

Aver Auto Tracking Camera

PTC500S / PTC115

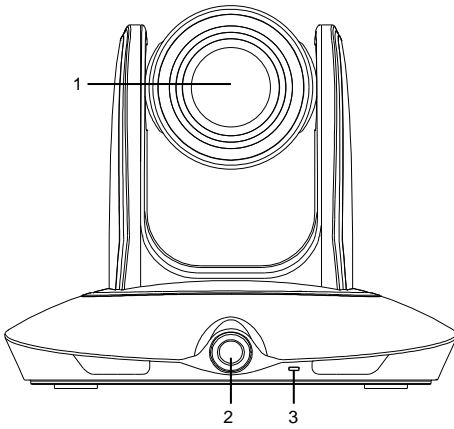
Control Codes

2021.1.8 v3

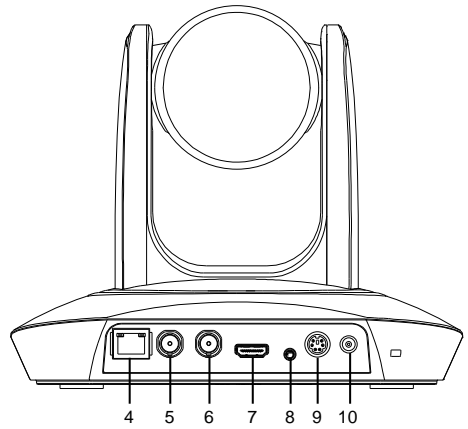


Product Introduction

Overview



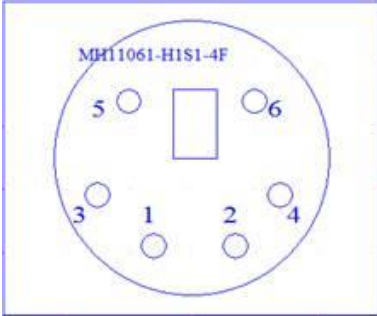
- 1. PTZ camera
 - 2. Panoramic camera
 - 3. Power indicator
 - 4. RJ-45 port
 - 5. 3G-SDI 2 port(Panoramic view)
- *Audio input level: 1Vrms(max.)



- 6. 3G-SDI 1 port(PTZ view)
- 7. HDMI port(PTZ view)
- 8. Audio in port*
- 9. RS-232 port
- 10. Power jack

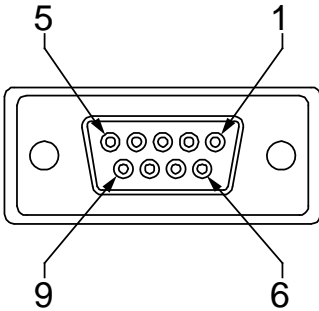
RS232 Connection

RS232 Pin Definition



Pin	Definition
1	RS232_DTR
2	RS232_DSR
3	N.C.
4	RS232_TXD
5	GND
6	RS232_RXD

● Din6 to D-Sub9 Cable Pin Definition



Advanced Setting

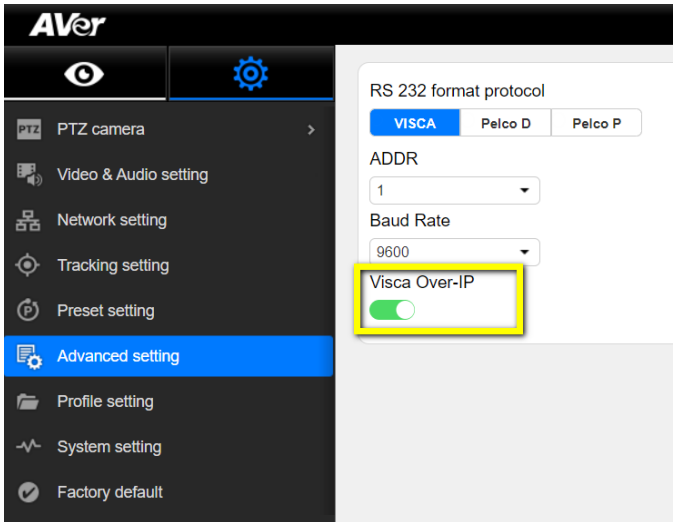
To adjust RS232 protocol, address and baud rate, select Advance Setting from OSD menu.

OSD Tree

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

Web Interface



Enable Visca-over-IP if needed.

RS232/422 VISCA Command Table

Command Set	Command	Command Packet	Comments	
IF_Clear		8x 01 00 01 FF	x = Cam address	
IF_Clear(broadcast)		88 01 00 01 FF		
CAM_Power	On	8x 01 04 00 02 FF		
	Off	8x 01 04 00 03 FF	*RS-232 support, over IP not support	
CAM_Zoom	Stop	8x 01 04 07 00 FF		
	Tele(Variable)	8x 01 04 07 2p FF		
	Wide(Variable)	8x 01 04 07 3p FF	p=0 (Low) to 7 (High)	
	Direct	8x 01 04 47 0Y 0Y 0Y 0Y FF	0xYYYY = zoom pos	
CAM_Focus	Far(Variable)	8x 01 04 08 2P FF	p=0-F	
	Near(Variable)	8x 01 04 08 3P FF	p=0-F	
	Auto Focus	8x 01 04 38 02 FF		
	Manual Focus	8x 01 04 38 03 FF		
CAM_WB	One Push	8x 01 04 18 01 FF		
	Auto	8x 01 04 35 00 FF	Normal Auto	
	One Push WB	8x 01 04 35 03 FF	One Push WB mode	
	Manual	8x 01 04 35 05 FF	Manual Control mode	
CAM_RGain	One Push	8x 01 04 10 05 FF	One Push WB Trigger	
	Up	8x 01 04 03 02 FF	Manual Control of R Gain	
CAM_Bgain	Down	8x 01 04 03 03 FF		
	Up	8x 01 04 04 02 FF	Manual Control of B Gain	
CAM_AE	Down	8x 01 04 04 03 FF		
	Full Auto	8x 01 04 39 00 FF	Automatic Exposure mode	
	Manual	8x 01 04 39 03 FF	Manual Control mode	
	Shutter Priority	8x 01 04 39 0A FF	Shutter Priority Automatic Exposure mode	
	Iris Priority	8x 01 04 39 0B FF	Iris Priority Automatic Exposure mode	
CAM_Shutter	Bright	8x 01 04 39 0D FF	Bright Mode (Manual control)	
	Up	8x 01 04 0A 02 FF	Shutter Setting	
CAM_Iris	Down	8x 01 04 0A 03 FF		
	Up	8x 01 04 0B 02 FF	Iris Setting	
CAM_Bright	Down	8x 01 04 0B 03 FF		
	Up	8x 01 04 0D 02 FF	Bright Setting	
CAM_ExpComp	Down	8x 01 04 0D 03 FF		
	Up	8x 01 04 0E 02 FF	Exposure Compensation Amount Setting	
CAM_Backlight	Down	8x 01 04 0E 03 FF		
	On	8x 01 04 33 02 FF	Back Light Compensation ON/OFF	
CAM_Preset	Off	8x 01 04 33 03 FF		
	reset	8x 01 04 3F 00 YY FF		
	set	8x 01 04 3F 01 YY FF	YY = preset num(0-0x7F)	
	recall	8x 01 04 3F 02 YY FF		
CAM_Menu	On/Off	8x 01 06 06 10 FF	Display ON/OFF	
	Pan-tilt Drive	Up	8x 01 06 01 VV WW 03 01	VV=pan speed: 0x00-0x0F WW= tilt speed: 0x00-0x0F
		Down	8x 01 06 01 VV WW 03 02	
		Left	8x 01 06 01 VV WW 01 03	
		Right	8x 01 06 01 VV WW 02 03	
		UpLeft	8x 01 06 01 VV WW 01 01	
		UpRight	8x 01 06 01 VV WW 02 01	
		DownLeft	8x 01 06 01 VV WW 01 02	
		DownRight	8x 01 06 01 VV WW 02 02	
		Stop	8x 01 06 01 VV WW 03 03	
		Home	8x 01 06 04 FF	
Reset	8x 01 06 05 FF			
PT_Direct	8x 01 06 02 00 0Y 0Y 0Y 0V 0V 0V FF	0xYYYY = pan pos 0xVVVV = tilt pos		
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		
CAM_Profile_Save		8x 01 04 40 02 YY FF	YY = profile num(0x01-0x05)	
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(0x01-0x09)	
CAM_PIP_OFF		8x 01 04 7F 02 00 FF		

Inquiry Command	Command Packet	Reply Packet	Comments
CAM_PowerInq	8x 09 04 00 FF	y0 50 02 FF	On
		y0 50 03 FF	Off
CAM_WBModelInq	8x 09 04 35 FF	y0 50 00 FF	Auto
		y0 50 05 FF	Manual
CAM_RGainInq	8x 09 04 43 FF	y0 50 00 00 0p 0q FF	pq: R Gain
CAM_AEModelInq	8x 09 04 39 FF	y0 50 00 00 0p 0q FF	Full Auto
		y0 50 03 FF	Manual
		y0 50 0A FF	Shutter Priority
		y0 50 0B FF	Iris Priority
		y0 50 0D FF	Bright
CAM_ShutterPosInq	8x 09 04 4A FF	y0 50 00 00 0p 0q FF	pq: Shutter Position
CAM_IrisPosInq	8x 09 04 4B FF	y0 50 00 00 0p 0q FF	pq: Iris Position
CAM_GainPosInq	8x 09 04 4C FF	y0 50 00 00 0p 0q FF	pq: Gain Position
CAM_BrightPosInq	8x 09 04 4D FF	y0 50 00 00 0p 0q FF	pq: Bright Position
CAM_ExpCompPosInq	8x 09 04 4E FF	y0 50 00 00 0p 0q FF	pq: ExpComp Position
CAM_VersionInq	8x 09 00 02 FF		
PT_Pos_Inq	8x 09 06 12 FF		
Zoom_Pos_Inq	8x 09 04 47 FF		

Visca-over-IP Settings

VISCA over IP

PORT

Internet protocol	IPv4
Transport protocol	UDP
Port address	52381

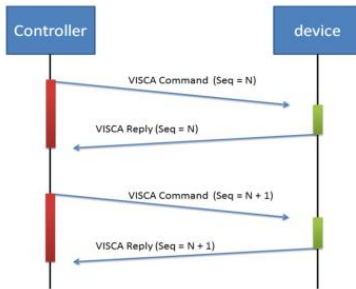
FORMAT

	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								Sequence number	
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



Sequence number = N