

Partner: Lumens Digital Optics Inc.**Model: VC-A50S****Device Type: Camera****GENERAL INFORMATION**

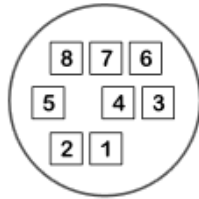
| | |
|------------------------------------|--|
| SIMPLWINDOWS NAME: | Lumens VC-A50S v1.0 |
| CATEGORY: | Camera |
| VERSION: | 1.0 |
| SUMMARY: | This module will control the Lumens VC-A50S. It uses 2-way RS232 communications, stores up to 25 presets on the Crestron system, and allows camera control using Crestron Touch Screen and Crestron App. White Balance, Exposure, and Advanced controls are also included. |
| GENERAL NOTES: | <ol style="list-style-type: none">1 Select the camera ID (use the Set_Addresses)2 There are two ways to control the camera using the Pan/Tilt control<ol style="list-style-type: none">2.1 Enable the Auto function, camera will configure the appropriate speed depending on the zoom position2.2 User can manually adjust the speed of pan, tilt and zoom.3 Saving a preset is a three step process:<ol style="list-style-type: none">3.1 Move the camera to the desired position3.2 Press "Save "3.3 Press the preset you wish to save the location to4 To recall a preset, just press the preset number. |
| CRESTRON HARDWARE REQUIRED: | <ol style="list-style-type: none">1. Crestron 3-Series Controller2. Com port x13. LAN port x1 |
| SETUP OF CRESTRON HARDWARE: | RS232 Baud:9600 Parity: None Data Bits: 8 Stop Bits: 1 |
| VENDOR FIRMWARE: | none |
| VENDOR SETUP: | If you are using more than one camera with the VISCA inputs daisy chained, you must pulse the Set_Addresses input. This will set the address of each camera on the daisy chain. You should only pulse the Set_Addresses input on one of the modules in the program, not on all of them. |

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CABLE DIAGRAM:

▼ RS-232 IN Pins Instructions



| NO | Pins | Signals |
|----|--------|-------------------------|
| 1 | DTR | Data Transmission Reade |
| 2 | DSR | Data Set Reade |
| 3 | TXD | Transmit Data |
| 4 | GND | Ground |
| 5 | RXD | Receive Data |
| 6 | GND | Ground |
| 7 | IR OUT | IR Commander Signal |
| 8 | N.C. | No Connection |

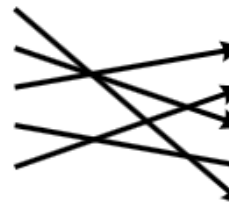
▼ RS-232 Connection Instructions

RS-232 IN of VC

1. DTR
2. DSR
3. TXD
4. GND
5. RXD
6. GND
7. IR OUT
8. N.C.

RS-232 of PC

1. CD
2. RXD
3. TXD
4. DTR
5. GND
6. DSR
7. RTS
8. CTS
9. RI



CONTROL:

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|-----------------------------|--|
| Cam_Normal_Func_ASK_Status | Get the status from the camera for Normal Tab |
| Cam_ExpMode_ASK_Status | Get the status from the camera for Exposure Tab |
| Cam_WhiteBalance_ASK_Status | Get the status from the camera for White Balance Tab |
| Cam_Advanced_ASK_Status | Get the status from the camera for Advanced Tab |
| Cam_Power_ASK_Status | Get the power status from the camera |

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|---------------------|---|---|
| Set_Id_01~Set_Id_07 | D | Set the addresses 1~7 for the cameras |
| Set_Addresses | D | Pulse once to set the addresses for the cameras with the VISCA inputs daisy chained |
| Power_On | D | Power on camera |
| Power_Off | D | Power off camera |
| Tilt_Up | D | Tilt up |
| Tilt_Down | D | Tilt down |
| Pan_Left | D | Pan Left |
| Pan_Right | D | Pan Right |
| Pan_Tilt_Reset | D | Reset the pan and tilt motor of camera |
| Zoom_In | D | Zoom in camera |
| Zoom_Out | D | Zoom out camera |
| Pan_Speed# | A | Set the pan speed |
| Tilt_Speed# | A | Set the tilt speed |
| Zoom_Speed# | A | Set the zoom speed |
| Pan_Speed_Auto | D | Set Pan speed auto or manual |
| Tilt_Speed_Auto | D | Set Tilt speed auto or manual |
| Focus_Near | D | Focus near in manual focus mode |
| Focus_Far | D | Focus far in manual focus mode |
| Auto_Focus_On | D | Set camera to auto focus mode |
| Auto_Focus_Off | D | Set camera to manual focus mode |
| Auto_Focus_Toggle | D | Trigger one auto focus action |

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|-----------------------------|---|--|
| Home | D | Camera go to the home position |
| Save | D | Save preset |
| Reset | D | Reset (Clear) preset |
| Preset_1 ~ Preset_25 | D | Call preset |
| Pic_Mirror | D | Set Image mirror on or off |
| Pic_Flip | D | Set Image flip on or off |
| Freeze | D | Set camera output freeze |
| EXP_Full_Auto | D | Set exposure mode to full auto mode |
| EXP_Manual | D | Set exposure mode to manual mode |
| EXP_Shutter_Priority | D | Set exposure mode to shutter priority mode |
| EXP_Iris_Priority | D | Set exposure mode to iris priority mode |
| EXP_Bright | D | Set exposure mode to bright mode |
| EXP_Smooth_Auto | D | Set exposure mode to smooth auto mode VC-A50S don't support this mode |
| EXP_White_Board | D | Set exposure mode to white board mode But VC-A50S don't support this mode |
| Iris_Reset | D | Iris reset |
| Iris_Up | D | Iris up |
| Iris_Down | D | Iris down |
| Iris_Position_In# | A | Read the Iris Position |
| Shutter_Reset | D | Shutter reset |
| Shutter_Up | D | Shutter up |

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| | | |
|-------------------------------|---|---|
| Shutter_Down | D | Shutter down |
| Shutter_Position_In# | A | Read the Shutter Position |
| Gain_Reset | D | Gain Reset |
| Gain_Up | D | Gain Up |
| Gain_Down | D | Gain Down |
| Gain_Position_In# | A | Read Gain from Camera |
| ExpComp_On | D | Exposure Compensation On |
| ExpComp_Off | D | Exposure Compensation Off |
| ExpComp_Reset | D | Exposure Compensation Reset |
| ExpComp_Up | D | Exposure Compensation Up |
| ExpComp_Down | D | Exposure Compensation Down |
| ExpComp_Position_In# | A | Read the current value of Exposure Compensation |
| ExpComp_Position_Out# | A | Set the value of Exposure Compensation |
| WDR_Off | D | Turn WDR On or Off |
| WDR_Off_FB | D | The feedback of WDR_Off |
| WDR_Mode_1 ~WDR_Mode_5 | D | Set WDR value 1~5 |
| WhiteBalance_Auto | D | Set White Balance to Auto Mode |
| WhiteBalance_Indoor | D | Set White Balance to Indoor Mode |
| WhiteBalance_Outdoor | D | Set White Balance to Outdoor Mode |
| WhiteBalance_OnePushWB | D | Set White Balance to One Push WB Mode |
| WhiteBalance_ATW | D | Set White Balance to ATW Mode |

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|---------------------------------------|---|--|
| WhiteBalance_Manual | D | Set White Balance to Manual Mode |
| WhiteBalance_OutdoorAuto | D | Set White Balance to Outdoor Mode |
| WhiteBalance_SDLampAuto | D | Set White Balance to Sodium Lamp Auto Mode |
| WhiteBalance_SodiumLamp | D | Set White Balance to Sodium Lamp Mode |
| WhiteBalance_SDLampOutdoorAuto | D | Set White Balance to Sodium Lamp Outdoor Auto Mode |
| WhiteBalance_OnePushTrigger | D | Trigger One Push White Balance |
| RGain_Reset | D | Reset RGain |
| RGain_Up | D | RGain Up |
| RGain_Down | D | RGain Down |
| BGain_Reset | D | Reset BGain |
| BGain_Up | D | BGain Up |
| BGain_Down | D | BGain Down |
| RGain_Position_Out# | A | Read the RGain value from camera |
| RGain_Position_In# | A | Set the RGain value to camera |
| BGain_Position_Out# | A | Read the BGain value from camera |
| BGain_Position_In# | A | Set the BGain value to camera |
| Preset_Speed_Fast_B | D | Set preset speed to fast speed |
| Preset_Speed_Middle_B | D | Set preset speed to fast speed |
| Preset_Speed_Slow_B | D | Set preset speed to slow speed |
| PanTiltSpeed_Smooth_B | D | Set pan tile speed mode to “Smooth” mode |
| PanTiltSpeed_Normal_B | D | Set pan tile speed mode to “Normal” mode |

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| From_PTZCamera\$ | S | Serial signal to be routed from a 2 way serial com port |
| To_PTZCamera\$ | S | Serial signal to be route to a 2 way serial com port. |

FEEDBACK:

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|----------------------------|---|--------------------------------------|
| Show_Device_id# | A | The feedback of camera address |
| Power_On_FB | D | The feedback of Power_On |
| Power_Off_FB | D | The feedback of Power_Off |
| Pan_Speed_Auto_On | D | The feedback of Pan_Speed_Auto |
| Tilt_Speed_Auto_On | D | The feedback of Tilt_Speed_Auto |
| Focus_Auto_FB | D | The feedback of Auto_Focus_On |
| Focus_Manual_FB | D | The feedback of Auto_Focus_Off |
| Preset_1_FB ~ Preset_25_FB | D | The feedback of call preset |
| Pic_Mirror_On_FB | D | The feedback of Pic_Mirror |
| Pic_Flip_On_FB | D | The feedback of Pic_Flip |
| Pic_Freeze_On_Fb | D | The feedback of Freeze |
| EXP_Full_Auto_Fb | D | The feedback of EXP_Full_Auto |
| EXP_Manual_Fb | D | The feedback of EXP_Manual |
| EXP_Shutter_Priority_Fb | D | The feedback of EXP_Shutter_Priority |
| EXP_Iris_Priority_Fb | D | The feedback of EXP_Iris_Priority |
| EXP_Bright_Fb | D | The feedback of EXP_Bright |
| EXP_Smooth_Auto_Fb | D | The feedback of EXP_Smooth_Auto |
| EXP_White_Board_Fb | D | The feedback of EXP_White_Board_Fb |

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|--|---|--|
| Cam_ExpComp_On_Fb | D | The feedback of ExpComp_On |
| Cam_ExpComp_Off_Fb | D | The feedback of ExpComp_Off |
| WDR_Mode_1_FB ~ WDR_Mode_5_FB | D | The feedback of WDR_Mode_* |
| WhiteBalance_Auto_FB | D | The feedback of WhiteBalance_Auto |
| WhiteBalance_Indoor_FB | D | The feedback of WhiteBalance_Indoor |
| WhiteBalance_Outdoor_FB | D | The feedback of WhiteBalance_Outdoor |
| WhiteBalance_OnePushWB_FB | D | The feedback of WhiteBalance_OnePushWB |
| WhiteBalance_ATW_FB | D | The feedback of WhiteBalance_ATW |
| WhiteBalance_Manual_FB | D | The feedback of WhiteBalance_Manual |
| WhiteBalance_OutdoorAuto_FB | D | The feedback of WhiteBalance_OutdoorAuto |
| WhiteBalance_SDLampAuto_FB | D | The feedback of WhiteBalance_SDLampAuto |
| WhiteBalance_SodiumLamp_FB | D | The feedback of WhiteBalance_SodiumLamp |
| WhiteBalance_SDLampOutdoorAuto_FB | D | The feedback of WhiteBalance_SDLampOutdoorAuto |
| Preset_Speed_Fast_Fb | D | The feedback of Preset_Speed_Fast_B |
| Preset_Speed_Middle_Fb | D | The feedback of Preset_Speed_Middle_B |
| Preset_Speed_Slow_Fb | D | The feedback of Preset_Speed_Slow_B |
| PanTiltSpeed_Smooth_Fb | D | The feedback of PanTiltSpeed_Smooth_B |
| PanTiltSpeed_Normal_Fb | D | The feedback of PanTiltSpeed_Normal_B |

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|---|---|
| OPS USED FOR TESTING: | RMC3: v1.012.0017 |
| SIMPL WINDOWS USED FOR TESTING: | 4.04.03 |
| DEVICE DB USED FOR TESTING: | 78.05.001.00 |
| CRES DB USED FOR TESTING: | 58.05.002.00 |
| SYMBOL LIBRARY USED FOR TESTING: | 1010 |
| SAMPLE PROGRAM: | 3-Series: Lumens VC-A50S v1.0 Demo RMC3.smw |
| REVISION HISTORY: | v1.0 – Initial Release |