

Table of Contents

TA	ABLE OF	CONTENTS	. 2
FC		PLIANCE STATEMENT	. 4
w	ARNING	S AND PRECAUTIONS	. 4
w	ARRAN	۲۷	. 5
		ad Warranty	
1.	PRODU	CT OVERVIEW	. 7
2.	FEATUR	ES	. 7
3.	LOCATI	ON AND FUNCTION OF PARTS	. 8
4.	CONNE	CTIONS	10
	4.1 4.2 4.3	CAMERA REAR CONTROL PANEL	10
5.	SYSTEM	I DIAGRAM	11
6.	REMOT	E CONTROL AND ON-SCREEN MENU	12
	6.1 6.2	Remote Control Functions	
7.	INSTRU	CTION FOR INSTALLATION	24
	STEP 2 – STEP 3 – STEP 4 – STEP 5 – STEP 6 – STEP 7 –	DIP Switch Setting	24 24 25 27 28 28
8.	DIP SW	ITCH SETTINGS	29
	8.1 8.2	DIP Switch SW1	

9. NETWORK CONFIGURATION 31						
10. RMC-:	180 PTZ CAMERA CONTROL UNIT					
10.1	Direct Connection to Camera					
10.2	CONNECTION TO CAMERA VIA RECEIVER BOX					
11. FIRM	WARE UPDATE					
12. DIME	NSIONS					
13. SPECI	FICATIONS					
NOTE						
14. SERVI	I4. SERVICE AND SUPPORT					

Disclaimer of Product and Services

The information offered in this instruction manual is intended as a guide only. At all times, Datavideo Technologies will try to give correct, complete and suitable information. However, Datavideo Technologies cannot exclude that some information in this manual, from time to time, may not be correct or may be incomplete. This manual may contain typing errors, omissions or incorrect information. Datavideo Technologies always recommend that you double check the information in this document for accuracy before making any purchase decision or using the product. Datavideo Technologies is not responsible for any omissions or errors, or for any subsequent loss or damage caused by using the information contained within this manual. Further advice on the content of this manual or on the product can be obtained by contacting your local Datavideo Office or dealer.

FCC Compliance Statement

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received, including interference that may cause undesired operation.

Warnings and Precautions

- 1. Read all of these warnings and save them for later reference.
- 2. Follow all warnings and instructions marked on this unit.
- 3. Unplug this unit from the wall outlet before cleaning. Do not use liquid or aerosol cleaners. Use a damp cloth for cleaning.
- 4. Do not use this unit in or near water.
- 5. Do not place this unit on an unstable cart, stand, or table. The unit may fall, causing serious damage.
- 6. Slots and openings on the cabinet top, back, and bottom are provided for ventilation. To ensure safe and reliable operation of this unit, and to protect it from overheating, do not block or cover these openings. Do not place this unit on a bed, sofa, rug, or similar surface, as the ventilation openings on the bottom of the cabinet will be blocked. This unit should never be placed near or over a heat register or radiator. This unit should not be placed in a built-in installation unless proper ventilation is provided.
- This product should only be operated from the type of power source indicated on the marking label of the AC adapter. If you are not sure of the type of power available, consult your Datavideo dealer or your local power company.
- 8. Do not allow anything to rest on the power cord. Do not locate this unit where the power cord will be walked on, rolled over, or otherwise stressed.
- 9. If an extension cord must be used with this unit, make sure that the total of the ampere ratings on the products plugged into the extension cord do not exceed the extension cord's rating.
- 10. Make sure that the total amperes of all the units that are plugged into a single wall outlet do not exceed 15 amperes.
- 11. Never push objects of any kind into this unit through the cabinet ventilation slots, as they may touch dangerous voltage points or short out parts that could result in risk of fire or electric shock. Never spill liquid of any kind onto or into this unit.
- 12. Except as specifically explained elsewhere in this manual, do not attempt to service this product yourself. Opening or removing covers that are marked "Do Not Remove" may expose you to dangerous voltage points or

other risks, and will void your warranty. Refer all service issues to qualified service personnel.

- 13. Unplug this product from the wall outlet and refer to qualified service personnel under the following conditions:
 - a. When the power cord is damaged or frayed;
 - b. When liquid has spilled into the unit;
 - c. When the product has been exposed to rain or water;
 - d. When the product does not operate normally under normal operating conditions. Adjust only those controls that are covered by the operating instructions in this manual; improper adjustment of other controls may result in damage to the unit and may often require extensive work by a qualified technician to restore the unit to normal operation;
 - e. When the product has been dropped or the cabinet has been damaged;
 - f. When the product exhibits a distinct change in performance, indicating a need for service.

Warranty

Standard Warranty

- Datavideo equipment is guaranteed against any manufacturing defects for one year from the date of purchase.
- The original purchase invoice or other documentary evidence should be supplied at the time of any request for repair under warranty.
- The product warranty period beings on the purchase date. If the purchase date is unknown, the product warranty period begins on the thirtieth day after shipment from a Datavideo office.
- All non-Datavideo manufactured products (product without Datavideo logo) have only one year warranty from the date of purchase.
- Damage caused by accident, misuse, unauthorized repairs, sand, grit or water is not covered under warranty.
- Viruses and malware infections on the computer systems are not covered under warranty.
- Any errors that are caused by unauthorized third-party software installations, which are not required by our computer systems, are not covered under warranty.
- All mail or transportation costs including insurance are at the expense of the owner.
- All other claims of any nature are not covered.

- All accessories including headphones, cables, batteries, metal parts, housing, cable reel and consumable parts are not covered under warranty.
- Warranty only valid in the country or region of purchase.
- Your statutory rights are not affected.

Three Year Warranty

 All Datavideo products purchased after July 1st, 2017 qualify for a free two years extension to the standard warranty, providing the product is registered with Datavideo within 30 days of purchase.



- Certain parts with limited lifetime expectancy such as LCD panels, DVD drives, Hard Drive, Solid State Drive, SD Card, USB Thumb Drive, Lighting, Non-PCIe Card and third party provided PC components are covered for 1 year.
- The three-year warranty must be registered on Datavideo's official website or with your local Datavideo office or one of its authorized distributors within 30 days of purchase.

Disposal



For EU Customers only - WEEE Marking

This symbol on the product or on its packaging indicates that this product must not be disposed of with your other household waste. Instead, it is your responsibility to dispose of your waste equipment by handing it over to a designated collection point for the recycling of waste electrical and electronic equipment. The separate collection and recycling of your waste equipment at the

time of disposal will help to conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. For more information about where you can drop off your waste equipment for recycling, please contact your local city office, your household waste disposal service or the shop where you purchased the product.

> **CE Marking** is the symbol as shown on the left of this page. The letters "**CE**" are the abbreviation of French phrase "Conformité Européene" which literally means "European Conformity". The term initially used was "EC Mark" and it

was officially replaced by "CE Marking" in the Directive 93/68/EEC in 1993. "CE Marking" is now used in all EU official documents.

1. Product Overview

The PTC-150T/TW HD/SD Video Camera is a PTZ camera that can be mounted on a wall, ceiling, floor, or a tabletop. The camera is equipped with HDBaseT Technology for remote control purpose, video image conveyance, power transmission and Ethernet connection. The camera captures HD video at 1920 \times 1080 resolution, and features wide dynamic range with backlight compensation. The camera features a motorized 30x optical zoom capability, and its image mirror and image rotation functions allow you to electronically adjust the image and deliver a correctly oriented image. In addition to the basic camera functions, the PTC-150T/TW also has a receiver box that allows the user to control the camera at a remote location with just one Ethernet cable.

50 programmable presets including pan, tilt, and zoom positions, allow the camera to quickly move between predetermined camera positions using the remote.

For multi-camera shoots, the built-in tally light can identify active camera. The camera features a built-in IR cut filter in the image path for low light shooting, and then returns for daytime shooting. Moreover, PTC-150T/TW supports real time position report on a per frame basis; this will be helpful to virtual studio application. The camera supports Sony VISCA protocol for PTZ control using RS-422 interface over the unit's RJ-45 port.

2. Features

- HD Resolution: 1/2.8" High Definition 2.14 M Pixels progressive CMOS sensor
- 30x optical zoom (f = 4.3 mm to 129 mm)
- High definition formats supported: 1080/59.94p, 1080/50p, 1080/59.94i, 1080/29.97p, 1080/25p, 1080/50i, 720/59.94p, 720/50p
- Standard definition formats supported: 480i, 576i
- Digital Noise Reduction Function (DNR) to reduce the noise and enable clearer image under low light conditions.
- Position coordinates report in real time per frame.
- Video Output: HD-SDI + CVBS + HDMI synchronously.
- Tally LED Design
- Supports VISCA Protocol Keyboard
- Supports DVIP Control Protocol
- Supports HDBaseT

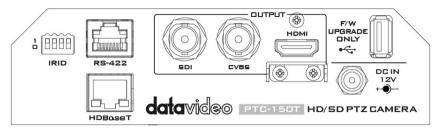
3. Location and Function of Parts

Fr	ont	of Camera
	1	Lens Built-in 1/2.8" 2.14M Pixel CMOS HD color camera with white balance control, backlight compensation settings, automatic gain settings and etc.
	2	Tally LED Tally lamp lights up when tally signal has been transmitted to the tally signal box.
	3	Sensor for Remote Control Remote controller receiver
R	ear	of Camera
	1	DIP Switch SW2 DIP switch for IRID setting. See the <u>DIP</u> Switch Settings section for details.
	2	RS422 Communication Port Connection to the RMC-180 PTZ Camera Control Unit for remote control of the camera via any RJ-45 cable.
	2	See <u>Section 10</u> for physical connection to the RMC-180. For details on how to use the RMC-180, please read the RMC-180 instruction manual.
	3	HD-SDI OUT Video signal output
	4	CVBS OUT Video signal output
	5	HDMI OUT Video signal output

	6	 HDBaseT Communication Port Connects the camera to the receiver box, thereby extending video transmission up to 100m. Note: If the camera is used as a standalone device, this port can be used to connect the camera directly to the PC or to a network router via any RJ-45 cables. See <u>Section 9</u> for configuring the camera's network settings using the DVIP Network Configuration Tool.
	7	Power Input DC in socket connects the supplied 12V PSU. The connection can be secured by screwing the outer fastening ring of the DC In plug to the socket.
		USB Port The USB port is used for F/W Upgrade Only. Insert a USB stick containing the latest firmware files into this port.
		See <u>Section 11</u> for Firmware Update Procedure.
Bot	ttor	n of Camera
	1	Tripod Screw Hole allows the user to mount the camera on the tripod.
	2	DIP Switch SW1 Camera settings include VISCA ID, Remote Control Protocol, Resolution and Video Mode Selection Method. See the <u>DIP Switch Settings</u> section for
3		details.
	3	Screw Hole Screw holes for ceiling bracket mounting.
		See <u>Section 7</u> for installation instructions.

4. Connections

4.1 Camera Rear Control Panel

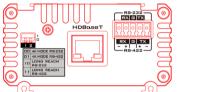




HDBaseT

Port for connection to the PTC-150T/TW Receiver Box HD-Base-T Port using a CAT5e/6 Cable

4.2 Receiver Box Front Panel

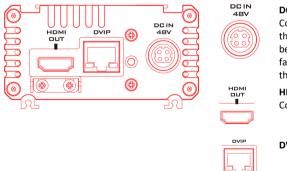


D,	

HDBaseT

Port for connection to the PTC-150T/TW Camera HDBaseT Port using a CAT5e/6 Cable

4.3 Receiver Box Rear Panel



DC In Socket

Connects the supplied 48V PSU to this socket. The connection can be secured by screwing the outer fastening ring of the DC In plug to the socket.

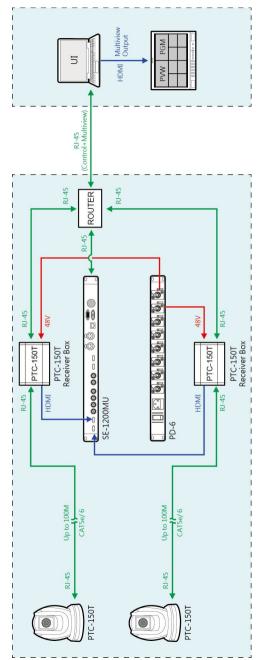
HDMI OUT

Connection to Monitor Display

DVIP Communication Port

Warning: Please do not plug the 48V power adapter into the PTC-150T/TW Camera DC-IN Socket.

5. System Diagram



6. Remote Control and On-Screen Menu

6.1 Remote Control Functions

15			No Item Description			
		1	Reset	Press RESET button to return the camera lens to the front.		
4 0 0 0 6 0 0 0 0 5 0 0 0 0 11 1 1			Group	Use the No. bottom & the group bottom to select the group scan. Press any of the No. buttons 1~8 and then press GROUP button.		
8 7 9 14 3 Contravideo		3 Camera Select Camera Select		Select CAM1-CAM4 in a multi-camera environment Assign an ID number to the camera intended for operation by adjusting the IRID (SW2) switch located at the rear of the camera Press CAMERA SELECT (CAM 1~ CAM4) buttons corresponding to the numbers set previously to navigate between four cameras		
No	Item		Desc	ription		
4	Position Setting 1 2 3 4 8 6 7 8 9 1 0 1 1 1 2 1 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1	Various combinations of settings (position, zoom, focus, gain control and iris control) can be saved to presets. Adjust Preset Point Adjust position, zoom, focus, gain control and iris of the camera. Set up Preset Point Press any of the POSITION buttons 1~50 and then press SET button. Recall saved setting Press any of the POSITION buttons 1~50 and then press PRESET button. Set up Group Scan mode Press any of the POSITION buttons 1~8 and then press GROUP button. Return Camera Lens back to Front Press number 0 and then press PRESET button.				

5	Focus Setup	Manually focus camera lens on a subject Press either (F) FAR button or (N) NEAR button to manually focus the camera lens onto the subject.
6	Auto Focus Control	Automatically focus camera lens on a subject Press A/ FOCUS button. Camera lens will be automatically focused on the subject such that it is positioned at the center of the screen. Exit Sub-Menu Option Press A/ FOCUS button to exit sub-menu option
7	Gain Control	Adjust Brightness Press GAIN+ button to increase the brightness or GAIN- button to decrease the brightness of the environment. To cancel the function or return to default setup, press A/ GAIN button.
8	P/T Speed	Adjust Pan/ Tilt Speed Press SPEED + / - button to switch to different speed (up/down)
9	Auto Iris Control	Make the subject appear brighter Adjust the iris opening (aperture), to control the amount of light coming through the lens (i.e. the "exposure"). Press IRIS+ button to enlarge the iris opening to allow more light to come in so that the subject appears brighter and press IRIS- button to shrink the iris opening to allow less light to come in so that the subject appears less bright. To cancel the function or return to default setup, press A/IRIS button.
10		ENTER Menu ENTER key

11	Direction Arrows	Change camera direction Press arrow buttons to change the direction of the camera head Stop Preset Point Auto Scan mode Press any of the DIRECTION buttons Select Menu Option Press UP or DOWN button to select the menu option Adjust P/T Speed Press UP or DOWN button to adjust the PAN/TILT Speed Enter Sub-Menu Option Press ENTER button to enter sub- menu option Adjust Setup Value Press LEFT or RIGHT button to adjust the value
12	Enter / Exit Camera Menu	Enter or Exit Camera Menu Option
13	Zoom In / Out Buttons	Zoom Press either (T) TELE button to zoom in on the subject such that it appears to be close to the camera or (W) WIDE button to zoom out from the subject such that it appears to be far away from the camera.
14	Zoom Speed Button (4 speed selection)	Adjust Zoom In/Out Speed Press this button to switch to different speed (The Highest~ The Lowest)
15	Power Button	Switch Remote Controller ON/OFF

6.2On-Screen Menu

On-Screen Menu allows the user to change various camera settings such as shooting conditions and the system setup. Press [Menu] on the remote control to enter the on-screen menu as shown below.

- On-Screen MENU 1: Camera Set (Normal) 2: Memory 3: Video Output 4: Remote Control 5: System
- 6: Camera Set (Advance)
- 7: Reset P/T/Z
- 8: Escape

The following table lists all the sub-options of the options on the main menu.

	Main Options							
	Camera Set (Normal)	Memory	Video Output	Remote Control	System	Camera Set (Advance)	Reset P/T/Z	Escape
	1. Camera Name	1. Preset Position	1. Selection Way	1. PAN/TILT Reverse	1. Display	1. Camera Name	Reset P/T/Z	
	2. Mirror	2.Group-1	2. Video Mode	2. Remote Source	2. Set Motor	2. Mirror		
	3. White Balance	3. Group-2	3. CV Mode	3. Set RS- 422	3. Tally Light	3. White Balance		
	4. Focus	4. Group-3	4. Pattern	4. Set DVIP	4. Reset All	4. Focus		
	5. Iris	5. Group-4	5. Escape	5. Set IR	5. Update Software	5. Iris		
suo	6. AGC	6. Group-5		6. PTZ INFO. output	6. Escape	6. AGC		
Sub-Options	7. Escape	7. Group-6		7. Escape		7. Fog Correction		
р Ч		8. Group-7				8. Aperture		
Sul		9. Group-8				9. Vivid Effect		
		10. Escape				10. Pedestal Effect		
						11. Backlight Correct		
						12. Day/Night Mode		
						13. Shutter		
						14. Gamma Mode		
						15. WD Mode		
						16. Escape		

Details of all options in the on-screen menu are listed in the table below.

First Level	Second Level	Third Level	Fourth Level	Sub-Option	
Main Options	Sub-Options	Parameters	Parameters	Descriptions	
		NAME			
		DISPLAY SW	ON/OFF		
	1. Camera Name	0.01 2.1 011	LOWER LEFT		
		POSITION	UPPER RIGHT		
		FCCADE	OFFERMON		
		ESCAPE			
		H+V			
	2. Mirror	V			
		H OFF			
		UFF	AWB(AUTO)		
			AWC (ONE PUSH)		
			MWB (MANUAL)		
		MODE	3200K (INDOOR)		
			6500K (OUTDOOR)		
	3. White		4200K (FLUO)		
	Balance		OFF		
		SMART ATW	SMART1/2/3		
		MWB RED COMPONENT	0~128~255		
		MWB BLUE COMPONENT	0~128~255		
		ESCAPE			
	4. Focus	FOCUS MODE	AUTO		
			MANUAL		
1. Camera Set		AF SENSITIVITY	LOW		
(Normal)			NORMAL		
(normal)		FOCUS SPEED	1~4		
		ESCAPE	1	T	
		IRIS MODE	AUTO IRIS		
			MANUAL		
			F1.6 F2.0		
			F2.4		
			F2.8		
			F3.4		
			F4		
	5. Iris	MANUAL IRIS LEVEL	F4.8		
		MANUAL IRIS LEVEL	F5.6		
			F6.8		
			F8		
			F9.6		
			F11		
			F14		
			CLOSE		
		ESCAPE	1		
			AGC MODE	OFF	
				ON ON	
	6. AGC	DAY (COLOR) AGC	MANUAL GAIN	0 dB ~ GAIN LIMIT	
				9 dB	
			GAIN LIMIT		

1.			ESCAPE	15 dB 18 dB 21 dB 24 dB 27 dB 30 dB 33 dB 36 dB 39 dB	
1.				21 dB 24 dB 27 dB 30 dB 33 dB 36 dB	
1.				24 dB 27 dB 30 dB 33 dB 36 dB	
1.				27 dB 30 dB 33 dB 36 dB	
1.				30 dB 33 dB 36 dB	
1.				33 dB 36 dB	
1.				36 dB	
1.					
1.				39 dB	
1.					
1.					
1.			DNR (AT AGC ON)	ON	
1.				OFF	
1.				0	
1.				1	
1.		DNR	DNR LEVEL	2	
1.			DINK LEVEL	3	
1.				4	
1.				5	
1.			ESCAPE		
1.		ESCAPE			
	. Escape				
			Р		
PC	. Preset	1-50	Т		
	Position		Z		
		51	ESCAPE		
			PRESET NO.	1~50	
		1-16	ITEM ON/OFF	ON/OFF	
			SPEED LIMIT	1~18	
			WAITING TIME	0~180	
			NEXT POSITION	NEXT TIME	
				RETURN	
				GROUP – 1	
				GROUP – 2	
2.	2. Group – 1			GROUP – 3	
				GROUP – 4	
				GROUP – 5	
				GROUP – 6	
2. Memory				GROUP – 7	
				GROUP – 8	
			ESCAPE		
		17. ESCAPE			
			PRESET NO.	1~50	
			ITEM ON/OFF	ON/OFF	
			SPEED LIMIT	1~18	
			WAITING TIME	0~180	
				NEXT TIME	
				RETURN	
3.	. Group – 2	1-16		GROUP – 1	
	5. Group – 2			GROUP – 2	
			NEXT POSITION	CDOULD 3	
				GROUP – 3	
				GROUP – 3 GROUP – 4	
				GROUP – 4	

			GROUP – 8			
		ESCAPE				
	17. ESCAPE	·				
		PRESET NO.	1~50			
		ITEM ON/OFF	ON/OFF			
		SPEED LIMIT	1~18			
		WAITING TIME	0~180			
			NEXT TIME			
			RETURN			
			GROUP – 1			
	1-16		GROUP – 2			
4. Group – 3		NEXT POSITION	GROUP – 3			
			GROUP – 4			
			GROUP – 5			
			GROUP – 6 GROUP – 7			
			GROUP – 8			
		FECADE	01001 0			
		ESCAPE				
	17. ESCAPE					
		PRESET NO.	1~50			
		ITEM ON/OFF	ON/OFF			
		SPEED LIMIT WAITING TIME	1~18 0~180			
		NEXT POSITION	NEXT TIME			
			RETURN			
			GROUP – 1			
	1 10		GROUP – 2			
5. Group – 4	1-16		GROUP – 3			
			GROUP – 4			
			GROUP – 5			
			GROUP – 6			
			GROUP – 7			
			GROUP – 8			
		ESCAPE				
	17. ESCAPE					
		PRESET NO.	1~50			
		ITEM ON/OFF	ON/OFF			
		SPEED LIMIT	1~18			
		WAITING TIME	0~180			
			NEXT TIME			
			RETURN			
			GROUP – 1			
6 Crows 5	1-16		GROUP - 2			
6. Group – 5		NEXT POSITION	GROUP – 3			
			GROUP – 4			
			GROUP - 5			
			GROUP – 6 GROUP – 7			
			GROUP – 7 GROUP – 8			
		ESCAPE	GNOOF - 0			
	17.50005					
	17. ESCAPE	DECETNO	1:50			
7 (1011)	1.10	PRESET NO.	1~50			
7. Group – 6	1-16	ITEM ON/OFF SPEED LIMIT	ON/OFF			
l	1	SPEED LIIVII I	1~18			

	1		WAITING TIME	0~180
				NEXT TIME
				RETURN
				GROUP – 1
				GROUP – 2
				GROUP – 3
			NEXT POSITION	GROUP – 4
				GROUP – 5
				GROUP – 6
				GROUP – 7
				GROUP – 8
			ESCAPE	
		17. ESCAPE		
			DRESET NO	1~50
			PRESET NO.	1~50
			ITEM ON/OFF	ON/OFF
			SPEED LIMIT WAITING TIME	1~18 0~180
			WATTING TIME	
				NEXT TIME
				RETURN
				GROUP - 1
	9 Group 7	1-16		GROUP – 2 GROUP – 3
	8. Group – 7		NEXT POSITION	
				GROUP – 4
				GROUP - 5
				GROUP - 6
				GROUP – 7
				GROUP – 8
			ESCAPE	
		17. ESCAPE	ESCAPE	
		17. ESCAPE	ESCAPE PRESET NO.	1~50
		17. ESCAPE		1~50 ON/OFF
		17. ESCAPE	PRESET NO.	
		17. ESCAPE	PRESET NO. ITEM ON/OFF	ON/OFF
		17. ESCAPE	PRESET NO. ITEM ON/OFF SPEED LIMIT	ON/OFF 1~18
		17. ESCAPE	PRESET NO. ITEM ON/OFF SPEED LIMIT	ON/OFF 1~18 0~180
		17. ESCAPE	PRESET NO. ITEM ON/OFF SPEED LIMIT	ON/OFF 1~18 0~180 NEXT TIME
		17. ESCAPE 1-16	PRESET NO. ITEM ON/OFF SPEED LIMIT	ON/OFF 1~18 0~180 NEXT TIME RETURN
	9. Group – 8		PRESET NO. ITEM ON/OFF SPEED LIMIT WAITING TIME	ON/OFF 1~18 0~180 NEXT TIME RETURN GROUP – 1
	9. Group – 8		PRESET NO. ITEM ON/OFF SPEED LIMIT	ON/OFF 1~18 0~180 NEXT TIME RETURN GROUP – 1 GROUP – 2
	9. Group – 8		PRESET NO. ITEM ON/OFF SPEED LIMIT WAITING TIME	ON/OFF 1~18 0~180 NEXT TIME RETURN GROUP – 1 GROUP – 2 GROUP – 3
	9. Group – 8		PRESET NO. ITEM ON/OFF SPEED LIMIT WAITING TIME	ON/OFF 1~18 0~180 NEXT TIME RETURN GROUP – 1 GROUP – 2 GROUP – 3 GROUP – 4
	9. Group – 8		PRESET NO. ITEM ON/OFF SPEED LIMIT WAITING TIME	ON/OFF 1~18 0~180 NEXT TIME RETURN GROUP – 1 GROUP – 2 GROUP – 3 GROUP – 4 GROUP – 5
	9. Group – 8		PRESET NO. ITEM ON/OFF SPEED LIMIT WAITING TIME	ON/OFF 1~18 0~180 NEXT TIME RETURN GROUP - 1 GROUP - 2 GROUP - 2 GROUP - 3 GROUP - 4 GROUP - 5 GROUP - 6
	9. Group – 8		PRESET NO. ITEM ON/OFF SPEED LIMIT WAITING TIME	ON/OFF 1~18 0~180 NEXT TIME RETURN GROUP - 1 GROUP - 2 GROUP - 3 GROUP - 4 GROUP - 5 GROUP - 6 GROUP - 7
	9. Group – 8		PRESET NO. ITEM ON/OFF SPEED LIMIT WAITING TIME NEXT POSITION	ON/OFF 1~18 0~180 NEXT TIME RETURN GROUP - 1 GROUP - 2 GROUP - 3 GROUP - 4 GROUP - 5 GROUP - 6 GROUP - 7
	9. Group – 8 10. Escape	1-16	PRESET NO. ITEM ON/OFF SPEED LIMIT WAITING TIME NEXT POSITION	ON/OFF 1~18 0~180 NEXT TIME RETURN GROUP - 1 GROUP - 2 GROUP - 2 GROUP - 3 GROUP - 4 GROUP - 5 GROUP - 6 GROUP - 7
	10. Escape	1-16 17. ESCAPE BY MENU	PRESET NO. ITEM ON/OFF SPEED LIMIT WAITING TIME NEXT POSITION	ON/OFF 1~18 0~180 NEXT TIME RETURN GROUP - 1 GROUP - 2 GROUP - 2 GROUP - 3 GROUP - 4 GROUP - 5 GROUP - 6 GROUP - 7
		1-16 17. ESCAPE	PRESET NO. ITEM ON/OFF SPEED LIMIT WAITING TIME NEXT POSITION	ON/OFF 1~18 0~180 NEXT TIME RETURN GROUP - 1 GROUP - 2 GROUP - 2 GROUP - 3 GROUP - 4 GROUP - 5 GROUP - 6 GROUP - 7
	10. Escape	1-16 17. ESCAPE BY MENU BY SWITCH 1080i60	PRESET NO. ITEM ON/OFF SPEED LIMIT WAITING TIME NEXT POSITION	ON/OFF 1~18 0~180 NEXT TIME RETURN GROUP - 1 GROUP - 2 GROUP - 2 GROUP - 3 GROUP - 4 GROUP - 5 GROUP - 6 GROUP - 7
3. Video	10. Escape	1-16 17. ESCAPE BY MENU BY SWITCH	PRESET NO. ITEM ON/OFF SPEED LIMIT WAITING TIME NEXT POSITION	ON/OFF 1~18 0~180 NEXT TIME RETURN GROUP - 1 GROUP - 2 GROUP - 2 GROUP - 3 GROUP - 4 GROUP - 5 GROUP - 6 GROUP - 7
3. Video Output	10. Escape 1. Selection Way	1-16 17. ESCAPE BY MENU BY SWITCH 1080i60 1080i50 720p60	PRESET NO. ITEM ON/OFF SPEED LIMIT WAITING TIME NEXT POSITION	ON/OFF 1~18 0~180 NEXT TIME RETURN GROUP - 1 GROUP - 2 GROUP - 2 GROUP - 3 GROUP - 4 GROUP - 5 GROUP - 6 GROUP - 7
	10. Escape	1-16 17. ESCAPE BY MENU BY SWITCH 1080i60 1080i50 720p60 720p50	PRESET NO. ITEM ON/OFF SPEED LIMIT WAITING TIME NEXT POSITION	ON/OFF 1~18 0~180 NEXT TIME RETURN GROUP - 1 GROUP - 2 GROUP - 3 GROUP - 4 GROUP - 5 GROUP - 6 GROUP - 7
	10. Escape 1. Selection Way	1-16 17. ESCAPE BY MENU BY SWITCH 1080i60 1080i50 720p60 720p50 1080p30	PRESET NO. ITEM ON/OFF SPEED LIMIT WAITING TIME NEXT POSITION	ON/OFF 1~18 0~180 NEXT TIME RETURN GROUP - 1 GROUP - 2 GROUP - 3 GROUP - 4 GROUP - 5 GROUP - 6 GROUP - 7
	10. Escape 1. Selection Way	1-16 17. ESCAPE BY MENU BY SWITCH 1080i60 1080i50 720p60 720p50	PRESET NO. ITEM ON/OFF SPEED LIMIT WAITING TIME NEXT POSITION	ON/OFF 1~18 0~180 NEXT TIME RETURN GROUP - 1 GROUP - 2 GROUP - 2 GROUP - 3 GROUP - 4 GROUP - 5 GROUP - 6 GROUP - 7

	r		1	1		
		1080p60				
	L	1080p50				
	3. CV Mode	16:9				
	3. CV WIDUE	4:3				
	4. Dattaur	OFF				
	4. Pattern	COLOR BAR				
	5. Escape	•	•	•		
	51 Escape	OFF				
		P				
	1. PAN/TILT					
	Reverse	T				
		P+T				
	2. Remote	RS-422, SW				
	Source	(Configurable using				
	Jource	bottom DIP switch ONLY)				
			BY MENU			
		CAMERA ID MODE	BY SWITCH			
		CAMERA ID	1~7			
			9600			
	3. Set RS-422	1	19200			
		RS-422 BAUD RATE				
			38400			
4. Remote			115200			
Control	L	ESCAPE	1			
			9600			
			19200			
		DVIP BAUD RATE	38400			
	4. Set DVIP		57600			
			115200			
		ESCAPE	115200			
	IR GROUP ID					
		(Configurable using rear	CAM1~4			
	5. Set IR		CAMI 4			
		DIP switch ONLY)				
	6 DT7 IN/50	ESCAPE INFO				
	6. PTZ INFO.	ON/OFF				
	Output					
	7. Escape					
		P/T/Z OSD	PAN OSD	ON/OFF		
			TILT OSD	ON/OFF		
		1,172,030	ZOOM OSD	ON/OFF		
		1	ESCAPE			
			DEBUG IR OSD	ON/OFF		
		1	DEBUG CAM. OSD	ON/OFF		
	1. Display	1	DEBUG RS-422 OSD	ON/OFF		
		1	DEBUG DVIP OSD	ON/OFF		
		DEBUG OSD				
			DEBUG M_CTL OSD	ON/OFF		
		1	DEBUG REG OSD	ON/OFF		
5. System		1	DEBUG FRAME NO	ON/OFF		
			PWR ON CAM TEST	ON/OFF		
	L	ļ	ESCAPE			
		PAN torque ADJ	LOW			
			+1~+5			
			LOW			
		TILT torque ADJ	+1~+5			
	2. Set Motor		+5.4			
		1	+4.5			
		PAN offset ADJ				
		FAIL OUSEL ADJ	+3.6			
			+2.7			
			+1.8			

	1	1		1
			+0.9	
			0.0	
			-0.9	
			-1.8	
			-2.7	
			-3.6	
			-4.5	
			-5.4	
			+6.3	
			+5.4	
			+4.5	
			+3.6	
			+2.7	
			+1.8	
			+0.9	
		TILT offset ADJ	0.0	
			-0.9	
			-1.8	1
			-2.7	1
			-3.6	
			-4.5	
			-5.4	
			-6.3	1
		ESCAPE		
		RED/GREEN		
	3. Tally Light	GREEN		
	5. Tally Light	RED		
		OFF		
	4. Reset All	YES/NO		
		SW VERSION	ESCAPE	
		MB CPU	V01.17i	
	5. Update	MB FPGA	V017	
	Software	MCTL CPU	V00.42	
		UPDATE ALL	YES/NO	
		ESCAPE	123/110	
	6 Eccano	LJOINTE		
	6. Escape		1	1
		NAME		
		DISPLAY SW	ON/OFF	
			UPPER LEFT	
	1. Camera Name		LOWER LEFT	
		POSITION	UPPER RIGHT	
			LOWER RIGHT	
				1
		ESCAPE	-	
C C		H+V		
6. Camera Set	2. Mirror	V		
(ADVANCE)	2. 10111101	Н		
		OFF		
			AWB (AUTO)	
			AWC (ONE PUSH)	
			MWB (MANUAL)	
	3. White	MODE	3200K (INDOOR)	1
	Balance		6500K (OUTDOOR)	
	Balance		4200K (FLUO)	
				+
		SMART ATW	OFF	_
		(Enabled in AWB (AUTO)	SMART1~3	

INUME RED COMPONENT 0~128~255 0 MWB BLUE COMPONENT 0~128~255 0 ESCAPE 10 0 FOCUS MODE AUTO 0 AF SENSITIVITY 10W 0 AF SENSITIVITY NORMAL 0 FOCUS SPEED 1 0 ESCAPE 1 0 BESCAPE 0 0 IRIS MODE AUTO 0 F1.6 0 0 F2.4 0 0 F2.4 0 0 F2.4 0 0 F3.4 0 0 F3.4 0 0 F3.4 0 0 F3.4 0 0 F3.6 0 0 F4.8 0			mode)		
MWB BLUE COMPONENT 0-128-255 I ESCAPE AUTO MANUAL AF SENSITIVITY LOW NORMAL AF SENSITIVITY LOW NORMAL FOCUS SPEED 1				0~128~255	
ESCAPE AITO Imanual AF SENSITIVITY LOW Imanual AF SENSITIVITY LOW Imanual POCUS SPEED 1 Imanual 3 Imanual Imanual FOCUS SPEED 1 Imanual Imanual RIS LEVEL Norman Imanual FS. Iris Manual RIS LEVEL FS.6 Imanual FS.1 Imanual RIS LEVEL FS.6 Imanual FS.1 FS.6 Imanual Imanual FS.1 Manual RIS LEVEL FS.6 Imanual FS.1 FS.6 Imanual Imanual FS.1 Imanual Imanual Imanual FS.1 Imanual Imanual Imanual FS.1 Imanual Imanual Imanual <td>1</td> <td></td> <td></td> <td></td>	1				
FOCUS MODE AUTO MANUAL Image: Construct of the second sec			MWB BLUE COMPONENT	0~128~255	
A. Focus POCUS MODE MANUAL Image: construction of the second			ESCAPE		
AF SENSITIVITY IOW Imanual 4. Focus 1 -			FOCUS MODE	AUTO	
A-SCUS NAP SENSITIVITY NORMAL I 1 1 1 1 1 FOCUS SPEED 3 1 1 1 1 3 1			FOCUS MODE	MANUAL	
A. Focus NORMAL Image: mail of the system o				LOW	
FOCUS SPEED 2 1 ESCAPE AUTO 1 ESCAPE MANUAL 1 IRIS MODE MANUAL 1 F1.6 1 1 F2.0 1 1 F2.4 1 1 F3.4 1 1 F4 1 1 F3.6 1 1 F6.8 1 1 F9.6 1 1 F1 1 1 F1.4 1 1 COSE 1 1 ESCAPE 0 0 DAY (COLOR) AGC AGC MODE 0 GAIN LIMIT 1 1 12 dB 3 1 30 dB 3 1 30 dB			AI SENSITIVITI	NORMAL	
FOCUS SPEED 3 1 ESCAPE AUTO 1 IRIS MODE AUTO 1 IRIS MODE MANUAL 1 F1.6 1 1 F2.0 1 1 F2.1 1 1 F2.3 1 1 F3.4 1 1 F4.8 1 1 F4.8 1 1 F6.8 1 1 F8 1 1 F9.6 1 1 F14 1 1 CLOSE 1 1 ESCAPE 1 1 AGC MODE 008"-GAIN 1 Manual IRIS LEVEL AGC MODE 0N/OFF Gain Limit 2 1 1 F14 1 1 1 Gain Limit 24 dB 1 1 13 dB 3 3 1 3 0 1		4. Focus			
3 0 4 0 ESCAPE 0 MANUAL 0 F1.6 1 F2.0 0 F2.1 1 F2.3 0 F2.4 1 F2.3 1 F3.4 0 F3.4 0 F3.4 0 F3.4 0 F6.8 0 F6.8 0 F1 1 F2 1 F3 1 F4 1 F3 1 F3 1 F3 1 F3 1 F3 1			FOCUS SPEED	-	
ESCAPE AUTO Manual IRIS MODE AUTO MANUAL F1.6 F1.6 F1.6 F2.4 F2.4 F2.4 F2.8 F2.4 F2.4 F3.4 - F2.4 F3.4 - F2.4 F3.4 - F2.4 F3.4 - F2.4 F5.6 F6.8 - F6.8 - - F9.6 - - F11 - - F14 - - COSE - - ESCAPE - - DAY (COLOR) AGC - ON/OFF MANUAL GAIN OdB*GAIN 112 d8 12 d8 12 d8 - 12 d8 - - 30 d8 - </td <td></td> <td></td> <td></td> <td></td> <td></td>					
IRIS MODE AUTO MANUAL F1.6 F2.0 F2.4 F2.4 F3.4 F3.4 F4.8 F5.6 F5.6 F3.4 F5.6 F3.4 F5.6 F9.6 F14 CLOSE ESCAPE DAY (COLOR) AGC MANUAL GAIN OderGAIN UMIT 9 dB 12 dB 12 dB 13 dB 0AY (COLOR) AGC 0AG <td< td=""><td></td><td></td><td></td><td>4</td><td></td></td<>				4	
6. AGC INIS MODE MANUAL F1.6			ESCAPE		
5. Iris					
5. Iris Manual IRIS LEVEL F2.0 1 F3.4 1 1 F4 1 1 F6.8 1 1 F8 1 1 F11 1 1 F14 1 1 F0.6 1 1 F11 1 1 F14 1 1 CLOSE 1 1 ESCAPE 1 1 DAY (COLOR) AGC AGC MODE 0N/OFF GAIN LIMIT 12 d8 15 d8 12 d8 12 d8 12 d8 12 d8 12 d8 13 d8 30 d8 30 d8 30 d8 33 d8 36 d8 39 d8 ESCAPE 1 1 DNR DNR LEVEL 1 1 2 3 1 3 3					
5. Iris Manual IRIS LEVEL F2.4 1 F2.8 1 1 F4 1 1 F4.8 1 1 F6.8 1 1 F9.6 1 1 F11 1 1 F14 1 1 F9.6 1 1 F14 1 1 F14 1 1 F14 1 1 F14 1 1 CLOSE 1 1 ESCAPE 0 0 DAY (COLOR) AGC AGC MODE 0N/OFF GAIN LIMIT 24 d8 12 d8 12 d8 13 d8 30 d8 30 d8 30 d8 30 d8 GAIN LIMIT 0 0 F7 d8 30 d8 30 d8 GAIN LIMIT 0 0					
5. Iris Manual IRIS LEVEL F2.8 III F3.4 IIII IIIIII F4.8 IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII					
5. Iris Manual IRIS LEVEL F3.4 Image: F3.4 Image: F4.8 F4.8 Image: F4.8 Image: F5.6 Image: F5.					
5. Iris Manual IRIS LEVEL F4 Image: Constraint of the second secon					
5. Iris Manual IRIS LEVEL F4.8					
6. AGC Manual IRIS LEVEL F5.6					
6. AGC F6.8 F8 F8 F8 F9.6 F1		5. Iris	Manual IRIS LEVEL	-	
6. AGC F8 Image: F8 Image: F9.6 Image: F9.6 Image: F9.6 Image: F9.6 Image: F11					
6. AGC F9.6 I F11 I I F14 I I CLOSE I I ESCAPE AGC MODE ON/OFF MANUAL GAIN OdB~GAIN LIMIT I 9 dB 12 dB 15 dB 11 dB 12 dB 15 dB 12 dB 12 dB 13 dB 30 dB 33 dB 36 dB 30 dB 36 dB 39 dB ESCAPE I I DNR LEVEL I I 1 I I 2 3 I 3 I I 2 I I 3 I I <td< td=""><td></td><td></td><td></td><td></td><td></td></td<>					
F11 Image: F14 Image: F14 <td></td> <td rowspan="5"></td> <td></td> <td></td> <td></td>					
F14 Image: Close ESCAPE AGC MODE ON/OFF MANUAL GAIN OdB~GAIN LIMIT Image: Close 9 dB 12 dB 15 dB 12 dB 21 dB 21 dB 21 dB 21 dB 30 dB 33 dB 36 dB 39 dB ESCAPE ESCAPE 0N DNR DNR(AT AGC ON) ON 0 1 2 30 dB 30 dB 30 dB 32 dB 30 dB 31 dB 33 dB 36 dB 39 dB ESCAPE 0 1 DNR EVEL 0 1 2 3 4 5 3					
ESCAPE AGC MODE ON/OFF MANUAL GAIN 0dB~GAIN LIMIT 0dB~GAIN LIMIT 9 dB 12 dB 12 dB 12 dB 12 dB 12 dB 12 dB 21 dB 22 dB 30 dB 33 dB 36 dB 33 dB 36 dB 39 dB ESCAPE 0N 0FF DNR DNR(AT AGC ON) 0FF 1 2 3 4 5 3					
AGC MODE ON/OFF MANUAL GAIN 0dB~GAIN LIMIT 9 dB 12 dB 12 dB 15 dB 18 dB 21 dB 21 dB 24 dB 27 dB 30 dB 30 dB 36 dB 33 dB 36 dB 39 dB 1 ESCAPE 0N DNR 0N 0FF 1 1 2 33 dB 36 dB 30 dB 30 dB 31 dB 36 dB 30 dB 30 dB 31 dB 36 dB 32 dB 36 dB 33 dB 36 dB 31 dB 3 32 dB 3 33 dB 3 30 dB 3 30 dB 3				CLOSE	
6. AGC HARC OdB~GAIN LIMIT 9 dB 12 dB 12 dB 13 dB 21 dB 21 dB 21 dB 21 dB 21 dB 21 dB 24 dB 27 dB 30 dB 33 dB 36 dB 39 dB ESCAPE ON OFF OFF 0 1 2 3 4 5			ESCAPE		
6. AGC 6. AGC				AGC MODE	ON/OFF
6. AGC 0				MANUAL GAIN	
6. AGC 0 AGC 1 2 dB 1 8 dB 2 1 dB 2 4 dB 2 7 dB 3 0 dB 3 3 dB 3 6 dB 3 9 dB 0 AGC 0 AGC 0 AGC 1 C 2 C 1 C 2 C 1 C 2 C 1 C 2 C 3 C 4 C 5 C 0 C 1 C 2 C 3 C 4 C 5 C 0 C 1 C 2 C 3 C 4 C 5 C 0 C 1 C 2 C 3 C 4 C 5 C 0 C 1 C 1 C 1 C 1 C 1 C 1 C 1					
6. AGC 0 AGC 1 5 dB 18 dB 21 dB 24 dB 27 dB 30 dB 33 dB 36 dB 39 dB 0 0 AGC 0 AGC 1 2 0 1 2 3 4 5 0 1 2 3 4 5 0 1 2 3 4 5 0 1 2 3 4 5 0 1 2 3 4 5 0 1 2 3 4 5 0 1 2 3 4 5 0 1 2 3 4 5 0 1 1 2 3 4 5 0 1 1 1 1 1 1 1 1 1 1 1 1					
6. AGC 6.					15 dB
6. AGC 6.					18 dB
6. AGC 6.			DAY (COLOR) AGC		21 dB
6. AGC 6.				GAIN LIMIT	
6. AGC 6. AGC 6. AGC 6. AGC 6. AGC 133 dB 36 dB 39 dB ESCAPE					
6. AGC					
Image: Solution of the second state of the		6 AGC			
ESCAPE ON DNR(AT AGC ON) OFF 0 0 1 2 0NR LEVEL 3 4 5		0.760			
DNR (AT AGC ON) OFF 0 1 2 3 4 5				FECADE	39 dB
DNR LEVEL 0 0 0 1 2 3 4 5				ESCAPE	
DNR DNR LEVEL OFF 0 1 2 3 4 4 5				DNR(AT AGC ON)	ON
DNR DNR LEVEL 1 2 3 4 5				, ,	
DNR LEVEL 2 3 4 5					
DNK LEVEL 3 4 5			DNR		
3 4 5				DNR LEVEL	
5					
ESCAPE				I	5
			ESCAPE		

	7. Fog	FOG CORRECTION	OFF/ON	
	Correction	ESCAPE		
	8. Aperture	0~15		
				-
	9. Vivid Effect	0~14		
	10. Pedestal Effect	0~14		
	11. Backlight Correction	OFF/ON (This option is enabled after AGC is turned on)		
	12. Day/Night	B/W		
	Mode	COLOR		
			NORMAL	
		SHUTTER SPEED	1/100	
			1/125	
	13. Shutter		1/250 1/500	-
			1/1000	
		ESCAPE		1
	14. Gamma Mode	STANDARD MODE1 (WD OFF) MODE2 (WD OFF) MODE3 (WD OFF) MODE4 (WD OFF)		
	15. WD Mode	ON/OFF (This option is enabled after AGC is turned on)		
	16. Escape			
7. Reset P/T/Z	Reset P/T/Z	YES/NO		
8. Escape				

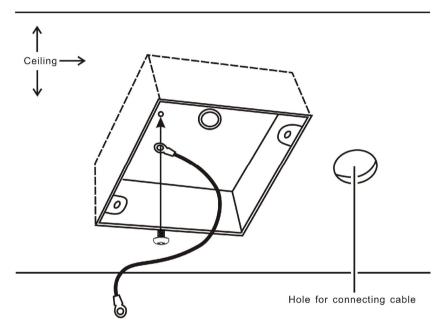
7. Instruction for installation

Step 1 – DIP Switch Setting

Set the Mirror option to H+V mode.

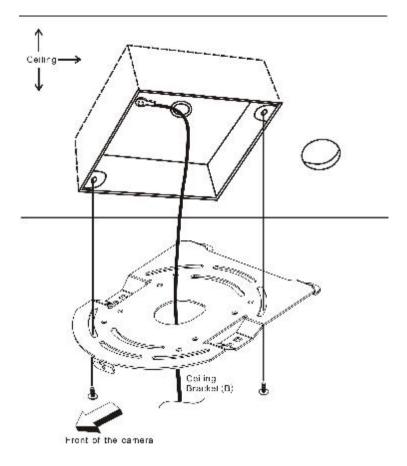
Step 2 – One End of Mounting Wire

Attach the mounting wire to the junction box mounted on the ceiling by screwing one end of the mounting wire into a screw hole in the junction box with a screw (not supplied) as shown in the diagram below.



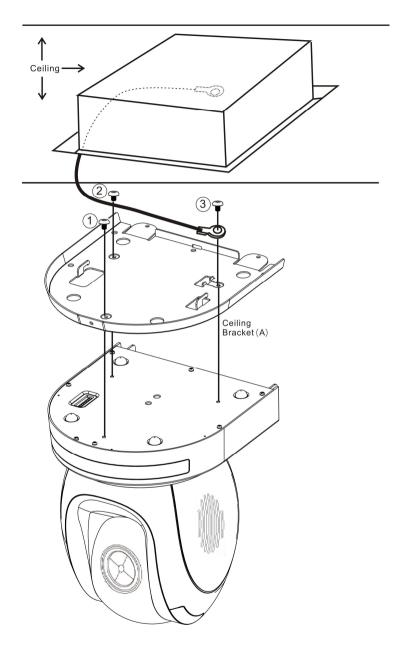
Step 3 – Ceiling Bracket (B)

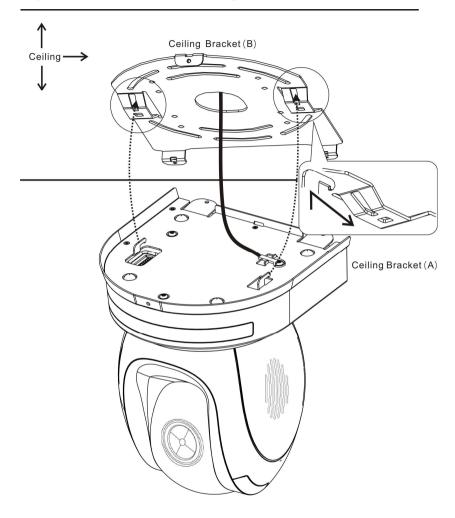
- Again, as illustrated in the diagram below, screw a ceiling bracket (B) into the junction box mounted on the ceiling.
- Make sure the screw holes of the ceiling bracket (B) are aligned with the holes on the junction box.



Step 4 – Ceiling Bracket (A) and Camera

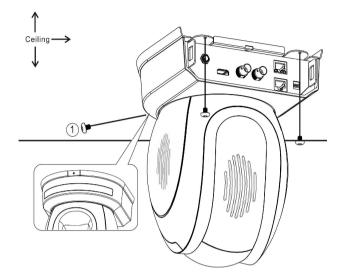
- Screw ceiling bracket (A) into the bottom of the camera using three screws.
- Position the screws as shown in the diagram below.
- Align the screw holes on the bottom of the camera with those in the ceiling bracket.
- Insert the screws into the corresponding screw holes in the numbered order.
- The other end of the mounting wire is screwed into the screw hole #3.
- Securely tighten all three screws.





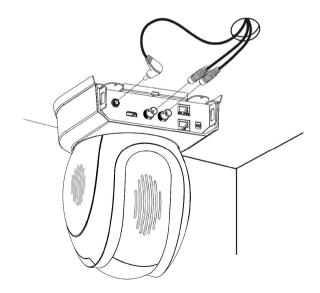
Step 6 – Screw to Secure Camera

Secure the camera by screwing three screws into the corresponding screw holes as shown in the diagram below.



Step 7 – Cable Connection

Connect the cables to the connectors located on the rear of the camera.



8. DIP Switch Settings

8.1 DIP Switch SW1

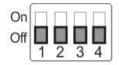
The DIP Switch SW1 can be found at the bottom of the camera, where the user is allowed to set the camera's VISCA ID, enable remote control, select the video resolution, and configure how the video mode can be selected.



DIP SW 1/2/3	VISCA ID
(1,2,3) = (ON,OFF,OFF)	VISCA-ID 1
(1,2,3) = (OFF,ON ,OFF)	VISCA-ID 2
(1,2,3) = (ON ,ON ,OFF)	VISCA-ID 3
(1,2,3) = (OFF,OFF,ON)	VISCA-ID 4
(1,2,3) = (ON ,OFF,ON)	VISCA-ID 5
(1,2,3) = (OFF,ON ,ON)	VISCA-ID 6
(1,2,3) = (ON ,ON ,ON)	VISCA-ID 7
DIP SW 4	Remote Control Protocol
ON	DVIP
OFF	RS-422
DIP SW 5/6/7	Resolution
(5,6,7) = (OFF,OFF,OFF)	1920x1080i60
(5,6,7) = (ON,OFF,OFF)	1920x1080i50
(5,6,7) = (OFF,ON,OFF)	1280x720p60
(5,6,7) = (ON,ON,OFF)	1280x720p50
(5,6,7) = (OFF,OFF,ON)	1920x1080p30
(5,6,7) = (ON,OFF,ON)	1920x1080p25
(5,6,7) = (OFF,ON,ON)	1920x1080p60
(5,6,7) = (ON,ON,ON)	1920x1080p50
DIP SW 8	Video Mode Selection Method
ON	Video mode selectable by DIP switch only
OFF	Video mode selectable by menu

8.2DIP Switch SW2 (IRID)

The IRID DIP Switch can be found on the rear panel of the PTC-150T/TW camera. This DIP switch allows the user to assign an ID number to the camera so that the user can navigate between the cameras by pressing the **CAMERA SELECT** buttons.



DIP SW 1/2	Camera Select Function (IR Remote Control) – Camera ID Assignment	
(1,2) = (OFF,OFF)	CAM1 (IR)	
(1,2) = (ON,OFF)	CAM2 (IR)	
(1,2) = (OFF,ON)	CAM3 (IR)	
(1,2) = (ON,ON)	CAM4 (IR)	
* DIP SW 3/4 should be always OFF.		

9. Network Configuration

The DVIP Configuration Tool allows the user to configure network settings of the PTC series cameras on the PC. **The DVIP Configuration Tool can be downloaded from the product page.**

The PTC series cameras usually have a static IP address of 192.168.100.XXX. The unit can be directly connected to a Windows-based computer using an RJ-45 Ethernet cable. The following setup procedure outlined below should allow you to initially configure the unit before moving it to an existing DHCP / LAN network.

Note: All devices should be connected to the same network domain.

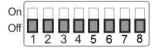
 First connect the DVIP port of the PTC-150T/TW PTZ camera or the Receiver Box (if used) to a Windows computer using an RJ-45 Ethernet cable.

Note: You do not need to manually assign an IP address to the PC but make sure the right interface card is selected at Step 11.

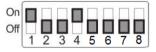
2. Install the DVIP Configuration Tool by double clicking the executable file already downloaded to your computer.



3. Locate the DIP switch at the bottom of the PTC series camera.



4. Set DIP Switch positions 1 and 4 to ON.



- 5. Plug in the power cord into the PTC series camera and connect it to a monitor via the HDMI interface.
- 6. Open the main menu by pressing the menu button on the IR remote control and select option 4 "**Remote Control**."

[MAIN MENU]

- 1: CAMERA SET (NORMAL)
- 2: MEMORY
- 3: VIDEO OUTPUT

- 4: REMOTE CONTROL
- 5: SYSTEM
- 6: CAMERA SET (ADVANCE)
- 7: RESET P/T/Z
- 8: ESCAPE
- 7. Select "SET DVIP."

[REMOTE CONTROL]

- 1: PAN/TILT REVERSE: P+T
- 2: REMOTE SOURCE: DVIP, SW
- 3: SET RS422
- 4: SET DVIP
- 5: SET IR
- 6: PTZ INFO. OUTPUT: OFF
- 7: ESCAPE
- 8. Set **DVIP baud rate** to 115200.



- Connect your PC directly to the DVIP port on the PTC series camera or if in a multiple DVIP device environment, connect all devices to an Ethernet router. Please note that the router and the connected devices should be in the same IP range.
- On the PC, open the DVIP Configuration Tool by double clicking "DVIP_Net_Conf.exe." The DVIP Configuration Tool can be obtained from Datavideo local distributors or downloaded from the product page.

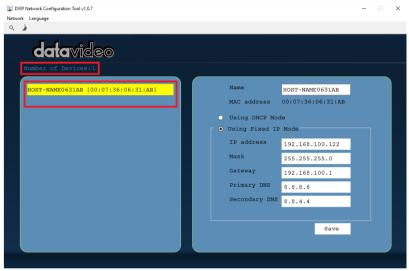


11. After the DVIP Configuration Tool is opened, select your network interface card and click the "**OK**" button.

Note: Make sure you select the card that is on the same network as the camera or else the DVIP Configuration Tool will not be able to find the connected DVIP devices.



12. On the DVIP Device List, you will then be able to see the Device Name, MAC address and IP address of the connected device.



- 13. After the network setting (Static or DHCP) and the host name are properly configured, click the "**Save**" button to write the new information into the device.
- 14. Right after the "**Save**" button is clicked, you will be able to see a prompt message at the top right corner to request for a device reboot for the new settings to become effective.

DVIP Network Configuration Tool v1.0.7 Network Language	×
٩)	
datavideo	Please reboot your device
Number of Devices:1	
HOST-NAME0631AB [00:07:36:06:31:AB]	Name HOST-NAME0631AB
	MAC address 00:07:36:06:31:AB
	O Using DHCP Mode
	• Using Fixed IP Mode
	IP address 192.168.100.122
	Mask 255.255.0
	Gateway 192.168.100.1
	Primary DNS 8.8.8.8
	Secondary DNS 8.8.4.4
	Save

15. Reboot the device to apply the new settings.

In addition to configuring network settings of the connected DVIP devices, the DVIP configuration tool also allows you to search for DVIP devices, clear the device list, switch to other interface cards and change the interface language. Each individual function is described below.

Device Search

On the tool bar, the user can click the search icon to search for all DVIP devices.



Clearing Device List

On the tool bar, the user is allowed to clear the device list by clicking the "Device List Clear" button.



• Switch to Other Network Interfaces

To select other network interface cards, click Network \rightarrow Network Card



Language Selection

On the tool bar, select a language: Traditional Chinese, Simplified Chinese or English



10. RMC-180 PTZ Camera Control Unit

The RMC-180 PTZ Camera Controller is designed to control up to 4 Datavideo Pan Tilt Zoom (PTZ) cameras such as the PTC-150T/TW.

The four RJ-45 ports provided on the RMC-180 rear serve to connect PTZ cameras, thus allowing the user to use any RJ-45 cable to connect the RMC-180 to the RS-422 port located on the PTZ camera's rear panel. The communication protocol is VISCA.

Note: Before connecting the camera to these channel ports, please set bit 4 of the camera DIP switch located at the bottom to OFF.

10.1 Direct Connection to Camera

To use the RMC-180 PTZ Camera Control Unit to directly control the PTC-150T/TW camera, connect the RS-422 port on the camera's rear panel to the RJ-45 port of the RMC-180 using any RJ-45 cable. The RS-422 wiring scheme is shown below.

RM	RMC-180 Controller (RJ-45 Port)					PTC-150T/T (RS-422		
GND	1	White/Orange	GND	White/Orange	1	GND		
NC	2	Orange		Orange	2	NC		
тх-	3	White/Green	→	White/Green	3	RX-		
RX-	4	Blue	←───	Blue	4	TX-		
RX+	5	White/Blue	←───	White/Blue	5	TX+		
TX+	6	Green	→	Green	6	RX+		
NC	7	White/Brown		White/Brown	7	NC		
NC	8	Brown		Brown	8	NC		
18				1 [[]]]] [] 1/E.				

10.2 Connection to Camera via Receiver Box

To use the RMC-180 PTZ Camera Control Unit to control the PTC-150T/TW camera behind the Receiver Box, please connect the RMC-180 to the box using the RS-422 wiring scheme as shown below. The cabling required needs

to be designed specifically and can be made by yourself or a competent technician. Please speak with your Dealer or local Datavideo office to get further help and advice.

	Receiver Box					RMC-180 Co		oller
(Ph	oeni	ix Terminal)	GND	(RJ-45 Pc	ort)			
GND	3	White/Orange		White/Orange	1	GND		
				Orange	2	NC		
RX-	1	White/Green	◀	White/Green	3	тх-		
ТХ-	5	Blue	┣──►	Blue	4	RX-		
TX+	4	White/Blue	├	White/Blue	5	RX+		
RX+	2	Green	•	Green	6	TX+		
				White/Brown	7	NC		
				Brown	8	NC		
	1 2 3 4 5			۲ المستقلقات المحالة 1/EXT	Ĵ			

11. Firmware Update

- Copy three image files, p150mcpu.bin, P150FPGA.bin and p150mctl.bin, into the root directory of a USB hard drive (<16 GB) and insert it into the USB port of PTC-150T/TW (You may also use USB extension cord).
- 2) Open the operation menu of IR remote controller (select from CAM 1-4; default is CAM1)
- 3) Main Menu

=> 5: SYSYEM

=> 4: UPDATE SOFTWARE

```
=> 5: UPDATE ALL
```

=>YES

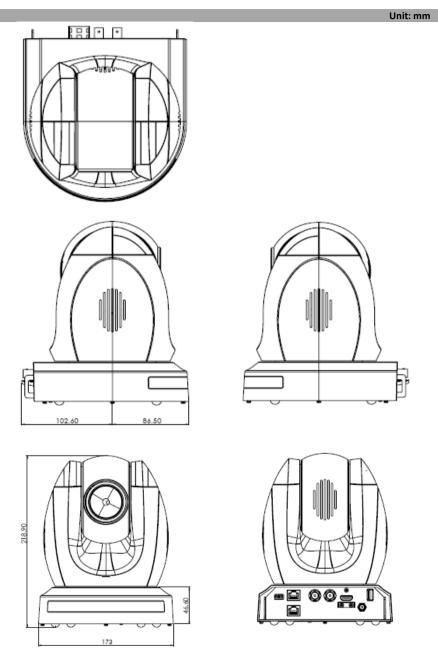
=> ENTER

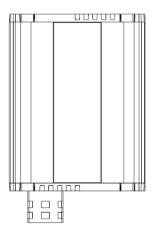
- 4) Wait for another five minutes until the following lines appear on the screen
 - Updated Mot-BD=>OK.
 - Updated FPGA =>OK.
 - Updated MCPU =>OK

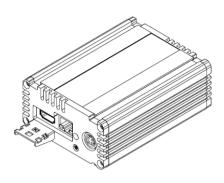
The OSD will flash "Write OK/Power ON Again" alternately; it takes approximately 5-7 minutes to complete the update.

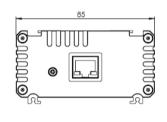
- 5) Turn off the device by unplugging the power cord and plug the power cord back into the socket to turn on the device again.
- 6) FW Update is complete.

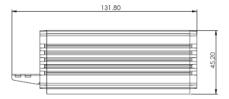
12. Dimensions











13. Specifications

Video			
Image Pickup Element	1/2.8" type progressive scan CMOS sensor		
Effective Picture Elements	Approx. 2.14 Mega pixels		
Resolution	HD / FHD / SD (CVBS only)		
Signal System	HDMI & SDI: 1080p 59.94/50/29.97/25 1080i 59.94/50 720p 59.94/50 CVBS: 480i, 576i		
S/N Ratio	50 dB		
Min. Illumination	Color : 0.4 lx (F1.6, 1/30 sec, 50IRE, Gain: High) B/W : 0.03 lx (F1.6, 1/30 sec, 50IRE, Gain: High)		
Electric Shutter	1/25 (1/30), 1/50 (1/60), 1/120 (1/100), 1/250, 1/500, 1/1000 sec		
Gamma Control	Off / Normal / Standard Mode 1-4		
Iris Control	Auto / Manual		
Digital Noise Reductions	0 - 5		
On-Screen Display (OSD)	English		
White Balance	AWB / MWB / One push WB / Outdoor / Indoor / Fluorescent		
AGC / Gain Control	Auto / Manual (0 to 39 step) Max. Gain Limit (9 to 39 step)		
Zoom Ratio	30x Optical Zoom		
Mirror	OFF / Horizontal / Vertical / H+V		
Camera Title (OSD)	ON / OFF		
Color Bar	On / Off (Full Bar)		
Focus Mode	Auto / Manual		
Day & Night (IR)	Auto / Color / BW		
	Pan / Tilt / Zoom		
Pan/Tilt Range	Pan: 270°, Tilt: +90° to -20°		
Pan/Tilt Speed	Manual: 1~150°/Sec Swing: 1~150°/Sec		
Initialization Time	30 sec		

Coordinate Report	P, T, Z (While Panning , Tilting and Zooming) by frame			
	Lens			
Lens Type	30x Optical Zoom			
Focal Length	F=4.3 mm (WIDE) to 129 mm (TELE) F1.6 to F4.7			
Angle of View (Horizontal)	Approx. 63.7 degrees (WIDE END) / 2.3 degrees (TELE END)			
Filter	M52.0x0.75 Thread with UV Protection			
RoHS	Compliant			
	Video Output			
Video Output	HDMI (V1.3) x 1 HD-SD-SDI x 1 CVBS x 1 HDBaseT x 1 to PTC-150T/TW Receiver Box			
Video Format Output	1 Vp-p / 75 Ohms			
	Control			
Protocol	VISCA / HDbaseT			
Remote Control	RS-422 & HDBaseT by RJ-45 interface			
F/W Update	USB 2.0			
IR Control	One IR controller			
	Receiver Box			
Protocol	DVIP / HDBaseT			
Video Out	HDMI (V1.3) x 1			
Power	DC 48V (Please connect DC 48V to Receiver Box)			
Control	DVIP by RJ-45 interface			
HDBaseT Distance	Up to 100M by Cat.6 cable (RJ-45 interface)			
	Others			
Moving Noise while Tilt	<=25dB			
Moving Noise while Pan	<=25dB			
Operating Temperature	0°C ~ 50°C			
Storage Temperature	- 10°C ~ 60°C			
Operating Humidity:	10 % to 80 % (no condensation)			
Certifications	CE / FCC Class A			

NOTE

Service & Support

It is our goal to make your products ownership a satisfying experience. Our supporting staff is available to assist you in setting up and operating your system. Please refer to our web site www.datavideo.com for answers to common questions, support requests or contact your local office below.



Tel: +86 531-8607 8813 E-mail:service@datavideo.cn Datavideo Hong Kong Ltd G/F.,26 Cross Lane Wanchal, Hong Kong

Tel: +852-2833-1981
 Fax:+852-2833-9916
 E-mail:info@datavideo.com.hk

Datavideo India Noida A-132, Sec-63,Noida-201307, India

Tel: +91-0120-2427337 Fax:+91-0120-2427338 E-mail: sales@datavideo.in

Datavideo India Kochi 2nd Floor-Nettr Wing, Govardhan Buliding, Opp, NCC Group Headquaters, Chittoor Road, Cochin-682035 Teit. +91 4844-025336 Fax:+91 4844-027595 E-mail: sales@datavideo.in

Datavideo Technologies Europe BV Foloridadreef 106 3565 AM Utrecht. The Netherlands Tel: +31-30-261-96-56 Fax:+31-30-261-96-57 E-mail:info@datavideo.nl

Datavideo Visual Technology(S) Pte Ltd No. 178 Paya Lebar Road #06-07 Singapore 409030

Tel: +65-6749 6866 Fax:+65-6749 3266 E-mail:info@datavideovirtualset.com Datavideo Technologies (S) PTE Ltd No. 178 Paya Lebar Road #06-03 Singapore 409030

Tel: +65-6749 6866 Fax:+65-6749 3266 E-mail:sales@datavideo.sg

Datavideo Technologies Co. Ltd 10F. No. 176, Jian 1st Rd., Chung Ho District, New Taipei City 235, Taiwan

Tel: +886-2-8227-2888 Fax:+886-2-8227-2777 E-mail:service@datavideo.com.tw

Datavideo Corporation 7048 Elmer Avenue. Whittler, CA 90602, U.S.A. Tel: +1-562-696 2324 Fax:+1-562-698 6930 E-mail:sales@datavideo.com

Datavideo UK Limited Brookfield House, Brookfield Industrial Estate, Peakdale Road, Glossop, Debyshire, SK13 6LQ Tel: +44-1457 851 000 Fax:+44-1457 851 0964 E-mail:sales@datavideo.co.uk

Datavideo France s.a.r.l. Cité Descartes 1, rue Albert Einstein Champs sur Marne 774477 – Marne la Vallée cedex 2 Tel: +33-1-60370246 Fax:+33-1-60376732 E-mail:info@datavideo.fr



Please visit our website for latest manual update. www.datavideo.com/product/PTC-150T

www.datavideo.com/product/PTC-150TW



All the trademarks are the properties of their respective owners. Datavideo Technologies Co., Ltd. All rights reserved 2018

> Jun.-21.2018 Ver:E4