

TR530/TR320

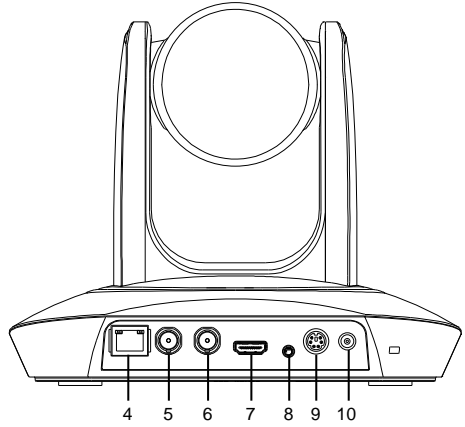
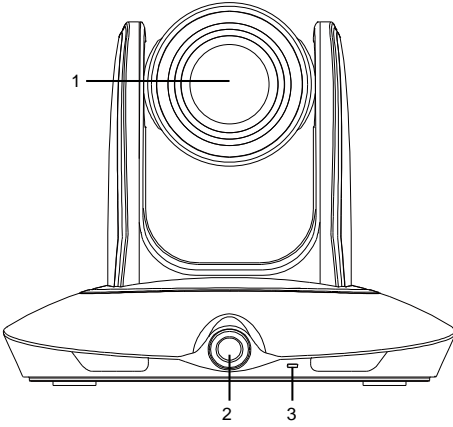
Control Codes



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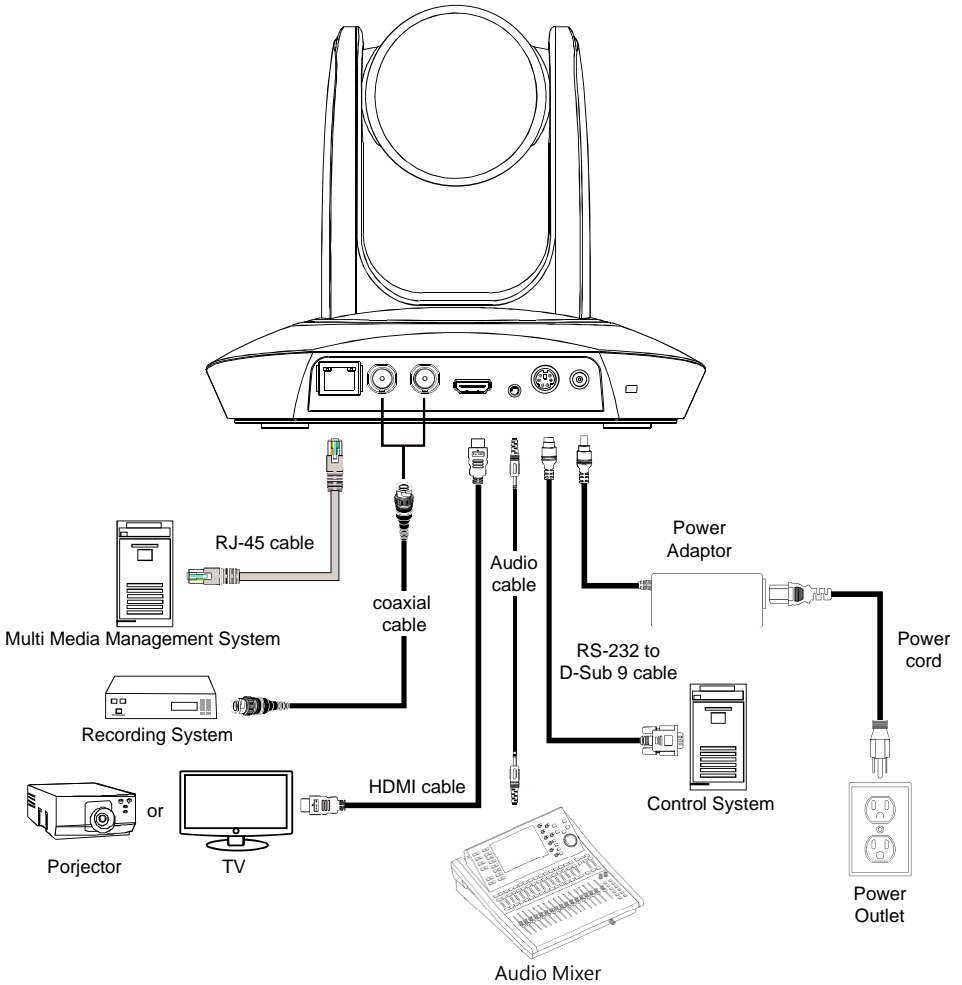
Product Overview



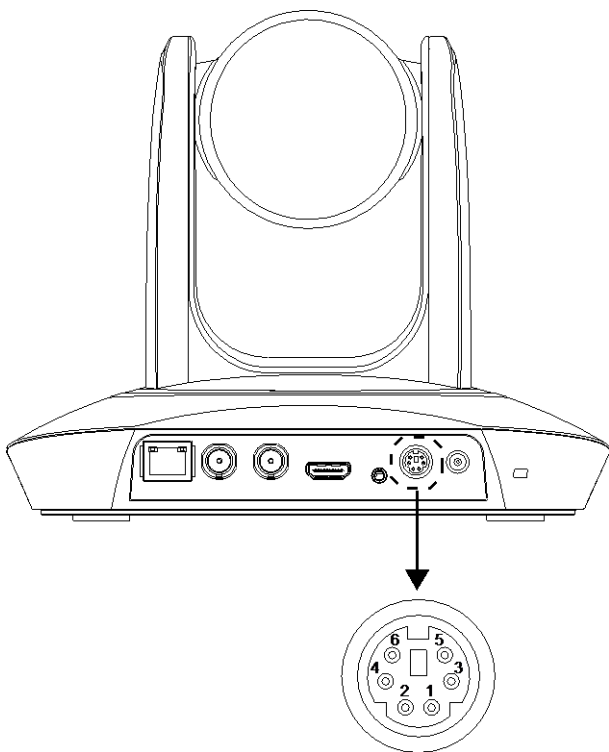
- 1. PTZ camera
 - 2. Panoramic camera
 - 3. Power indicator
 - 4. RJ-45 port
 - 5. 3G-SDI 2 port(Panoramic view)
 - 6. 3G-SDI 1 port(PTZ view)
 - 7. HDMI port(PTZ view)
 - 8. Audio in port*
 - 9. RS-232 port
 - 10. Power jack
- *Audio input level: 1Vrms(max.)

CONNECTIONS

Device Connections



RS232 Pin Definition



DIN6 PIN No.	I/O Type	Description
1	Output	DTR
2	Input	DSR
3	--	Not Connect
4	Output	TXD
5	GND	GND
6	Input	RXD

OSD Tree Map

Camera OSD

Tracking	On
Camera	>
Video Format	>
Preset	>
Advanced Setting	>
Language	>
Profile	>
Factory Default	>
Information	>

Camera Advanced Setting

To adjust RS232 protocol, address and baud rate, select **Advance Setting** from OSD menu. If you need VISCA-over-IP, please make sure it is turned "On" in the menu.

Tracking	On
Camera	>
Video Format	>
Advanced Setting	>
Preset	>
Language	>
Profile	>
Factory Default	>
Information	>

RS232 Protocol	VISCA
Address(ADDRD)	1
Baud Rate	9600
VISCA-over-IP	off

VISCA Over IP Setting

VISCA over IP

PORT

Internet protocol	IPv4
Transport protocol	UDP
Port address	52381

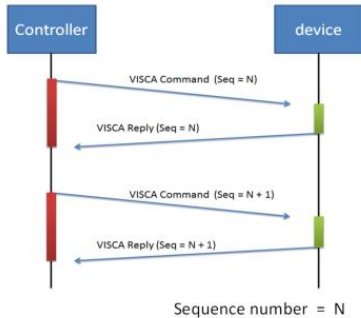
FORMAT

	byte 0	byte 1	byte 2	byte 3	byte 4	byte 5	byte 6	byte 7	byte8 ~~~	byte23	
func	Payload type		Payload length		Sequence number				Payload (1 to 16 bytes)		
data	Value1	Value2	1~16 (0x0001~0x0010)		0X00000000 ~ 0XFFFFFFF				VISCA Packet (see page VISCA)		

Payload type

Name	Value1	Value2	Description
VISCA command	0x01	0x00	Stores the VISCA command.
VISCA inquiry	0x01	0x10	Stores the VISCA inquiry.
VISCA reply	0x01	0x11	Stores the reply for the VISCA command or VISCA inquiry

Sequence number



VISCA Command Codes

Command	Packet	Comments
IF_Clear	8x 01 00 01 FF	x = Cam address
IF_Clear(broadcast)	88 01 00 01 FF	
CAM_VersionInq	8x 09 00 02 FF	
CAM_Power_ON	8x 01 04 00 02 FF	
CAM_Power_OFF	8x 01 04 00 03 FF	
PT_Stop	8x 01 06 01 00 00 03 03 FF	
PT_Up	8x 01 06 01 OP OT 03 01 FF	P = Pan speed(0~0x0F)
PT_Down	8x 01 06 01 OP OT 03 02 FF	T = Tilt speed(0~0x0F)

PT_Left	8x 01 06 01 OP OT 01 03 FF	
PT_Right	8x 01 06 01 OP OT 02 03 FF	
PT_UpLeft	8x 01 06 01 OP OT 01 01 FF	
PT_UpRight	8x 01 06 01 OP OT 02 01 FF	
PT_DownLeft	8x 01 06 01 OP OT 01 02 FF	
PT_DownRight	8x 01 06 01 OP OT 02 02 FF	
PT_Direct	8x 01 06 02 00 00 OY OY OY OY OV OV OV OV FF	0xYYYY = pan pos 0xVVVV = tilt pos
PT_Pos_Inq	8x 09 06 12 FF	
Zoom_Stop	8x 01 04 07 00 FF	
Zoom_Tele	8x 01 04 07 2y FF	y=0 (Low) to 7 (High) (zoom speed)
Zoom_Wide	8x 01 04 07 3y FF	
Zoom_Direct	8x 01 04 47 OY OY OY OY FF	0xYYYY = zoom pos
Zoom_Pos_Inq	8x 09 04 47 FF	
CAM_reset	8x 01 04 3F 00 YY FF	YY = preset num(0~0x7F)
CAM_set	8x 01 04 3F 01 YY FF	
CAM_recall	8x 01 04 3F 02 YY FF	
CAM_Track_ON	8x 01 04 7D 02 00 FF	
CAM_Track_OFF	8x 01 04 7D 03 00 FF	
CAM_Profile_Read	8x 01 04 40 01 YY FF	YY = profile num(0x00~0x05)
CAM_Profile_Save	8x 01 04 40 02 YY FF	
CAM_WOL_ON	8x 01 04 7E 02 00 FF	
CAM_WOL_OFF	8x 01 04 7E 03 00 FF	
CAM_PIP_SET	8x 01 04 7F 01 YY FF	YY = pip num(0x00~0x09)
CAM_PIP_OFF	8x 01 04 7F 02 00 FF	

PELCO P Command Codes

PAN AND TILT COMMANDS		P/T bit(byte4.0) = 0							
	byte 1	byte 2	byte 3	byte 4	byte 5	byte 6	byte 7	byte 8	
func	STX	ADDR	data1	data2	data3	data4	ETX	checksum	
data	0xA0	0~7F	cmd 1	cmd 2	Pan speed	Tilt speed	0xAF	1~7 XOR	
						note : speed = 0x00~0x30			
byte3 : command 1		bit 7	bit 6	bit 5	bit 4	bit 3	bit 2	bit 1	bit 0
		NA	CAM ON	NA	CAM ON/OFF	NA	NA	NA	NA
						note : power off : byte3.6 = 0 & byte3.4 = 1			
byte4: command 2		bit 7	bit 6	bit 5	bit 4	bit 3	bit 2	bit 1	bit 0
		NA	ZOOM Wide	ZOOM Tele	TILT Down	TILT Up	PAN Left	PAN Right	P/T bit 0(always)
EXTENDED COMMAND SET		P/T bit(byte4.0) = 1							
	byte 1	byte 2	byte 3	byte 4	byte 5	byte 6	byte 7	byte 8	
func	STX	ADDR	data1	data2	data3	data4	ETX	checksum	
Set Preset XX	0xA0	0~7	0x00	0x03	0x00	Preset #	0xAF	1~7 XOR	
Go To Preset XX	0xA0	0~7	0x00	0x07	0x00	Preset #	0xAF	1~7 XOR	
Track ON	0xA0	0~7	0x00	0x65	0x00	0x00	0xAF	1~7 XOR	
Track OFF	0xA0	0~7	0x00	0x67	0x00	0x00	0xAF	1~7 XOR	
WOL ON	0xA0	0~7	0x00	0x69	0x00	0x00	0xAF	1~7 XOR	
WOL OFF	0xA0	0~7	0x00	0x6B	0x00	0x00	0xAF	1~7 XOR	
Read Profile XX	0xA0	0~7	0x00	0x6D	0x00	Profile #	0xAF	1~7 XOR	
Save To Profile XX	0xA0	0~7	0x00	0x6F	0x00	Profile #	0xAF	1~7 XOR	
						note : Preset # : 0x01 ~ 0xFF Profile # : 0x01 ~ 0x05			

PELCO D Command Codes

PAN AND TILT COMMANDS		P/T bit(byte4.0) = 0							
		byte 1	byte 2	byte 3	byte 4	byte 5	byte 6	byte 7	
	func	SYNC	ADDR	cmd 1	cmd 2	data1	data2	checksum	
	data	0xFF	1~80	cmd 1	cmd 2	Pan speed	Tilt speed	2~6 SUM	
						note : speed = 0x00~0x30			
byte3 : command 1									
		bit 7	bit 6	bit 5	bit 4	bit 3	bit 2	bit 1	bit 0
		SENSE ON	NA	NA	NA	CAM ON/OFF	NA	NA	NA
						note : power off : byte3.7 = 0 & byte3.3 = 1			
byte4: command 2									
		bit 7	bit 6	bit 5	bit 4	bit 3	bit 2	bit 1	bit 0
		NA	ZOOM Wide	ZOOM Tele	TILT Down	TILT Up	PAN Left	PAN Right	P/T bit 0(always)
EXTENDED COMMAND SET		P/T bit(byte4.0) = 1							
		byte 1	byte 2	byte 3	byte 4	byte 5	byte 6	byte 7	
	func	SYNC	ADDR	data1	data2	data3	data4	checksum	
	Set Preset XX	0xFF	1~8	0x00	0x03	0x00	Preset #	2~6 SUM	
	Go To Preset XX	0xFF	1~8	0x00	0x07	0x00	Preset #	2~6 SUM	
	Track ON	0xFF	1~8	0x00	0x65	0x00	0x00	2~6 SUM	
	Track OFF	0xFF	1~8	0x00	0x67	0x00	0x00	2~6 SUM	
	WOL ON	0xFF	1~8	0x00	0x69	0x00	0x00	2~6 SUM	
	WOL OFF	0xFF	1~8	0x00	0x6B	0x00	0x00	2~6 SUM	
	Read Profile XX	0xFF	1~8	0x00	0x6D	0x00	Profile #	2~6 SUM	
	Save To Profile XX	0xFF	1~8	0x00	0x6F	0x00	Profile #	2~6 SUM	
						note : Preset # : 0x01 ~ 0xFF Profile # : 0x01 ~ 0x05			