1 ~ x20)</td>
</tr>
<tr>
<td></td>
<td>CAM_Focus</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CAM_Focus</td>
<td>Stop</td>
<td>8x 01 04 08 00 FF</td>
<td>p=0 (Low) to 7 (High)</td>
</tr>
<tr>
<td></td>
<td>Far (Standard)</td>
<td>8x 01 04 08 02 FF</td>
<td>(* Enabled during Manual Focus Mode)</td>
</tr>
<tr>
<td>CAM_Focus</td>
<td>Near (Standard)</td>
<td>8x 01 04 08 03 FF</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Far Step</td>
<td>8x 01 04 08 04 FF</td>
<td></td>
</tr>
<tr>
<td>CAM_Focus</td>
<td>Near Step</td>
<td>8x 01 04 08 05 FF</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Far (Variable)</td>
<td>8x 01 04 08 2p FF</td>
<td></td>
</tr>
<tr>
<td>CAM_Focus</td>
<td>Near (Variable)</td>
<td>8x 01 04 08 3p FF</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Direct</td>
<td>8x 01 04 48 0p 0q 0r 0s FF</td>
<td>pqrs: Focus Position , pqrs parameters are in the General Zoom Foucs Table 0x00 ~ 0x3C3 (* Enabled during Manual Focus Mode)</td>
</tr>
<tr>
<td></td>
<td>Auto Focus</td>
<td>8x 01 04 38 02 FF</td>
<td>AF ON/OFF</td>
</tr>
<tr>
<td></td>
<td>Manual Focus</td>
<td>8x 01 04 38 03 FF</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Auto/Manual</td>
<td>8x 01 04 38 10 FF</td>
<td></td>
</tr>
<tr>
<td></td>
<td>One Push Trigger</td>
<td>8x 01 04 18 01 FF</td>
<td>One Push AF Trigger(* Enabled during Manual Focus Mode)</td>
</tr>
<tr>
<td>VISCA_MF_ZOOM_TRACKING</td>
<td>Zoom Tracking Switch</td>
<td>8x 01 04 38 03 0p FF</td>
<td>p: 0(OFF) 、1(ON)</td>
</tr>
<tr>
<td>AF Sensitivity</td>
<td>High</td>
<td>8x 01 04 58 01 FF</td>
<td>High / Middle / Low</td>
</tr>
</tbody>
</table>

RS158 - VC-A51P_VC-A51PN RS-232 command set
<table>
<thead>
<tr>
<th>Command Set</th>
<th>Command</th>
<th>Command Packet</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Middle</td>
<td>8x 01 04 58 02 FF</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Low</td>
<td>8x 01 04 58 03 FF</td>
<td></td>
</tr>
<tr>
<td>AF Frame</td>
<td>Full Frame</td>
<td>8x 01 04 5C 02 FF</td>
<td>Auto / Full Frame / Center / Smart AF</td>
</tr>
<tr>
<td></td>
<td>Center</td>
<td>8x 01 04 5C 03 FF</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Smart AF</td>
<td>8x 01 04 5C 04 FF</td>
<td></td>
</tr>
<tr>
<td>CAM_ZoomFocus</td>
<td>Direct</td>
<td>8x 01 04 47 0p 0q 0r 0s 0t 0u 0v 0w FF</td>
<td>pqrs: Zoom Position(0x0000~0x4000) tuvw: Focus Position(0x00 ~ 0x575) (* Enabled during Manual Focus Mode)</td>
</tr>
<tr>
<td>Resolution Setting</td>
<td>Select Resolution</td>
<td>8x 01 06 35 00 0p FF</td>
<td>p: 0x00:1080p-60 0x01:1080p-59.94 0x02:1080p-50 0x03:1080p-30 0x04:1080p-29.97 0x05:1080p-25 0x06:1080i-60 0x07:1080i-59.94 0x08:1080i-50 0x09:720p-60 0x0A:720p-59.94 0x0B:720p-50</td>
</tr>
<tr>
<td>CAM_WB</td>
<td>Auto</td>
<td>8x 01 04 35 00 FF</td>
<td>Normal Auto</td>
</tr>
<tr>
<td></td>
<td>Indoor</td>
<td>8x 01 04 35 01 FF</td>
<td>Indoor mode</td>
</tr>
<tr>
<td></td>
<td>Outdoor</td>
<td>8x 01 04 35 02 FF</td>
<td>Outdoor mode</td>
</tr>
<tr>
<td></td>
<td>One Push WB</td>
<td>8x 01 04 35 03 FF</td>
<td>One Push WB mode</td>
</tr>
</tbody>
</table>

RS158 - VC-A51P_VC-A51PN RS-232 command set
<table>
<thead>
<tr>
<th>Command Set</th>
<th>Command</th>
<th>Command Packet</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATW</td>
<td>8x 01 04 35 04 FF</td>
<td></td>
<td>Auto Tracing White Balance</td>
</tr>
<tr>
<td>Manual</td>
<td>8x 01 04 35 05 FF</td>
<td></td>
<td>Manual mode</td>
</tr>
<tr>
<td>Sodium Lamp</td>
<td>8x 01 04 35 06 FF</td>
<td></td>
<td>Sodium lamp source fixed mode</td>
</tr>
<tr>
<td>3000K</td>
<td>8x 01 04 35 07 FF</td>
<td></td>
<td>Color temperture fixed at 3000K mode</td>
</tr>
<tr>
<td>4300K</td>
<td>8x 01 04 35 08 FF</td>
<td></td>
<td>Color temperture fixed at 4300K mode</td>
</tr>
<tr>
<td>5000K</td>
<td>8x 01 04 35 09 FF</td>
<td></td>
<td>Color temperture fixed at 5000K mode</td>
</tr>
<tr>
<td>6500K</td>
<td>8x 01 04 35 0A FF</td>
<td></td>
<td>Color temperture fixed at 6500K mode</td>
</tr>
<tr>
<td>8000K</td>
<td>8x 01 04 35 0B FF</td>
<td></td>
<td>Color temperture fixed at 8000K mode</td>
</tr>
<tr>
<td>WideAuto</td>
<td>8x 01 04 35 0C FF</td>
<td></td>
<td>Wide Auto mode</td>
</tr>
<tr>
<td>One Push Trigger</td>
<td>8x 01 04 10 05 FF</td>
<td></td>
<td>One Push WB Trigger(* Enabled during One Push WB Mode)</td>
</tr>
<tr>
<td>CAM_WB_RGAIN</td>
<td>Reset 8x 01 04 03 00 FF</td>
<td></td>
<td>Manual R gain Setting</td>
</tr>
<tr>
<td></td>
<td>Up 8x 01 04 03 02 FF</td>
<td></td>
<td>(* Enabled during WB Manual mode ) pq = 0x00 To 0x80</td>
</tr>
<tr>
<td></td>
<td>Down 8x 01 04 03 03 FF</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Direct 8x 01 04 43 00 00 0p 0q FF</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CAM_WB_BGAIN</td>
<td>Reset 8x 01 04 04 00 FF</td>
<td></td>
<td>Manual B gain Setting</td>
</tr>
<tr>
<td></td>
<td>Up 8x 01 04 04 02 FF</td>
<td></td>
<td>(* Enabled during WB Manual mode ) pq = 0x00 To 0x80</td>
</tr>
<tr>
<td></td>
<td>Down 8x 01 04 04 03 FF</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Direct 8x 01 04 44 00 00 0p 0q FF</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CAM_AE</td>
<td>Full Auto 8x 01 04 39 00 FF</td>
<td></td>
<td>Automatic Exposure mode</td>
</tr>
<tr>
<td></td>
<td>Manual 8x 01 04 39 03 FF</td>
<td></td>
<td>Manual Control mode</td>
</tr>
<tr>
<td></td>
<td>Shutter Priority 8x 01 04 39 0A FF</td>
<td></td>
<td>Shutter Priority Automatic Exposure mode</td>
</tr>
<tr>
<td></td>
<td>Iris Priority 8x 01 04 39 0B FF</td>
<td></td>
<td>Iris Priority Automatic Exposure mode</td>
</tr>
<tr>
<td>CAM_Shutter</td>
<td>Reset 8x 01 04 0A 00 FF</td>
<td></td>
<td>&quot;Shutter Setting&quot;</td>
</tr>
<tr>
<td></td>
<td>Up 8x 01 04 0A 02 FF</td>
<td></td>
<td>(* Enabled during AE Shutter Priority/Manual Mode)</td>
</tr>
</tbody>
</table>

RS158 - VC-A51P_VC-A51PN RS-232 command set
<table>
<thead>
<tr>
<th>Command Set</th>
<th>Command</th>
<th>Command Packet</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Down</td>
<td>8x 01 04 0A 03 FF</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Direct</td>
<td>8x 01 04 4A 00 00 0p 0q FF</td>
<td></td>
</tr>
<tr>
<td>CAM_Iris</td>
<td>Reset</td>
<td>8x 01 04 0B 00 FF</td>
<td>Iris Setting</td>
</tr>
<tr>
<td></td>
<td>Up</td>
<td>8x 01 04 0B 02 FF</td>
<td>(* Enabled during Iris Priority/Manual Mode)</td>
</tr>
<tr>
<td></td>
<td>Down</td>
<td>8x 01 04 0B 03 FF</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Direct</td>
<td>8x 01 04 4B 00 00 0p 0q FF</td>
<td>pq: Iris Position , pq: 00 To 0E</td>
</tr>
<tr>
<td></td>
<td>Iris Limit</td>
<td>8x 01 04 2B 0p FF</td>
<td>p: Iris F number , p: 3 To 7 ( * Disabled during AE Manual Mode and IrisPri Mode)</td>
</tr>
<tr>
<td>CAM_Gain</td>
<td>Reset</td>
<td>8x 01 04 0C 00 FF</td>
<td>Gain Setting</td>
</tr>
<tr>
<td></td>
<td>Up</td>
<td>8x 01 04 0C 02 FF</td>
<td>(* Enabled during AE Manual Mode)</td>
</tr>
<tr>
<td></td>
<td>Down</td>
<td>8x 01 04 0C 03 FF</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Direct</td>
<td>8x 01 04 4C 00 00 0p 0q FF</td>
<td>pq: Gain Position, pq:00 To 0F ( * Enabled during AE Manual Mode)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(* 0dB ~ +45dB)</td>
</tr>
<tr>
<td></td>
<td>Gain Limit</td>
<td>8x 01 04 2C 0p FF</td>
<td>p: Gain Position , p: 3 To F ( * Disabled during AE Manual Mode)</td>
</tr>
<tr>
<td>CAM_ExpComp</td>
<td>On</td>
<td>8x 01 04 3E 02 FF</td>
<td>Exposure Compensation ON/OFF</td>
</tr>
<tr>
<td></td>
<td>Off</td>
<td>8x 01 04 3E 03 FF</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Reset</td>
<td>8x 01 04 0E 00 FF</td>
<td>Exposure Compensation Amount Setting</td>
</tr>
<tr>
<td></td>
<td>Up</td>
<td>8x 01 04 0E 02 FF</td>
<td>(* Enabled during ExpComp On )</td>
</tr>
<tr>
<td></td>
<td>Down</td>
<td>8x 01 04 0E 03 FF</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Direct</td>
<td>8x 01 04 4E 00 00 0p 0q FF</td>
<td>pq: ExpComp Position , pq: 00 To 0A ( * Enabled during ExpComp On )</td>
</tr>
<tr>
<td></td>
<td>Direct</td>
<td>8x 01 04 4E 00 00 0p 0q FF</td>
<td>pq: ExpComp Position , pq: 00 To 0B ( * Enabled during ExpComp On )</td>
</tr>
<tr>
<td>Command Set</td>
<td>Command</td>
<td>Command Packet</td>
<td>Comments</td>
</tr>
<tr>
<td>-------------------</td>
<td>---------------</td>
<td>------------------</td>
<td>-----------------------------------------------</td>
</tr>
<tr>
<td>CAM_BackLight</td>
<td>On/Off</td>
<td>8x 01 04 33 02 FF</td>
<td>Back Light Compensation ON/OFF</td>
</tr>
<tr>
<td>CAM_WDR</td>
<td>Set Parameter</td>
<td>8x 01 04 2D 0p FF</td>
<td>WDR Mode p:0~5</td>
</tr>
<tr>
<td>CAM_Aperture</td>
<td>Reset/Up/Down</td>
<td>8x 01 04 02 00 FF</td>
<td>Aperture Control</td>
</tr>
<tr>
<td></td>
<td></td>
<td>8x 01 04 02 02 FF</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>8x 01 04 02 03 FF</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>8x 01 04 02 00 0p 0q FF</td>
<td>pq: Aperture Gain, pq: 00 To 0F</td>
</tr>
<tr>
<td>CAM_HR</td>
<td>On/Off</td>
<td>8x 01 04 52 02 FF</td>
<td>High-Resolution Mode ON/OFF</td>
</tr>
<tr>
<td>CAM_2DNR</td>
<td>Set 2DNR Level</td>
<td>8x 01 04 53 0p FF</td>
<td>p: NR Setting, p: 0 To 6 (0: Auto, 1: Off 6: Max )</td>
</tr>
<tr>
<td>CAM_3DNR</td>
<td>Set 3DNR Level</td>
<td>8x 01 04 54 0p FF</td>
<td>p: NR Setting, p: 0: Off 1: Low 2: Typ 3: Max 4: Auto</td>
</tr>
<tr>
<td>CAM_Gamma</td>
<td>Gamma setting</td>
<td>8x 01 04 5B 0p FF</td>
<td>p: 0 To 3 (* Enabled during Image Mode = Custom mode )</td>
</tr>
<tr>
<td>CAM_HighSensitivity</td>
<td>On/Off</td>
<td>8x 01 04 5E 02 FF</td>
<td>High-Sensitivity mode ON/OFF</td>
</tr>
<tr>
<td>CAM_LR_Reverse</td>
<td>On/Off</td>
<td>8x 01 04 61 02 FF</td>
<td>Mirror Image ON/OFF</td>
</tr>
<tr>
<td>CAM_Freeze</td>
<td>On/Off</td>
<td>8x 01 04 62 02 FF</td>
<td>Still Image ON/OFF</td>
</tr>
<tr>
<td>CAM_PictureEffect</td>
<td>Off</td>
<td>8x 01 04 63 00 FF</td>
<td>Picture Effect Setting</td>
</tr>
<tr>
<td></td>
<td>Neg.Art</td>
<td>8x 01 04 63 02 FF</td>
<td></td>
</tr>
<tr>
<td></td>
<td>B&amp;W</td>
<td>8x 01 04 63 04 FF</td>
<td></td>
</tr>
<tr>
<td>CAM_PictureFlip</td>
<td>On</td>
<td>8x 01 04 66 02 FF</td>
<td>Picture flip ON/OFF</td>
</tr>
</tbody>
</table>

RS158 - VC-A51P_VC-A51PN RS-232 command set
<table>
<thead>
<tr>
<th>Command Set</th>
<th>Command</th>
<th>Command Packet</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Off</td>
<td></td>
<td>8x 01 04 66 03 FF</td>
<td></td>
</tr>
<tr>
<td>CAM_Memory (Preset)</td>
<td>Reset</td>
<td>8x 01 04 3F 00 pp FF</td>
<td>pp: Memory Number (pp: 0x00 To 0x7F)</td>
</tr>
<tr>
<td></td>
<td>Set</td>
<td>8x 01 04 3F 01 pp FF</td>
<td>(* Preset address : 0~127)</td>
</tr>
<tr>
<td></td>
<td>Recall</td>
<td>8x 01 04 3F 02 pp FF</td>
<td>(* Preset address : 0 mapping preset 1 on webpage and remote)</td>
</tr>
<tr>
<td>CAM_Mute</td>
<td>On</td>
<td>8x 01 04 75 02 FF</td>
<td>Mute ON</td>
</tr>
<tr>
<td></td>
<td>Off</td>
<td>8x 01 04 75 03 FF</td>
<td>Mute OFF</td>
</tr>
<tr>
<td></td>
<td>On/Off</td>
<td>8x 01 04 75 10 FF</td>
<td>Mute Trigger</td>
</tr>
<tr>
<td>CAM_ColorGain(Saturation)</td>
<td>Direct</td>
<td>8x 01 04 49 00 00 00 pq FF</td>
<td>pq:0x00~0x19 (* Enabled during Image Mode = Custom mode )</td>
</tr>
<tr>
<td>IR_Receive</td>
<td>On</td>
<td>8x 01 06 08 02 FF</td>
<td>IR(remote commander) receive ON/OFF</td>
</tr>
<tr>
<td></td>
<td>Off</td>
<td>8x 01 06 08 03 FF</td>
<td></td>
</tr>
<tr>
<td></td>
<td>On/Off</td>
<td>8x 01 06 08 10 FF</td>
<td></td>
</tr>
<tr>
<td>IR_ReceiveReturn</td>
<td>On</td>
<td>8x 01 7D 01 03 00 00 00 FF</td>
<td>IR (remote commander) receive message via the VISCA communication ON/OFF</td>
</tr>
<tr>
<td></td>
<td>Off</td>
<td>8x 01 7D 01 13 00 00 FF</td>
<td></td>
</tr>
<tr>
<td>Pan-tiltDrive</td>
<td>Up</td>
<td>8x 01 06 01 VV WW 03 01</td>
<td>VV: Pan speed 0x01 (low speed) to 0x18 (high speed)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>WW: Tilt Speed 0x01 (low speed) to 0x18 (high speed)</td>
</tr>
<tr>
<td></td>
<td>Down</td>
<td>8x 01 06 01 VV WW 03 02 FF</td>
<td>VV: Pan speed 0x01 (low speed) to 0x18 (high speed)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>WW: Tilt Speed 0x01 (low speed) to 0x18 (high speed)</td>
</tr>
<tr>
<td></td>
<td>Left</td>
<td>8x 01 06 01 VV WW 01 03 FF</td>
<td>VV: Pan speed 0x01 (low speed) to 0x18 (high speed)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>WW: Tilt Speed 0x01 (low speed) to 0x18 (high speed)</td>
</tr>
<tr>
<td></td>
<td>Right</td>
<td>8x 01 06 01 VV WW 02 03 FF</td>
<td>VV: Pan speed 0x01 (low speed) to 0x18 (high speed)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>WW: Tilt Speed 0x01 (low speed) to 0x18 (high speed)</td>
</tr>
<tr>
<td></td>
<td>UpLeft</td>
<td>8x 01 06 01 VV WW 01 01 FF</td>
<td>VV: Pan speed 0x01 (low speed) to 0x18 (high speed)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>WW: Tilt Speed 0x01 (low speed) to 0x18 (high speed)</td>
</tr>
<tr>
<td>Command Set</td>
<td>Command</td>
<td>Command Packet</td>
<td>Comments</td>
</tr>
<tr>
<td>-------------------</td>
<td>---------------</td>
<td>----------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>UpRight</td>
<td>8x 01 06 01 VV WW 02 01 FF</td>
<td>VV: Pan speed 0x01 (low speed) to 0x18 (high speed)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>WW: Tilt Speed 0x01 (low speed) to 0x18 (high speed)</td>
</tr>
<tr>
<td></td>
<td>DownLeft</td>
<td>8x 01 06 01 VV WW 01 02 FF</td>
<td>VV: Pan speed 0x01 (low speed) to 0x18 (high speed)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>WW: Tilt Speed 0x01 (low speed) to 0x18 (high speed)</td>
</tr>
<tr>
<td></td>
<td>DownRight</td>
<td>8x 01 06 01 VV WW 02 02 FF</td>
<td>VV: Pan speed 0x01 (low speed) to 0x18 (high speed)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>WW: Tilt Speed 0x01 (low speed) to 0x18 (high speed)</td>
</tr>
<tr>
<td></td>
<td>Stop</td>
<td>8x 01 06 01 VV WW 03 03 FF</td>
<td></td>
</tr>
</tbody>
</table>
|                   | AbsolutePosition | 8x 01 06 02 VV WW 0Y 0Y 0Y 0Y 0Z 0Z 0Z 0Z FF | YYYY : Pan Position 0x0000 to 0x6A40 & 0x95C0 to 0xFFFF (center 0000)  
ZZZZ : Tilt Position 0x0000 to 0x3840 & 0xED40 to 0xFFFF (center 0000) |
|                   | RelativePosition | 8x 01 06 03 VV WW 0Y 0Y 0Y 0Y 0Z 0Z 0Z 0Z FF | YYYY : Pan Position 0x0000 to 0x6A40 & 0x95C0 to 0xFFFF (center 0000)  
ZZZZ : Tilt Position 0x0000 to 0x3840 & 0xED40 to 0xFFFF (center 0000) |
|                   | Home          | 8x 01 06 04 FF |                                                                                                                                          |
|                   | Reset         | 8x 01 06 05 FF |                                                                                                                                          |
|                   | Pan-tiltLimitSet | LimitSet       | 8x 01 06 07 00 0W 0Y 0Y 0Y 0Y 0Z 0Z 0Z 0Z FF                                                                                             |
|                   |               |                | W: 1 UpRight YYYY: Pan Limit Position 0x0000~0x6A40                                
ZZZZ: Tilt Limit Position 0x0000~0x3840                                    |
|                   |               |                | W: 0 DownLeft YYYY: Pan Limit Position 0xFFFF~0x95C0                                
ZZZZ: Tilt Limit Position 0xFFFF~0xED40                                      |
|                   | Firmware      | 8x 01 02 03 FF |                                                                                                                                          |
|                   | Error Code    | 8x 01 01 01 FF |                                                                                                                                          |
|                   | Clear Error Code | 8x 02 02 02 FF |                                                                                                                                          |
|                   | Factory Reset | 8x 01 04 3F 03 00 FF |                                                                                                                                          |
|                   | CAM_HARDWARE_FACTORY_ | System Factroy Reset | 8x 01 CD 0p FF                                                                                                                               |
|                   |               |                | p: 1, 1: Enable                                                                                                                             |

RS158 - VC-A51P_VC-A51PN RS-232 command set
<table>
<thead>
<tr>
<th>Command Set</th>
<th>Command</th>
<th>Command Packet</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>RESET</td>
<td>Factory Reset</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CAM_Img Mode</td>
<td>Select CAM Image Mode</td>
<td>8x 01 04 3F 04 0p FF</td>
<td>p: 0~6, 6:Custom mode</td>
</tr>
<tr>
<td>CAM Prompt</td>
<td>Set Prompt On/Off</td>
<td>8x 01 04 07 00 0p FF</td>
<td>OSD Prompt ON/OFF</td>
</tr>
<tr>
<td>CAM Model ID</td>
<td>Set Camera model ID</td>
<td>8x 01 04 23 pp qq rr ss FF</td>
<td>pqqq: Vender ID , rss:Model ID, default: SRG-300 (Vender ID = 0xEEEE)</td>
</tr>
<tr>
<td>AF Speed</td>
<td>Normal</td>
<td>8x 01 04 56 02 FF</td>
<td>Set anytime AF speed : Normal / Fast</td>
</tr>
<tr>
<td></td>
<td>Fast</td>
<td>8x 01 04 56 03 FF</td>
<td></td>
</tr>
<tr>
<td>CAM_Img Mode Brightness</td>
<td>Set Brightness</td>
<td>8x 01 04 75 67 pq FF</td>
<td>pq: 0x00~0x19(* Enabled during Image Mode = Custom mode )</td>
</tr>
<tr>
<td>CAM_Img Mode Contrast</td>
<td>Set Contrast</td>
<td>8x 01 04 75 68 pq FF</td>
<td>pq: 0x00~0x19(* Enabled during Image Mode = Custom mode )</td>
</tr>
<tr>
<td>CAM_Skin Tone</td>
<td>Select red level</td>
<td>8x 01 04 75 06 0p FF</td>
<td>p: 0~5(* Enabled during Image Mode = Custom mode )</td>
</tr>
<tr>
<td>Black Level</td>
<td>Black Level</td>
<td>8x 01 04 75 69 0p FF</td>
<td>p: 0 to 5, 0:Off, 1:Type 1, 2:Type 2, 3:Type 3, 4:Type 4, 5:Type 5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(* Enabled during Image Mode = Custom mode )</td>
<td></td>
</tr>
<tr>
<td>SYS_Menu</td>
<td>On</td>
<td>8x 01 06 06 02 FF</td>
<td>turn on the menu screen</td>
</tr>
<tr>
<td></td>
<td>Off</td>
<td>8x 01 06 06 03 FF</td>
<td>turn off the menu screen</td>
</tr>
<tr>
<td></td>
<td>On/Off</td>
<td>8x 01 06 06 10 FF</td>
<td>turn on/off the menu screen</td>
</tr>
<tr>
<td></td>
<td>Enter</td>
<td>8x 01 7E 01 02 00 01 FF</td>
<td>menu enter</td>
</tr>
<tr>
<td></td>
<td>Up</td>
<td>8x 01 06 01 01 01 03 01 FF</td>
<td>menu up</td>
</tr>
<tr>
<td></td>
<td>Down</td>
<td>8x 01 06 01 01 01 03 02 FF</td>
<td>menu down</td>
</tr>
<tr>
<td></td>
<td>Left</td>
<td>8x 01 06 01 01 01 01 03 FF</td>
<td>menu left</td>
</tr>
<tr>
<td></td>
<td>Right</td>
<td>8x 01 06 01 01 01 02 03 FF</td>
<td>menu right</td>
</tr>
<tr>
<td>Pan speed table update command</td>
<td>-</td>
<td>8x 01 06 1A 0p 0q Or 0s 0u 0v FF</td>
<td>pqrs: 0x0 ~ 0xFFFF , uv: 0x1 ~ 0x64</td>
</tr>
<tr>
<td>Tilt speed table update command</td>
<td>-</td>
<td>8x 01 06 1B 0p 0q Or 0s 0u 0v FF</td>
<td>pqrs: 0x0 ~ 0xFFFF , uv: 0x1 ~ 0x64</td>
</tr>
</tbody>
</table>

RS158 - VC-A51P_VC-A51PN RS-232 command set
<table>
<thead>
<tr>
<th>Command Set</th>
<th>Command</th>
<th>Command Packet</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>command</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pan/Tilt speed table to</td>
<td>-</td>
<td>8x 01 06 1C 0p 0q 0D 0E 0F FF</td>
<td>pq: 0x18 or 0x64</td>
</tr>
<tr>
<td>default</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pan/tilt speed table size</td>
<td>-</td>
<td>8x 01 06 1D 0p 0q FF</td>
<td>pq: 0x18 or 0x64</td>
</tr>
<tr>
<td>Pan/tilt speed table save</td>
<td>-</td>
<td>8x 01 06 1E FF</td>
<td></td>
</tr>
<tr>
<td>CAM_SET ETHERNET_DHCP</td>
<td>Ethernet DHCP Enable/Disable</td>
<td>8x 01 CC 0p FF</td>
<td>p: 0~1 , 0: Disable  1: Enable</td>
</tr>
<tr>
<td>CAM_HARDWARE_FACTORY_</td>
<td>System Hardware Factory Reset</td>
<td>8x 01 CD 0p FF</td>
<td>p: 1, 1: Enable</td>
</tr>
<tr>
<td>RESET</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CAM_MSDC_RESET</td>
<td>MSDC Storage Reset</td>
<td>8x 01 CE 0p FF</td>
<td>p: 1, 1: Enable</td>
</tr>
<tr>
<td>Tally Mode</td>
<td></td>
<td>8x 01 7E 01 0A 01 0p FF</td>
<td></td>
</tr>
<tr>
<td>Tally Lamp</td>
<td>On</td>
<td>8x 01 7E 01 0A 00 02 FF</td>
<td>Tally Lamp ON/OFF</td>
</tr>
<tr>
<td></td>
<td>Off</td>
<td>8x 01 7E 01 0A 00 03 FF</td>
<td></td>
</tr>
<tr>
<td>CAM_SET_IP_Address_IPv4</td>
<td>Set IP Address</td>
<td>8x 01 CC 01 0p 0q 0r 0s 0t 0u 0v 0w FF</td>
<td>address : pq.rs.tu.vw (HEX), pq = 0<del>255, rs = 0</del>255, tu = 0<del>255, vw = 0</del>255, e.g. 192.168.100.150 =&gt; 81 01 CC 01 0C 00 0A 08 06 04 09 06 FF</td>
</tr>
<tr>
<td>CAM_SET_IP_Netmask</td>
<td>Set Subnet Mask</td>
<td>8x 01 CC 02 0p 0q 0r 0s 0t 0u 0v 0w FF</td>
<td>address : pq.rs.tu.vw (HEX), pq = 0<del>255, rs = 0</del>255, tu = 0<del>255, vw = 0</del>255,</td>
</tr>
<tr>
<td>Command Set</td>
<td>Command</td>
<td>Command Packet</td>
<td>Comments</td>
</tr>
<tr>
<td>---------------------------------</td>
<td>-----------------------</td>
<td>-------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------</td>
</tr>
<tr>
<td>CAM_SET_IP_Getway</td>
<td>Set Gateway</td>
<td>8x 01 CC 03 0p 0q 0r 0s 0t 0u 0v 0w FF</td>
<td>e.g. 255.255.255.0 =&gt; 81 01 CC 02 0F 0F 0F 0F 0F 0F 00 00 FF</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>address : pq.rs.tu.vw (HEX), pq = 0<del>255, rs = 0</del>255, tu = 0<del>255, vw = 0</del>255, e.g. 192.168.100.254 =&gt; 81 01 CC 03 0C 00 0A 08 06 04 0F 0E FF</td>
</tr>
<tr>
<td>Power_LoadState</td>
<td></td>
<td>8x 01 04 75 6A 02 FF</td>
<td>Load preset 0 when power on</td>
</tr>
<tr>
<td></td>
<td></td>
<td>8x 01 04 75 6A 03 FF</td>
<td>Load Last status when power on</td>
</tr>
<tr>
<td>PanTilt_Control_Device</td>
<td></td>
<td>8x 01 7E 03 01 0p FF</td>
<td>p: 0 Encoder 1: Controller</td>
</tr>
<tr>
<td>VISCA_SET_RTSP_MULTICASE</td>
<td>Set RTSP Multicast</td>
<td>8x 01 7E 03 30 0p FF</td>
<td>p: 0*1 , 0: Disable  1: Enable</td>
</tr>
<tr>
<td>VISCA_SET_IPRATIO1</td>
<td>Set IP Ratio1</td>
<td>8x 01 7E 03 31 0p 0q FF</td>
<td>Set IP Ratio1, pq(HEX) = 1 ~ 60, Example: Set IPRatio1 to 60 =&gt; 81 01 7E 03 31 03 0C FF</td>
</tr>
<tr>
<td>VISCA_SET_IPRATIO2</td>
<td>Set IP Ratio2</td>
<td>8x 01 7E 03 32 0p 0q FF</td>
<td>Set IP Ratio2, pq(HEX) = 1 ~ 30, Example: Set IPRatio2 to 30 =&gt; 81 01 7E 03 32 01 0E FF</td>
</tr>
<tr>
<td>VISCA_SET_REBOOT</td>
<td>Set Reboot</td>
<td>8x 01 7E 74 FF</td>
<td>Set to reboot</td>
</tr>
<tr>
<td>SmartAF ConfLevel</td>
<td></td>
<td>8x 01 7E 04 0p FF</td>
<td>SmartAF ConfLevel</td>
</tr>
</tbody>
</table>

### 13. Inquiry Command List

<table>
<thead>
<tr>
<th>Inquiry Command</th>
<th>Command Packet</th>
<th>Inquiry Packet</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAM_PowerInq</td>
<td>8x 09 04 00 FF</td>
<td>y0 50 02 FF</td>
<td>On</td>
</tr>
<tr>
<td>CAM_OpticalZoomPosInq</td>
<td>8x 09 04 47 FF</td>
<td>y0 50 0p 0q 0s FF</td>
<td>Off (Standby)</td>
</tr>
<tr>
<td>CAM_OpticalZoomPosInq</td>
<td>8x 09 04 47 FF</td>
<td>y0 50 0p 0q 0s FF</td>
<td>pqr: Zoom Position, pqr: 0x0000~0x4000</td>
</tr>
<tr>
<td>Inquiry Command</td>
<td>Command Packet</td>
<td>Inquiry Packet</td>
<td>Comments</td>
</tr>
<tr>
<td>----------------------</td>
<td>----------------</td>
<td>----------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>CAM_FocusModeInq</td>
<td>8x 09 04 38 FF</td>
<td>y0 50 02 FF</td>
<td>Auto Focus</td>
</tr>
<tr>
<td></td>
<td></td>
<td>y0 50 03 FF</td>
<td>Manual Focus</td>
</tr>
<tr>
<td>CAM_FocusPosInq</td>
<td>8x 09 04 48 FF</td>
<td>y0 50 0p 0q 0r 0s FF</td>
<td>pqrst: Focus Position, pqrst: parameters are in the General Zoom Foucs Table near end to far end</td>
</tr>
<tr>
<td>AF SensitivityInq</td>
<td>8x 09 04 58 FF</td>
<td>y0 50 01 FF</td>
<td>High</td>
</tr>
<tr>
<td></td>
<td></td>
<td>y0 50 02 FF</td>
<td>Middle</td>
</tr>
<tr>
<td></td>
<td></td>
<td>y0 50 03 FF</td>
<td>Low</td>
</tr>
<tr>
<td>AF FrameInq</td>
<td>8x 09 04 5C FF</td>
<td>y0 50 02 FF</td>
<td>Full Frame</td>
</tr>
<tr>
<td></td>
<td></td>
<td>y0 50 03 FF</td>
<td>Center</td>
</tr>
<tr>
<td></td>
<td></td>
<td>y0 50 04 FF</td>
<td>Smart AF</td>
</tr>
<tr>
<td>Resolution SettingInq</td>
<td>8x 09 06 23 FF</td>
<td>y0 50 0p FF</td>
<td>p: 0x00:1080p-60 0x01:1080p-59.94 0x02:1080p-50 0x03:1080p-30 0x04:1080p-29.97 0x05:1080p-25 0x06:1080i-60 0x07:1080i-59.94 0x08:1080i-50 0x09:720p-60 0x0A:720p-59.94 0x0B:720p-50</td>
</tr>
<tr>
<td>CAM_WBModeInq</td>
<td>8x 09 04 35 FF</td>
<td>y0 50 00 FF</td>
<td>Auto</td>
</tr>
<tr>
<td></td>
<td></td>
<td>y0 50 01 FF</td>
<td>In Door</td>
</tr>
<tr>
<td></td>
<td></td>
<td>y0 50 02 FF</td>
<td>Out Door</td>
</tr>
<tr>
<td>Inquiry Command</td>
<td>Command Packet</td>
<td>Inquiry Packet</td>
<td>Comments</td>
</tr>
<tr>
<td>-----------------</td>
<td>----------------</td>
<td>---------------</td>
<td>----------</td>
</tr>
<tr>
<td>CAM_RGainInq</td>
<td>8x 09 04 43 FF</td>
<td>y0 50 00 00 0p 0q FF</td>
<td>pq : R Gain, pq: 00 To 80</td>
</tr>
<tr>
<td>CAM_BGainInq</td>
<td>8x 09 04 44 FF</td>
<td>y0 50 00 00 0p 0q FF</td>
<td>pq : B Gain, pq: 00 To 80</td>
</tr>
<tr>
<td>CAM_AEModelInq</td>
<td>8x 09 04 39 FF</td>
<td>y0 50 00 FF</td>
<td>Full Auto</td>
</tr>
<tr>
<td></td>
<td></td>
<td>y0 50 03 FF</td>
<td>Manual</td>
</tr>
<tr>
<td></td>
<td></td>
<td>y0 50 0A FF</td>
<td>Shutter Priority</td>
</tr>
<tr>
<td></td>
<td></td>
<td>y0 50 0B FF</td>
<td>Iris Priority</td>
</tr>
<tr>
<td>CAM_ShutterPosInq</td>
<td>8x 09 04 4A FF</td>
<td>y0 50 00 00 0p 0q FF</td>
<td>pq: Shutter Position, pq: 00 To 15</td>
</tr>
<tr>
<td>CAM_IrisPosInq</td>
<td>8x 09 04 4B FF</td>
<td>y0 50 00 00 0p 0q FF</td>
<td>pq: Iris Position, pq: 06 To 0E</td>
</tr>
<tr>
<td>CAM_GainPosInq</td>
<td>8x 09 04 4C FF</td>
<td>y0 50 00 00 0p 0q FF</td>
<td>pq: Gain Position, pq: 00 To 0F</td>
</tr>
<tr>
<td>CAM_IrisLimitInq</td>
<td>8x 09 04 2B FF</td>
<td>y0 50 0q FF</td>
<td>p: Gain Limit, p: 3 To 7</td>
</tr>
<tr>
<td>CAM_GainLimitInq</td>
<td>8x 09 04 2C FF</td>
<td>y0 50 0q FF</td>
<td>p: Gain Limit, p: 3 To F</td>
</tr>
<tr>
<td>CAM_ExpCompPosInq</td>
<td>8x 09 04 4E FF</td>
<td>y0 50 00 00 0p 0q FF</td>
<td>pq: ExpComp Position, pq: 00 To 0B</td>
</tr>
<tr>
<td>CAM_WDModelInq</td>
<td>8x 09 04 3D FF</td>
<td>y0 50 02 FF</td>
<td>On</td>
</tr>
<tr>
<td></td>
<td></td>
<td>y0 50 03 FF</td>
<td>Off</td>
</tr>
<tr>
<td>CAM_WDParameterInq</td>
<td>8x 09 04 2D FF</td>
<td>y0 50 0p FF</td>
<td>p: WDR mode (p: 0 To 5)</td>
</tr>
<tr>
<td>Inquiry Command</td>
<td>Command Packet</td>
<td>Inquiry Packet</td>
<td>Comments</td>
</tr>
<tr>
<td>-------------------------</td>
<td>----------------</td>
<td>----------------</td>
<td>-----------------------------------------------</td>
</tr>
<tr>
<td>CAM_ApertureInq</td>
<td>8x 09 04 42 FF</td>
<td>y0 50 00 00 0p 0q FF</td>
<td>pq: Aperture Gain, pq: 00 To 0F</td>
</tr>
<tr>
<td>CAM_HRModelInq</td>
<td>8x 09 04 52 FF</td>
<td>y0 50 02 FF</td>
<td>On (Hi-Resolution)</td>
</tr>
<tr>
<td>CAM_2DNRModelInq</td>
<td>8x 09 04 53 FF</td>
<td>y0 50 0p FF</td>
<td>p: NR Setting , p: 0 To 6 (0: Auto, 1: Off, 6: Max)</td>
</tr>
<tr>
<td>CAM_3DNRModelInq</td>
<td>8x 09 04 54 FF</td>
<td>y0 50 0p FF</td>
<td>p: NR Setting , p: 0: Off, 1: Low, 2: Typ, 3: Max, 4: Auto</td>
</tr>
<tr>
<td>CAM_GammaInq</td>
<td>8x 09 04 5B FF</td>
<td>y0 50 0p FF</td>
<td>Gamma p: 0 To 3</td>
</tr>
<tr>
<td>CAM_LR_ReverseModelInq</td>
<td>8x 09 04 61 FF</td>
<td>y0 50 02 FF</td>
<td>On</td>
</tr>
<tr>
<td>CAM_FreezeModeInq</td>
<td>8x 09 04 62 FF</td>
<td>y0 50 02 FF</td>
<td>On</td>
</tr>
<tr>
<td>CAM_PictureEffectModelInq</td>
<td>8x 09 04 63 FF</td>
<td>y0 50 00 FF</td>
<td>Off</td>
</tr>
<tr>
<td>CAM_PictureFlipModelInq</td>
<td>8x 09 04 66 FF</td>
<td>y0 50 02 FF</td>
<td>On</td>
</tr>
<tr>
<td>CAM_MemoryInq</td>
<td>8x 09 04 3F FF</td>
<td>y0 50 pp FF</td>
<td>pp: Memory number recalled last, default value(no get any recall command) pp: 0x00 To 0x7F</td>
</tr>
<tr>
<td>CAM_MuteModeInq</td>
<td>8x 09 04 75 FF</td>
<td>y0 50 02 FF</td>
<td>On</td>
</tr>
<tr>
<td>CAM_Version Inq</td>
<td>8x 09 00 02 FF</td>
<td>y0 50 pp qq rr ss jj jj kk FF</td>
<td>ppqq: Vendor ID, rrss: Model ID, jjjj: Rom revision, kk: Maximum socket</td>
</tr>
<tr>
<td>SYS_MenuModelInq</td>
<td>8x 09 06 06 FF</td>
<td>y0 50 02 FF</td>
<td>On</td>
</tr>
<tr>
<td>IR_Receive</td>
<td>8x 09 06 08 FF</td>
<td>y0 50 02 FF</td>
<td>On</td>
</tr>
</tbody>
</table>

RS158 - VC-A51P_VC-A51PN RS-232 command set
<table>
<thead>
<tr>
<th>Inquiry Command</th>
<th>Command Packet</th>
<th>Inquiry Packet</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>IR_ReceiveReturn</td>
<td>8x 01 7D 01 03 00 00 FF (IR_Receive Return Message On)</td>
<td>y0 07 7D 01 04 00 FF</td>
<td>Power ON/OFF</td>
</tr>
<tr>
<td></td>
<td></td>
<td>y0 07 7D 01 04 07 FF</td>
<td>Zoom tele/wide</td>
</tr>
<tr>
<td></td>
<td></td>
<td>y0 07 7D 01 04 38 FF</td>
<td>AF On/Off</td>
</tr>
<tr>
<td></td>
<td></td>
<td>y0 07 7D 01 04 33 FF</td>
<td>CAM_Backlight</td>
</tr>
<tr>
<td></td>
<td></td>
<td>y0 07 7D 01 04 3F FF</td>
<td>CAM_Memory(All memory set)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>y0 07 7D 01 06 01 FF</td>
<td>Pan_tiltDrive</td>
</tr>
<tr>
<td>Pan-tiltMaxSpeedInq</td>
<td>8x 09 06 11 FF</td>
<td>y0 50 ww zz FF</td>
<td>ww = Pan Max Speed, ww: 0x18</td>
</tr>
<tr>
<td></td>
<td></td>
<td>zz = Tilt Max Speed, zz: 0x18</td>
<td></td>
</tr>
<tr>
<td>Pan-tiltPosInq</td>
<td>8x 09 06 12 FF</td>
<td>y0 50 0w 0w 0w 0z 0z 0z FF</td>
<td>wwww: Pan Position: 0x0000 to 0x6A40 &amp; 0x95C0 to 0xFFFF (center 0000)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>zzzz: Tilt Position: 0x0000 to 0x3840 &amp; 0xED40 to 0xFFFF (center 0000)</td>
<td></td>
</tr>
<tr>
<td>CAM Image ModelInq</td>
<td>8x 09 04 3F 04 FF</td>
<td>y0 50 0p FF</td>
<td>p: 0-5 = Mode 1-6; p: 6 = Custom mode</td>
</tr>
<tr>
<td>Prompt Inq</td>
<td>8x 09 04 07 00 FF</td>
<td>y0 50 02 FF</td>
<td>On</td>
</tr>
<tr>
<td></td>
<td></td>
<td>y0 50 03 FF</td>
<td>Off</td>
</tr>
<tr>
<td>CAM SERIAL INQ</td>
<td>8x 09 02 18 FF</td>
<td>y0 50 aa bb cc dd ee ff gg hh ii FF</td>
<td>aa bb cc dd ee ff gg hh ii : Serial Number (ASCII)</td>
</tr>
<tr>
<td>CAM_AF Speed Inq</td>
<td>8x 09 04 56 FF</td>
<td>y0 50 02 FF</td>
<td>Normal</td>
</tr>
<tr>
<td></td>
<td></td>
<td>y0 50 03 FF</td>
<td>Fast</td>
</tr>
<tr>
<td>BlackLevelInq</td>
<td>8x 09 04 75 69 FF</td>
<td>y0 50 0p FF</td>
<td>p: 0 to 5, 0:Off, 1:Type 1, 2:Type 2, 3:Type 3,4:Type 4,5:Type 5</td>
</tr>
<tr>
<td>Pan speed table inq</td>
<td>8x 09 06 1A 0p 0q FF</td>
<td>y0 50 0p 0q 0r 0s FF</td>
<td>pq: 0x0 ~ 0x63, pqrs: 0x0 ~ 0xFFFF</td>
</tr>
<tr>
<td>Tilt speed table inq</td>
<td>8x 09 06 1B 0p 0q FF</td>
<td>y0 50 0p 0q 0r 0s FF</td>
<td>pq: 0x0 ~ 0x63, pqrs: 0x0 ~ 0xFFFF</td>
</tr>
<tr>
<td>Model name inq</td>
<td>0x 09 04 3C FF</td>
<td>y0 50 aa bb cc dd ee ff gg hh ii kk FF</td>
<td>aa bb cc dd ee ff gg hh ii kk (ascii code)</td>
</tr>
</tbody>
</table>

RS158 - VC-A51P_VC-A51PN RS-232 command set
<table>
<thead>
<tr>
<th>Inquiry Command</th>
<th>Command Packet</th>
<th>Inquiry Packet</th>
<th>Comments</th>
</tr>
</thead>
</table>
| Tally Mode Inq    | 8x 09 7E 01 0A 01 FF | y0 50 0p FF | p: 0: (Power LED:Green  Standby:OFF)  
5: (Power LED:Red  Standby:Red)  - Tally Lamp must be Enabled  
6: (Power LED: Green  Standby:Red)  - Tally Lamp must be Enabled  
7: (Power LED: OFF  Standby:OFF)  - Tally Lamp must be Enabled |
| Tally Lamp Inq    | 8x 09 7E 01 0A 00 FF | y0 50 0p FF | p: 2 Enable 3: Disable |
| CAM_ColorGainInq  | 8x 09 04 49 FF | y0 50 00 00 00 pq FF | pq: Color Gain setting , pq: 0x00 To 0x19 |
| CAM_Skin_ToneInq  | 8x 09 04 75 06 FF | y0 50 0p FF | p: 0~5 |
| CAM_IP_Addr_Inq   | 8x 09 04 02 FF | y0 50 pq rs tu vw FF | address : pq.rs.tu.vw (HEX), pq = 0~255, rs = 0~255, tu = 0~255, vw = 0~255,  
e.g. 192.168.100.150 => 90 50 C0 A8 64 96 FF |
| CAM_Subnet.Mask_Inq | 8x 09 04 03 FF | y0 50 pq rs tu vw FF | address : pq.rs.tu.vw (HEX), pq = 0~255, rs = 0~255, tu = 0~255, vw = 0~255,  
e.g. 255.255.255.0 => 90 50 FF FF FF 00 FF |
| CAM_Gateway_Inq   | 8x 09 04 04 FF | y0 50 pq rs tu vw FF | address : pq.rs.tu.vw (HEX), pq = 0~255, rs = 0~255, tu = 0~255, vw = 0~255,  
e.g. 192.168.100.254 => 90 50 C0 A8 64 FE FF |
<p>| CAM_Lens_Control_BlockInq | 8x 09 7E 00 FF | y0 50 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 FF | Please refer &quot;Block_Inquiry&quot; page |
| CAM_Camera_Control_BlockInq | 8x 09 7E 01 FF | y0 50 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 FF | Please refer &quot;Block_Inquiry&quot; page |
| CAM_Other_BlockInq | 8x 09 7E 02 FF | y0 50 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 FF | Please refer &quot;Block_Inquiry&quot; page |</p>
<table>
<thead>
<tr>
<th>Inquiry Command</th>
<th>Command Packet</th>
<th>Inquiry Packet</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAM_Extended_1_BlockInq</td>
<td>8x 09 7E 7E 03 FF</td>
<td>y0 50 00 00 00 00 00 00 00 00 00 00 00 FF</td>
<td>Please refer &quot;Block_Inquiry&quot; page</td>
</tr>
<tr>
<td>CAM_Extended_2_BlockInq</td>
<td>8x 09 7E 7E 04 FF</td>
<td>y0 50 00 00 00 00 00 00 00 00 00 00 00 FF</td>
<td>Please refer &quot;Block_Inquiry&quot; page</td>
</tr>
<tr>
<td>CAM_Extended_3_BlockInq</td>
<td>8x 09 7E 7E 05 FF</td>
<td>y0 50 00 00 00 00 00 00 00 00 00 00 00 FF</td>
<td>Please refer &quot;Block_Inquiry&quot; page</td>
</tr>
<tr>
<td>CAM OPT ZOOM LIMIT INQ</td>
<td>8x 09 04 34 43 FF</td>
<td>y0 50 0a 0b FF</td>
<td>ab: 0 ~ 0x13</td>
</tr>
<tr>
<td>CAM MF TRACKING INQ</td>
<td>8x 09 04 32 23 FF</td>
<td>y0 05 0a FF</td>
<td>a: 0(OFF) · 1(ON)</td>
</tr>
<tr>
<td>Power_LoadStateInq</td>
<td>8x 09 04 75 6A FF</td>
<td>y0 50 02 FF</td>
<td>Load preset 0 when power on</td>
</tr>
<tr>
<td></td>
<td></td>
<td>y0 50 03 FF</td>
<td>Load Last status when power on</td>
</tr>
<tr>
<td>Custom_BrightnessInq</td>
<td>8x 09 04 75 67 FF</td>
<td>y0 50 pq FF</td>
<td>pq: 0x0 ~0x19</td>
</tr>
<tr>
<td>Custom_Contrast</td>
<td>8x 09 04 75 68 FF</td>
<td>y0 50 pq FF</td>
<td>pq:0x0 ~ 0x19</td>
</tr>
<tr>
<td>PanTilt_Control_Device_Inq</td>
<td>8x 09 04 75 31 FF</td>
<td>y0 50 0p FF</td>
<td>p: 0 Encoder 1: Controller</td>
</tr>
<tr>
<td>PanTilt_Preset_Speed_Inq</td>
<td>8x 09 04 75 32 FF</td>
<td>y0 50 0p FF</td>
<td>p: 0: [5 deg/sec] · 1: [25 deg/sec] · 2: [50 deg/sec] · 3: [80 deg/sec] · 4: [120 deg/sec] · 5: [160 deg/sec] · 6: [200 deg/sec] · 7: [300 deg/sec]</td>
</tr>
<tr>
<td>CAM_IPRatio1_Inq</td>
<td>8x 09 04 08 FF</td>
<td>y0 50 pq FF</td>
<td>pq: IPRatio1(Hex), ex. IPRatio1 : 60 =&gt; 90 50 3C FF</td>
</tr>
<tr>
<td>CAM_IPRatio2_Inq</td>
<td>8x 09 04 09 FF</td>
<td>y0 50 pq FF</td>
<td>pq: IPRatio2(Hex), ex. IPRatio2 : 30 =&gt; 90 50 1E FF</td>
</tr>
<tr>
<td>RTSP_Multicase_Inq</td>
<td>8x 09 04 10 FF</td>
<td>y0 50 0p FF</td>
<td>p: 0~1 , 0: Disable 1: Enable</td>
</tr>
<tr>
<td>SmartAF ConfLevel</td>
<td>8x 09 7E 04 FF</td>
<td>y0 50 0p FF</td>
<td>p: 1 ~9 (Level)</td>
</tr>
</tbody>
</table>

RS158 - VC-A51P_VC-A51PN RS-232 command set
14. Camera Block Inquiry Command List

14.1 CAM_Lens_Control_Blocking...........Command Set 8x 09 7E 7E 00 FF

<table>
<thead>
<tr>
<th>Byte</th>
<th>Bit</th>
<th>Comments</th>
<th>Byte</th>
<th>Bit</th>
<th>Comments</th>
<th>Byte</th>
<th>Bit</th>
<th>Comments</th>
<th>Byte</th>
<th>Bit</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td></td>
<td></td>
<td>0</td>
<td></td>
<td></td>
<td>0</td>
<td></td>
<td></td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td>2</td>
<td></td>
<td></td>
<td>2</td>
<td></td>
<td></td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td>4</td>
<td></td>
<td></td>
<td>4</td>
<td></td>
<td></td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td>5</td>
<td></td>
<td></td>
<td>5</td>
<td></td>
<td></td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
<td>6</td>
<td></td>
<td></td>
<td>6</td>
<td></td>
<td></td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
<td>7</td>
<td></td>
<td></td>
<td>7</td>
<td></td>
<td></td>
<td>7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Byte0: Source Address
Byte1: Destination Address

<table>
<thead>
<tr>
<th>Byte</th>
<th>Bit</th>
<th>Comments</th>
<th>Byte</th>
<th>Bit</th>
<th>Comments</th>
<th>Byte</th>
<th>Bit</th>
<th>Comments</th>
<th>Byte</th>
<th>Bit</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td></td>
<td></td>
<td>0</td>
<td></td>
<td></td>
<td>0</td>
<td></td>
<td></td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td>2</td>
<td></td>
<td></td>
<td>2</td>
<td></td>
<td></td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td>4</td>
<td></td>
<td></td>
<td>4</td>
<td></td>
<td></td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td>5</td>
<td></td>
<td></td>
<td>5</td>
<td></td>
<td></td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
<td>6</td>
<td></td>
<td></td>
<td>6</td>
<td></td>
<td></td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
<td>7</td>
<td></td>
<td></td>
<td>7</td>
<td></td>
<td></td>
<td>7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Byte2: Zoom Position (HH)

<table>
<thead>
<tr>
<th>Byte</th>
<th>Bit</th>
<th>Comments</th>
<th>Byte</th>
<th>Bit</th>
<th>Comments</th>
<th>Byte</th>
<th>Bit</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td></td>
<td></td>
<td>0</td>
<td></td>
<td></td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td>2</td>
<td></td>
<td></td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td>4</td>
<td></td>
<td></td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td>5</td>
<td></td>
<td></td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
<td>6</td>
<td></td>
<td></td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
<td>7</td>
<td></td>
<td></td>
<td>7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Byte3: Zoom Position (HL)

<table>
<thead>
<tr>
<th>Byte</th>
<th>Bit</th>
<th>Comments</th>
<th>Byte</th>
<th>Bit</th>
<th>Comments</th>
<th>Byte</th>
<th>Bit</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td></td>
<td></td>
<td>0</td>
<td></td>
<td></td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td>2</td>
<td></td>
<td></td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td>4</td>
<td></td>
<td></td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td>5</td>
<td></td>
<td></td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
<td>6</td>
<td></td>
<td></td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
<td>7</td>
<td></td>
<td></td>
<td>7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Byte4: Zoom Position (LH)

<table>
<thead>
<tr>
<th>Byte</th>
<th>Bit</th>
<th>Comments</th>
<th>Byte</th>
<th>Bit</th>
<th>Comments</th>
<th>Byte</th>
<th>Bit</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td></td>
<td></td>
<td>0</td>
<td></td>
<td></td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td>2</td>
<td></td>
<td></td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td>4</td>
<td></td>
<td></td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td>5</td>
<td></td>
<td></td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
<td>6</td>
<td></td>
<td></td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
<td>7</td>
<td></td>
<td></td>
<td>7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Byte5: Zoom Position (LL)

<table>
<thead>
<tr>
<th>Byte</th>
<th>Bit</th>
<th>Comments</th>
<th>Byte</th>
<th>Bit</th>
<th>Comments</th>
<th>Byte</th>
<th>Bit</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td></td>
<td></td>
<td>0</td>
<td></td>
<td></td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td>2</td>
<td></td>
<td></td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td>4</td>
<td></td>
<td></td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td>5</td>
<td></td>
<td></td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
<td>6</td>
<td></td>
<td></td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
<td>7</td>
<td></td>
<td></td>
<td>7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Byte6: Zoom Position (HH)

<table>
<thead>
<tr>
<th>Byte</th>
<th>Bit</th>
<th>Comments</th>
<th>Byte</th>
<th>Bit</th>
<th>Comments</th>
<th>Byte</th>
<th>Bit</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td></td>
<td></td>
<td>0</td>
<td></td>
<td></td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td>2</td>
<td></td>
<td></td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td>4</td>
<td></td>
<td></td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td>5</td>
<td></td>
<td></td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
<td>6</td>
<td></td>
<td></td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
<td>7</td>
<td></td>
<td></td>
<td>7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Byte7: Focus Position (HH)

<table>
<thead>
<tr>
<th>Byte</th>
<th>Bit</th>
<th>Comments</th>
<th>Byte</th>
<th>Bit</th>
<th>Comments</th>
<th>Byte</th>
<th>Bit</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td></td>
<td></td>
<td>0</td>
<td></td>
<td></td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td>2</td>
<td></td>
<td></td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td>4</td>
<td></td>
<td></td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td>5</td>
<td></td>
<td></td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
<td>6</td>
<td></td>
<td></td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
<td>7</td>
<td></td>
<td></td>
<td>7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Byte8: Focus Position (HH)
<table>
<thead>
<tr>
<th>Byte</th>
<th>Bit</th>
<th>Comments</th>
<th>Byte</th>
<th>Bit</th>
<th>Comments</th>
<th>Byte</th>
<th>Bit</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>Focus Position (HL)</td>
<td>6</td>
<td>0</td>
<td></td>
<td>6</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1</td>
<td></td>
<td>7</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>0</td>
<td>Focus Position (LH)</td>
<td>0</td>
<td>0</td>
<td></td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1</td>
<td></td>
<td>1</td>
<td>0</td>
<td></td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2</td>
<td></td>
<td>2</td>
<td>0</td>
<td></td>
<td>2</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3</td>
<td></td>
<td>3</td>
<td>0</td>
<td></td>
<td>3</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4</td>
<td></td>
<td>4</td>
<td>0</td>
<td></td>
<td>4</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5</td>
<td></td>
<td>5</td>
<td>0</td>
<td></td>
<td>5</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6</td>
<td></td>
<td>6</td>
<td>0</td>
<td></td>
<td>6</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>7</td>
<td></td>
<td>7</td>
<td>0</td>
<td></td>
<td>7</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>0</td>
<td>Focus Position (LL)</td>
<td>0</td>
<td>0</td>
<td></td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1</td>
<td></td>
<td>1</td>
<td>0</td>
<td></td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2</td>
<td></td>
<td>2</td>
<td>0</td>
<td></td>
<td>2</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3</td>
<td></td>
<td>3</td>
<td>0</td>
<td></td>
<td>3</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4</td>
<td></td>
<td>4</td>
<td>0</td>
<td></td>
<td>4</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5</td>
<td></td>
<td>5</td>
<td>0</td>
<td></td>
<td>5</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6</td>
<td></td>
<td>6</td>
<td>0</td>
<td></td>
<td>6</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>7</td>
<td></td>
<td>7</td>
<td>0</td>
<td></td>
<td>7</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>0</td>
<td>Focus Mode 0: Manual 1:</td>
<td>0</td>
<td>0</td>
<td></td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1</td>
<td></td>
<td>1</td>
<td>0</td>
<td></td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2</td>
<td></td>
<td>2</td>
<td>0</td>
<td></td>
<td>2</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3</td>
<td></td>
<td>3</td>
<td>0</td>
<td></td>
<td>3</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4</td>
<td></td>
<td>4</td>
<td>0</td>
<td></td>
<td>4</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5</td>
<td></td>
<td>5</td>
<td>0</td>
<td></td>
<td>5</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6</td>
<td></td>
<td>6</td>
<td>0</td>
<td></td>
<td>6</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>7</td>
<td></td>
<td>7</td>
<td>0</td>
<td></td>
<td>7</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

RS158 - VC-A51P_VC-A51PN RS-232 command set
### 14.2 CAM_Camera_Control_Block

#### Command Set 8x 09 7E 7E 01 FF

<table>
<thead>
<tr>
<th>Byte</th>
<th>Bit</th>
<th>Comments</th>
<th>Comments</th>
<th>Comments</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>Source Address</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>0</td>
<td>Destination Address</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>0</td>
<td>R Gain (H)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>0</td>
<td>R Gain (L)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>0</td>
<td>B Gain (H)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>0</td>
<td>B Gain (L)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>0</td>
<td>WB Mode</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>0</td>
<td>Aperture Gain</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>0</td>
<td>Exposure Mode</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

RS158 - VC-A51P VC-A51PN RS-232 command set
<table>
<thead>
<tr>
<th>Byte</th>
<th>Bit</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>Exposure Comp.</td>
<td>1: On 0: Off</td>
</tr>
<tr>
<td>2</td>
<td>Back Light</td>
<td>1: On 0: Off</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>4</td>
<td>WDR</td>
<td>0:Off 1:On</td>
</tr>
<tr>
<td>5</td>
<td>High-Resolution</td>
<td>1: On 0: Off</td>
</tr>
<tr>
<td>6</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Byte10</th>
<th>Bit</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Shutter Position</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Byte11</th>
<th>Bit</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>6</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Byte12</th>
<th>Bit</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>6</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Byte13</th>
<th>Bit</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>6</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Byte14</th>
<th>Bit</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>6</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Byte15</th>
<th>Bit</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>

*RS158 - VC-A51P_VC-A51PN RS-232 command set*
### CAM_Other_BlockInq Command Set 8x 09 7E 7E 02 FF

<table>
<thead>
<tr>
<th>Byte</th>
<th>Bit</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>Source Address</td>
</tr>
<tr>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Byte</th>
<th>Bit</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>0</td>
<td>LR Reverse 1: On 0: Off</td>
</tr>
<tr>
<td>3</td>
<td>0</td>
<td>Freeze 1: On 0: Off</td>
</tr>
<tr>
<td>4</td>
<td>0</td>
<td>ICR 1: On 0: Off</td>
</tr>
<tr>
<td>5</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Byte</th>
<th>Bit</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Byte</th>
<th>Bit</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Byte</th>
<th>Bit</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Byte</th>
<th>Bit</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>0</td>
<td>Picture Effect Mode</td>
</tr>
<tr>
<td>5</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Byte</th>
<th>Bit</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Byte</th>
<th>Bit</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Byte</th>
<th>Bit</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Byte</th>
<th>Bit</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>0</td>
<td>Camera ID (HH)</td>
</tr>
</tbody>
</table>

---

RS158 - VC-A51P VC-A51PN RS-232 command set
<table>
<thead>
<tr>
<th>Byte</th>
<th>Bit</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
<td>Camera ID (HL)</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Byte</th>
<th>Bit</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
<td>Camera ID (LH)</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Byte</th>
<th>Bit</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td></td>
<td>System 1:1/50, 1/25 0:1/59.94, 1/29.97</td>
</tr>
<tr>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>ICR 1: Provided 0: Not provided</td>
</tr>
<tr>
<td>3</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>0</td>
<td>Memory 1: Provided 0: Not provided</td>
</tr>
<tr>
<td>5</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Byte</th>
<th>Bit</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Byte</th>
<th>Bit</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

RS158 - VC-A51P VC-A51PN RS-232 command set
### 14.4 CAM_Extended_1_BlockInq........Command Set 8x 09 7E 7E 03 FF

<table>
<thead>
<tr>
<th>Byte</th>
<th>Bit</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>0</td>
<td>Source Address</td>
</tr>
<tr>
<td>2</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>0</td>
<td>Destination Address</td>
</tr>
<tr>
<td>6</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Byte</th>
<th>Bit</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Byte</th>
<th>Bit</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Byte</th>
<th>Bit</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Byte</th>
<th>Bit</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Byte</th>
<th>Bit</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Byte</th>
<th>Bit</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

**RS158 - VC-A51P VC-A51PN RS-232 command set**
<table>
<thead>
<tr>
<th>Byte</th>
<th>Bit</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Byte10</th>
<th>Bit</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
<td>Flip (1: On, 0: Off)</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>Alarm (1: On, 0: Off)</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Byte11</th>
<th>Bit</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
<td>Flip (1: Provided, 0: Not provided)</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Byte9</th>
<th>Bit</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Byte12</th>
<th>Bit</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Byte13</th>
<th>Bit</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>2DNR Level</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Byte14</th>
<th>Bit</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Gain Limit</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Byte15</th>
<th>Bit</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Byte</th>
<th>Bit</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
<td>Advanced Privacy (1: Provided, 0: Not provided)</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>Color Gain (0h (60%) to Eh (200%))</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>High Sensitivity mode (1: ON, 0: OFF)</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>Gamma</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>0</td>
</tr>
</tbody>
</table>
### 14.5 CAM_Extended_2_BlockInq...........Command Set 8x 09 7E 7E 04 FF

<table>
<thead>
<tr>
<th>Byte</th>
<th>Bit</th>
<th>Comments</th>
<th>Byte</th>
<th>Bit</th>
<th>Comments</th>
<th>Byte</th>
<th>Bit</th>
<th>Comments</th>
<th>Byte</th>
<th>Bit</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Byte0</td>
<td>0</td>
<td></td>
<td>0</td>
<td>0</td>
<td></td>
<td>0</td>
<td>0</td>
<td></td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>Source Address</td>
<td>1</td>
<td>0</td>
<td></td>
<td>1</td>
<td>0</td>
<td></td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2</td>
<td></td>
<td>2</td>
<td>0</td>
<td></td>
<td>2</td>
<td>0</td>
<td></td>
<td>2</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3</td>
<td></td>
<td>3</td>
<td>0</td>
<td></td>
<td>3</td>
<td>0</td>
<td></td>
<td>3</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4</td>
<td></td>
<td>4</td>
<td>0</td>
<td></td>
<td>4</td>
<td>0</td>
<td></td>
<td>4</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>Destination Address</td>
<td>5</td>
<td>0</td>
<td></td>
<td>5</td>
<td>0</td>
<td></td>
<td>5</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6</td>
<td></td>
<td>6</td>
<td>0</td>
<td></td>
<td>6</td>
<td>0</td>
<td></td>
<td>6</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>7</td>
<td></td>
<td>7</td>
<td>0</td>
<td></td>
<td>7</td>
<td>0</td>
<td></td>
<td>7</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Byte1</td>
<td>0</td>
<td></td>
<td>0</td>
<td>0</td>
<td></td>
<td>0</td>
<td>0</td>
<td></td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1</td>
<td></td>
<td>1</td>
<td>0</td>
<td></td>
<td>1</td>
<td>0</td>
<td></td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2</td>
<td></td>
<td>2</td>
<td>0</td>
<td></td>
<td>2</td>
<td>0</td>
<td></td>
<td>2</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3</td>
<td></td>
<td>3</td>
<td>0</td>
<td></td>
<td>3</td>
<td>0</td>
<td></td>
<td>3</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4</td>
<td></td>
<td>4</td>
<td>0</td>
<td></td>
<td>4</td>
<td>0</td>
<td></td>
<td>4</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5</td>
<td></td>
<td>5</td>
<td>0</td>
<td></td>
<td>5</td>
<td>0</td>
<td></td>
<td>5</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6</td>
<td></td>
<td>6</td>
<td>0</td>
<td></td>
<td>6</td>
<td>0</td>
<td></td>
<td>6</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>7</td>
<td></td>
<td>7</td>
<td>0</td>
<td></td>
<td>7</td>
<td>0</td>
<td></td>
<td>7</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Byte2</td>
<td>0</td>
<td></td>
<td>0</td>
<td>0</td>
<td></td>
<td>0</td>
<td>0</td>
<td></td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1</td>
<td></td>
<td>1</td>
<td>0</td>
<td></td>
<td>1</td>
<td>0</td>
<td></td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2</td>
<td></td>
<td>2</td>
<td>0</td>
<td></td>
<td>2</td>
<td>0</td>
<td></td>
<td>2</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3</td>
<td></td>
<td>3</td>
<td>0</td>
<td></td>
<td>3</td>
<td>0</td>
<td></td>
<td>3</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4</td>
<td></td>
<td>4</td>
<td>0</td>
<td></td>
<td>4</td>
<td>0</td>
<td></td>
<td>4</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5</td>
<td></td>
<td>5</td>
<td>0</td>
<td></td>
<td>5</td>
<td>0</td>
<td></td>
<td>5</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6</td>
<td></td>
<td>6</td>
<td>0</td>
<td></td>
<td>6</td>
<td>0</td>
<td></td>
<td>6</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>7</td>
<td></td>
<td>7</td>
<td>0</td>
<td></td>
<td>7</td>
<td>0</td>
<td></td>
<td>7</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Byte</td>
<td>Bit</td>
<td>Comments</td>
<td>Byte</td>
<td>Bit</td>
<td>Comments</td>
<td>Byte</td>
<td>Bit</td>
<td>Comments</td>
<td>Byte</td>
<td>Bit</td>
<td>Comments</td>
</tr>
<tr>
<td>------</td>
<td>-----</td>
<td>----------</td>
<td>------</td>
<td>-----</td>
<td>----------</td>
<td>------</td>
<td>-----</td>
<td>----------</td>
<td>------</td>
<td>-----</td>
<td>----------</td>
</tr>
<tr>
<td>0</td>
<td>0</td>
<td></td>
<td>0</td>
<td>0</td>
<td></td>
<td>0</td>
<td>0</td>
<td></td>
<td>0</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>0</td>
<td></td>
<td>1</td>
<td>0</td>
<td></td>
<td>1</td>
<td>0</td>
<td></td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>0</td>
<td></td>
<td>2</td>
<td>0</td>
<td></td>
<td>2</td>
<td>0</td>
<td></td>
<td>2</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>0</td>
<td></td>
<td>3</td>
<td>0</td>
<td></td>
<td>3</td>
<td>0</td>
<td></td>
<td>3</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>0</td>
<td></td>
<td>4</td>
<td>0</td>
<td></td>
<td>4</td>
<td>0</td>
<td></td>
<td>4</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>0</td>
<td></td>
<td>5</td>
<td>0</td>
<td></td>
<td>5</td>
<td>0</td>
<td></td>
<td>5</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>0</td>
<td></td>
<td>6</td>
<td>0</td>
<td></td>
<td>6</td>
<td>0</td>
<td></td>
<td>6</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>0</td>
<td></td>
<td>7</td>
<td>0</td>
<td></td>
<td>7</td>
<td>0</td>
<td></td>
<td>7</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>0</td>
<td></td>
<td>0</td>
<td>0</td>
<td></td>
<td>0</td>
<td>0</td>
<td></td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>0</td>
<td></td>
<td>1</td>
<td>0</td>
<td></td>
<td>1</td>
<td>0</td>
<td></td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>0</td>
<td></td>
<td>2</td>
<td>0</td>
<td></td>
<td>2</td>
<td>0</td>
<td></td>
<td>2</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>0</td>
<td></td>
<td>3</td>
<td>0</td>
<td></td>
<td>3</td>
<td>0</td>
<td></td>
<td>3</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>0</td>
<td></td>
<td>4</td>
<td>0</td>
<td></td>
<td>4</td>
<td>0</td>
<td></td>
<td>4</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>0</td>
<td></td>
<td>5</td>
<td>0</td>
<td></td>
<td>5</td>
<td>0</td>
<td></td>
<td>5</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>0</td>
<td></td>
<td>6</td>
<td>0</td>
<td></td>
<td>6</td>
<td>0</td>
<td></td>
<td>6</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>0</td>
<td></td>
<td>7</td>
<td>0</td>
<td></td>
<td>7</td>
<td>0</td>
<td></td>
<td>7</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

**RS158 - VC-A51 PN**

VC-A51PN RS-232 command set
### 14.6 CAM_Extended_3_BlockInq Command Set 8x 09 7E 7E 05 FF

<table>
<thead>
<tr>
<th>Byte</th>
<th>Bit</th>
<th>Comments</th>
<th>Byte</th>
<th>Bit</th>
<th>Comments</th>
<th>Byte</th>
<th>Bit</th>
<th>Comments</th>
<th>Byte</th>
<th>Bit</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td></td>
<td>0</td>
<td>0</td>
<td></td>
<td>0</td>
<td>0</td>
<td></td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>0</td>
<td>Source Address</td>
<td>1</td>
<td>0</td>
<td></td>
<td>1</td>
<td>0</td>
<td></td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>0</td>
<td></td>
<td>2</td>
<td>0</td>
<td></td>
<td>2</td>
<td>0</td>
<td></td>
<td>2</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>0</td>
<td></td>
<td>3</td>
<td>0</td>
<td></td>
<td>3</td>
<td>0</td>
<td></td>
<td>3</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>1</td>
<td>Destination Address</td>
<td>4</td>
<td>0</td>
<td></td>
<td>4</td>
<td>0</td>
<td></td>
<td>4</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>0</td>
<td></td>
<td>5</td>
<td>0</td>
<td></td>
<td>5</td>
<td>0</td>
<td></td>
<td>5</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>1</td>
<td></td>
<td>6</td>
<td>0</td>
<td></td>
<td>6</td>
<td>0</td>
<td></td>
<td>6</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>0</td>
<td></td>
<td>7</td>
<td>0</td>
<td></td>
<td>7</td>
<td>0</td>
<td></td>
<td>7</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>0</td>
<td></td>
<td>0</td>
<td>0</td>
<td></td>
<td>0</td>
<td>0</td>
<td></td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>0</td>
<td></td>
<td>1</td>
<td>0</td>
<td></td>
<td>1</td>
<td>0</td>
<td></td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>0</td>
<td></td>
<td>2</td>
<td>0</td>
<td></td>
<td>2</td>
<td>0</td>
<td></td>
<td>2</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>0</td>
<td></td>
<td>3</td>
<td>0</td>
<td></td>
<td>3</td>
<td>0</td>
<td></td>
<td>3</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>0</td>
<td></td>
<td>4</td>
<td>0</td>
<td></td>
<td>4</td>
<td>0</td>
<td></td>
<td>4</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>0</td>
<td></td>
<td>5</td>
<td>0</td>
<td></td>
<td>5</td>
<td>0</td>
<td></td>
<td>5</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>0</td>
<td></td>
<td>6</td>
<td>0</td>
<td></td>
<td>6</td>
<td>0</td>
<td></td>
<td>6</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>0</td>
<td></td>
<td>7</td>
<td>0</td>
<td></td>
<td>7</td>
<td>0</td>
<td></td>
<td>7</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

RS158 - VC-A51P VC-A51PN RS-232 command set
<table>
<thead>
<tr>
<th>Byte</th>
<th>Bit</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>4</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>5</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>6</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>7</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Byte</th>
<th>Bit</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>4</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>5</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>6</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>7</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Byte</th>
<th>Bit</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>4</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>5</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>6</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>7</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Byte</th>
<th>Bit</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>4</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>5</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>6</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>7</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Byte</th>
<th>Bit</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>4</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>5</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>6</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>7</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Byte</th>
<th>Bit</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>4</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>5</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>6</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>7</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Byte</th>
<th>Bit</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>4</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>5</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>6</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>7</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Byte</th>
<th>Bit</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>4</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>5</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>6</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>7</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

RS158 - VC-A51P VC-A51PN RS-232 command set
15. RS232 over IP

15.1 Overview of RS232 over IP
   RS232 over IP allows you to control this unit from the controller with the IP communication function via the LAN by using RS232.
   You can connect up to 5 controllers simultaneously on one LAN segment.
   The communication specifications of RS232 over IP are as follows:

15.2 Interface
   RJ-45 10Base-T/100Base-TX (automatically discrimination)

15.3 Internet protocol
   IPv4

15.4 Transport protocol
   UDP

15.5 IP address
   Set by the IP card setting command

15.6 Port address
   52381

15.7 Delivery confirmation/Retransmission control
   Depends on the application

15.8 Coverage
   Limited dedicated network in the same segment without going through a bridge connection.
   In this section, the device outputting commands, for example, a computer, is called the controller, and this unit and the devices connected to the same LAN are called the peripheral device. In the connection using RS-232/RS-422, the controllers and peripheral devices are connected to a one-direction ring. On the IP communication connection, the controllers and peripheral devices are connected by star type through a LAN.
While the IP communication connection, the address of each device cannot be set in the RS232 message as it is because the controllers and peripheral devices that are connected simultaneously are increased. In this case, addresses of the controllers and peripheral devices that are set in the RS232 message are locked to 0 (for the controller) or 1 (for the peripheral device).

15.9 Packet Structure
The basic unit of VISCA communication is called a packet [Pic.1]. The first byte of the packet is called the header and comprises the sender’s and receiver’s addresses. For example, the header of the packet sent to the SRG assigned address 1 from the controller (address 0) is 81h in hexadecimal. The packet sent to the SRG assigned address 2 is 82h. In the command list, as the header is 8X, input the address of the SRG to X. The header of the reply packet from the SRG assigned address 1 is 90h. The packet from the SRG assigned address 2 is A0h.
Some of the setting commands for SRG can be sent to all devices at one time (broadcast)*. In the case of broadcast, the header should be 88h in hexadecimal.
When the terminator is FFh, it signifies the end of the packet.
*The broadcast function is not available for VISCA over IP.

Pic. 1 Packet structure

Note:
Pic. 1 shows the packet structure, while Pic.2 shows the actual waveform. Data flow will take place with the LSB first.
16. Communication method of VISCA over IP

16.1 Communication method
VISCA over IP can process the VISCA communication between the controllers and peripheral devices using the messages that can be identified on the LAN, and sends/receives them. Because of this, VISCA over IP is not concerned about the contents of the communication between the controllers and peripheral devices. However, the VISCA communication sequence is different, depending on the types, as follows.

16.2 VISCA command
This is a command from the controller to the peripheral device. When the peripheral device receives this command, Acknowledge is returned. After completing command processing, a completion notice is returned. This command uses the socket of VISCA. The order of completion notices may be changed if the multiple commands are sent to the same peripheral device.

16.3 VISCA inquiry
This is an inquiry from the controller to the peripheral device. When the peripheral device receives this type of command, the reply for the inquiry is returned. This command does not use the socket of VISCA. The order of the replies is not changed if a multiple commands are sent.
16.4 VISCA reply
This is an Acknowledge, completion notice, reply, or error reply from the peripheral device to the controller. The classification for sending messages from the peripheral device to the controller is common.

16.5 VISCA device setting command
This is the device setting command from the controller to the peripheral device. When the peripheral device receives this classifications command, the peripheral device performs the function depend on the command.

16.6 Address
Sets the address of the peripheral device, and does not return a reply to the controller. While using VISCA over IP, the address command is not sent from the controller because a Network Change command from the peripheral device that triggers sending command is not issued.

16.7 IF_Clear
Sends the reply message to the controller after clearing, without using VISCA socket.

16.8 CAM_VersionInq
Sends the reply message to the controller, without using VISCA socket.

16.9 Format
These are the specifications of the message header (8 bytes) and payload (1 to 16 bytes).
16.10  Payload type
Stores the value (Byte 0 and Byte 1) of the following table on the payload division.
### Payload length
Stores the number of bytes (1 to 16) of data is stored on the payload.
Example: when the payload length is 16 bytes.

- **Byte 2**: 00h
- **Byte 3**: 10h

### Sequence number
The controller stores the sequence number that is added every time a message is sent. If the sequence number reaches the limit, next values will be 0. The peripheral device saves the sequence number in the message from the controller, and stores the sequence number of the received message corresponding to the message sent to the controller.

### Payload
Depending on the payload type, the following are stored.

- **VISCA command**
  - Stores the packet of the VISCA command.
- **VISCA inquiry**
  - Stores the packet of VISCA message.
- **VISCA reply**
  - Stores the reply for the command or inquiry (Acknowledge message, completion message, or error message).
- **VISCA device setting command**

---

<table>
<thead>
<tr>
<th>Name</th>
<th>Value (Byte 0)</th>
<th>Value (Byte 1)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>VISCA command</td>
<td>01h</td>
<td>00h</td>
<td>Stores the VISCA command.</td>
</tr>
<tr>
<td>VISCA inquiry</td>
<td>01h</td>
<td>10h</td>
<td>Stores the VISCA inquiry.</td>
</tr>
<tr>
<td>VISCA reply</td>
<td>01h</td>
<td>11h</td>
<td>Stores the reply for the VISCA command and VISCA inquiry, or VISCA device setting command.</td>
</tr>
<tr>
<td>VISCA device setting command</td>
<td>01h</td>
<td>20h</td>
<td>Stores the VISCA device setting command.</td>
</tr>
<tr>
<td>Control command</td>
<td>02h</td>
<td>00h</td>
<td>Stores the control command.</td>
</tr>
<tr>
<td>Control reply</td>
<td>02h</td>
<td>01h</td>
<td>Stores the reply for the control command.</td>
</tr>
</tbody>
</table>

Pic.4 Payload Type Table
- Stores the packet of the VISCA device setting command.
  - Control command
    - The following are stored on the payload division of the control command.

<table>
<thead>
<tr>
<th>Name</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RESET</td>
<td>01h</td>
<td>Resets the sequence number to 0. The value that was set as the sequence number is ignored.</td>
</tr>
<tr>
<td>ERROR</td>
<td>0Fyyh</td>
<td>yy=01: Abnormality in the sequence number. yy=02: Abnormality in the message (message type)</td>
</tr>
</tbody>
</table>

- Controlled reply
  - The following are stored on the payload division of the reply for the control command.

<table>
<thead>
<tr>
<th>Message</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acknowledge</td>
<td>01h</td>
<td>Reply for RESET.</td>
</tr>
</tbody>
</table>

16.14 Delivery confirmation
VISCA over IP uses UDP as a communications protocol of the transport layer. Delivery of messages is not guaranteed for the UDP communication. Delivery confirmation and retransmission should be performed on the application. When the controller sends a message to the peripheral device, wait until a reply for the message is received before sending the next message. You can confirm delivery of messages by managing the time-out waiting for a reply message sent.
If time out occurs on the controller, loss of one of the following message is considered:
- Command
- Acknowledge message
- Completion message for command
- Inquiry
- Reply message for the inquiry
- Error message
- Inquiry of the VISCA device setting command
- Reply message of the VISCA device setting command.
### 17. PelcoD Internal Command List

<table>
<thead>
<tr>
<th>Internal Command</th>
<th>Byte 1</th>
<th>Byte 2 (Address)</th>
<th>Byte 3</th>
<th>Byte 4</th>
<th>Byte 5</th>
<th>Byte 6</th>
<th>Byte 7</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Right</td>
<td>0xFF</td>
<td>0x00 ~ 0xFF</td>
<td>0x00</td>
<td>0x02</td>
<td>0xVV</td>
<td>0xWW</td>
<td>CheckSum</td>
<td></td>
</tr>
<tr>
<td>Left</td>
<td>0xFF</td>
<td>0x00 ~ 0xFF</td>
<td>0x00</td>
<td>0x04</td>
<td>0xVV</td>
<td>0xWW</td>
<td>CheckSum</td>
<td></td>
</tr>
<tr>
<td>Up</td>
<td>0xFF</td>
<td>0x00 ~ 0xFF</td>
<td>0x00</td>
<td>0x08</td>
<td>0xVV</td>
<td>0xWW</td>
<td>CheckSum</td>
<td></td>
</tr>
<tr>
<td>Down</td>
<td>0xFF</td>
<td>0x00 ~ 0xFF</td>
<td>0x00</td>
<td>0x10</td>
<td>0xVV</td>
<td>0xWW</td>
<td>CheckSum</td>
<td></td>
</tr>
<tr>
<td>Right - Up</td>
<td>0xFF</td>
<td>0x00 ~ 0xFF</td>
<td>0x00</td>
<td>0x0A</td>
<td>0xVV</td>
<td>0xWW</td>
<td>CheckSum</td>
<td></td>
</tr>
<tr>
<td>Left - Up</td>
<td>0xFF</td>
<td>0x00 ~ 0xFF</td>
<td>0x00</td>
<td>0x0C</td>
<td>0xVV</td>
<td>0xWW</td>
<td>CheckSum</td>
<td></td>
</tr>
<tr>
<td>Right - Down</td>
<td>0xFF</td>
<td>0x00 ~ 0xFF</td>
<td>0x00</td>
<td>0x12</td>
<td>0xVV</td>
<td>0xWW</td>
<td>CheckSum</td>
<td></td>
</tr>
<tr>
<td>Left - Down</td>
<td>0xFF</td>
<td>0x00 ~ 0xFF</td>
<td>0x00</td>
<td>0x14</td>
<td>0xVV</td>
<td>0xWW</td>
<td>CheckSum</td>
<td></td>
</tr>
<tr>
<td>Zoom Tele Down</td>
<td>0xFF</td>
<td>0x00 ~ 0xFF</td>
<td>0x00</td>
<td>0x30</td>
<td>0xVV</td>
<td>0xWW</td>
<td>CheckSum</td>
<td></td>
</tr>
<tr>
<td>Zoom Tele Up</td>
<td>0xFF</td>
<td>0x00 ~ 0xFF</td>
<td>0x00</td>
<td>0x28</td>
<td>0xVV</td>
<td>0xWW</td>
<td>CheckSum</td>
<td></td>
</tr>
<tr>
<td>Zoom Tele Left</td>
<td>0xFF</td>
<td>0x00 ~ 0xFF</td>
<td>0x00</td>
<td>0x24</td>
<td>0xVV</td>
<td>0xWW</td>
<td>CheckSum</td>
<td></td>
</tr>
<tr>
<td>Zoom Tele Right</td>
<td>0xFF</td>
<td>0x00 ~ 0xFF</td>
<td>0x00</td>
<td>0x22</td>
<td>0xVV</td>
<td>0xWW</td>
<td>CheckSum</td>
<td></td>
</tr>
<tr>
<td>Zoom Tele Up-Left</td>
<td>0xFF</td>
<td>0x00 ~ 0xFF</td>
<td>0x00</td>
<td>0x2C</td>
<td>0xVV</td>
<td>0xWW</td>
<td>CheckSum</td>
<td></td>
</tr>
<tr>
<td>Zoom Tele Up-Right</td>
<td>0xFF</td>
<td>0x00 ~ 0xFF</td>
<td>0x00</td>
<td>0x2A</td>
<td>0xVV</td>
<td>0xWW</td>
<td>CheckSum</td>
<td></td>
</tr>
<tr>
<td>Zoom Tele Down-Left</td>
<td>0xFF</td>
<td>0x00 ~ 0xFF</td>
<td>0x00</td>
<td>0x34</td>
<td>0xVV</td>
<td>0xWW</td>
<td>CheckSum</td>
<td></td>
</tr>
<tr>
<td>Zoom Tele Down-Right</td>
<td>0xFF</td>
<td>0x00 ~ 0xFF</td>
<td>0x00</td>
<td>0x32</td>
<td>0xVV</td>
<td>0xWW</td>
<td>CheckSum</td>
<td></td>
</tr>
<tr>
<td>Zoom Wide Down</td>
<td>0xFF</td>
<td>0x00 ~ 0xFF</td>
<td>0x00</td>
<td>0x50</td>
<td>0xVV</td>
<td>0xWW</td>
<td>CheckSum</td>
<td></td>
</tr>
<tr>
<td>Zoom Wide Up</td>
<td>0xFF</td>
<td>0x00 ~ 0xFF</td>
<td>0x00</td>
<td>0x48</td>
<td>0xVV</td>
<td>0xWW</td>
<td>CheckSum</td>
<td></td>
</tr>
<tr>
<td>Zoom Wide Left</td>
<td>0xFF</td>
<td>0x00 ~ 0xFF</td>
<td>0x00</td>
<td>0x44</td>
<td>0xVV</td>
<td>0xWW</td>
<td>CheckSum</td>
<td></td>
</tr>
<tr>
<td>Zoom Wide Right</td>
<td>0xFF</td>
<td>0x00 ~ 0xFF</td>
<td>0x00</td>
<td>0x42</td>
<td>0xVV</td>
<td>0xWW</td>
<td>CheckSum</td>
<td></td>
</tr>
<tr>
<td>Zoom Wide Up-Left</td>
<td>0xFF</td>
<td>0x00 ~ 0xFF</td>
<td>0x00</td>
<td>0x4C</td>
<td>0xVV</td>
<td>0xWW</td>
<td>CheckSum</td>
<td></td>
</tr>
<tr>
<td>Zoom Wide Up-Right</td>
<td>0xFF</td>
<td>0x00 ~ 0xFF</td>
<td>0x00</td>
<td>0x4A</td>
<td>0xVV</td>
<td>0xWW</td>
<td>CheckSum</td>
<td></td>
</tr>
<tr>
<td>Zoom Wide Down-Left</td>
<td>0xFF</td>
<td>0x00 ~ 0xFF</td>
<td>0x00</td>
<td>0x54</td>
<td>0xVV</td>
<td>0xWW</td>
<td>CheckSum</td>
<td></td>
</tr>
<tr>
<td>Zoom Wide Down-Right</td>
<td>0xFF</td>
<td>0x00 ~ 0xFF</td>
<td>0x00</td>
<td>0x52</td>
<td>0xVV</td>
<td>0xWW</td>
<td>CheckSum</td>
<td></td>
</tr>
</tbody>
</table>

VV : Tilt speed 0x01 (low speed) to 0x18 (high speed)
WW : Pan speed 0x01 (low speed) to 0x18 (high speed)
<table>
<thead>
<tr>
<th>Internal Command</th>
<th>Byte 1</th>
<th>Byte 2 (Address)</th>
<th>Byte 3</th>
<th>Byte 4</th>
<th>Byte 5</th>
<th>Byte 6</th>
<th>Byte 7</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOCUS Far Down</td>
<td>0xFF</td>
<td>0x00 ~ 0xFF</td>
<td>0x00</td>
<td>0x90</td>
<td>0xVV</td>
<td>0xWW</td>
<td>CheckSum</td>
<td>VV : Tilt speed 0x01 (low speed) to 0x18 (high speed) WW : Pan speed 0x01 (low speed) to 0x18 (high speed)</td>
</tr>
<tr>
<td>FOCUS Far Up</td>
<td>0xFF</td>
<td>0x00 ~ 0xFF</td>
<td>0x00</td>
<td>0x88</td>
<td>0xVV</td>
<td>0xWW</td>
<td>CheckSum</td>
<td></td>
</tr>
<tr>
<td>FOCUS Far Left</td>
<td>0xFF</td>
<td>0x00 ~ 0xFF</td>
<td>0x00</td>
<td>0x84</td>
<td>0xVV</td>
<td>0xWW</td>
<td>CheckSum</td>
<td></td>
</tr>
<tr>
<td>FOCUS Far Right</td>
<td>0xFF</td>
<td>0x00 ~ 0xFF</td>
<td>0x00</td>
<td>0x82</td>
<td>0xVV</td>
<td>0xWW</td>
<td>CheckSum</td>
<td></td>
</tr>
<tr>
<td>FOCUS Far Up-Left</td>
<td>0xFF</td>
<td>0x00 ~ 0xFF</td>
<td>0x00</td>
<td>0x8C</td>
<td>0xVV</td>
<td>0xWW</td>
<td>CheckSum</td>
<td></td>
</tr>
<tr>
<td>FOCUS Far Up-Right</td>
<td>0xFF</td>
<td>0x00 ~ 0xFF</td>
<td>0x00</td>
<td>0x8A</td>
<td>0xVV</td>
<td>0xWW</td>
<td>CheckSum</td>
<td></td>
</tr>
<tr>
<td>FOCUS Far Down-Left</td>
<td>0xFF</td>
<td>0x00 ~ 0xFF</td>
<td>0x00</td>
<td>0x94</td>
<td>0xVV</td>
<td>0xWW</td>
<td>CheckSum</td>
<td></td>
</tr>
<tr>
<td>FOCUS Far Down-Right</td>
<td>0xFF</td>
<td>0x00 ~ 0xFF</td>
<td>0x00</td>
<td>0x92</td>
<td>0xVV</td>
<td>0xWW</td>
<td>CheckSum</td>
<td></td>
</tr>
<tr>
<td>FOCUS Near Down</td>
<td>0xFF</td>
<td>0x00 ~ 0xFF</td>
<td>0x01</td>
<td>0x10</td>
<td>0xVV</td>
<td>0xWW</td>
<td>CheckSum</td>
<td></td>
</tr>
<tr>
<td>FOCUS Near Up</td>
<td>0xFF</td>
<td>0x00 ~ 0xFF</td>
<td>0x01</td>
<td>0x08</td>
<td>0xVV</td>
<td>0xWW</td>
<td>CheckSum</td>
<td></td>
</tr>
<tr>
<td>FOCUS Near Left</td>
<td>0xFF</td>
<td>0x00 ~ 0xFF</td>
<td>0x01</td>
<td>0x04</td>
<td>0xVV</td>
<td>0xWW</td>
<td>CheckSum</td>
<td></td>
</tr>
<tr>
<td>FOCUS Near Right</td>
<td>0xFF</td>
<td>0x00 ~ 0xFF</td>
<td>0x01</td>
<td>0x02</td>
<td>0xVV</td>
<td>0xWW</td>
<td>CheckSum</td>
<td></td>
</tr>
<tr>
<td>FOCUS Near Up-Left</td>
<td>0xFF</td>
<td>0x00 ~ 0xFF</td>
<td>0x01</td>
<td>0x0C</td>
<td>0xVV</td>
<td>0xWW</td>
<td>CheckSum</td>
<td></td>
</tr>
<tr>
<td>FOCUS Near Up-Right</td>
<td>0xFF</td>
<td>0x00 ~ 0xFF</td>
<td>0x01</td>
<td>0x0A</td>
<td>0xVV</td>
<td>0xWW</td>
<td>CheckSum</td>
<td></td>
</tr>
<tr>
<td>FOCUS Near Down-Left</td>
<td>0xFF</td>
<td>0x00 ~ 0xFF</td>
<td>0x01</td>
<td>0x14</td>
<td>0xVV</td>
<td>0xWW</td>
<td>CheckSum</td>
<td></td>
</tr>
<tr>
<td>FOCUS Near Down-Right</td>
<td>0xFF</td>
<td>0x00 ~ 0xFF</td>
<td>0x01</td>
<td>0x12</td>
<td>0xVV</td>
<td>0xWW</td>
<td>CheckSum</td>
<td></td>
</tr>
<tr>
<td>Stop</td>
<td>0xFF</td>
<td>0x00 ~ 0xFF</td>
<td>0x00</td>
<td>0x00</td>
<td>0x00</td>
<td>CheckSum</td>
<td>Stop Pan/Tilt &amp; Zomm/Focus</td>
<td>Speed = VISCA Tele (Variable) = 0x03</td>
</tr>
<tr>
<td>Zoom Tele</td>
<td>0xFF</td>
<td>0x00 ~ 0xFF</td>
<td>0x00</td>
<td>0x20</td>
<td>0x00</td>
<td>CheckSum</td>
<td>Speed = VISCA Tele (Variable) = 0x03</td>
<td></td>
</tr>
<tr>
<td>Zoom Wide</td>
<td>0xFF</td>
<td>0x00 ~ 0xFF</td>
<td>0x00</td>
<td>0x40</td>
<td>0x00</td>
<td>CheckSum</td>
<td>Speed = VISCA Wide (Variable) = 0x03</td>
<td></td>
</tr>
<tr>
<td>Focus Far</td>
<td>0xFF</td>
<td>0x00 ~ 0xFF</td>
<td>0x00</td>
<td>0x80</td>
<td>0x00</td>
<td>CheckSum</td>
<td>Speed = VISCA Far (Variable) = 0x02</td>
<td></td>
</tr>
<tr>
<td>Focus Near</td>
<td>0xFF</td>
<td>0x00 ~ 0xFF</td>
<td>0x01</td>
<td>0x00</td>
<td>0x00</td>
<td>CheckSum</td>
<td>Speed = VISCA Near (Variable) = 0x02</td>
<td></td>
</tr>
</tbody>
</table>

Checksum = Mod((Byte 2 + Byte 3 + Byte 4 + Byte 5 + Byte 6), 0x100);
18. PelcoD External Command List

### 18.1 External Command

<table>
<thead>
<tr>
<th>External Command</th>
<th>Byte 1</th>
<th>Byte 2 (Address)</th>
<th>Byte 3</th>
<th>Byte 4</th>
<th>Byte 5</th>
<th>Byte 6</th>
<th>Byte 7</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Set Preset</td>
<td>0xFF</td>
<td>0x00 ~ 0x7F</td>
<td>0x00</td>
<td>0x03</td>
<td>0x00</td>
<td>0x00</td>
<td>0xpq</td>
<td>CheckSum</td>
</tr>
<tr>
<td>Clear Preset</td>
<td>0xFF</td>
<td>0x00 ~ 0x7F</td>
<td>0x00</td>
<td>0x05</td>
<td>0x00</td>
<td>0x00</td>
<td>0xpq</td>
<td>CheckSum</td>
</tr>
<tr>
<td>Goto Preset</td>
<td>0xFF</td>
<td>0x00 ~ 0x7F</td>
<td>0x00</td>
<td>0x07</td>
<td>0x00</td>
<td>0x00</td>
<td>0xpq</td>
<td>CheckSum</td>
</tr>
<tr>
<td>POWER</td>
<td>0xFF</td>
<td>0x00 ~ 0xFF</td>
<td>0x00</td>
<td>0x45</td>
<td>0x00</td>
<td>On:0x01 Off:0x02</td>
<td>CheckSum</td>
<td>Power On/Off</td>
</tr>
<tr>
<td>MENU</td>
<td>0xFF</td>
<td>0x00 ~ 0xFF</td>
<td>0x00</td>
<td>0x47</td>
<td>0x00</td>
<td>On:0x01 Off:0x02</td>
<td>CheckSum</td>
<td>System Menu On/Off</td>
</tr>
<tr>
<td>ENTER</td>
<td>0xFF</td>
<td>0x00 ~ 0xFF</td>
<td>0x00</td>
<td>0x49</td>
<td>0x00</td>
<td>0x00</td>
<td>CheckSum</td>
<td>Menu Enter</td>
</tr>
<tr>
<td>BACKLIGHT</td>
<td>0xFF</td>
<td>0x00 ~ 0xFF</td>
<td>0x00</td>
<td>0x31</td>
<td>0x00</td>
<td>On:0x01 Off:0x02</td>
<td>CheckSum</td>
<td>Back Light Compensation ON/OFF</td>
</tr>
<tr>
<td>MIRROR</td>
<td>0xFF</td>
<td>0x00 ~ 0xFF</td>
<td>0x00</td>
<td>0x4B</td>
<td>0x00</td>
<td>0x01:Normal 0x02:Mirror 0x03:Flip 0x04:Mirror+Flip</td>
<td>CheckSum</td>
<td>Mirror Image ON/OFF &amp; Picture flip ON/OFF</td>
</tr>
<tr>
<td>FREEZE</td>
<td>0xFF</td>
<td>0x00 ~ 0xFF</td>
<td>0x00</td>
<td>0x4D</td>
<td>0x00</td>
<td>On:0x01 Off:0x02</td>
<td>CheckSum</td>
<td>Still Image ON/OFF</td>
</tr>
<tr>
<td>Auto Foucus / Manual Focus</td>
<td>0xFF</td>
<td>0x00 ~ 0xFF</td>
<td>0x00</td>
<td>0x2B</td>
<td>0x00</td>
<td>AF:0x01 MF:0x02</td>
<td>CheckSum</td>
<td>AF/MF Switch</td>
</tr>
<tr>
<td>Bright Ctrl Up</td>
<td>0xFF</td>
<td>0x00 ~ 0xFF</td>
<td>0x00</td>
<td>0xA1</td>
<td>0x00</td>
<td>0x00</td>
<td>CheckSum</td>
<td>AE Bright Control Up</td>
</tr>
<tr>
<td>Bright Ctrl Down</td>
<td>0xFF</td>
<td>0x00 ~ 0xFF</td>
<td>0x00</td>
<td>0xA3</td>
<td>0x00</td>
<td>0x00</td>
<td>CheckSum</td>
<td>AE Bright Control Down</td>
</tr>
</tbody>
</table>
### 18.2 Query Command

<table>
<thead>
<tr>
<th>Query Command</th>
<th>Byte 1</th>
<th>Byte 2 (Address)</th>
<th>Byte 3</th>
<th>Byte 4</th>
<th>Byte 5</th>
<th>Byte 6</th>
<th>Byte 7</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Query Command Package</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Query Pan Position</td>
<td>0xFF</td>
<td>0x00 ~ 0xFF</td>
<td>0x00</td>
<td>0x51</td>
<td>0x00</td>
<td>0x00</td>
<td>CheckSum</td>
<td>Get Pan Position</td>
</tr>
<tr>
<td>Query Tilt Position</td>
<td>0xFF</td>
<td>0x00 ~ 0xFF</td>
<td>0x00</td>
<td>0x53</td>
<td>0x00</td>
<td>0x00</td>
<td>CheckSum</td>
<td>Get Tilt Position</td>
</tr>
<tr>
<td>Query Zoom Position</td>
<td>0xFF</td>
<td>0x00 ~ 0xFF</td>
<td>0x00</td>
<td>0x55</td>
<td>0x00</td>
<td>0x00</td>
<td>CheckSum</td>
<td>Get Zoom Position</td>
</tr>
<tr>
<td>Query POWER</td>
<td>0xFF</td>
<td>0x00 ~ 0xFF</td>
<td>0x00</td>
<td>0x61</td>
<td>0x00</td>
<td>0x00</td>
<td>CheckSum</td>
<td>Get Power On/Off Status</td>
</tr>
<tr>
<td>Query MENU</td>
<td>0xFF</td>
<td>0x00 ~ 0xFF</td>
<td>0x00</td>
<td>0x63</td>
<td>0x00</td>
<td>0x00</td>
<td>CheckSum</td>
<td>Get Menu On/Off Status</td>
</tr>
<tr>
<td>Query BACKLIGHT</td>
<td>0xFF</td>
<td>0x00 ~ 0xFF</td>
<td>0x00</td>
<td>0x65</td>
<td>0x00</td>
<td>0x00</td>
<td>CheckSum</td>
<td>Get Backlight On/Off Status</td>
</tr>
<tr>
<td>Query MIRROR</td>
<td>0xFF</td>
<td>0x00 ~ 0xFF</td>
<td>0x00</td>
<td>0x67</td>
<td>0x00</td>
<td>0x00</td>
<td>CheckSum</td>
<td>Get Mirror &amp; Flip Status</td>
</tr>
<tr>
<td>Query FREEZE</td>
<td>0xFF</td>
<td>0x00 ~ 0xFF</td>
<td>0x00</td>
<td>0x69</td>
<td>0x00</td>
<td>0x00</td>
<td>CheckSum</td>
<td>Get Freeze Status</td>
</tr>
<tr>
<td><strong>Query Ack Package</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Query Pan Response</td>
<td>0xFF</td>
<td>0x00 ~ 0xFF</td>
<td>0x00</td>
<td>0x59</td>
<td>0xpq</td>
<td>0xrz</td>
<td>CheckSum</td>
<td>pqrz: Pan Position 0x0000 to 0x06A4 &amp; 0xF95C to 0xFFFF (center 0000)</td>
</tr>
<tr>
<td>Query Tilt Response</td>
<td>0xFF</td>
<td>0x00 ~ 0xFF</td>
<td>0x00</td>
<td>0x5B</td>
<td>0xpq</td>
<td>0xrz</td>
<td>CheckSum</td>
<td>pqrz: Tilt Position 0x0000 to 0x0384 &amp; 0xFED4 to 0xFFFF (center 0000)</td>
</tr>
<tr>
<td>Query Zoom Response</td>
<td>0xFF</td>
<td>0x00 ~ 0xFF</td>
<td>0x00</td>
<td>0x5D</td>
<td>0xpq</td>
<td>0xrz</td>
<td>CheckSum</td>
<td>pqrz: Zoom Position , pqrz: 0x0000~0x4000</td>
</tr>
<tr>
<td>Query POWER Response</td>
<td>0xFF</td>
<td>0x00 ~ 0xFF</td>
<td>0x00</td>
<td>0x71</td>
<td>0x00</td>
<td>On:0x01 Off:0x02</td>
<td>CheckSum</td>
<td>Power Status Response</td>
</tr>
<tr>
<td>Query MENU Response</td>
<td>0xFF</td>
<td>0x00 ~ 0xFF</td>
<td>0x00</td>
<td>0x73</td>
<td>0x00</td>
<td>On:0x01 Off:0x02</td>
<td>CheckSum</td>
<td>Menu Status Response</td>
</tr>
<tr>
<td>Query BACKLIGHT</td>
<td>0xFF</td>
<td>0x00 ~ 0xFF</td>
<td>0x00</td>
<td>0x75</td>
<td>0x00</td>
<td>On:0x01 Off:0x02</td>
<td>CheckSum</td>
<td>Backlight Status Response</td>
</tr>
</tbody>
</table>

RS158 - VC-A51P VC-A51PN RS-232 command set
<table>
<thead>
<tr>
<th>Query Command</th>
<th>Byte 1</th>
<th>Byte 2 (Address)</th>
<th>Byte 3</th>
<th>Byte 4</th>
<th>Byte 5</th>
<th>Byte 6</th>
<th>Byte 7</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Response</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Query MIRROR</td>
<td>0xFF</td>
<td>0x00 ~ 0xFF</td>
<td>0x00</td>
<td>0x77</td>
<td>0x00</td>
<td>0x01:Normal</td>
<td>0x00</td>
<td>Mirror &amp; Flip Status Response</td>
</tr>
<tr>
<td>Response</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Query FREEZE</td>
<td>0xFF</td>
<td>0x00 ~ 0xFF</td>
<td>0x00</td>
<td>0x79</td>
<td>0x00</td>
<td>0x01:On; 0x02:Off</td>
<td>0x00</td>
<td>Freeze Status Response</td>
</tr>
<tr>
<td>Response</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Checksum = Mod((Byte 2 + Byte 3 + Byte 4 + Byte 5 + Byte 6), 0x100);