



Manufacturer: Lumens Digital Optics Inc.  
 Model: VC Camera  
 Device Type: Camera

CONTACT SUPPORT: (please fill out carefully)	
COMPANY NAME:	Lumens Digital Optics Inc.
SUPPORT CONTACT:	Lumens support team
EMAIL ADDRESS:	fae@lumens.com.tw
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NOTES:	

GENERAL INFORMATION	
SIMPLWINDOWS NAME:	Lumens VC Camera
CATEGORY:	Camera
VERSION:	1.0
SUMMARY:	This module provides RS-232 / IP control of Lumens VC Cameras
GENERAL NOTES:	RS-232 / IP control of the Lumens VC Cameras
CRESTRON HARDWARE REQUIRED:	1. Crestron 3-Series Controller 2. Com port x1 3. LAN port x1
SETUP OF CRESTRON HARDWARE:	RS232 Baud:9600 Parity:None Data Bits: 8 Stop Bits: 1
VENDOR FIRMWARE:	Unknown

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VENDOR SETUP: N/A

CABLE  
 DIAGRAM:

- **RS-232 / RS-422**
  - **Communication Protocol**
- Transmit Method: Asynchronous Interface Half Duplex Serial Communication
- Transmit Speed: 9600bps
- Start bit: 1Bit
- Parity Check: NA
- Data Bit: 8Bit
- Stop Bit: 1Bit

■ **RS-232 Connection Instruction**

▼ **RS-232 IN Pins Instructions**



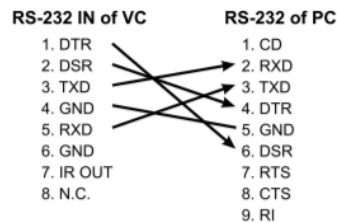
NO	Pins	Signals
1	DTR	Data Transmission Reade
2	DSR	Data Set Reade
3	TXD	Transmit Data
4	GND	Ground
5	RXD	Receive Data
6	GND	Ground
7	IR OUT	IR Commander Signal
8	N.C.	No Connection

▼ **RS-232 OUT Pins Instructions**

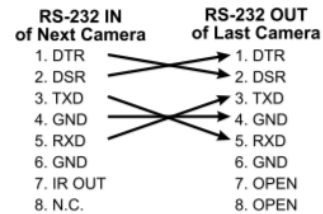


NO	Pins	Signals
1	DTR	Data Transmission Reade
2	DSR	Data Set Reade
3	TXD	Transmit Data
4	GND	Ground
5	RXD	Receive Data
6	GND	Ground
7	OPEN	Reserved
8	OPEN	Reserved

▼ **RS-232 Connection Instructions**



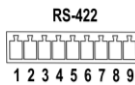
▼ **RS-232 Connection Instructions**



■ **RS-422 Connection Instruction**

Manufacturer: Lumens Digital Optics Inc.  
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 Device Type: Camera

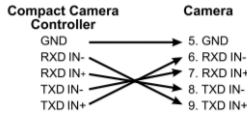
▼ RS-422 Pins Instructions



Pin NO.	Function
1	RXD OUT-
2	RXD OUT+
3	TXD OUT-
4	TXD OUT+
5	GND
6	RXD IN-
7	RXD IN+
8	TXD IN-
9	TXD IN+

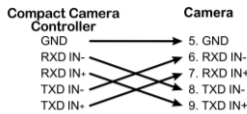
▼ RS-422 Connection Instructions

— Applicable to Lumens Compact Camera Controller



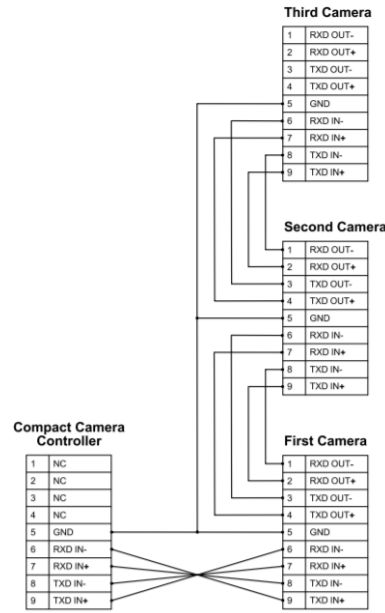
▼ RS-422 Connection Instructions

— Applicable to SONY Compact Camera Controller



▼ RS-422 Serial Connection

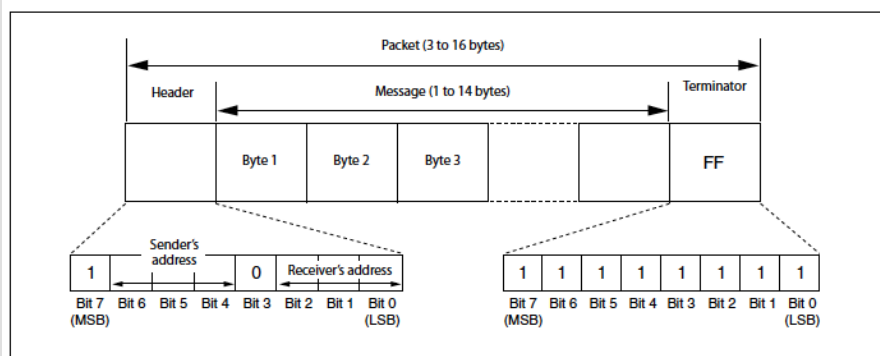
Up to seven cameras can be daisy-chained



➤ RS232 over IP

The communication specifications of RS232 over IP are as follows:

- Interface : RJ-45 10Base-T/100Base-TX (automatically discrimination)
- Internet protocol : IPv4
- Transport protocol : UDP
- IP address : Set by the IP card setting command
- Port address : 52381
- Packet Structure





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CONTROL:		
Power On_Off	D	Press to set power on / off the unit
Zoom_Tele, Zoom_Wide (Standard)	D	Press and hold to zoom in/out standard. Release to stop the zoom operation.
Zoom_Tele, Zoom_Wide (Step)	D	Press and hold to zoom in/out step. Release to stop the zoom operation.
Zoom_Tele, Zoom_Wide (Variable)	D	Press and hold to zoom in/out. Release to stop the zoom operation.
Focus_Far, Focus_Near(Standard)	D	Press and hold to move the focus position to far/near position standard. Release to stop the focus operation.
Focus_Far, Focus_Near(Step)	D	Press and hold to move the focus position to far/near position step. Release to stop the focus operation.
Focus_Far, Focus_Near(Variable)	D	Press and hold to move the focus position to far/near position variable. Release to stop the focus operation.
Focus_Auto/Manual	D	Press to set the focus mode to either auto or manual.
Focus_One Push Trigger	D	One Push AF Trigger(* Enabled during Manual Focus Mode)
Auto White Balance	D	Press to set white balance mode to auto.
White Balance_One Push Trigger	D	One Push WB Trigger(* Enabled during One Push WB Mode)
Exposure_Full Auto, Manual, Shutter Priority, Iris Priority	D	Press to set the exposure mode to Full Auto, Manual, Shutter Priority or, Iris Priority.
Exposure_Shutter	D	Shutter Setting(* Enabled during Shutter Priority/Manual Mode)
Exposure_Iris	D	Iris Setting(* Enabled during Iris Priority/Manual Mode)
Exposure_Gain	D	Gain Setting(* Enabled during AE Manual Mode)
Picture_Bright	D	Bright Setting
D-effect_PictureFlip		Press to set picture flip ON/OFF



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Preset_Set/Recall/Reset	D	Press to save/recall/reset the preset to a selected preset position number.
Pan Tilt_Up/Down/Left/Right/ UpLeft/ UpRight/DownLeft/ DownRight	D	Press and hold to pan_tilt
Pan Tilt_Stop/Home/Reset	D	Press to set camera to stop pan_tilt/ back to home position/reset
Pan Tilt_Filp	D	Press to set Pan_Filp/Tilt_Filp on/off
PTZ Speed Compensation	D	Press to set PTZ Speed Compensation on/off
Motionless preset	D	Press to set Motionless preset on/off
Motion sync	D	Press to set Motion sync on/off
PanTilt_Preset_Speed	D	To select PanTilt_Preset_Speed
Auto Tracking-Framing	D	Press to set Auto Tracking/Framing on/off
Tracking_Body-Tracking	D	Press to set tracking body size Full Body/Upper Body
Auto Framing	D	Press to set Auto Framing on/off
Auto Tracking-Framing_type	D	Press to set auto tracking or auto framing.

**FEEDBACK: (\*examples below)**

PanTilt Speed	D	Get current PanTilt Speed level
Zoom speed	D	Get current Zoom speed level

**PARAMETERS:**

NA		
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TESTING:	
OPS USED FOR TESTING:	CP3: v1.012.0017
SIMPL WINDOWS USED FOR TESTING:	4.11.05
DEVICE DB USED FOR TESTING:	114.00.001.00
CRES DB USED FOR TESTING:	88.00.002.00
SYMBOL LIBRARY USED FOR TESTING:	1101
SAMPLE PROGRAM:	Lumens VC-Camera_IP_EXE.c3p
REVISION HISTORY:	v1.0 – Initial Release