

CONTACT SUPPORT:

COMPANY NAME:	Sony Imaging Products & Solutions Inc.
SUPPORT CONTACT:	Crestron driver support
EMAIL ADDRESS:	Crestron.driver@am.sony.com
NOTES:	

GENERAL INFORMATION				
SIMPLWINDOWS NAME:	Sony_BRC-X400_SRG-X_series			
CATEGORY:	Camera			
VERSION:	1.0			
SUMMARY:	This module controls Sony BRC-X400, SRG-X series cameras by way of VISCA over IP protocol.			
	Using the provided sample program, you will be able to control up to 2 cameras by selecting the camera (either Camera1 or Camera2) in Camera selection menu in [System] tab.			
	This program works with the following models of Sony network camera products.			
GENERAL NOTES:	- BRC-X400, SRG-X400, SRG-X120, BRC-X401, SRG-201M2, SRG-X402, SRG-HD1M2			
	Prior to building and transferring the firmware into the Crestron Control System, be sure to set up the correct IP addresses of the camera in IP-ID-04 and IP-ID-05 UDP/IP Communications in Slot-07 of "Central Control Modules: DMPS3-4K-150C" in the Program View of the SIMPL Windows project. Right click the UDP/IP Communications object and then select "Configure devices (F6)", go into [IP Net Address] tab and then put the correct camera IP address in the "Default Address" fields (see below pictures).			

©2013 Crestron Electronics, Inc. 15 Volvo Drive • Rockleigh, NJ 07647 800.237.2041 / 201.767.3400

http://application.market.com



	Bookmarks Tools Help Online Support			
	🖪 🗠 🕺 🖻 🛍 📠 👖 🎞 🐘 🚝 🚺	? 💀 🕃 📰 🗔 🕸 ;	×	
	Program View		Detail View	
	Central Control Modules : DMPS3-4K-150-C		S-1 : SONY_X400SE	
	Slot-02 : IR Outputs : IR Outputs			
	Slot-04 : Relays : Relays		Up_only	
	Slot-06 : Cresnet Devices : Cresnet Devices		Down_only	
	Slot-07 : Ethernet Devices : Ethernet Devices		Left_only	
	P-ID-03 : XPanel 2.0 Smart Graphics : XPa	nel 2.0 Smart Graphics	Right_only	
	In IP-ID-04: UDP/IP Communication	sert Subsystem	Alt+S	<u>—</u>
	B Slot-08 : DMPS3 Control : DMPS3 Co	sert Device Extender	>	<u>—</u>
	Slot-09: Connect It Devices : Connec	ew/Edit Device Name	Ctrl+R or Tab	
	Slot-11: DMPS3-4K-150-C-USB-HID4	now Detail	Ctrl+D	<u> </u>
	B-G Logic Fi	nd Detail		<u> </u>
	S-1: SONY_X400SERIES Se	arch and Replace	F9	<u> </u>
	General S-2: Initialize	omment out Symbol	Alt+F1	
	B-G S-4: Camera 1	ake Symbol Complete	Ctrl+I	
		opy Symbol	Ctrl+C	
	B-G: PanTilt Pa	aste Symbol	Ctrl+V	
	B	elete Symbol	Del	
		int Symbols		
	S-10: Color Se	t Watch on all signals in folder		
	G	ear Watch on all signals in folder		
	B S-13 : Power Ec	dit User Module		
	G G S-14: TallyLevel	nport Crestron Module		Iger
	S-15: TallyControl	port To Remote System Def File		
	S-17: Exclusive	nport Remote System Def File		
	🗈 🧰 Signal List 🛛 💦 🦷 🦷	Import .RSD File On Program Ope	n	
	Cc	onfigure Device	F6	
	h	eip	FI	
	Device Settings: Crestron UDP/IP Comm Device Name IP Net Address Com IP ID 04 0 Remap this IP ID Default Address 192.168.0 * The above screen capture WINDOWS USED FOR TEST applies to the SIMPL Window	nection Sheet Device In at program upload 115 OUse IP Add OUse Host N is based on SIM ING column under ws screen capture	X nfo ress lame PL Windows er TESTING e below.	version described in SIMPL chapter. The same also
CRESTRON HARDWARE REQUIRED:	3-series processor with Ethe	ernet capabilities		
SETUP OF CRESTRON HARDWARE:	N/A			
VENDOR FIRMWARE:	Greater than or equal to v1 cameras being connected.)	.00 (Be sure not	to mix up th	ne software version among

©2013 Crestron Electronics, Inc. 15 Volvo Drive • Rockleigh, NJ 07647 800.237.2041 / 201.767.3400

http://application.market.com



VENDOR SETUP:	IPv4 address of the camera should be properly configured beforehand. In case that the camera's IPv4 address is configured as fixed address, use "RM-IP Setup Tool" to set the IP address, the Subnet mask and the default gateway address and then press either [Apply] or [OK] button.
CABLE DIAGRAM:	N/A

CONTROL:		
UP, DOWN	D	Press and hold to tilt up/down the camera. Release to stop the tilt operation.
LEFT, RIGHT	D	Press and hold to pan the camera to the left/right. Release to stop the pan operation.
Home	D	Press to move the camera to the home position for pan and tilt.
pan_speed_up, pan_speed_down	D	Increment/decrement pan speed.
tilt_speed_up, tilt_speed_down	D	Increment/decrement tilt speed.
zoom_tele, zoom_wide	D	Press and hold to zoom in/out.
zoom_speed_up, zoom_speed_down	D	Increment/decrement zoom speed
zoom_mode_optical, zoom_mode_clearimage, zoom_mode_full	D	Press to set the zoom mode to either optical, clear image zoom or full mode. The other signals that are not last set will be changed to 0 via corresponding control feedback signals.
tele_convert_on, tele_convert_off	D	Press to enable or disable Tele Shift mode. This can be configured only in supported model and supported video format.
auto_focus, manual_focus	D	Press to set the focus mode to either auto or manual. The other signal will be changed to 0 via corresponding control feedback signal.
focus_far, focus_near	D	Press and hold to move the focus position to far/near position. Release to stop the focus operation.
focus_speed_up, focus_speed_down	D	Increment/decrement focus speed.
focus_one_push_trigger	D	Press to perform one push AF.

©2013 Crestron Electronics, Inc. 15 Volvo Drive • Rockleigh, NJ 07647 800.237.2041 / 201.767.3400

http://application.market.com



preset_mode_std, preset_mode_ptzf, preset_mode_trace	D	Press to set the preset operation mode to either "standard", "ptzf" or "trace" as follows. "standard": Save/restore its PTZF positions as well as its camera configuration parameters such as exposure, white balance etc. "ptzf": Save/restore its PTZF positions only "trace": Preset save/call operations are mapped to PTZ Trace. This is supported in software version 2.00. The other signals that are not last set will be changed to 0 via corresponding feedback control signals.
preset_freeze, preset_normal	D	Press to set preset recall mode to either freeze or normal. The other signal will be changed to 0 via corresponding feedback control signal.
preset_set, preset_recall, preset_reset	D	Press to save/recall/reset the preset to a selected preset position number.
preset_number_up, preset_number_down	D	Increment/decrement preset number for save/recall/reset operation.
preset_speed_up, preset_speed_down	D	Increment/decrement preset position operation speed.
preset_compatible, preset_separate, preset_common	D	Press to set preset speed mode to either compatible, separate or common whose details are shown below. The other signals that are not last set will be changed to 0 via correspondent feedback control signals. "compatible": The same effect as "separate" in case that the preset operation is controlled under VISCA and/or VISCA over IP protocol. However, be sure that it should be configured to this mode when you use the preset position function by way of CGI protocol as well. "separate": Preset operation speed is set when saving the preset position using preset_set signal. Thus, the speed configuration should be per position basis. "common": Preset operation speed is uniquely configured regardless of recalled/saved preset position number.
wb_mode_auto, wb_mode_indoor, wb_mode_outdoor, wb_mode_one_push, wb_mode_ATW, wb_mode_manual	D	Press to set white balance mode to either auto, indoor, outdoor, one push, ATW (Auto Tracing White balance) or manual. The other signals that are not last set will be changed to 0 via corresponding feedback control signals.
wb_one_push_trigger	D	Press to perform one push WB. This is possible when the White balance mode is set to one push beforehand.
wb_offset_reset	D	Press to reset white balance offset.
wb_offset_up, wb_offset_down	D	Increment/decrement white balance offset.
r_gain_reset	D	Press to reset red gain.

©2013 Crestron Electronics, Inc. 15 Volvo Drive • Rockleigh, NJ 07647 800.237.2041 / 201.767.3400

http://application.market.com



r_gain_up, r_gain_down	D	Increment/decrement red gain.
b_gain_reset	D	Press to reset blue gain.
b_gain_up, b_gain_down	D	Increment/decrement blue gain.
exposure_mode_auto, exposure_mode_shutter, exposure_mode_iris, exposure_mode_manual	D	Press to set exposure mode to either auto, shutter priority, iris priority or manual. The other signals that are not last set will be changed to 0 via corresponding feedback control signals.
exposure_iris_reset	D	Press to reset IRIS value.
exposure_iris_up, exposure_iris_down	D	Increment/decrement IRIS value
exposure_gain_reset	D	Press to reset gain.
exposure_gain_up, exposure_gain_down	D	Increment/decrement gain.
exposure_shutter_reset	D	Press to reset shutter speed.
exposure_shutter_up, exposure_shutter_down	D	Increment/decrement shutter speed
slow_shutter_on, slow_shutter_off	D	Press to set slow shutter mode on/off.
exposure_compensation_on, exposure_compensation_off	D	Press to set exposure compensation to on/off.
exposure_compensation_reset	D	Press to reset exposure compensation value.
exposure_compensation_up, exposure_compensation_down	D	Increment/decrement exposure compensation value.
backlight_on, backlight_off	D	Press to set backlight compensation mode to on/off.
visibility_enhancer_on, visibility_enhancer_off	D	Press to set visibility enhancer to on/off.
brightness_up, brightness_down	D	Increment/decrement visibility enhancer brightness level.
luminance_up, luminance_down	D	Increment/decrement visibility enhancer luminance level.
intensity_up, intensity_down	D	Increment/decrement visibility enhancer compensation level.
video_1, video_2, video_3, video_4, video_5, video_6, video_7, video_8, video_9, video_10, video_11, video_12, video_13, video_14, video_15, video_16	D	Press to select the video format setting as follows. Please be sure that the software version of the camera should be greater than or equal to v2.00 and that the SYSTEM SELECT switch is set to 6. Please also be sure that recycling the power

©2013 Crestron Electronics, Inc. 15 Volvo Drive • Rockleigh, NJ 07647 800.237.2041 / 201.767.3400

http://application.market.com



video_1: 1280x720/59.94p (VGA)video_2: 1280x720/50.94pvideo_3: 1920x1080/29.97pvideo_4: 1920x1080/59.94p (Level A)video_5: 1920x1080/59.94p (Level A)video_6: 1920x1080/50p (Level B)video_10: 1920x1080/50p (Level B)video_11: 1920x1080/50p (Level B)video_11: 1920x1080/50p (Level B)video_11: 1920x1080/50p (Level B)video_11: 1920x1080/50p (Level B)video_12: 1920x1080/50p (Level B)video_13: 3840x2160/23.98p (only for 4K supported model)video_14: 1920x1080/23.98pvideo_14: 1920x1080/501 (Level B)video_14: 1920x1080/502 (Level A)video_14: 1920x1080/501 (Level B)video_14: 1920x1080/502 (Level A)video_14: 1920x1080/502 (Level A)video_14: 1920x1080/503 (Level B)video_14: 1920x1080/504 (Level B)video_14: 1920x1080/504 (Level B)video_14: 1920x1080/504 (Level B)video_14: 1920x1080/539 (D) I for 4K supported model)video_15: 3840x2160/23.98p (only for 4K supported model)video_16: 11: 1920x1080/504 (Level B)video_17: 1200x1080/504 (Level B)tally_ont tally_evel of, tally_level IDPress to set the tally level to either off, low or high. The other signals that are nottally_level_of, tally_evel_ofDPress to set outo focus mode to either normal, interval or zo			or once turning off and on the camera using power button to reflect the setting.
video_2: 1280x720/50.94pvideo_3: 1920x1080/29.97pvideo_4: 1920x1080/59.94p (Level A)video_6: 1920x1080/59.94p (Level A)video_6: 1920x1080/59.94p (Level A)video_6: 1920x1080/59.94p (Level B)video_1: 1920x1080/50p (Level A)video_1: 1920x1080/50p (Level B)video_1: 1920x1080/50p (Level B)<			video_1: 1280x720/59.94p (VGA)
video_3: 1920x1080/29.97pvideo_4: 1920x1080/59.944video_5: 1920x1080/59.944video_5: 1920x1080/59.944video_5: 1920x1080/59.944video_5: 1920x1080/59.944video_6: 1920x1080/59.946video_7: 3840x2160/29.97p(only for 4K supported model)video_1: 1920x1080/50video_1: 1920x1080video_1: 1920x1080/50vide			video_2: 1280x720/50.94p
video_4: 1920x1080/59.94ivideo_5: 1920x1080/59.94p (Level A)video_6: 1920x1080/59.94p (Level A)video_6: 1920x1080/59.94p (Level B)video_7: 3840x2160/29.97p (only for 4K supported model)video_1: 1920x1080/25pvideo_1: 1920x1080/50ivideo_1: 1920x1080/50p (Level A)video_1: 1920x1080/25p (only for 4K supported model)video_1: 1920x1080/25p (only for 4K supported model)rideo_1: 1920x1080/23.98pvideo_1: 1920x1080/23.98p (only for 4K supported model)The other signals that are not last set will be changed to 0 via correspondingtally_on, tally_offDPress to set the tally mode to on/off.tally_level_highcamera1, camera2Dpress to select the target camera for control.af_mode_normal, af_mode_interval, signals that are not last set will be changed to 0 via corresponding feedback control signals.system_tab_pressed, orde_zoomtriggervideo_ut_tab_pressed, orde_zoomtriggervideo_ut_tab_pressed, orles_tab_pressed, orles_tab_pressed, color_tab_pressed, pressed, presset_tab_pressed, orles_tab_pressed, orles_tab_pressed, orles_tab_pressed, orles_tab_pressed, orles_tab_pressed, orles_tab_pressed, orles_tab_pressed, orles_tab_pressed, operation.presst_stoppresst_sto sto the currently on-going preset operation. In case that the preset mode signals will sto the currently on-going Presst operation. In case that the preset mode o			video_3: 1920x1080/29.97p
video_f: 1920x1080/59.94p (Level A)video_f: 1920x1080/59.94p (Level B)video_f: 1920x1080/59.94p (Level B)video_f: 1920x1080/59.94p (Level B)video_f: 1920x1080/50pvideo_f: 1920x1080/50pvideo_f: 1920x1080/50pvideo_f: 1920x1080/50pvideo_f: 1920x1080/50p (Level A)video_f: 1920x1080/50p (Level B)video_f: 1920x1080/50p (Level A)video_f: 1920x1080/50p (Level B)video_f: 1920x1080/50p (Level A)video_f: 1920x1080/50p (Level B)video_f: 1920x1080/50p (Level B)video_f: 1920x1080/50p (Level A)video_f: 1920x1080/50p (Level B)video_f:			video_4: 1920x1080/59.94i
video_f: 1920x1080/59.94p (Level B)video_7: 3840x2160/29.97p (only for 4K supported model)video_3: 1920x1080/25pvideo_10: 1920x1080/50p (Level A)video_11: 1920x1080/50p (Level A)video_11: 1920x1080/50p (Level A)video_11: 1920x1080/50p (Level B)video_11: 1920x1080/50p (Level B)video_11: 1920x1080/25p (only for 4K supported model)video_12: 1920x1080/25p (only for 4K supported model)video_14: 1920x1080/23.98pvideo_15: 3840x2160/23.98p (only for 4K supported model)video_15: 3840x2160/23.98p (only for 4K supported model)video_16: 3840x2160/23.98p (only for 4K supported model)video_17: 3840x2160/23.98p (only for 4K supported model)video_16: 3840x2160/23.98p (only for 4K supported model)video_16: 3840x2160/23.98p (only for 4K supported model)video_17: 3840x2160/23.98p (only for 4K supported model)video_16: 3840x2160/23.98p (only for 4K supported model)video_17: 1920x1080/23.98p (only for 4K supported model)video_17: 1920x1080/23.98p (only for 4K supported model)tally_level_off, tally_level_offtally_level_highdDpress to stel tally level to either off, low or high. The other signals that are nottally_level_highcamera1, camera2Dpress to stel ta tally for the target camera for control.tally_level_high <th></th> <th></th> <th>video_5: 1920x1080/59.94p (Level A)</th>			video_5: 1920x1080/59.94p (Level A)
wideo_fr: 3840x2160/29.97p (only for 4K supported model)wideo_f: 1280x720/50pwideo_f: 1920x1080/25pwideo_fi: 1920x1080/50p (Level A)wideo_fi: 1920x1080/50p (Level A)wideo_fi: 1920x1080/50p (Level B)wideo_fi: 1920x1080/50p (Level B)tally_on, tally_offDPress to set the tally mode to on/off.tally_level_highcamera1, camera2DPress to select the target camera for control.af_mode_normal, af_mode_interval, tignals that are not last set will be changed to 0 via corresponding feedback controlsignals.system_tab_pressed, pressed, ptzf_tab_pressedwideo_out_tab_pressed, ptzf_tab_pressedwideo_out_tab_pressed, prosure, tab_pressed, prosure, tab_pressed, opoure, tab_pressed, opoure, tab_pressed, opoure, tab_pressed, opoure, tab_pressed, opoure, tab_pressed, opoure, tab_pressed, opoure, tab_pressed, opoure, tab_pressed, opoure, tab_pressed, ptz			video_6: 1920x1080/59.94p (Level B)
wideo_B: 1280x720/50pwideo_B: 1920x1080/25pwideo_10: 1920x1080/50pwideo_11: 1920x1080/50p<			video_7: 3840x2160/29.97p (only for 4K supported model)
video_9: 1920x1080/25pvideo_10: 1920x1080/50ivideo_11: 1920x1080/50p (Level A)video_12: 1920x1080/50p (Level B)video_13: 3840x2160/25p (only for 4K supported model)video_13: 3840x2160/23.98pvideo_15: 3840x2160/23.98p (only for 4K supported model)The other signals that are not last set will be changed to 0 via correspondingfeedback control signals.power_pushDtally_on, tally_offDpress to set the tally mode to on/off.tally_level_fighDpress to set the tally level to either off, low or high. The other signals that are nottally_level_nighDpress to select the target camera for control.af_mode_normal, af_mode_interval, exposure_tab_pressed, pressed, pressed, pres			video_8: 1280x720/50p
video_10: 1920x1080/50ivideo_11: 1920x1080/50p (Level A)video_12: 1920x1080/50p (Level B)video_13: 3840x2160/25p (only for 4K supported model)video_14: 1920x1080/23.98pvideo_15: 3840x2160/23.98p (only for 4K supported model)tideo_15: 3840x2160/23.98p (only for 4K supported model)tideo_16: tideotideotideotideotideotideopower_pushDPress to change the camera to stand-by or power-on state.tilly_level_off, tally_level_low,10Press to set the tally mode to on/off.tilly_level_highDPress to select the target camera for control.af_mode_normal, af_mode_interval,af_mode_interval,system_tab_pressed,videoout_tab_pressed, ptzf_tab_pressedvideoout_tab_pressed, ptzf_tab_pressedvideoout_tab_pressed, ptzf_tab_pressedvideoout_tab_pressed, presset_tab_pressedvideoout_tab_pressed, presset_tab_pressedvideoout_tab_pressed, presset_tab_pressedvideoout_tab_pressed, pressed_tab_ressedvideoout_tab_pressed, pressed_tab_ressedvideoout_tab_pressed, pressed_tab_pressedvideoout_tab_pressed, pressed_tab_pressedvideoout_tab_pressed, pressed_tab_pressedvideoout_tab_pressed, pressed_tab_pressed <t< th=""><th></th><th></th><th>video_9: 1920x1080/25p</th></t<>			video_9: 1920x1080/25p
video_11: 1920x1080/50p (Level A) video_12: 1920x1080/50p (Level A) video_13: 3840x2160/25p (only for 4K supported model) video_14: 1920x1080/23.98p video_15: 3840x2160/23.98p (only for 4K supported model) The other signals that are not last set will be changed to 0 via corresponding feedback control signals.power_pushDPress to change the camera to stand-by or power-on state.tally_on, tally_offDPress to set the tally mode to on/off.tally_level_off, tally_level_low, tally_level_highDPress to set the tally level to either off, low or high. The other signals that are not last set will be changed to 0 via corresponding feedback control signals.af_mode_normal, af_mode_interval, af_mode_zoomtriggerDPress to select the target camera for control.system_tab_pressed, pressed, prest_tab_pressed, oron_ab_pressed, press_tab_pressed, oron_ab_pressed, pressed, pres			video_10: 1920x1080/50i
video_12: 1920x1080/50p (Level B) video_13: 3840x2160/25p (only for 4K supported model) video_14: 1920x1080/23.98p video_15: 3840x2160/23.98p (only for 4K supported model) The other signals that are not last set will be changed to 0 via corresponding feedback control signals.power_pushDPress to change the camera to stand-by or power-on state.tally_on, tally_offDPress to set the tally mode to on/off.tally_level_off, tally_level_low, tally_level_highDPress to set the tally level to either off, low or high. The other signals that are not last set will be changed to 0 via corresponding feedback control signals.af_mode_normal, af_mode_interval, af_mode_zoomtriggerDPress to set auto focus mode to either normal, interval or zoom trigger. The other signals that are not last set will be changed to 0 via corresponding feedback control signals.system_tab_pressed, origner_itab_pressed, origner_itab_pressed, pressed_triggerDPress to select tab in the SmartGraphics GUI to either System, Video out, PTZF, Exposure_Color or Preset tab. The other signals that are not last set will be changed to 0 via corresponding feedback control signals.presset_stopDPress to stop the currently on-going preset operation. In case that the preset mode is set to Trace mode, pressing this signal will stop the currently on-going PTZ tracepresset_stopDPress to stop the currently on-going preset operation. In case that the preset mode is set to Trace mode, pressing this signal will stop the currently on-going PTZ trace			video_11: 1920x1080/50p (Level A)
video_13: 3840x2160/25p (only for 4K supported model) video_14: 1920x1080/23.98p (video_15: 3840x2160/23.98p (only for 4K supported model) The other signals that are not last set will be changed to 0 via corresponding feedback control signals.power_pushDPress to change the camera to stand-by or power-on state.tally_on, tally_offDPress to set the tally mode to on/off.tally_level_off, tally_level_low, tally_level_highDPress to set the tally level to either off, low or high. The other signals that are not last set will be changed to 0 via corresponding feedback control signals.af_mode_normal, af_mode_interval, off_mode_zoomtriggerDPress to select the target camera for control.system_tab_pressed, videoout_tab_pressed, orlab_pressed, preset_tab_pressedDPress to select tab in the SmartGraphics GUI to either System, Video out, PTZF, Exposure, Color or Preset tab. The other signals that are not last set will be changed to 0 via corresponding feedback control signals.presst_stopDPress to select tab in the SmartGraphics GUI to either System, Video out, PTZF, Exposure, Color or Preset tab. The other signals that are not last set will be changed to 0 via corresponding feedback control signals.presst_stopDPress to stop the currently on-going preset operation. In case that the preset mode is set to Trace mode, pressing this signal will stop the currently on-going PTZ trace operation.			video_12: 1920x1080/50p (Level B)
video_14: 1920x1080/23.98p video_15: 3840x2160/23.98p (only for 4K supported model) The other signals that are not last set will be changed to 0 via corresponding feedback control signals.power_pushDPress to change the camera to stand-by or power-on state.tally_on, tally_offDPress to set the tally mode to on/off.tally_level_off, tally_level_low, tally_level_highDPress to set the tally level to either off, low or high. The other signals that are not last set will be changed to 0 via corresponding feedback control signals.af_mode_normal, af_mode_interval, af_mode_zoomtriggerDPress to set auto focus mode to either normal, interval or zoom trigger. The other signals that are not last set will be changed to 0 via corresponding feedback control signals.system_tab_pressed, videoout_tab_pressed, color_tab_pressed, oressed, preset_tab_pressedPress to select the in the SmartGraphics GUI to either System, Video out, PTZF, Exposure, Color or Preset tab. The other signals that are not last set will be changed to 0 via corresponding feedback control signals.preset_stopDPress to stop the currently on-going preset operation. In case that the preset mode operation.			video_13: 3840x2160/25p (only for 4K supported model)
video_15: 3840x2160/23.98p (only for 4K supported model) The other signals that are not last set will be changed to 0 via corresponding feedback control signals.power_pushDPress to change the camera to stand-by or power-on state.tally_on, tally_offDPress to set the tally mode to on/off.tally_level_off, tally_level_low, tally_level_highDPress to set the tally level to either off, low or high. The other signals that are not last set will be changed to 0 via corresponding feedback control signals.camera1, camera2DPress to set the target camera for control.af_mode_normal, af_mode_interval, videoout_tab_pressed, ptzf_tab_pressed, color_tab_pressed, pressed, pressedPress to select tab in the SmartGraphics GUI to either signals that are not last set will be changed to 0 via corresponding feedback control signals.presset_stopDPress to sto pthe currently on-going preset operation. In case that the presset mode is set to Trace mode, pressing this signal will stop the currently on-going PTZ trace			video_14: 1920x1080/23.98p
The other signals that are not last set will be changed to 0 via corresponding feedback control signals.power_pushDPress to change the camera to stand-by or power-on state.tally_on, tally_offDPress to set the tally mode to on/off.tally_level_off, tally_level_low, tally_level_highDPress to set the tally level to either off, low or high. The other signals that are not last set will be changed to 0 via corresponding feedback control signals.camera1, camera2DPress to set the target camera for control.af_mode_normal, af_mode_interval, af_mode_zoomtriggerDPress to select the target camera for control.system_tab_pressed, videoout_tab_pressed, color_tab_pressed, preset_tab_pressed, color_tab_pressed, oressed, presset_tab_pressed, color_tab_pressed, oressed, pressed_tab_pressed, color_tab_pressed, opressed, pressed_tab_pressed, color_tab_pressed, pressed_tab_pressed, color or Press to stop the currently on-going preset operation. In case that the press mode is set to Trace mode, pressing this signal will stop the currently on-going PTZ tracepresst_stopDPress to stop the currently on-going pressing this signal will stop the currently on-going PTZ trace operation.			video_15: 3840x2160/23.98p (only for 4K supported model)
power_pushDPress to change the camera to stand-by or power-on state.tally_on, tally_offDPress to set the tally mode to on/off.tally_level_off, tally_level_low, tally_level_highDPress to set the tally level to either off, low or high. The other signals that are not last set will be changed to 0 via corresponding feedback control signals.camera1, camera2DPress to select the target camera for control.af_mode_normal, af_mode_interval, af_mode_zoomtriggerDPress to set auto focus mode to either normal, interval or zoom trigger. The other signals that are not last set will be changed to 0 via corresponding feedback controlsystem_tab_pressed, videoout_tab_pressed, ptzf_tab_pressedDPress to select tab in the SmartGraphics GUI to either System, Video out, PTZF, Exposure, Color or Preset tab. The other signals that are not last set will be changed to 0 via corresponding feedback control signals.presst_stopDPress to stop the currently on-going preset operation. In case that the presset mode is set to Trace mode, pressing this signal will stop the currently on-going PTZ trace			The other signals that are not last set will be changed to 0 via corresponding feedback control signals.
tally_on, tally_offDPress to set the tally mode to on/off.tally_level_off, tally_level_low, tally_level_highDPress to set the tally level to either off, low or high. The other signals that are not last set will be changed to 0 via corresponding feedback control signals.camera1, camera2DPress to select the target camera for control.af_mode_normal, af_mode_interval, af_mode_zoomtriggerDPress to set auto focus mode to either normal, interval or zoom trigger. The other signals that are not last set will be changed to 0 via corresponding feedback controlsystem_tab_pressed, videoout_tab_pressed, pressed, press_tab_pressed, color_tab_pressed, pressed, pressed, color_tab_pressed, color_tab_pressed, color_tab_pressed, color_tab_pressed, pressed, color_tab_pressed, pressed, color_tab_pressed, color_tab_pressed, pressed, color_tab_pressed, pressed, pressed, color_tab_pressed, presse	power_push	D	Press to change the camera to stand-by or power-on state.
tally_level_off, tally_level_low, tally_level_highDPress to set the tally level to either off, low or high. The other signals that are not last set will be changed to 0 via corresponding feedback control signals.camera1, camera2DPress to select the target camera for control.af_mode_normal, af_mode_interval, af_mode_zoomtriggerDPress to set auto focus mode to either normal, interval or zoom trigger. The other signals that are not last set will be changed to 0 via corresponding feedback control signals.system_tab_pressed, videoout_tab_pressed, ptzf_tab_pressed, color_tab_pressed, preset_ab_pressedDPress to select tab in the SmartGraphics GUI to either System, Video out, PTZF, Exposure, Color or Preset tab. The other signals that are not last set will be changed to 0 via corresponding feedback control signals.preset_stopDPress to stop the currently on-going preset operation. In case that the preset mode is set to Trace mode, pressing this signal will stop the currently on-going PTZ trace	tally_on, tally_off	D	Press to set the tally mode to on/off.
camera1, camera2DPress to select the target camera for control.af_mode_normal, af_mode_interval, af_mode_zoomtriggerDPress to set auto focus mode to either normal, interval or zoom trigger. The other signals that are not last set will be changed to 0 via corresponding feedback control signals.system_tab_pressed, videoout_tab_pressed, ptzf_tab_pressed color_tab_pressed, preset_tab_pressedPress to select tab in the SmartGraphics GUI to either System, Video out, PTZF, Exposure, Color or Preset tab. The other signals that are not last set will be changed to 0 via corresponding feedback control signals.preset_stopDPress to stop the currently on-going preset operation. In case that the preset mode is set to Trace mode, pressing this signal will stop the currently on-going PTZ trace	tally_level_off, tally_level_low, tally_level_high	D	Press to set the tally level to either off, low or high. The other signals that are not last set will be changed to 0 via corresponding feedback control signals.
af_mode_normal, af_mode_interval, af_mode_zoomtriggerDPress to set auto focus mode to either normal, interval or zoom trigger. The other signals that are not last set will be changed to 0 via corresponding feedback control signals.system_tab_pressed, 	camera1, camera2	D	Press to select the target camera for control.
system_tab_pressed, videoout_tab_pressed, ptzf_tab_pressed, exposure_tab_pressed, preset_tab_pressed, color_tab_pressed, preset_tab_pressedDPress to select tab in the SmartGraphics GUI to either System, Video out, PTZF, Exposure, Color or Preset tab. The other signals that are not last set will be changed to 0 via corresponding feedback control signals.preset_stopDPress to stop the currently on-going preset operation. In case that the preset mode is set to Trace mode, pressing this signal will stop the currently on-going PTZ trace	af_mode_normal, af_mode_interval, af_mode_zoomtrigger	D	Press to set auto focus mode to either normal, interval or zoom trigger. The other signals that are not last set will be changed to 0 via corresponding feedback control signals.
preset_stopPress to stop the currently on-going preset operation. In case that the preset mode is set to Trace mode, pressing this signal will stop the currently on-going PTZ trace operation.	system_tab_pressed, videoout_tab_pressed, ptzf_tab_pressed, exposure_tab_pressed, color_tab_pressed, preset_tab_pressed	D	Press to select tab in the SmartGraphics GUI to either System, Video out, PTZF, Exposure, Color or Preset tab. The other signals that are not last set will be changed to 0 via corresponding feedback control signals.
	preset_stop	D	Press to stop the currently on-going preset operation. In case that the preset mode is set to Trace mode, pressing this signal will stop the currently on-going PTZ trace operation.

FEEDBACK:

©2013 Crestron Electronics, Inc. 15 Volvo Drive • Rockleigh, NJ 07647 800.237.2041 / 201.767.3400

http://application.market.com



zoom_mode_optical_fb, zoom_mode_clearimge_fb, zoom_mode_full_fb	D	Indicates the current zoom mode, which is either optical, clear image zoom or full.
tele_convert_on_fb, tele_convert_off_fb	D	Indicates the current Tele shift mode, which is either on or off.
auto_focus_fb, manual_focus_fb	D	Indicates the current focus mode, which is either auto or manual.
preset_mode_std_fb, preset_mode_ptzf_fb, preset_mode_trace_fb	D	Indicates the current preset mode, which is either standard, ptzf or trace mode.
preset_freeze_fb, preset_normal_fb	D	Indicates the current preset recall mode, which is either freeze or normal.
preset_compatible_fb, preset_separate_fb, preset_common_fb	D	Indicates the current preset speed mode, which is either compatible, separate or common.
wb_mode_auto_fb, wb_mode_indoor_fb, wb_mode_outdoor_fb, wb_mode_one_push_fb, wb_mode_ATW_fb, wb_mode_manual_fb	D	Indicates the current white balance mode, which is either auto, indoor, outdoor, one push, ATW or manual.
exposure_mode_auto_fb, exposure_mode_shutter_fb, exposure_mode_iris_fb, exposure_mode_manual_fb	D	Indicates the current exposure mode, which is either auto, shutter priority, iris priority or manual.
slow_shutter_on_fb, slow_shutter_off_fb	D	Indicates the current slow shutter mode which is either on or off.
exposure_compensation_on_fb, exposure_compensation_off_fb	D	Indicates the current exposure compensation mode which is either on or off.
backlight_on_fb, backlight_off_fb	D	Indicates the current backlight compensation mode which is either on or off.
visibility_enhancer_on_fb, visibility_enhancer_off_fb	D	Indicates the current visibility enhancer mode which is either on or off.
video_1_fb, video_2_fb, video_3_fb, video_4_fb, video_5_fb, video_6_fb, video_7_fb, video_8_fb, video_9_fb, video_10_fb, video_11_fb, video_12_fb, video_13_fb, video_14_fb, video_15_fb	D	Indicates the current video format setting. See the description in the corresponding video_ <n> signals in Control signal description above.</n>
power_push_fb	D	Indicates the current power status, which is either power-on or stand-by.
tally_on_fb, tally_off_fb	D	Indicates the current tally status, which is either on or off.
tally_level_off, tally_level_low, tally_level_high	D	Indicates the current tally level setting, which is either off, low or high.
enable_1, enable_2	D	Indicates which camera is currently selected, which is either camera1 or camera2.
af_mode_normal_fb, af_mode_interval_fb,	D	Indicates the current Auto Focus mode, which is ether normal, interval or zoom

http://application.market.com

©2013 Crestron Electronics, Inc. 15 Volvo Drive • Rockleigh, NJ 07647 800.237.2041 / 201.767.3400



af_mode_zoomtrigger_fb		trigger.
system_tab_pressed_fb, videoout_tab_pressed_fb, ptzf_tab_pressed_fb, exposure_tab_pressed_fb, color_tab_pressed_fb, preset_tab_pressed_fb	D	 Indicates the currently selected tab in the Smart Graphics GUI which is either one of the following tabs System Video out PTZF Exposure Color Preset
enable_preset_mode	D	Indicates whether the preset mode of the connected camera can be configured i.e. either standard or ptzf.
enable_tele_convert	D	Indicates whether the tele convert mode is available by the connected camera.
enable_tally	D	Indicates whether the tally control is possible for the connected camera.
enable_ptztrace	D	Indicates whether the PTZ Trace is possible for the connected camera.
enable_video_out	D	Indicates whether the video format selection is possible for the connected camera and its system select setting.
enable_zoom_mode	D	Indicates whether the zoom mode can be changed for the connected camera.
busy, not_busy	D	When selecting the camera in the Smart Graphics GUI, busy signal is asserted for a certain period until the necessary answer messages to the inquiry requests are responded so that necessary GUI set up can be performed. The busy signal indicates such busy state while not_busy signal indicates its inverted state.

PARAMETERS:

N/A

TESTING:	
OPS USED FOR TESTING:	1.503.3732.27877
SIMPL WINDOWS USED FOR TESTING:	4.11.06.01
DEVICE DB USED FOR TESTING:	108.05.001.00

©2013 Crestron Electronics, Inc. 15 Volvo Drive • Rockleigh, NJ 07647 800.237.2041 / 201.767.3400

http://application.market.com



CRES DB USED FOR TESTING:	81.05.001.00
SYMBOL LIBRARY USED FOR TESTING:	1094
SAMPLE PROGRAM:	Sony_X400SERIES
REVISION HISTORY:	V1.0 – First release

Appendix:

The provided sample program supports up to 2 cameras that can be connected. However, there might be some case that you would need to increase the number of cameras that can be connected in the program. Please perform the following steps to do so (the following instruction is based on the example to add 2 more cameras).

 Create/add additional 'Camera' button(s) and put appropriate Digital / Enable join Display XPanel 2.0 Smart Graphics into Detail View under program mode and then put "camera3" and "camera4" in the pressXXX signals.

Slot-07: Ethemet Devices : Ethemet Devices	video_14_fb	fb101	press101 video_14
IP-ID-03: XFanel 2.0 Smart Graphics: XPanel 2.0 Smart Graphics	video_15_fb	6102	press102 video_15
IP-ID-04: UDP/IP Communications: UDP/IP Communications IP-ID-05: UDP/IP Communications: UDP/IP Communications	power_push_fb	@103	press103 power_push
Slot-08: DNIPS3 Control: DMPS3 Control	tally_on_fb	m104	press104 tally_on
Stot-09: Connect It Devices: Connect It Devices	tally_off_fb	th 105	press105 tally_of
 Sich-12: System Monitor: System Manitar 	tally_level_off_fb	tb 106	press106 tally_level_off
Logic	tally_level_low_fb	6 107	press107 tally_level_low
Signal List	tally_level_high_fb	m 108	press108 tally_level_high
	erable_1	tb 109	press109 camera1
	enable_2	m110	press110 camera2
	af_mode_normal_fb	0111	press111 af_mode_normal
	af_mode_interval_fb	6112	press112 af_mode_intenal
	af_mode_zoomtrigger_fb	6113	press113 af_mode_zoomtrigger
	system_tab_pressed_fb	6114	press114 system_tab_pressed
	videoout_tab_pressed_fb	D115	press115 videoout_tab_pressed
	ptzf_tab_pressed_fb	D116	press116 ptzf_tab_pressed
	exposure_tab_pressed_fb	0117	press117 exposure_tab_pressed
	color_tab_pressed_fb	fb118	press118 color_tab_pressed
	preset_tab_pressed_fb	6119	press119 preset_tab_pressed
		6120	press120 preset_stop
	enable_preset_mode	0121	press121
	enable_teleconvert	. 10122	press122
	enable_taily	6123	press123
	enable_ptztrace	b124	press124
	enable_video_out	0125	press125
	enable_zcom_mode	0128	press126
	not_busy	0127	press127
	busy	0128	press128
		6129	press129
		tb130	press130 camera3
		0131	press131 camera4
		0.132	(12) and (12)

©2013 Crestron Electronics, Inc. 15 Volvo Drive • Rockleigh, NJ 07647 800.237.2041 / 201.767.3400

http://application.market.com



Then open System page in the VT Pro-e project (.vtp) and then create "Camera3" and "Camera4" buttons as below.

System Video aut PTZE Exposure Color Preset	🔮 Button	
5/3(c114 video 125 1 12 116 24)05 117 cole 118 1105 119	Category Name	Buttons
	VersionNumber	1.0.8.540
	Object Name	Button_3
	Description	Crestron Button
Camera selection	Template Data	
	Properties	
Camerala Camerala Camerala Camerala	Position and Size	
	Тор	128
W:96	Left	480
	Width	96
Diagon wait	Height	38
Tally Construct Please Wall	Button Style	
	+ Icon Style	
	Icon Type	No Image
Off 123 On 127	Horizontal Text Alignment	Center
	Page Elip	(None)
	Show Control Feedback	\checkmark
Tally Level	Press Digital Join	130
	Enable Digital Join	127
Off 123 Low 123 High123	Visibility Digital Join	0
	Indirect Text Serial Join	0
	Suppress Key Clicks	
	Multiline Support	\checkmark
	Label	Camera4
	Text Shadow	

Figure 2: VT Pro-e window (system page)

* The above screen capture is based on VT Pro-e version 6.2.00 where Smart Graphics Controls version 2.15.03.04 is applied.

2. Add UDP/IP communications objects via Configure mode view of SIMPL project Go to SIMPL project and then move to Configure view in order to add UDP/IP communications objects.

http://application.market.com





Figure 3: Configure mode view – Addition of UDP/IP Communications objects

3. Move to logic mode view, open the original UDP/IP communications and the newly created one, and then copy the signal names using drag & drop operation.



©2013 Crestron Electronics, Inc. 15 Volvo Drive · Rockleigh, NJ 07647 800.237.2041 / 201.767.3400

http://application.market.com



In the new UDP/IP communications, put "52381d" that is UDP port number of controlling VISCA over IP protocol. Select all the three signals using [Ctrl] + mouse-click and then press [F9] to prompt 'Search and Replace' dialog box. Put "_2" and "_3" (in case of 3rd camera addition) in the upper 2 edit boxes and then press [OK] to correct the signal names. Repeat the same operation towards newly created UDP/IP communication objects.



Figure 5: Signal name correction using Substring replace

 Addition of signals under S-3: CameraSelect Logic Expand S-3: CameraSelect logic and then display all the objects in Detail View. Add respective signals whose signal name contain numerical suffix by pressing [Alt] + [+] button.

http://application.market.com





Figure 6: Signal extension under S-3: CameraSelect logic

5. Copy and paste S5: Camera2 logic

Select and copy S5: Camera2 logic using [Ctrl] + C and then move the mouse focus to "Logic". Select $[Edit] \rightarrow [Paste Special... (Ctrl + Shift + V)]$ to prompt the Paste Special dialog box. In the dialog, set the following and then press [OK] to paste Camera3 and Camera4 in this example.

- Number of Copies: 2
- Increment Signal Names: checked
- Select [Last] in "Which Numeric Component to Increment:"
- Check all the items in "Which Items to Increment:" i.e. Inputs, Parameters, Outputs and Symbol Comment

http://application.market.com



Ctrl+X Ctrl+C Ctrl+V Ctrl+Shift+V	Program View Central Control Modules : DMPS3-4K-150-C Central Control COM : COM		
Ctrl+C Ctrl+V Ctrl+Shift+V	Central Control Modules : DMPS3-4K-150-C D= Control Modules : DMPS3-4K-150-C D= Control COM : COM		
Ctrl+V Ctrl+Shift+V	B-B Slot-01 : COM : COM		
Ctrl+Shift+V			
Ctrl+F	Slot-03 : Digital Inputs : Digital Inputs		
F3	Slot-04 : Relays : Relays		
15	Slot-05 : IK Inputs : IK Inputs		
F9	Slot-07: Ethernet Devices : Ethernet Devices		
	P-ID-03 : XPanel 2.0 Smart Graphics : XPanel 2.0 Smart Graphics		
	IP-ID-04: UDP/IP Communications: UDP/IP Communications		
	IP-ID-05 : UDP/IP Communications : UDP/IP Communications		
F4	IP-ID-06 : UDP/IP Communications : UDP/IP Communications		
Shift+F4	IP-ID-07 : UDP/IP Communications : UDP/IP Communications		
	Slot-08 : DMPS3 Control : DMPS3 Control		
F6	😥 📲 Slot-12 : System Monitor : System Monitor		
Alt+1	🖕 🚔 Logic		
Alt+2	S-1: SONY_X400SERIES		
Alt+3			
Alt+4	B S-3: CameraSelect		
Alt+5	++++		
Alt+6	S-6: Pan IIIt		
Alt+Shift+6			
	Ctrl+F F3 F9 F4 Shift+F4 F6 Alt+1 Alt+2 Alt+3 Alt+4 Alt+5 Alt+6 Alt+Shift+6		

Figure 7: Program View before pasting Camera3 and Camera4



Figure 8: Program View after pasting Camera3 and Camera4

©2013 Crestron Electronics, Inc. 15 Volvo Drive • Rockleigh, NJ 07647 800.237.2041 / 201.767.3400

http://application.market.com



6. Connect added signals of "enable_<n>" into XPanel 2.0 Smart Graphics object. Put "enable_3" and "enable_4" signals in the control feedback signal as below.

Slot-07 : Ethernet Devices : Ethernet Devices	af_mode_normal_fb	_fb111	press111	af_mode_normal
🗄 🧱 IP-ID-03 : XPanel 2.0 Smart Graphics : XPanel 2.0 Smart Graphics	af_mode_interval_fb	fb112	press112	af_mode_interval
IP-ID-0+, ODF/IF Communications : ODF/IF Communications IP-ID-05 : UDP/IP Communications : UDP/IP Communications	af_mode_zoomtrigger_fb	fb113	press113	af_mode_zoomtrigger
IP-ID-06: UDP/IP Communications: UDP/IP Communications	system_tab_pressed_fb	fb114	press114	system_tab_pressed
	videoout_tab_pressed_fb	fb115	press115	videoout_tab_pressed
Slot-08 : DMPS3 Control : DMPS3 Control	ptzf_tab_pressed_fb	fb116	press116	ptzf_tab_pressed
Biot-05: Connect in Devices - Connect in Devices	exposure_tab_pressed_fb	fb117	press117	exposure_tab_pressed
Blot-12 : System Monitor : System Monitor	color_tab_pressed_fb	fb118	press118	color_tab_pressed
	preset_tab_pressed_fb	fb119	press119	preset_tab_pressed
Se: Initialize		fb120	press120	preset_stop
	enable_preset_mode	fb121	press121	
	enable teleconvert	fb122	press122	
	enable tally	fb123	press123	
	enable ptztrace	fh124	press124	₽
	enable video out	fb125	prese125	→
	onable zeem mede	6406	press 125	→
S-10: Color	enable_200m_mode	10120	press 120	⊳
B-G S-12: VideoSelect	hot_busy	10127	press127	>
	busy	fb128	press128	→
🗈 💼 S-14 : TallyLevel		fb129	press129	
Garage Market S-15: TallyControl	enable_3	fb130	press130	camera3
	enable_4	fb131	press131	camera4
S-18: Camera3		10152	press132	
		fb133	press133	

Figure 9: Addition of "enable_<n>" signals into Smart Graphics

7. Build VT Pro-e and SIMPL project and then transfer the program / firmware into the target Crestron devices

http://application.market.com