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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.
- 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 are 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 begins 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, and batteries 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 are qualified 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, Camera module, PCIe Card 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.

1. Product Overview

The PTC-145 series is the continuation of the PTC-140 series and continues its high quality output specification with 20x optical zoom, which is suitable for auditoriums, classrooms, conference halls and other application scenarios. The built-in AI Tracking object tracking, which can be turned on instantly by the camera controller or the infrared remote control, operates the camera smoothly, and the push-pull-shift is natural without lagging.

One time simultaneous output HDMI, 3G-SDI, streaming can be pushed to two platforms, encoding format support H.264, H.265, Motion JPEG, audio input support 3.5mm line in by the Web GUI direct switching. The PTC-145 can be integrated with on-site audio devices, and the standard PoE (IEEE802.3af) configuration makes power wiring simpler.

The PTC-145 is a series of products for different workflow requirements, and extensions such as the PTC-145T HDBaseT model and the NDI model are expected to be released from the end of 2022 to 2023.

Features

- HDMI/3G-SDI/Streaming Outputs
- PTZ camera with line in input
- One-touch activation of AI Tracking, smooth lens operation, no need for cameraman operation
- Streaming to two streaming platforms at a time
- 1/2.8" CMOS, 20x optical zoom, 8x digital zoom.
- Also available in white color to match interior design and decor

2. System Diagram



3. Location and Function of Parts



	Rear of Camera			
1	Power Input Port Connect the 12V power cord supplied with the product to the DC power port. The DC power adapter cable can be locked to the port using the outer ring locking mechanism.			
2	POE DVIP/LAN Port The POE DVIP/LAN Port is a bi-directional port that allows you to connect the camera over a network. The POE DVIP/LAN port connects the camera to your computer over an Ethernet cable to monitor the camera images on the web user interface, and it also allows you to stream your camera images over a variety of streaming protocols.			
3	HDMI OUT Port Connects an HDMI monitor externally via an HDMI cable.			

4	3G-SDI OUT Port Connects to an external SDI display via an SDI cable.
5	Audio Input 3.5mm audio input connector for external sound reception.
6	RS-422/RS-485 Interface (RJ-45) The RS-422/RS-485 interface connects to an external RS-422/RS-485 device. Use an Ethernet cable to connect to an external RS-422/RS-485 controller and refer to " <u>Chapter 10 Remote Control Port Pin</u> <u>Definitions</u> " for making the connection cable.
7	RS-232 Interface (RJ-45) The PTC-145 can be connected to a remote controller or computer via the RS-232 interface. Use an Ethernet cable to connect to an external RS-232 controller and refer to " <u>Chapter 10 Remote Control Port Pin</u> <u>Definitions</u> " for making the connection cable.



4. Basic setup

4.1 Initial Setting

Insert the power cord into the power connection hole as shown in the following figure, and the Tally light in the front will start blinking red. The Tally lamp will stop blinking after the initialization is completed, and the camera head should be in the Home position with the lens facing forward. However, if you have set Preset 0, the camera head should return to the Preset 0 position.



4.2 Video Output

You can view camera images through the Ethernet port, HDMI video output port, and 3G-SDI video output port.

POE DVIP/LAN



Perform the following steps to view the camera image in the web user interface.

1. Connect the PTC-145 to a PC or laptop via an Ethernet cable.

2. Open a web browser on the connected PC or laptop and enter the camera's default IP address into the address bar.

Note: The default setting of PTC-145 is DHCP, if the camera is not assigned to an IP address, it will jump back to 192.168.100.100.

- 3. The login page of the Web UI will be opened and then please enter the user name and password (the default user name and password is admin/admin).
- 4. Open the preview window to preview the image frames taken by the camera.

HDMI Video Output



Connect the HDMI video output port to an external monitor via an HDMI cable.



3G-SDI Video Output

Connect the SDI video output port to the external monitor via the SDI cable.

5. Remote Control and OSD Menu

Chapter 5 introduces the remote control functions and OSD menus.

5.1 Remote Control Function



NO.	Function Keys	Descriptions
1	Power Button	Power button Tap this button once to enter standby mode. Tap it again to enter normal mode. Note: The power consumption in standby mode is about half of that in normal mode.
2	Camera 1-4	 Camera 1-4 The Camera 1~ Camera 4 buttons allow you to set your PTC-145 camera to be numbered 1-4. A short press on the 1~4 button means selecting Camera 1, Camera 2, Camera 3 or Camera 4. After long press any key from Camera 1 to Camera 4, the four buttons will light up, then short press the numbering 1~4 buttons to complete the numbering setting of your camera.
3	Prese1-4 Preset Keys	The Preset 1, 2, 3, 4 preset buttons allow you to set up to 4 sets of camera presets. How to set Preset : After you have finished adjusting the camera parameters and lens position you want, press the "STR" button on the remote control, and then press the Preset number button (Preset 1-4) you want to save your settings as Preset settings. How to call out the preset setting : Please directly press the Preset number key (Preset 1-4) you want to call out, then you can call out the preset setting stored in advance.

NO.	Function Keys	Descriptions
4	Focus Far/ Focus Near	Focus Far/Focus Near Press the "Focus Far" or "Focus Near" button to change the PTC-145 camera to Manual Focus mode. Focus Far allows you to focus far away and Focus Near allows you to focus close.
5	Zoom Tele/Zoom Wide	Zoom Tele/Zoom Wide The Zoom Tele/Zoom Wide button allows you to manually zoom in and out of the subject. "Zoom Tele" allows you to zoom in on the subject and "Zoom Wide" allows you to zoom out.
6	Micro Joystick	Micro Joystick: Up/Down/Left/Right/OK Move the Micro Joystick up/down/left/right to turn the camera lens up/down/left/right. When the OSD menu is open, move the Micro Joystick up/down to select different options. Move left/right to select different settings and press the Micro Joystick to confirm your selection.
7	Reset IP Key	Reset IP Key The default setting of PTC-145 is DHCP, if the camera is not assigned to an IP, it will jump back to 192.168.100.100.

NO.	Function Keys	Descriptions
8	STR Button	STR Button Pressing this button together with the Preset 1-4 button allows you to save your desired preset settings. After you have set the desired settings and camera lens position, press the "STR" button and then press the Preset 1-4 number you want to save to save the preset successfully.
9	AF Auto Focus button	AF Auto Focus button Press this button to activate the AF autofocus function.
10	Back Button	Back Button Pressing the Back button allows you to turn the camera lens back to the initial "Home" position. With the OSD open, pressing the Back button will take you back to the previous OSD menu.
11	Menu Button	Menu Button Press the "Menu" button to open the OSD menu of the PTC- 145 camera on an external screen.
12	AT Auto Tracking Button	AT Auto Tracking Button Pressing this AT Auto Tracking button allows you to turn the camera's Auto Tracking feature on or off.

NO.	Function Keys	Descriptions
13	Auto-tracking mode selector	Auto-tracking mode selector These three buttons allow you to select the auto-tracking mode you want. From left to right, the three auto-tracking modes are "full body", "half body" and "close shot".

5.2 OSD Menu

The OSD menu allows the user to change many of the camera's settings. Press the [MENU] button on the remote control to enter the OSD menu as shown below.

MENU Language Tracking Setup Camera P/T/Z Video Format Network Settings Version Restore Default	
[个↓](Select)	[← →] (Change value)
[Menu](Back)	[Home] OK

The following table lists the options of the main menu and its sub-menu.

	Main Options								
	Language	Tracking	Setup	Camera	P/T/Z	Video Format	Network Settings	Version	Restore Default
	English	Tracking	Protocol	Exposure	Spped by zoom	1080P60	DHCP	ARM	Restore Default
	Traditional Chinese		VISCA Address	Color	Zoom speed	1080P50	IP Addr	SOC	
	Simplified Chinese		VISCA Address Fix	Image	Image Freezing	1080160		AF	
ns			PELCO-P Address	Focus	Acc Curve	1080150			
ptio			PELCO-D Address	Noise Reduction	Preset Speed	1080P30			
0-qr			Baudrate	Style	Joystick Pan Dir	1080P25			
Sı			Auto Flip		Joystick Tilt Dir	720P60			
			TallyLight			720P50			
						1080P			
						1080			
						59.94			
						29.97			
						720P 59.94			

The OSD menu options are listed below.

Main Menu	Sub Menu	Options	Options
Language	English Traditional Chinese Simplified Chinese		
	Tracking	ON OFF	
	Tracking Mode	Presenter Tracking	
	Figure Size	Full Customized Half-Body Close up	
	Full Presetting	1 2 3	
Tracking	Customized Presetting	1 2 3 4 5 6 7 8 9	
	Half-Body Presetting	1 2 3	
	Near Body Presetting	1 2 3	
	Track Speed	Slow Fast Middle	
	Character Position	Center Right Half Left Half	
Setup	Protocol	Auto VISCA	

		PELCOO-D	
		PELCCO-P	
	VISCA Address	1-7	
	VISCA Address Fix	ON/OFF	
	PELCO-P Address	1-255	
	PELCO-D Address	1-255	
		2400	
		4800	
	Baudrate	9600	
		38400	
		115200	
		ON	
	Auto Flip	OFF	
		RED/GREEN	
	Tally Light	RED	
		GREEN	
		OFF	
			Auto
			Manual
		Mode	SAE
			AAE
			Bright
		EV	<u>ON</u>
			0FF
			0
			1
			2
			3
			4
Comoro	Evenesure		5
Camera	Exposure	EV/ Loval	7
			7
			-/
			-0 F
			-5
			-4
			-5 2
			-2
		BLC	OFF
			OFF
		Flicker	50Hz
		THUNCI	60Hz
			00112

	G.Limit	0~15
		OFF
		1
		2
		3
	DRC	4
	Dife	5
		6
		7
		2 2
		0
		F1.8
		F2.0
		F2.4
		F2.8
		F3.4
		F4.0
	Iris	F4.8
		F5.6
		F6.8
		F8.0
		F9.6
		F11
		OFF
		1/60
		1/90
		1/100
		1/125
		1/120
		1/100
		1/250
		1/550
	Shutter	1/500
		1/725
		1/1000
		1/1500
		1/2000
		1/3000
		1/4000
		1/6000
		1/10000
	Gain	0~36
	Bright	0~14
	WB Mode	Auto
		Manual
		Indoor
		Outdoor
		OnePush
		VAR
		2400K
		2500K
		23000

Color

	2600K
	2700K
	2800K
	2900K
	3000K
	3100K
	3200K
	3300K
	3400K
	3500K
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	6200K
	6200K
	6400K
	6700K
	6800K
	6900K
	7000K
	7100K
	0
	1
RG Tuning	2
	3
	4

6 7 8 9 10 -10 -9 -8 -7 -6 -5 -4 -3 -2 -1 0 1 2 3 4 5 6 7 8 9 BG Tuning 10 -1 2 3 4 5 6 7 8 9 BG Tuning 10 -10 -9 -8 -7 -6 -5 -4 -3 -2 -1 RG 0°255 BG 0°255 60%
7 8 9 10 -10 -9 -8 -7 -6 -5 -4 -3 -2 -1 0 1 2 3 4 5 6 7 8 9 BG Tuning 10 -10 -9 -8 -7 -6 -5 -4 -3 9 BG Tuning 10 -10 -9 -8 -7 -6 -5 -4 -3 -2 -3 -2 -3 -2 -3 -2 -3
8 9 10 -10 -9 -8 -7 -6 -5 -4 -3 -2 -1 0 1 2 3 4 5 6 7 8 9 BG Tuning 10 -10 -9 -8 -7 -6 -5 -4 -3 -9 -8 -7 -6 -5 -4 -3 -2 -10 -9 -8 -7 -6 -5 -4 -3 -2 -1 RG <
9 10 -10 -9 -8 -7 -6 -5 -4 -3 -2 -1 0 1 2 3 4 5 6 7 8 9 BG Tuning 10 -10 -9 -8 -7 -6 -5 -4 -3 -10 -9 -8 -7 -6 -5 -4 -3 -2 -1 RG 0°255 BG 0°255 60% 70% 80% 90% 100% 100%
10 -10 -9 -8 -7 -6 -5 -4 -3 -2 -1 0 1 2 3 4 5 6 7 8 9 BG Tuning 10 -10 -9 -8 -7 -6 -5 -4 -3 -10 -9 -8 -7 -6 -5 -4 -3 -2 -1 RG 0°255 BG 0°255 60% 70% 80% 90% 100% 100%
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-9 -8 -7 -6 -5 -4 -3 -2 -1 0 1 2 3 4 5 6 7 8 9 BG Tuning 10 -10 -9 -8 -7 -6 -5 -4 -3 -2 10 -10 -9 -8 -7 -6 -5 -4 -3 -2 -1 RG 0~255 BG 0~255 60% 70% 80% 90% 100% 100%
-8 -7 -6 -5 -4 -3 -2 -1 0 1 2 3 4 5 6 7 8 9 BG Tuning 10 -10 -9 -8 -7 -6 -5 -4 -3 -2 -10 -9 -8 -7 -6 -5 -4 -3 -2 -1 RG 0~255 BG 0~255 BG% 9% 90% 100% 100% 110%
-7 -6 -5 -4 -3 -2 -1 0 1 2 3 4 5 6 7 8 9 BG Tuning 10 -10 -9 -8 -7 -6 -5 -4 -3 -2 -10 -9 -8 -7 -6 -5 -4 -3 -2 -1 RG 0~255 BG 0~255 BG 0~255 60% 70% 80% 90% 100% 110%
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9 BG Tuning 10 -10 -9 -8 -7 -6 -5 -4 -3 -2 -1 RG 0°255 BG 0°255 90% 100% 100% 110%
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-10 -9 -8 -7 -6 -5 -4 -3 -2 -1 RG 0°255 BG 0°255 60% 70% 80% 90% 100% 110% 130%
-9 -8 -7 -6 -5 -4 -3 -2 -1 RG 0°255 BG 0°255 60% 70% 80% 90% 100% 110% 130%
-8 -7 -6 -5 -4 -3 -2 -1 RG 0°255 BG 0°255 60% 70% 80% 90% 100% 110%
-7 -6 -5 -4 -3 -2 -1 RG 0°255 BG 0°255 60% 70% 80% 90% 100% 110%
-6 -5 -4 -3 -2 -1 RG 0~255 BG 0~255 60% 70% 80% 90% 100% 110%
-5 -4 -3 -2 -1 RG 0~255 BG 0~255 60% 70% 80% 90% 100% 110%
-4 -3 -2 -1 RG 0~255 BG 0~255 60% 70% 80% 90% 100% 110%
-3 -2 -1 RG 0~255 BG 0~255 60% 70% 80% 90% 100% 110% 5aturation 120%
-2 -1 RG 0~255 BG 0~255 60% 70% 80% 90% 100% 110% 120%
-1 RG 0~255 BG 0~255 60% 70% 80% 90% 100% 110% Saturation 120%
RG 0~255 BG 0~255 60% 70% 80% 90% 100% 110% Saturation 120%
BG 0~255 60% 70% 80% 90% 100% 110% Saturation 120%
60% 70% 80% 90% 100% 110% Saturation
70% 80% 90% 100% 110% Saturation
80% 90% 100% 110% Saturation
90% 100% Saturation 120%
100% 110% Saturation 120%
Saturation 110%
120%
120%
130%
140%
4500/
150%
160%

		180%
		190%
		200%
		0
		1
		2
		3
		4
		5
		6
	Hue	/
		δ 0
		10
		10
		12
		13
		14
		15
		-15
		-14
		-13
		-12
		-11
		-10
		-9
		-8
		-7
		-6
		-5
		-4
		-3
		-2
		-1
	Brightness	0~32
	Contrast	0~14
		0
		1
Image	Sharpness	2
U-		3
		4
		5
		7
		8
		-

		-	
			9
			10
			11
		R&W Mada	Color
		B&W-WOUL	B&W
		DZoom	ON
		DZ00III	OFF
			Auto
		Focus Mode	Manual
			OnePush
			All
	Facus	AE Zono	Тор
	Focus	AF-Zone	Center
			Bottom
			Low
		AF-Sensitivity	Middle
			High
			OFF
			1
			2
			3
			4
	Noise Reduction	NR-3D	5
			6
			7
			8
			9
			10
			11
		Default	
		Meeting	
	Style	Clarity	
		Bright	
		Soft	
	Speed by Zoom	ON	When turned on, Zoom will gradually
		OFF	accelerate and decelerate.
	Zoom Speed	1	
		2	
P/T/Z		3	
		4	
		5	
		6	
		7	
		8	
	Imaga Franzina	ON	
	inage rieezing	OFF	
	Acc Curve	Standard	
	-		

		Slow	
		Fast	
		Fast	
	Preset Speed	Slow	
		Middle	
	Joystick Pan Dir	Positive Negative	
		Positive	
	Joystick Tilt Dir	Negative	
	1080P60		
	1080P50		
	1080160		
	1080 50		
	1080P30		
	1080P25		
Video Format	720P60		
	720P50		
	1080P59.94		
	1080 59.94		
	1080P29.97		
	720P59.94		
Network Settings	DHCP	ON OFF	
	IP Addr	192.168.100.100 (If DHCP is OFF)	
Version	ARM		
	SOC		
	AF]	
Restore Default	Restore Default (YES/NO)		

6. How to use the Tally Light option in the OSD

menu

The "Tally Light" option in the PTC-145 OSD menu allows you to determine whether the camera's Tally light will illuminate in red or green depending on the settings of the "PVW (green when pressed)" and "PGM (red when pressed)" buttons on the PTC-145 camera when it is connected to the a switcher (take the SHOWCASE 100 as an example.) First of all, please press the "MENU" button on the PTC-145 remote control to open the OSD menu, then go to "Setup>Tally Light" option to select your desired Tally light setting. There are 4 options for you to choose, including "RED", "GREEN", "RED/GREEN" and "OFF".

• When the "Tally Light" option on the OSD menu is set to "RED"

The "PVW" and "PGM" (channel 1 for example) of the switcher are not selected, that is, they are both set to "OFF", and the Tally lamp of the camera will not be lit at this time. The following is a schematic diagram



Switcher's "PVW" is set to "ON" and the "PGM" is set to "OFF" (take channel 1 as an example). At this time, the tally light of the camera will not be lit. The diagram below is a schematic diagram.



Switcher's "PGM" is set to "ON" and the "PVW" is set to "OFF" (take channel 1 as an example). At this time, the tally light of the camera will be lit in red. The diagram below is a schematic diagram.



Switcher's "PGM" is set to "ON" and the "PVW" is set to "ON" (take channel 1 as an example). At this time, the tally light of the camera will be lit in red. The diagram below is a schematic diagram.



When OSD Menu's "Tally Light" option is set in "GREEN"

No input source is selected by the switcher's "PVW" and "PGM" (take channel 1 as an example), which means that the "PVW" and "PGM" channels are "OFF". At this time, the camera's tally light will not be lit. The diagram below is a schematic diagram.



Switcher's "PGM" is set to "OFF" and the "PVW" is set to "ON" (take channel 1 as an example). At this time, the tally light of the camera will be lit in green. The diagram below is a schematic diagram.



Switcher's "PGM" is set to "ON" and the "PVW" is set to "OFF" (take channel 1 as an example). At this time, the tally light of the camera will not be lit. The diagram below is a schematic diagram.



Switcher's "PGM" is set to "ON" and the "PVW" is set to "ON" (take channel 1 as an example). At this time, the tally light of the camera will be lit in green. The diagram below is a schematic diagram.



When OSD Menu's "Tally Light" option is set in "RED"/ "GREEN"

No input source is selected by the switcher's "PVW" and "PGM" (take channel 1 as an example), which means that the "PVW" and "PGM" channels are "OFF". At this time, the camera's tally light will not be lit. The diagram below is a schematic diagram.


Switcher's "PGM" is set to "OFF" and the "PVW" is set to "ON" (take channel 1 as an example). At this time, the tally light of the camera will be lit in green. The diagram below is a schematic diagram.



Switcher's "PGM" is set to "ON" and the "PVW" is set to "OFF" (take channel 1 as an example). At this time, the tally light of the camera will be lit in red. The diagram below is a schematic diagram.



Switcher's "PGM" is set to "ON" and the "PVW" is set to "ON" (take channel 1 as an example). At this time, the tally light of the camera will be lit in red. The diagram below is a schematic diagram.



- When OSD Menu's "Tally Light" option is set in "OFF"
 - No input source is selected by the switcher's "PVW" and "PGM" (take channel 1 as an example), which means that the "PVW" and "PGM" channels are "OFF". At this time, the camera's tally light will not be lit. The diagram below is a schematic diagram.



Switcher's "PGM" is set to "OFF" and the "PVW" is set to "ON" (take channel 1 as an example). At this time, the tally light of the camera will not be lit. The diagram below is a schematic diagram.



Switcher's "PGM" is set to "ON" and the "PVW" is set to "OFF" (take channel 1 as an example). At this time, the tally light of the camera will not be lit. The diagram below is a schematic diagram.



Switcher's "PGM" is set to "ON" and the "PVW" is set to "ON" (take channel 1 as an example). At this time, the tally light of the camera will not be lit. The diagram below is a schematic diagram.



7. Installation Instructions

Note: Only mount the bracket on formwork or concrete surface. Do NOT mount the bracket on plasterboard.

In your product package, you should find

- PM3*5 screw x 6
- Ceiling bracket (upper and lower plates) x 1
- PTC-145 camera x 1



Ceiling Bracket (Upper and Lower Plates



Additionally, you will also need the following to secure the ceiling bracket to the ceiling:

- PA4*30 self-tapping screw x 4
- PA4 plastic screw stopper x 4



Step 1: The Ceiling Bracket

Separate the ceiling bracket into two parts (upper and lower plates) as depicted in the diagram below.

STEP 1



Ceiling Bracket





Lower Plate

Step 2: Mount the bracket's upper plate to the ceiling

Insert the four PA4 plastic screw stoppers into the ceiling as shown in the diagram below.

Using four PA4*30 self-tapping screws, affix the bracket's upper plate to the ceiling.



Step 3: Affix the bracket's lower plate to the bottom of PTC-145

As depicted in the diagram below, use three PM3*5 screws to affix the bracket's lower plate to the bottom of PTC-145.



Step 4: Mount the PTC-145 Camera to the ceiling

Now push the PTC-145 camera into the bracket's upper plate in the direction as indicated by the arrow in the diagram below. Make sure the two plates click into place.

Finally, secure the PTC-145 camera to the upper plate with three PM3*5 screws.



Step 5: Final



8. Network Connection

The Ethernet port on the back of the PTC-145 allows you to connect your computer to the camera via a fixed IP or DHCP connection. The PTC-145 is factory defaulted to DHCP mode. To access and modify network settings, you must first log in to the camera's web user interface.

If this is your first time using the camera, the default fixed IP address should be 192.168.100.100.

As shown in the figure below, please connect your PTC-145 camera and laptop to a router with an RJ-45 Ethernet cable.



Please go to the PTC-145 product page on Datavideo's website <u>https://www.datavideo.com/product/PTC-145</u> to download and install the DVIP Network Configuration Tool. Make sure your laptop or computer is also set to DHCP mode.

	1010001 1013/0114 (1017)11	in the period	
ieneral	Alternate Configuration		
You car this cap for the	n get IP settings assigned au bability. Otherwise, you need appropriate IP settings.	tomatically if your network suppo d to ask your network administrat	orts
0	btain an IP address automati	ically	
	se the following IP address:		
IP ac	ddress:		
Subr	net mask:		
Defa	ult gateway:		
	btain DNS server address au	tomatically	
OUs	se the following DNS server a	addresses:	
Prefe	erred DNS server:		
Alter	nate DNS server:		
V	alidate settings upon exit	Advanced	d

Please use DVIP Network Configuration Tool to find out the IP address of PTC-145.



DVIP Network Configuration Tool v1.1.6 Settings Q	-	×
datavideo		
Number of Devices: 1		
HOST NAME [192.168.50.128] [E4:77:D4:A9:16:7C]		

Open a web browser on your computer and enter the PTC-145's DHCP dynamic IP address, in this case 192.168.50.128, into the address bar, then press the Enter key on your keyboard to open the web user interface's login page.

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The following are the default login username and password :

- Username: admin
- Password: admin

After successfully logging in to the web user interface, you should see the following camera screen.



Click the "Network" option on the left side of the web user interface to enter the "Network" interface. You can utilize the "DHCP" ON/OFF switch and click the "Apply" button to set your camera's connection mode to DHCP mode or Fixed IP mode. To reset the IP mode of the PTC-145 to the factory default setting, press the "Default" button. The PTC-145 is factory defaulted to DHCP mode.



	Network	
datavideo	DHCP	
	IP Address	192.168.100.100
Solar Content	Subnet Mask	255.255.255.0
	Default Gateway	192.168.100.1
Network	Primary DNS	1111
†i† Audio	Secondary DNS	1144
	MAC Address	E4:77:D4:A9:16:70
	NTD Sellings	
	Tree	Antonia finder from the lateral
	1300	Antonia con presidente
	Time Zone	(GMT=05:00)Beijing, Hongkong, Singap
	Ntp Server	time.google.com
	Reset IP	Apply

In the next two chapters, we will introduce how to turn on DHCP for the camera and the Fixed IP Connection mode separately.

Note: To log out of the web user interface, click "Logout" at the top right of the page.

8.1 DHCP Mode

DHCP, or Dynamic Host Configuration Protocol, is a network protocol that enables a server to automatically assign IP addresses within a domain to all devices connected to the network. The following is an example of a DHCP network connection.



To turn on the DHCP mode of the camera, log in to the Web UI, click the "Network" option on the left side of the Web UI to enter the "Network" interface, and then click the "DHCP" ON/OFF switch to set it as "DHCP ON", and then press the "Apply" button, the PTC-145 will reboot itself automatically and set your PTC-145 to DHCP mode.

	Network			= Main RTMP = Sub RTMP	Video Output: 1000700 English	Logout
data video	DHCP					
	IP Address	192.168.50.128				
The Alignment Security	Subnet Mask	255.255.255.0				
(a) Etraco	Default Gateway	192.168.50.1				
(-) Second	Primary DNS	8.5.5				
tit Audio	Secondary DNS	8.8.4.4				
 System 	MAC Address	E4:77:D4:A9:16:70				
Alj Auto Tracking	NTD Settings					
	in ocungs					- 1
	Туре	Automatically from the internet				
	Time Zone	(GMT+08:00)Beijing, Hongkong, Singapore, Taipei 🛁 🗸				
	Ntp Server	time.google.com				
	Reset IP	Apply				
			Copyright © 2023 Datavideo all rights reserved.			_

8.2 Fixed IP Mode

To enable Fixed IP Mode for the camera, connect your computer or laptop directly using an RJ-45 Ethernet cable and set it to the same domain.



Since the PTC-145 is defaulted to DHCP mode, please log in to the Web UI in DHCP mode, click the "Network" option on the left side of the Web UI to enter the "Network" interface, and then click the "DHCP" ON/OFF switch to set it as

"DHCP OFF", and set up your desired fixed IP address and information in the options of "IP Address", "Subnet Mask", "Default Gateway", "Primary DNS " and "Secondary DNS", and click the "Apply" button to reboot the PTC-145. And then the PTC-145 will then set your PTC-145 to the Fixed IP Mode. Then you can connect your PTC-145 to a computer or laptop on the same domain and enter the fixed IP address into the web browser address bar to open the PTC-145 Web UI, taking the fixed IP address "192.168.100.100" as an example.

	Network						•	Main RTMP = Sub RTM	Video Culgut: 10	erce Esglish	~ 2	Logost
datavidee	DHCP	GIT										
	IP Address	192.168.100.100										
Camera Setup	Subnet Mask	255.255.255.0										
(a) Steeren	Default Gateway	192.168.100.1										
Network	Primary DNS	8888										
tit Audio	Secondary DNS	8844										
(5) System	MAC Address	E4:77:D4:A9:16:7C										
Auto Tracking	NTP Settings											
	Туре	Automatically from the internet										
	Time Zone	(GMT=08:00)Beijing, Hongkong, Singap	ore, Taipei 🛛 🗸									
	Ntp Server	time grouple com										
												_
	Reset IP	Apply										
				Сорупі	ght © 2023 Datavideo	all rights reserved.						

Note: When assigning an IP address, avoid trailing .0 or .255 because .0 or .255 is usually reserved for network protocols, and the first IP address in the IP range is not recommended because the first IP address is usually reserved for the router.

8.3 DVIP

DVIP is a network setup utility that searches for DVIP devices connected to the same domain. Network items that can be configured include Device Name, DHCP mode, IP address, Submask, Gateway IP, and Primary and Secondary DNS.

You can select the DVIP download point and install it according to the operating system you are using.

PC: <u>https://www.microsoft.com/en-us/p/dvip-network-</u> config/9p6gtz839k6s?activetab=pivot%3Aoverviewtab Android:

https://play.google.com/store/apps/details?id=com.datavideo.dvipnetconfig &hl=en_US

iOS: <u>https://itunes.apple.com/tw/app/dvip-network-</u> config/id1177895983?mt=8

After installing the DVIP Network Configuration Tool, follow the steps below to search for connected DVIP devices and enter the relevant settings.

Step 1: Open the DVIP Network Configuration Tool and select the Ethernet option you are connecting to from the "Network Interface" pop-up window and click the "OK" button.



Step 2: After selecting your network interface, the DVIP Network Configuration Tool interface will be displayed as shown below.

DVIP Network Co	nfiguration Tool v1.1.6		-	×
da	avideo			
Number o	Devices:	1		
PTC-14	5 [192.168.50.34]	[E4:77:D4:A7:CA:3B]		

Step 3: Click "PTC-145" to display the Network Setup pop-up window

DVIP Network Configuration Tool v1.1.6		_		×
Settings				
datavideo				
Number of Devices:	Host Name			
PTC-145 [192.168.50.3	nost wante	PTC-145	_	
	Model Name	PTC-145 (VID:0104, PID:301e)		
	MAC address	E4:77:D4:A7:CA:3B		
		192.168.50.34		
	Using Fix	ked IP Mode		
		8.8.4.4		
		Default Save		

Step 4: User can click "Host Name" to change the device name. If necessary, users can also click on the settings to change the value, then click "Save" to save the settings, and click "Default" to restore the default value.

Host Name	PTC-145
Model Name	PTC-145NDI (VID:0104, PID:301e)
MAC address	E4:77:D4:A7:CA:3B
	192.168.50.34
Using Fix	ed IP Mode
	255.255.255.0
	192.168.50.1
	8.8.8.8
	8.8.4.4
	Default Save

9. PTC-145 Web UI

A web-based user interface allows you to configure and operate the PTC-145 unit.

9.1 Camera Setup

The "Camera Setup" option allows users to see a preview of what the camera will capture on the Web UI. In addition, it also allows users to control camera control parameters such as "Focus", "Zoom", "Speed (Pan/Tilt speed)", "Enable/Disable AI auto-tracking", "Return camera lens to home position", "Save/Retrieve presets", and so on. In addition, there are camera control parameters including "Contrast", "Brightness", "Saturation", "Hue", "Sharpness", "G.Limit", "Exposure", "DRC", "White Balance", "RG Tuning", "BG Tuning", "Gamma", "Auto Mirror ON/OFF Switch", "Mirror", "Anti-flicker", "AGC" ON/OFF Switch, " 3DNR" and "WDR" ON/OFF switches are available for users to adjust. The "Camera Settings" interface is shown below.





CAMERA CONTROL

For "Camera Control" related functions, see the table below.

	Function Keys	Descriptions
1		Live Image Preview Window This live image preview window allows you to preview the live images taken by the camera.
2	Far FDCUS Near AF	 Focus The Focus option allows the user to adjust the focus point. AF AF Press the "AF" button to apply the "AF AUTO FOCUS" setting. MF MF : When the camera is in AF mode, press the "AF" button to switch to MF manual focus mode

	Function Keys	Descriptions
		and use the "Focus Far" Far and "Focus Near" Near buttons to adjust the focus manually.
3	Tele	Zoom The Zoom option allows users to adjust the Zoom Tele and Zoom Wide of the camera lens. You can press the Tele button Wide button Wide button to zoom the camera lens in and out respectively.
4	Fast SPEED Slow	Speed The Speed option allows the user to adjust the Pan, Tilt, Focus and Zoom speed of the camera lens. Pressing the Fast button increases the speed and pressing the Slow button Slow decreases the speed.
5		Virtual joystick (up/down/left/right) Users can use this virtual joystick to control the Panning and Tilting of the camera lens, push the virtual joystick up/down/left/right to control the Pan, Tilt direction of the camera lens.

	Function Keys	Descriptions
6	Aů	Al auto-tracking function on/off key Press the "AI" button to toggle between turning the AI auto-tracking feature on or off.
7	Â	Home Pressing this "Home" button returns the camera lens to its starting position.
8	PRESET: 1 儲存 呼叫	Preset storage and call keys The PTC-145 has 255 presets (0 - 254). Enter the preset number you wish to save into the "PRESET" field and press the "SAVE" button to save the preset. Enter the preset number you want to recall into the "PRESET" field and press the "CALL" button to recall the preset you want.

Image Setting

Please refer to the following table for "Image Settings" related functions.

		Function Keys	Descriptions
1.	Contrast	14	Contrast It allows the user to adjust the contrast. Use the slider to adjust the contrast, and press the "Apply" button to complete the setting.

	Function Keys	Descriptions
2.	Bright 32	Bright It allows the user to adjust the brightness. Please use the slider to adjust the brightness. After adjustment, press the "Apply" button to complete the setting.
3	Saturation 200%	Saturation It allows the user to adjust the saturation level. Use the slider to adjust the saturation, and press the "Apply" button after adjustment to complete the setting.
4	Hue 15	Hue It allows the user to adjust the color tone. Please use the slider to adjust the hue, and press the "Apply" button after adjustment to complete the setting.
5	Sharpness 11	Sharpness It allows the user to adjust the sharpness. Please use the slider to adjust the sharpness, after adjustment, press the "Apply" button to complete the setting.
6	G.Limit 15dB	G.Limit It allows the user to adjust the gain limit. Please use the slider to adjust the gain limit, after adjustment, press the "Apply" button to complete the setting.

	Fu	Descriptions		
7	Exposure	Auto		Exposure
	DRC	Auto		The exposure drop-down
	white Balance	Manual		menu allows the user to
	RG Tuning	SAE		select the desired
	BG Tuning	AAE		exposure mode. There
		Bright		are "Auto", "Manual",
				"Shutter Priority",
				"Aperture Priority" and
				"Brightness Priority"
				modes to choose from.
				 Auto: Fully
				automatic shutter
				speed and aperture
				settings with
				automatic
				adjustments for
				gain, dynamic
				range, backlight
				compensation, and
				anti-flicker.
				control the
				aperture and
				SAE: The camera
				• SAL. The callera
				intensity and
				automatically
				adjusts the
				aperture according
				to the shutter
				speed vou set.
				 AAE: The camera
				measures the light
				intensity and
				adjusts the shutter
				speed according to
				the aperture size
				you set.
				 Bright: The camera
				measures the

	Function Keys	Descriptions
		brightness and adjusts the appropriate exposure value. Press the "Apply" button to complete the setting.
8	DRC OFF white Balance RG Tuning BG Tuning 7 8 * * * * * * * * * * * * * * * * * *	Dynamic Range The Dynamic Range drop- down menu allows you to set the dynamic range or turn off the dynamic range function. Press the "Apply" button to complete the setting.
9	PRESET: Auto Manual OsePush G.Limit Indoor Exposure Outdoor DRC VAR white Balance Auto	White Balance The white balance drop- down menu allows you to select the white balance mode you want. There are four white balance modes to choose from: Auto, Manual, One-Touch White Balance and Specified Color Temperature. Press the "Apply" button to complete the setting.
10	RG Tuning 0 10 BG Tuning 10	R Gain Adjustment/B Gain Adjustment Users can use the "R Gain Adjustment" slider and "B Gain Adjustment Slider" to adjust the Red Gain and Blue Gain. Press the "Apply" button to complete the setting.
11	Gamma 0.45 Y	Gamma This drop-down menu allows the user to adjust the Gamma value. This

	Function Keys	Descriptions
		feature is currently not available.
12	Auto Mirror 💽	Auto Mirror The "Auto Mirror ON/OFF" switch allows the user to turn the auto mirror function on/off. When Auto Mirror is set to "ON", the screen will be displayed when a person is detected on the screen, regardless of whether the camera is in the upright position or hanging.
13	Auto Mirror Off Mirror Off ~ Anti-Flicker H V H+V	Mirroring When the "Auto Mirror ON/OFF" switch is set to "OFF", users can manually set the desired mirror style from the drop-down menu, with three options: "Horizontal Flip", "Vertical Flip" and "Horizontal and Vertical Flip". If you select "Off", the mirror function will be turned off. After adjustment, press the "Apply" button to complete the setting.
14	Anti-Flicker 60Hz OFF S0Hz 60Hz	Anti-flicker To avoid image flicker, you can set the camera's flicker frequency to 50Hz or 60Hz, and if you select

	Function Keys	Descriptions
		function will be disabled. After adjustment, press the "Apply" button to complete the setting.
15	AGC OFF	AGC Automatic Gain Control This is the AGC automatic gain control function. This function is not available yet.
16	3DNR 6 V WDR 8 9 10 11	3DNR This is a 3D Noise Reduction function that allows you to select the level of 3D Noise Reduction from a drop- down menu. After adjustment, press the "Apply" button to complete the setting.
17	WDR OFF	WDR WDR is wide dynamic range. This feature is not yet available.
18	Default	Default Pressing this button restores the relevant parameters in the Camera Settings option to the factory default settings.
19	Apply	Apply After you have set the relevant settings, click the "Apply" button to apply the selected settings.

9.2 Video Output

The "Video Output" option Video Output allows users to select the desired video output resolution from a drop-down menu. The image output interface is shown below. After selecting your desired video output resolution, press the "Apply" button to complete the setting. In the upper right corner of the "Video Output" interface, the output resolution you selected will be displayed. If you press the "Default" button, the default value can be restored.



9.3 Stream

The "Stream" option allows you to set the main stream and sub-streams including "Stream ON/OFF" switch, "Encoding Format", "Protocols", "Bitrate", "Resolution", "Bitrate Control", "Frame Rate", "I Key Frame Interval", "Stream Name", "RTSP Authorization ON/OFF" switch, and "RTSP Port" and other related parameters. After setting, click "Apply" button to complete the setting. If you press the "Default" button, the options of "Streaming" interface can be restored to the factory default settings. "The main interface of the "Stream" option is shown below.

	Stream				e Main RTMP e Sub RTMP	Video Output: 1000P60 English	Lopat
datavideo	MAIN STREAM		SUB STREAM				
(Main Stream		Sub Stream				
Camera Setup	Encoding Format	H.264 v	Encoding Format	H.264			
► Video Output	Protocols	RTSP	Protocols	RTSP			
((•)) Stream	Bitrate	8192	Bitrate	1024			
Network	Resolution	1920#1090	Persistion	720+490			
†‡† Andio	Readicion	1020 1000	Resolution	140 400			
③ System	Bitrate Control	CBR	Bitrate Control	CBR			
Aj Auto Tracking	Frame Rate	25	Frame Rate	25			
•	I Key Frame Interval	25	I Key Frame Interval	25			
•	Stream Name	Main:1	Stream Name	Sub:2			
	RTSP Auth		RTSP Auth	000			
	RTSP Port	554	RTSP Port	554			
	_	-					
	Default Apply	-					
			Copyright © 2023 E	Datavideo all rights reserved.			

For "Streaming" related functions, please refer to the following table.

	Function	Descriptions	
1.	Main Stream Sub Stream		Streaming ON/OFF Switch You can press this ON/OFF switch to turn on or off the streaming function of "Main Stream" or "Sub Stream".
2	Encoding Format Protocols Bitrate	H.264 ~ H.264 H.265 MIPEG	Encoding Format This option allows you to select the encoding format for streaming video. There are 3 encoding formats to choose from: "H.264", "H.265" and "MJPEG".
3	Protocols Bitrate Resolution Bitrate Control Frame Rate	RTSP v Multicast RTMP(5) SRT ONVIF	Protocols: Multicast, RTSP, RTMP(S), SRT and ONVIF There are five streaming protocols to choose from: Multicast, RTSP, RTMP(S), SRT and ONVIF.

	Function	n Keys	Descriptions
4	Bitrate	8192	Bit Rate The bit rate is the amount of data required to encode an image in one second. From the streaming point of view, the higher the bit rate, the higher the quality, but it also requires more bandwidth. The default bit rate for the main stream is "8192 Kb/s". The default bit rate for sub- streams is "1024 Kb/s".
5	Resolution Bitrate Control Frame Rate Bitrate Control Frame Rate I Key Frame Interval	1000*000 □ 100*100 □ 128*700 □ 25 □ 70*40 ✓ 64*40 ↓ 64*30 ↓ 32*50 □	ResolutionThe following resolutions are supported for the mainstream and sub-streams respectively.Main Stream1920 x 1080 1080 x 720Sub Stream720 x 480 640 x 480 640 x 360 320 x 240
6	Bitrate Control Frame Rate	CBR v cate V3R	Bit Rate Control You can select either a fixed bit rate or a variable bit rate. Fixed bit rate encoding does not optimize image quality, but it saves your storage space. Variable bit rate encoding takes longer but produces more satisfactory results because it optimizes the quality of your media files.

	Function Keys	Descriptions
7	Frame Rate 25 v	Frame rate A high frame rate for a smoother viewing experience, the default frame rate is 25.
8	I Key Frame Interval 25	I Frame Interval The shorter the I Frame interval, the higher the image quality. However, a larger bandwidth is required. Selecting a longer I Frame interval requires less bandwidth but results in a lower quality image. The default I Frame interval is 25.
9	Stream Name Main:1 Stream Name Sub.2	Stream Name This option allows you to set the stream name of the main stream or sub-stream.
10	Default	Default Pressing this button restores the relevant parameters in the Streaming option to their factory default settings.
11	Apply	Apply After you have set the relevant settings, click the "Apply" button to apply the selected settings.
12	■ Main RTMP ■ Sub RTMP	Streaming Status Alert Icon This icon shows the current streaming status of the master stream and sub- streams. If the main stream or sub-streams are streaming, the icon will be white on red. If it is not streaming, the icon will be grayed out.

Funct	ion Keys	Descriptions		
	RTSP streami	ng		
RTSP Auth		RTSP Authorization If the "RTSP Authorization" option is set to "ON", when you want to stream RTSP, you need to enter your PTC-145 Web UI login password, which is defaulted to "admin", in the RTSP streaming video player to view your RTSP streaming video.		
RTSP Port	554	RTSP Port		
		This is the RTSP port number,		
		which is 554 by default.		
	RTMPS stream	ling		
MRL.	rtmp://192.168.5.11/live/av0	MRL When you choose RTMPS streaming, you need to fill in the MRL field with the streaming server address and streaming key in the format of "Streaming Server URL / Streaming Key" obtained from RTMPS streaming platforms such as Youtube, Facebook, and so on. In the case of the Facebook platform, the MRL is: rtmps://live-api- s.facebook.com:443/rtmp/ FB-10211107991653400-0- Abzq_4uxzlu2C7k3		
	SRT Streaming (SRT Ca	aller Mode)		

Fun	ction Keys	Descriptions
SRT Mode	Caller ~	SRT Mode
		When SRT streaming is
		selected, you can choose
		either "Caller" or "Listener"
		mode from this drop-down
		menu. This is the SRT Caller
		mode.
SRT伺服器地址	192.168.100.1	SRT Server Address
		If your PTC-145 is set to SRT
		Caller mode, you need to fill
		in the "SRT Server Address"
		field with the SRT server
		address you obtained from
		your SRT streaming platform
SRT Address	192.168.5.50	SRT Port
		If your PTC-145 is set to SRT
		Caller mode, you need to fill
		in the "SRT Port" field with
		the SRT port number you
		obtained from your SPT
		streaming platform
		SPT port number you
		ski port number you
		obtained from your SRT
	(SRI Port field.
SRT Encryption	None 🗸	SRI Encryption Method
SRT Password	AFS-128	when you select the SRI
SRT Transmission	AES-256	streaming protocol, this
		option allows you to choose
		the SRT encryption method
		you want to use, with three
		options including None,
		AES128 and AES-256.
SRT Password	1234567890	SRT Password
		After setting SRT encryption
		method, you need to use this
		SRI password, the default
		value is 1234567890, which
		can be changed by user.
SRT Transmission	120	SRT Transmission
		This field allows you to set

Fund	ction Keys	Descriptions
		the transmission delay time
		for SRT streams. The setting
		range is 20-8000.
SRT StreamId	#!::u=admin	SRT Stream ID
		This is where you fill in the
		SRT Stream ID, which is
		usually provided by your CDN
		or cloud service platform.
	SRT streaming (SRT Liste	ner mode)
	0,0	,
SRT Mode	Listener ~	SRT Mode
		When SRT streaming is
		selected, you can choose
		either "Caller" or "Listener"
		mode from this drop-down
		menu. This is the SRT Listener
		mode.
SRT Port	9000	SRT Port
		This is the SRT port and the
		default value is 9000.
SRT Encryption	None ~	SRT Encryption Method
SRT Password	None	When you select the SRT
SITT assivoru	AES-128	streaming protocol, this
SRT Transmission	AES-256	option allows you to choose
		the SRT encryption method
		you want to use, with three
		options including None,
		AES128 and AES-256.
SRT Password	1234567890	SRT Password
		After setting SRT encryption
		method, you need to use this
		SRT password, the default
		value is 1234567890, which
		can be changed by user.
SRT Transmission	120	SRT Transmission
		This field allows you to set
		the transmission delay time
		for SRT streams. The setting
		range is 20-8000.
	MultiCast	<u> </u>

Functio	on Keys	Descriptions
Address	224.1.2.3	Address This address is the location of the multicast, the default value is 224.1.2.3
Port	4000	Port This is the port number for the multicast function and the default value is 4000.
	ONV	IF
ONVIF authorizat	ion OFF	ONVIF Authorization This is the ON/OFF switch for ONVIF authorization.

Notes.

1. SRT Caller and RTSP Publish can only work on the "Main Stream".

2. When SRT Caller and RTSP Publish are working on the "Main Stream", the "Sub Streams" will have no function.

Streaming to Youtube

Please see the following steps to learn how to stream to Youtube.

1. Please connect to the Youtube website <u>www.youtube.com</u> and click the "Create" button, and then click "Go Live".



2. You will see the main page of "Youtube Studio". Please click the "**Edit**" button to set the details of your live event, and click the "**Save**" button when you are done.

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l Test	EDIT			
Compet streaming software to go live Education				
Viewers will be able to find your stream once you go live Private Private				
STREAM SETUP HELP Users using Likes				
Start sending us your video from your streaming software to go live				
Stream settings Analytics Stream health				
Stream key Additional settings				
Select stream key Enable DVR C				
Default stream key (KTMP; Vanable)				
Stream key (parte in encoder) 360° video O				
Added deby				
Tringulariting youtube com/live2 COPY None				
C Beckup server UR. Coper Closed captions				
mmp//bitmp/youtube.com/wez/tackup=1				
3. You will see the streaming key and streaming URL provided by Youtube streaming platform. Take the main stream as an example, please set the "Stream" > "Main Streaming ON/OFF" switch of PTC-145 Web UI to "ON" and select "RTMP(S)" in the "Protocol" drop-down menu, then please copy the "Stream URL" and "Stream Key" separately and paste them into the "Stream>MRL" of the PTC-145 Web UI according to the format of "Stream URL/Stream Key". Finally, click the "Apply" button.

≡	Þ	Studio				À	К
(**) ©) Connect streaming software to go live Viewers will be able to find your stream once you go live STREAM SETUP HELP	Title Test Category Education Privacy Private Viewers walting			EDIT	
		Start sending us your video from your streaming sof Stream settings Analytics Stream health Stream key	tware to go live	- Additional settings			
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	Main Stream		Sub Stream				
Camera Setup	Encoding Format	H.264 🗸	Encoding Format	H.264			
 Video Output 	Protocols	RTMP(S) ~	Protocols	RTSP			
((+)) Stream	Bitrate	8192	Bitrate	1024			
	Resolution	1280*720 ~	Resolution	640*480			
	Bitrate Control	CBR v	Bitrate Control	CBR			
System	Frame Rate	25 ~	Frame Rate	25			
Auto Tracking	I Key Frame Interval	25	I Key Frame Interval	25			
	Stream Name	Main:1	Stream Name	Sub:2			
	MRL.	rtmp://192.168.5.11/live/av0	RTSP Auth	Orr			
			RTSP Port	554			
	Default Appl	×					
				yright © 2023 Datavideo all rig			

4. Please restart the PTC-145 camera and you will see the start screen on the Youtube live stream page. Click the "END STREAM" button to end the live stream.

=	Studio				н	*	DEND STR	EAM
	Image: Section of the section of th	e st ispory ucation acy Public wers waiting	Lines O					EDIT
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Streaming to Facebook

Below are the steps to set up a live streaming on Facebook Live Producer using RTMP:

Live Streaming with Facebook Live Producer

 Open the Facebook Live website. https://www.facebook.com/formedia/solutions/facebook-live and click the "Go Live Now" button as shown below.



Note: A single live stream on Facebook platform cannot exceed 8 hours.

2. Please click the "Select" button on the "Go Live" option as shown below.



3. Select the "Streaming Software" option and enter the title and description of your live video in the "Title" and "Description" fields. You can also choose whether or not to share the live stream to your Facebook story.

Q. Search Facebook	លិ	22	e ⁹⁹ 5	1	500		ø	
Create Live Video ? Connect video source Complete post details	Select a v	ideo source @	0]	Add live video details Share to story Your live video will also be added to your story. Title (optional)			
Go live	Webcam Streaming Copy and software.	Stream g Software Setup I paste the stream key into	wing Software		Description	0 ••••••••••••••••••••••••••••••••••••		
Choose where to post Post on timeline	Stream I FB-10208 This stream is preview the I	Key 1902208590202-0-AbwFgk48b ley is valid until you log out of Face broadcast you have up to 5 hours to	bMHH6b4B Copy ebook. Once you start to to go live.	y			•	
Stream Setup	Advance	ed Settings		ř				
III Dashboard	Video							
 Settings v Interactivity v 		Connect streaming softwa	are to go live					
Back Dr Go Dve								

4. Please click "Advanced Settings" and you will be able to see the "Server URL" required for live streaming, to match with the "Stream Key" on the page for live streaming.

Q. Search Facebook			r 8		6	5 <mark>9</mark>		۲	• •
Create Live Video	?		Select a video source	0		Add live video details			
Connect video source	1/3		0			Share to story Your live video will also be added to your stor	, D		
Complete post details		D	Webcam	Streaming Soft	ware	Title (optional)			
) 00 me			Streaming Software Se Copy and paste the str	etup ream key into your str	saming	Description	0		
Host - Your Profile			Stream Key			L			
Choose where to post Post on timeline	•		FB-1020890220859020 This stream key is valid until y	2-0-AbwFgk48bMHH6b4 ou log out of Facebook, Once	8 Copy you start to				
iii Only me			Advanced Settings	se up to 5 nours to go tive.	^				
Dashboard			Persistent Stream Key						
Settings	~		This can be reused every time one live video at a time with y	you go live. You can only bro your persistent stream key.	adcast				
 Interactivity 	×		Backup Stream Once a backup stream is adde removed. It will not affect you	ed to your live video, it canno ir stream it you choose not to	ibe use it.				
			Server URL rtmps://live-api-s.faceb This may be referred to as "U	sook.com:443/rtmp/ RL" or "Address" in your stres	Copy ming software.				
Back Di Go Live									

5. Take the main stream as an example, please set the "Streaming" > "Main Streaming ON/OFF" switch of the PTC-145 Web UI to "ON" and select "RTMP(S)" from the "Protocol" drop-down menu, then please copy the "Server URL" and "Stream Key" separately and paste them into the "Streaming > MRL" field of the PTC-145 Web UI according to the format of "Stream URL/Stream Key". Finally, click the "Apply" button.



	Stream					But RTSP Sub RTSP	Video Dolput: 1000P60 English	Loped
data video	MAIN STREAM		SUB STREAM					
	Main Stream	CR	Sub Stream					
Camera Setup	Encoding Format	H.264 👻	Encoding Format	H.264				
Video Output	Protocols	RTMP(5) ~	Protocols	RISP				
((+)) Stream	Bitrate	8192	Bitrate	1024				
Network	Resolution	1280*720 ~	Resolution	640*480				
†i† Andio	Bitrate Control	CBR v	Bitrate Control	C38				
System	Essena Data		Ecomo Data					
A) Auto Tracking	Frame Rate	2 V	Frame Rate	D				
	I Key Frame Interval	25	I Key Frame Interval	25				
	Stream Name	Main:1	Stream Name	Sub:2				
	MRL	ntmp://192.168.5.11/live/av0	RTSP Auth	OFF				
			RTSIP Port	554				
	Default Apply	×						
				Copyright © 2023 Datavideo all right	is reserved.			

6. Please go to the "System" option and click the "Reboot" button to reboot the PTC-145.

	System		n Main 1959 n Sub 1959 Viden Dapat Henrik 🕹 🛃
data video	Device Name	PTC-145	
📾 Camera Setup	Language	中文()) ~	
Video Output	Tally Mode	Red Green 🗸	
((+)) Stream	Firmware		
Network	Version	SOCv.2.1.9-ARMv2.1.3	
†i† Audio	File Path		Browso Update
System	Account and Password		
A) Auto Tracking	Admin Password		
	Factory Default	Apply	Reboot
			Copyright © 2023 Datasideo all rights enserved.

7. After the reboot is complete, you can see a preview of the live screen captured by the PTC-145 camera in the "Video" option on the Facebook Live page.

Q. Search Facebook		r 28 🕐 🗃	59	
Create Live Video	? 2/3	Select a video source ()	Add live video details Share to story What live odde will also be added to your stary.	
Complete post details		Wolcare Streaming Software	Title Inptional)	
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💿 Stream Setup		Advanced Settings ~		
Dashboard Settings Interactivity	v	Vder		
Back Di Ge Live		Expand Video		

8. Please set the relevant settings, including "Choose where to post" and "Select audience", and then click the "Start Live Streaming" button to live stream the footage captured by the PTC-145 immediately.

Choose where to post			,			Select audience	\times	
Post on timeline				9	Public Anyone on or o	ff Facebook	0	
Post on timeline		~		-	Friends Your friends on	Facebook	۲	
				4	Friends excep Don't show to s	e ome friends	>	
Post to Page you n	nanage	>		1	Specific friend Only show to se	fs ime friends	>	
🕙 Post in group		>		a	Only me		0	
				٠	Custom Include and exc	lude friends and lists	>	
				*	Close Friends Your custom list		0	
🚯 Q. Search Tacabana		ଜ	28	•		6 ⁰		
Create Live Video ?		Select a vi	deo source 🔘			Add live video details		
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Stream Setup		Advance	d Settings		~			
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s Interactivity v		-	-					
East Dr Ge Live		Expand	Video					

9. You will see the screen of the live stream that has been successfully carried out. If you want to end the live stream, please click the "End Live Video" button to end the live stream immediately.

Q Search Facebook	ନ <u>୫</u>	C ^O 🕀	6		
Live Dashboard ? •	Video	•	Comments	0 - *	
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0.00.00-14	++	+ at Mops	Options	0.1	
End Live Video		Video 8Arate	Canal Cana		

Live streaming using your personal Facebook page or fan page

1. Please click the "Live Video" button from your Facebook page or fan page.

Of Live Video	Photo/Video	Eeeling/Activity

2. Please click the "Go Live" button from the "Go live" option which is shown in the following diagram.

Q. Search Facebook		ŵ	85	•••	8	5 ⁹⁹	۲	
Create Live Video								
Dt Home								
Choose Video Type								
Disst - Your Profile	u							
Choose where to post Post on timeline			Go live			Create live video event		
			8. Go live by	y yourself or with a	others	People can respond to your event		
			 Add inter your audit 	activity tools to ke ience engaged	мр	Your live video will be available in more places		
						We'll remind you about your event		
					- 1			
				Select		Select		

3. Select the "Streaming Software" option and enter the title and description of your live video in the "Title" and "Description" fields. You can also choose whether or not to share the live stream to your Facebook story.

Q. Search Facebook	<u>م</u> 8	<mark>.</mark>		5 ⁰⁰		Ø	• •
Create Live Video ? Connect video source Complete post details Goine	Select a video source @ Webcam	Streaming Software		Add live video details Share to story Tour live video will also be added to your story. Title (optional) Description			
sent - Your Profile Orace where to part Post orienter or only me Stream Setup	Copy and paste the stream ke software. Stream Key FB-10200902208590202-0-Abas This stream key is used until you log ou preview the breaksait you have up to 1 Advanced Settings	ry into your streaming Fgk&BbMHH6b4B f of Facebook. Once you start I hours to go live.	Copy o		* • •		
Dushboard Settings v Interactivity v	Video G Connect streaming	Di software to go live					

4. Please click "Advanced Settings" and you will be able to see the "Server URL" required for live streaming, to match with the "Stream Key" on the page for live streaming.

l, Search Facebook	
e Live Video ? Select a video source @ Add live video details	
1/3 Share to story Your live voice will also be adder	ed to your story.
plete post details Webcam Streaming Software Title (optional)	
e Streaming Software Setup Description Cover and nate the steam key into your streaming	
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er to part timeline • • F8-1020890220-9-Abs/fg448bAMH46b48 Copy	
This stream tay is wild writil you log out of Acebook choice you start to preven the broadcast you have up to 5 hours to go live.	
am Setup Advanced Settings	
Abboard Perulatent Stream Key	
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Server URL	

5. Take the main stream as an example, please set the "Streaming" > "Main Streaming ON/OFF" switch of the PTC-145 Web UI to "ON" and select "RTMP(S)" from the "Protocol" drop-down menu, then please copy the "Server URL" and "Stream Key" separately and paste them into the "Streaming > MRL" field of the PTC-145 Web UI according to the format of "Stream URL/Stream Key". Finally, click the "Apply" button.

Q Search Facebook	ŵ 2	¥ 🗗	6	500		Ħ	•
Create Live Video ? Connect video source 1/3 Connect video source Complete post details	Select a video source	e @		Add live video details Share to story Your free video will also be added to your story. Title (optional)	۵		
Host - Your Profile Post on Simeline Otopor alters to pool Otopor alters to pool Otopor me	Streaming Software Copy and paste the software. Stream Key FB-102099022085902 This stream key is valid until preview the broadcast you	Setup stream key into your stream 202-0-AbwFgk48bMHH6b48 il you log out of Facebook. Once you have up to 3 hours to go live.	ing Copy	Description	⊖ ≰ ♥ ⊖		
Stream Setup Dahbaard Settings M Interactivity Conterent	Advanced Setting Persistent Stream Key This can be readed every fit in the video is a time with Backup Stream Once a backup stream is ad removed it with once affect y Server URL Trimps://live-api-s.fac This may be referred to as	gs me you go live. You can only broadca h your provident it wann kay. doed to your live video, it cannot be cour steam if you choose not to use i ebook.com:41)/tmp/ "Vitt" or "Address" in your showing	• • • • • • • • • • • • • • • • • • •				

	Stream					s Main RTSP s Sub STSP	Video Output: 1000P60 English	v 💶 Leg
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	Main Stream		Sub Stream					
Cimera Setup	Encoding Format	H.264 👻	Encoding Format	H.264				
Video Output	Protocols	RTMP(S) v	Protocols	RTSP				
((•)) Stream	Bitrate	8192	Bitrate	1024				
	Resolution	1280*720 ~	Resolution	640*430				
	Bitrate Control	CBR v	Bitrate Control	CBR				
	Frame Rate	3 ×	Frame Rate	25				
	1 Mars Property Internet		I Maria Promo Internal					
	They Frame Interval	22	They Frame Interval	22				
	Stream Name	Main:1	Stream Name	Sub:2				
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r			Copyri	ght © 2023 Datavideo all rights reser	wed.			

6. Please go to the "System" option and click the "Reboot" button to reboot the PTC-145.

	糸統		• ± •••• • ■ •••• • ■ •••• • • • • • • •
data video	摄影驶名稿	PTC-145	
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	杨秋王蒋		
A) 810302	Admin密碼		
	出版預設信	春用	
			Copyright © 2023 Datavideo all rights reserved.

7. After the reboot is complete, you can see a preview of the live screen captured by the PTC-145 camera in the "Video" option on the Facebook Live page.

G Search Facebook		r 26 c ⁰ 8 c ⁰	۲	۲
Create Live Video	? 2/3	Select a video source Add live video details Bare to story Tor live data will as the added to your story.		
Complete post details		Visition Despring Softners		
Bast - Start Profile		Streaming Software Setup Copy and patte the stream key into your streaming software.		
Chasse where to past Post on timeline # Only me	•	PB-0200902200190220 - 6-Alson/gA-MANAMINIKAN Corp. Tou smarship: confu only and all factores Corp. and at the presence the localized pro-theory to 5 facus to go ine		
Stream Setup		Advanced Settings		
Dashboard		Video		
 Interactivity 	×			
Back Di Ge Live		Expand Video		

8. Please set the relevant settings, including "Choose where to post" and "Select audience", and then click the "Start Live Streaming" button to live stream the footage captured by the PTC-145 immediately.

Choo	se where to post	_		Select audience	×
Post	on timeline	•		Public Anyone on or off Facebook	0
Ø	Post on timeline	~	*	Friends Your friends on Facebook	۲
			-	Friends except Don't show to some friends	>
1	Post to Page you manage	>	1	Specific friends Only show to some friends	>
8	Post in group	>	a	Only me	0
			٥	Custom Include and exclude friends and lists	>
			*	Close Friends Your custom list	0

Q: Seerch Facebook	r 20 c ⁰ 7 c	• E •	٠
Create Live Video ? 2/3 Convect video source Comparte port details	Select a video server @ Add the video detahl		
tester	Control by General Selang Control Seland S		
Dashourd Dashourd Stemp v interactivity	Vde		

9. You will see the screen of the live stream that has been successfully carried out. If you want to end the live stream, please click the "End Live Video" button to end the live stream immediately.

Q Search Facebook		ଜ	28			6		ш	•	•
Live Dashboard	? 0									
Now that you're live you can see time insights or add tools to incre distribution or engagement.	your real-	Video			*	Comments	0 •			
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a Friends				La Ran	20					
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		0 feastern	O O Drawn			Polls				
		O O Cres				Create a poll				
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00:00:14		1000		L.		Options				
End Live Video		(11-11-	the second s	Video	bps Ditrate	Option	0 1			
		A	· · · ·	1		(Particular)				

How to do the SRT Streaming by the vMix Software

How to install the Vmix Software

Please install the vMix software according to following steps. 1. At first, please go to vMix official website and then download the vMix 60day free-trial. This section will use vMix free-trial as an example to demonstrate the operation steps. Please click the "DOWNLOAD FREE TRIAL" button for downloading.



- 2. Please double-click the vmix23.exe ^{wmix23}.
- 3. Please click the "Next" button.



4. Please click "I accept the agreement" and then click the "Next" button.



5. Please click the "Next" button.

Setup - vMix	_		\times
Select Destination Location Where should vMix be installed?			Ð
Setup will install vMix into the following folder.			
To continue, click Next. If you would like to select a different	folder, cli	ck Browse.	
C:\Program Files (x86)\vMix		Browse.	
At least 841.3 MB of free disk space is required.			
< Back	Next >		Cancel

6. Please click the "Next" button.

Setup - vMix	—		\times
Select Start Menu Folder Where should Setup place the program's shortcuts?			Ð
Setup will create the program's shortcuts in the follow	ving Start I	Menu folde	r.
To continue, click Next. If you would like to select a different for	older, click	Browse.	
Mix		Browse	
		-	
< Back	Next >	Ca	ncel

7. Please click the "Next" button.

Setup - vMix	_		×
Select Additional Tasks Which additional tasks should be performed?			
Select the additional tasks you would like Setup to perform w click Next.	hile installin	ıg vMix, th	en
Additional icons:			
✓ Create a desktop icon			
< Back	Next >	Ca	ncel

8. Please click the "Install" button.

Setup - vMix	_		×
Select Additional Tasks Which additional tasks should be performed?			Ð
Select the additional tasks you would like Setup to perform whil click Next.	le installin	g vMix, tł	ien
Additional icons:			
Create a desktop icon			
< Back	vext >	Ca	ancel

9. The installation will be started.

Setup - vMix	_		×
Installing Please wait while Setup installs vMix on your computer.			ð
Extracting files C:\Program Files (x86)\vMix\GT\Textures\roof\Gray.jpg			
		C	ancel

10. Please click the "Finish" button to finish the installation.



11. Please select "Register for a fully functional 60 Day Trial" to fill out your Email Address. After that, please click the "OK" button to open the vMix software.

vMix Registration	
vMix	Registration Internet access required to complete Registration
◯ I have a Registration	ı Key
Key	
Visit	http://www.vmix.com/ to purchase a Registration Key
<u>Visit</u>	https://register.vmix.com/ to register for the FREE Basic Edition
Register for a fully f	functional 60 Day Trial
Email Address	kevinwang@datavideo.com
	OK Cancel

12. Please select the initial resolution and frame rate that you want to use and then please click the "OK" button.

vMix Configuration	
vMix	
Select a starting configuration for vMix below. These settings c customised later by clicking the Settings button.	an be
HD 1080 29.97p (1920x1080, 29.97 fp	s) v
	ок

13. After opening vMix, the software interface is shown as following diagram.



SRT Streaming with PTC-145 Camera and vMix Software

SRT streaming is divided into Caller Mode and Listener Mode, the following steps will help you understand how to operate.

Note: If vMix is set to Caller mode, then PTC-145 should be set to Listener mode. If vMix is set to Listener mode, the PTC-145 needs to be set to Caller mode.

Setting PTC-145 to Listener Mode

Open the PTC-145 Web UI interface, click the "Stream" option \rightarrow select the "SRT" option from the "Protocols" drop-down menu. The "SRT Port" option is set to 9000 by default, and the "SRT Password" and "SRT Encryption" in this example are set to 888888888888 and AES-256 respectively. Click the "Apply" button when you are done with the setup.

	Stream						Vites Cuput: 1000m50 Exglish 🗸	Logo
datarridso	MAIN STREAM			SUB STREAM		I		
	Main Stream			Sub Stream				
🖬 Camera Setup	Encoding Format	8.264 ×		Encoding Format	H.264			
 Video Output 	Protocols	sri 🗸 🗸]	Protocols	RTSP			
(•) Stram	Bitrate	4096		Bitrate	1024			
	Resolution	1920*1080 ~		Resolution	720*480			
	Bitrate Control	CBR. v		Bitrate Control	CBR			
	Frame Rate	30 ~		Frame Rate	25			
All Auto tracking	I Key Frame Interval	25		I Key Frame Interval	25			
	Stream Name	Main:1		Stream Name	Sub-2			
	SRT Mode	Linteper		RTSP Auth				
	SRT Address	192 148 100 1		RTSP Port	334			
	SRT Port	9000						
	SRT Exception	AFR.256						
	SPT Parrword	*****						
	SPT Transmission	175						
	SRT transmission	120						
	SICI StreamId	** 9*****						
		_						
	Desaut Apply				Copyright © 2023 Datasis	ideo all rights reserved.		

Please click "System" > "Reboot" button to reboot the PTC-145 to make the new settings take effect.

	System		a Mah <mark>ette</mark> a Gub ette - Webs Dagus HBBRHD English	Logest
data video	Device Name	PTC-145		
	Language	中文(著) ~		
	Tally Mode	Red Green 🗸		
	Firmware			
	Version	SOCv.2.1.9-ARMv2.1.3		
	File Path		Browse Update	
③ System	Account and Password			
Auto Tracking	Admin Password			
				Ľ
	Factory Default	Apply	Ret	cot

On your computer, after opening the Start Menu, click vMix(x64) to open the Vmix software and you will see the vMix main interface as shown below.



Click "Add Input" and select "More" from the pull-up menu.



Click the "Stream/SRT" option in the "Input Select" interface that opens, select SRT Caller in the Stream Type drop-down menu, and then enter the following field information:

• Enter the IP address of the connected device in the "Hostname" field, for example, 192.168.5.163 for PTC-145.

- The "Port" field is entered by the SRT port number 9000 in "Streaming->SRT Port" in the PTC-145 web UI.
- Enter the password 8888888888 set by the PTC-145 Web UI in the "Passphrase" field.
- The "Key Length" drop-down menu can be unselected.
- Finally, click the "OK" button.

In	put Select						×
	Video	Stream Type	SRT (Caller)			\sim	
0	DVD	Hostname	192.168.5.163	Port	9000		
Ē		Latency (ms)	200	Passphrase	888888888	Use Hardw	are Decoder
	Camera	Decoder Delay (ms)	0	Key Length	32	~	
	NDI / Desktop Capture	Stream ID					
"A"	Stream / SRT						
R	Instant Replay						
	Image Sequence / Stinger						
Û	Video Delay						
	Image						
	Phatas						
曱	PowerPoint						
	Colour						
Ŧ	Audio						
ШĴ	Audio Input						
Т	Title / XAML						
	Virtual Set						
	Web Browser						Clear
	Video Cal						
					Number 1 🗸	ок	Cancel

The images captured by the PTC-145 should be successfully streamed to the vMix software in SRT Listener mode.



Setting the PTC-145 to Caller Mode

Go to the PTC-145 Web UI interface, click the "Stream" option, and then enter the information in the following fields:

- Click on the "Protocols" drop-down menu and select SRT.
- The "SRT Address" field enters the IP address of the device on which the Vmix software is installed. In this example, it is a laptop computer and its IP address is 192.168.5.50.
- The "SRT Port" is the default value of 9000 for PTC-145.

	Stream							• Main 🛲	a Main attar a Sub attar	a Main Total a Sub Total View Disput 1980	a Main mane a Sub mane Mees Course 1000mms English	a Main mene a Dab atter Veres Deput Moores English 🗸	a Main mane a Gub mane Video Desor. 1000mm Digital	a Main mining a Sub mining Video Deput Massread English 🤍	a Nain 🛲 a Dai 💷 Video Overd: 1000798 🚺 Egilia 🔍 🚺	a Main 🛲 a Gub 🛲 Video Guave. 1000ma 🚺 Euglish 🛹 📘
data vidso	MAIN STREAM		SUB STREAM			1										
	Main Stream	040	Sub Stream	T SEE												
M Camera Setup	Encoding Format	H.264	Encoding Format	H.264												
 Video Output 	Protocols	SRT	Protocols	RTSP												
((•)) Stream	Bitrate	4096	Bitrate	1024												
	Resolution	1920*1080	Resolution	720*480												
	Bitrate Control	CBR	Bitrate Control	CBR												
All Auto Tracking	Frame Rate	30	Frame Rate	25												
	I Key Frame Interval	25	I Key Frame Interval	25												
	Stream Name	Main:1	Stream Name	8vh:2												
	SRT Mode	Caller	RTSP Auth	COFF												
	SRT Address	192.168.5.50	RTSP Port	554												
	SRT Port	9000														
	SRT Encryption	AES-256														
	SRT Password	\$\$\$\$\$\$\$\$\$														
	SRT Transmission	120														
	SRT Streamid	#1:smadesis														
	Default Appl	ly -														
				Consider & 2020 Dates	1000		white accounted	 day warmed	dis surgest	data annual	data ana and			data second	data second	data second

Click the "Apply" button to save the SRT Caller settings.

Click the "Reboot" button in the "System" option to reboot the PTC-145.

	System		a Main 🚮 🖉 a Gult 🚮 👘 Video Coque Hollman 🛛 English 🧹 🗾	Logout
data vidso	Device Name	PTC-145		
Mi Camera Setup	Language	中文(編) ~		
Video Output	Tally Mode	Red Green 🗸		
((*)) Stream	Firmware			
Network	Version	SOCv.2.1.9-ARMv2.1.3		
†i† Andio	File Path		Browse Update	
System	Account and Password			_
A) Auto Tracking	Admin Password			
	Factory Default	Apply	Rebo	
				_

On your computer, after opening the Start Menu, click vMix(x64) to open the Vmix software and you will see the vMix main interface as shown below.



Click "Add Input" and select "More" from the pull-up menu.



Click the "Stream/SRT" option in the open Input Selection interface, select SRT Listener in the Stream Type drop-down menu, and then enter the following field information:

- Enter 1935 into the "Port" field (the "Host Port" value of the PTC-145 Web UI).
- Enter 88888888888 in the "Passphrase" field to match the SRT password set in the PTC-145 Web UI.

• The "Key Length" drop-down menu selects a key length of 32, which is consistent with the "SRT Key Length" setting in the PTC-145 Web UI.

Finally, press the "OK" button.

ln	put Select						×
$\mathbf{\Sigma}$	Video	Stream Type	SRT (Listener)			\sim	
0	DVD			Port	1935		
Ē		Latency (ms)	200	Passphrase	888888888	Use Har	dware Decoder
	Camera	Decoder Delay (ms)	0	Key Length	32	~	
	NDI / Desktop Capture	Stream ID					
"A"	Stream / SRT						
R	Instant Replay						
	Image Sequence / Stinger						
Û	Video Delay						
Σ	Image						
	Photos						
豆	PowerPoint						
	Colour						
Ш.	Audio						
E)	Audio Input						
т	Title / XAML						
	Virtual Set						
	Web Browser				_		Clear
R	Video Call				n i Barra	01/	
					Number 1 🗸	ок	Cancel

The images captured by the PTC-145 should be successfully streamed to the vMix software in SRT Caller mode.



Multicast

Multicast allows you to view camcorder images remotely through a specific video player, such as VLC media player.

You can stream camera images via Multicast (multicast setting). Perform the following steps to stream TS on VLC media player.

 On the "Stream" page of the PTC-145 Web UI, select "Multicast" from the "Protocol" drop-down menu.

	Stream					a Main RTSP a Sub RTSP	Video Culput: 10000703 Englis	1 - V 💶	ogent
data video	MAIN STREAM		SUB STREAM						
	Main Stream		Sub Stream						
🖬 Camera Setup	Encoding Format	H.264 ~	Encoding Format	H.264					
Video Output	Protocols	Multicast ~	Protocols	Multicast					
((•)) Stream	Bitrate	\$192	Bitrate	1024					
Network	Resolution	13007730	Boralution	6107190					
†‡† Audio	Nesonaton		Resolution	040 420					
System	Bitrate Control	CBR	Bitrate Control	CBR					
Auto Tracking	Frame Rate	25 v	Frame Rate	25					
	I Key Frame Interval	25	I Key Frame Interval	25					
	Stream Name	Main:1	Stream Name	Sub:2					
	Address	224.1.2.3	Address	224.1.2.3					
	Port	4000	Port	4002					
	Default Appl								
			Copyrigh	at © 2023 Datavideo all rights reserve	d.				

- Turn on VLC, click "Media"→"Open Network Stream" and enter udp://224.1.2.3:4000 to view the main streaming image and udp://224.1.2.3:4002 to view the sub-streaming image.
- 3. Click the "Play" button to start your video stream.

9.4 Network

The "Network Settings" option allows you to set the PTC-145's networkrelated settings including "DHCP ON/OFF" switch, "IP Address", "Subnet Mask", "Default Gateway", "Primary DNS", "Secondary DNS", etc. In addition, the "Network Settings" option also allows you to set the NTP-related settings including "Type", "Time Zone", and "NTP Server". When you are done with the settings, click the "Apply" button to complete the setup. "The main interface of the Network Settings option is shown below.

	Network						n Main RTSP n Sub RTS	Video Output: 100	rea English	Loged
datavideo (DHCP									
	2 IP Address	192.168.50.128								
Camera Secup	3 Subnet Mask	255,255,255,0								
	Default Gateway	192.168.50.1								
((*)) Stream	Primary DNS	1111								
tit Andia	Secondary DNS	8844								
	7 MAC Address	E4:77:D4:A9:16:70								
Auto Tracking										
1	NTP Settings									
	8 Type	Automatically from the internet								
	9 Time Zone	(OMT=08.00)Beijing, Hongkong, Singapo	cre, Taipei 🛛 👻							
	10 Ntp Server	time.google.com								
	Reset IP	Apply T								
				Copy	right © 2023 Datavide	eo all rights reserved.				

For the functions related to "Network Settings", please refer to the following table.

	Function Ke	Descriptions	
1.	DHCP		DHCP ON/OFF Switch You can press this DHCP ON/OFF switch to set your camera to DHCP mode or Fixed IP mode. If it is set to "ON", it is DHCP mode, if it is set to
			"OFF", it is Fixed IP mode.

	Function	n Keys	Descriptions
2	IP Address	192.168.30.128	IP Address If your camera is set to "DHCP ON", this IP address will be automatically assigned by the router. If your camera is set to "DHCP OFF", then you need to manually fill in the fixed IP address you want. The PTC-145 is factory defaulted to DHCP mode.
3	Subnet Mask	255 255 255 0	Subnet Mask If your camera is set to Fixed IP Mode, this field allows you to manually enter the Subnet Mask value.
4	Default Gateway	192.168.59.1	Default Gateway If your camera is set to Fixed IP Mode, this field allows you to manually enter the Gateway value.
5	Primary DNS	8888	Primary DNS This field allows you to manually enter the "Primary DNS" value.
6	Secondary DNS	8844	Secondary DNS This field allows you to manually enter the "Other DNS Server" value.

	Function Keys	Descriptions
7	MAC Address E4:77:D4:A9:16:7C	MAC Address This is the MAC Address and cannot be changed.
8	Type Astronatically from the activent: v	Type This is the NTP (Network Time Protocol) setting type, and the default value is "Synchronize automatically from the network".
9	Time Zone (OMT-08.00)Brijing, Henglong, Singapore, Tapei 🧹	Time zone You can select your desired time zone from the drop-down menu.
10	NIp Server time groups com	NTP Server This option provides you with a Google NTP server for time correction purposes.
11	Roset IP	Reset IP Pressing this button resets the relevant parameters in the Network Settings option to the factory default settings.
12	Apply	Apply After you have set the relevant settings, click the "Apply" button to apply the selected settings.

9.5 Audio

The "Audio" option allows you to set the PTC-145's settings including the "Audio Enable ON/OFF" switch, "Audio Input", "Encode Type", "Sample Rate", "Bit Rate", "Soundtrack" and "ADTS" options. The main interface of "Audio" option is shown below.

	Audio		a Main a	atter = Sub (HTSP)	Video Output: 10000900 English	۷
datavidee	Enable					
	Audio Input	Lise In 🗸				
Camera seup	Encode Type	AAC ~				
	Sample Rate	48000 ~				
	Bitrate	128Kbps ~				
tit Auto	Soundtrack	Mono v				
(a) System	ADTS Option					
	8 Default	Apply				
			Committe @ 2023 Datamides all mithes reserved.			

For "Audio" related functions, see the table below.

	Functio	on Keys	Descriptions
1.	Enable		Audio Enable ON/OFF Switch This option allows the user to turn the sound input on or off.
2	Audio Input	Line In v	Audio Input This is the external audio input method, and the default value is Line in.

	Function Keys	Descriptions
3	Encode Type AAC ~	Encode Type This is the encoding format of the input sound, which is AAC format by default.
4	Sample Rate 48000 ~	Sample Rate This drop-down menu allows the user to select the desired sample rate for the input audio. The default value is 48K.
5	Bitrate 125Kbps v	Bit Rate This drop-down menu allows the user to select the bit rate.
6	Soundtrack Mono y	Soundtrack This option allows you to select "Mono" or "Stereo".
7	ADTS Option	ADTS Option This ADTS ON/OFF switch allows the user to turn the ADTS function on or off. This feature is currently not available.

	Function Keys	Descriptions
8	Default	Default Pressing this button restores the relevant parameter in the "Audio" option to the factory default setting.
9	Apply	Apply After you have set the relevant settings, click the "Apply" button to apply the selected settings.

9.6 System

"The "System" option allows you to set the PTC-145's "Camera Name", "Language", "Tally Mode", and "Admin Password". In addition, you can also see the current firmware version from the "Version" option. You can also click the "Browse" button to select the latest downloaded firmware file from your computer, and click the "Update" button to perform a firmware update. The main interface of the "System" option is shown below.

	System			a Main RTSP a Sub RTSP	Video Culput. 1000700	ia v	Logost
datavideo (Device Name	PTC-145					
🖬 Camera Setup	2 Language	中文(第) ~					
	Tally Mode	Red Green 👻					
	Firmware						
	Version	SOCv.2.1.9-ARMv2.1.3					
tit Andio	5 File Path		Browse Update				
(i) System	Account and Password						
Aji Auto Tracking	Admin Password						
	-						
	Factory Default	Apply 8				9 R	eboot

	Function Keys	Descriptions
1.	Device Name PTC-145	Device Name You can enter your desired camera name in this field.
2	Language 中文(第) マ Tally Modo Firmware 中文(第) 年文(第)	Language You can use this drop-down menu to select the display language of the Web UI.
3	Taily Mode Red Green Firmware Part Comm Version Red File Path Orem	Tally Mode You can set your camera's Tally Mode from this drop- down menu, which has three modes: "Red/Green", "Red" and "Green". Selecting "Off" will disable the Tally Mode function.
4	Version SOCv.2.1.9-ARMv2.1.3	Version This option displays the current firmware version.
5	File Path Update	This option allows you to select the latest firmware file for firmware update. Please click the "Browse" button Browse to select the latest downloaded firmware file from your computer, and

Please refer to the following table for "System" related functions.

	Function Keys	Descriptions
		then click the "Update"
		button Update to perform
		the firmware update.
6	Admin Password ·····	Admin Password
		This option allows you to set
		your Admin password, which
		is the password you need to
		log in to the PTC-145 Web UI.
		The factory default password
		is "admin". When you have
		finished setting the
		password, press the "Apply"
		button to take effect.
7	Factory Default	Factory Default
		Pressing this button restores
		the relevant parameters in
		the "System" option to the
		factory default settings.
8	Apply	Apply
0		After you have set the
		relevant settings, click the
		"Apply" button to apply the
		selected settings.
9	Reboot	Reboot
_		Press this button to reboot
		your PTC-145 camera.

9.7 Auto Tracking

The "Auto Tracking" option allows you to set the PTC-145's "Auto Track Mode ON/OFF", "Auto Track Mode" selection, "Auto Zoom ON/OFF" switch, "Auto Tilt ON/OFF" switch, "Detect Indicator", "Tracking Start Position", "Tracking Tip", "Figure Size", "Select Object", "Placement", "AT Speed", etc. The main interface of the "Auto Track" option is shown below.



Please refer to the following table for "Auto Track" related functions.

	Function	n Keys	Descriptions
1.	Tracking		Auto Track ON/OFF Switch You can use this switch to turn the camera's auto-tracking function on or off.
2	Track Mode	Presenter	Track Mode This is the auto-tracking mode, which is defaulted to Presenter mode.

	Function Keys	Descriptions
3	Auto Zoom	Auto Zoom ON/OFF Switch This is the Auto Zoom ON/OFF switch, which allows you to turn the camera's auto zoom function on or off.
4	Auto Tilt	Auto Tilt ON/OFF Switch This is the Auto Tilt ON/OFF switch that allows you to turn the camera's auto pan/tilt function on and off.
5	Detected Indicator Default v Tracking Start Position G OSD Reminder Condition	Detected Indicator This option allows you to set whether or not to turn on the detected indicator when the camera detects a person being photographed when the camera's auto-tracking function is turned on. There are three modes to choose from: Default, On and Off. The Default value of the detected indicator is On.
6	Tracking Statt Position Prest 1 U OSD Reminder Current Livestion Prest 1	Tracking Start Position This option allows you to set the start position of the camera's auto-tracking. There are Current Location and Preset 1 to choose from.
7	OSD Reminder	OSD Reminder This is the OSD Reminder ON/OFF switch. When set to "ON", a prompt will appear on the screen of the monitor connected to the camera when you turn on the auto tracking

	Function Keys	Descriptions
		function. If it is set to "OFF",
		the prompt is turned off.
8	Figure Size:	Figure Size
	i i S	The Figure Size option provides
	Full Half Body Close Up Customized	four preset settings, including
	Size Save	"Full Body", "Half Body",
	Figure Size Default: Back to default	"Close-up" and "Customized",
		which allow users to adjust the
		angle of the people that the
		camera wants to capture when
		in auto-tracking mode.
		You can also use the "Size"
		slider to adjust the auto-
		tracking camera angle you
		want, and then press the
		"Save" button after adjustment
		to complete the setting.
		If you press the "Back to
		Default" button, you can
		restore the default settings of
		this "Figure Size" related
0	Select Subject:	option.
9	Select	Select Subject
		tracking function is turned on
		vou cap uso the left or right
		you can use the left of fight
		Subject" option to select the
		character you want to track
		Once you have selected the
		character you want to track
		press the "Select" button again
		to complete the selection.

	Function Keys	Descriptions
10	Placement: Left Center Right	PlacementThis option allows you to setthe position of the person youwant to follow to be on theleft, center, or right side of thescreen when the cameracaptures the person you wantto follow. There are threeoptions for you to choosefrom: "Left", "Center" and"Right". Click the "Left","Center" or "Right" buttondirectly to complete thesetting.
11	AT Speed: Fast Mid Slow	AT Speed This option allows you to set your desired auto-tracking speed. There are three options for you to choose from: "Fast", "Mid", and "Slow".
12	Default	Default Click this button to restore all the relevant settings of the Auto Track interface to the factory default settings.
10. Remote Control Port Pin Definitions

In addition to operating the PTC-145 remotely over Ethernet, you can also operate the PTC-145 by connecting it to a computer or any external controller via an RS-232 or RS-422/RS-485 remote port. You can connect an external RS-232 or RS-422/RS-485 controller to the PTC-145 using an Ethernet cable and make your own connection cable according to the pinout definitions provided in this section.





The following are the pin definitions for the RS-232 control port.

No.	RJ-45 connector	Camera RS-232 Control Port
1	White/Orange	GND
2	Orange	NC
3	White/Green	NC
4	Blue	Transmit IN
5	White/Blue	NC
6	Green	Receive IN
7	White/Brown	Transmit OUT
8	Brown	Receive OUT

No.	RJ-45 connector	Camera RS-422/485 Control Port
1	White/Orange	GND
2	Orange	NC
3	White/Green	RX-
4	Blue	TX-
5	White/Blue	TX+
6	Green	RX+
7	White/Brown	NC
8	Brown	NC

The following are the pin definitions for the RS-422/RS-485 control port.

How to connect the PTC-145 to a 2-wire RS-485 interface

No.	RJ-45 connector	Camera RS-485 Control Port
1	White/Orange	GND
2	Orange	NC
3	White/Green	(RX-/TX-)
4	Blue	NC
5	White/Blue	NC
6	Green	(RX+/TX+)
7	White/Brown	NC
8	Brown	NC

11. Firmware Update

Firmware Update Procedure

PTC-145

This file provides procedures for updating the PTC-145 HD Tracking PTZ Camera.

Updating the PTC-145 Camera Firmware (ARM V2.1.3 2024-01-05/ SOC V2.1.9 2024-01-07/ AF Version V1.0.4 2023-10-27)

What to Prepare Before Firmware Upgrade

• The latest PTC-145 firmware update zip file x1.

The latest firmware zip file can be downloaded from the PTC-145 product page on Datavideo's official website at https://www.datavideo.com/product/PTC-145 . After unzipping the downloaded firmware zip file, you can see two firmware files.

Camera & AF firmware files: D-PTC145_NDI_SY20X_V2.1.9_R_20240107.mrg

- MCU firmware: PTC145_ARM_V2.1.3_20240105.mrg
- PTC-145 Camerax 1
- 12V Power Adaptor x 1
- Laptop or PC x 1
- Ethernet cablex 1

This document describes how to perform a firmware update on a Windows computer.

System Connection Diagram



Check Firmware Version	Page 115
Before Updating the Firmware	Page 118
Updating the MCU Firmware	Page 121
Updating camera and AF firmware	Page 123

11.1Check Firmware Version

1. Connect the RJ-45 Ethernet cable from the RJ-45 Ethernet interface of your PC or laptop to one of the LAN interfaces of the router.

2. Connect the RJ-45 Ethernet cable from the "LAN" interface on the rear panel of the PTC-145 to the other LAN interface of the router.

3. Connect the DC 12V power adapter to the PTC-145 camera.

4. The factory default setting of the PTC-145 is DHCP mode. Make sure your laptop or PC is set to DHCP mode.

Internet F	Protocol Version 4 (TCP/IPv	4) Prope	ertie	s			×
General	Alternate Configuration						
You car this cap for the	get IP settings assigned aut ability. Otherwise, you need appropriate IP settings.	omatical to ask y	ly if y our n	our n etwor	etwork su k adminis	ipports trator	
() Ot	otain an IP address automatic	ally					
OUs	e the following IP address: –						
IP ac	ldress:]	
Subr	et mask:]	
Defa	ult gateway:]	
() Ot	tain DNS server address aut	omatical	y				
OUs	e the following DNS server a	ddresses					
Prefe	erred DNS server:]	
Alter	nate DNS server:]	
V	alidate settings upon exit				Advar	nced]
				OK		Cancel	

5. Please download the "Datavideo Network Configuration Tool" from the PTC-145 product page on Datavideo's official website https://www.datavideo.com/product/PTC-145

6. Double-click the DVIP Network Configuration Tool to select the Ethernet card, and then click "OK".



7 You can see the DHCP IP address of the PTC-145. In this example, it is "192.168.50.73".



8. After obtaining the IP address of the PTC-145, enter the IP address in the browser address bar. After that, you will see the login page of PTC-145 Web UI. Please enter the default username and password for logging in to the Web UI.

Default User Name: admin

Default Password: admin



9. Click the "**System**" option to open the Firmware Update page. You will then see the current firmware version of the PTC-145 camera.

	System		a Main 6200 a Sink 4250 Veen Dapat Hotelets English 🗸 Logast
data video	Device Name	PTC-145	
adii Cemera Setun	Language	中文(第)	
	Tally Mode	Red Green	
	Firmware		
	Version	SOCv.2.1.9-ARMv2.1.3	
	File Path		Browse Update
③ System	Account and Password		
Aj Auto Tracking	Admin Password		
	Factory Default	Apply	Rebot
			Coverado & 2011 Potenidos all indos energad

11.2 Before Updating the Firmware

1. Connect the RJ-45 Ethernet cable from the RJ-45 Ethernet interface of your PC or laptop to one of the LAN interfaces of the router.

2. Connect the RJ-45 Ethernet cable from the LAN connector on the rear panel of your PTC-145 to another LAN interface on the router.

3. Connect the DC 12V power adapter to the PTC-145 camera.

4. The factory default setting of the PTC-145 is DHCP mode. Make sure your laptop or PC is set to DHCP mode.

ernet	rotocol Versio	n 4 (ICP/I	Pv4) Pi	ropertie	S			×
eneral	Alternate Conf	iguration						
You car this cap for the	n get IP settings Jability. Otherwis appropriate IP s	assigned a e, you nee ettings.	automa ed to a	tically if sk your r	your n networ	etwork k admir	supports histrator	
0	btain an IP addre	ess automa	atically					
	e the following I	P address:						
IP ac	ddress:					1.		
Subr	net mask:							
Defa	ult gateway:			1.1				
•	btain DNS server	address a	utoma	tically				
OUs	e the following [ONS server	addre	sses:				
Pref	erred DNS serve	n.						
Alter	nate DNS server	a -						
V	alidate settings (upon exit				Adv	anced	

5. Please download the "Datavideo Network Configuration Tool" from the PTC-145 product page on Datavideo's official website https://www.datavideo.com/product/PTC-145

6. Double-click the DVIP Network Configuration Tool to select the Ethernet card, and then click OK.



7 You can see the DHCP IP address of the PTC-145. In this example, it is "192.168.50.73".



8. After obtaining the IP address of the PTC-145, enter the IP address in the browser address bar. After that, you will see the login page of PTC-145 Web UI. Please enter the default username and password for logging into the Web UI.

Default User Name: admin

Default Password: admin

		Comparison Comparison Comparison Comparison	Currence → anim → anim → ··· → ··· Login Equità K+ K+	
datavideo	Camera Setap BODIL : PIC HINKI	CAMERA CONTROL	• The BOR • The BOR Vieldor dame	bgið - Lippel
Sharburga Sharburga Sharburga Sharburga Sharburga Sharburga Sharburga Anarburga Anarburga	And street Const. Const. Cons	Image: Section of the section of t	4 10 20	

11.3 Updating the MCU Firmware

1. Please make sure that you have unzipped the downloaded firmware. Then, press **System**->**Browse** to select the MCU firmware file "PTC145_ARM_V2.1.3_20240105.mrg".

	System				Main RTMP = Sub RTMP	Video Culput: 1000F59 English	×	Logost
datavideo	Device Name	PTC-145NDI						
🖬 Camera Setup	Language	English						
Video Output	Tally Mode	Red Green						
((+)) Stream	Firmware							
Network	Version	SOCv.2.1.9-ARMv2.1.3						
†‡† Audio	File Path		Browse	Jpdate				
💿 System	Account and Password							
A Auto Tracking	Admin Password							
	Factory Default	Apply					Reb	oot
				Copyright © 2023 Datavideo all rights reserv	ed.			





2. Please press the "Update" button, then the firmware update process of MCU will start automatically.

	System			# Main RIME # Sub RIME	View Curpet: 1000958 English 🗸 Logout
data video	Device Name	PTC-145NDI			
🗯 Camera Setup	Language	English v			
Video Output	Tally Mode	Red Green v			
((*)) Stream	Firmware				
Network	Version	SOCv.2.1.9-ARMv2.1.3			
tit Audio	File Path	D-PTC145_NDI_SY28X_V2.1.9_R_2824011	Browse Update		
System	Account and Password		Tps		
Al Auto Tracking	Admin Password	••••	is upgrading, please wait. After the success of the upgrade, please login againt		
	Factory Default	Apply			Reboot

3. After the MCU firmware is updated successfully, the PTC-145 will reboot automatically. After the reboot is completed, please press the "Yes" button and log in to the PTC-145 Web UI again, then the whole MCU firmware update process is completed successfully.

	System		# MAN (HIME) # 5	ub Rine Video Output: 1000F56 English 🗸 Lopout
datavideo	Device Name	PTC-145NDI		
🖬 Camera Setup	Language	English ~		
▶ Video Output	Tally Mode	Red Green v		
((*)) Stream	Firmware			
Network	Version	SOCv.2.1.9-ARMv2.1.3		
tit Audio	File Path	D-PTC145_NDI_SY20X_V2.1.9_R_2024010	Browse Update	
System	Account and Password		Tes 🖸	
Alj Auto Tracking	Admin Password		Upgrade success Pheater login after device has reloaded	
			Ves	
	Factory Default	Apply		Reboot
			Copyright @ 2023 Datavideo all rights reserved.	

11.4 Updating camera and AF firmware

1. Make sure you have unzipped the downloaded firmware. Then, please click System->Browse to select the Camera and AF firmware files. "D-PTC145_NDI_SY20X_V2.1.9_R_20240107.mrg".

	System			• Main RTMP = Sub RTMP	Video Output: 1000P50 English	×	Logout
data video	Device Name	PTC-145NDI					
Camera Setuo	Language	English					
Video Output	Tally Mode	Red Green					
((*)) Stream	Firmware						
Network	Version	SOCv.2.1.9-ARMv2.1.3					
†ii† Audio	File Path		Browse Update				
💿 System	Account and Password						
Alj Auto Tracking	Admin Password						
	Factory Default	Apply				Re	eboot

				III •	III 🕜
• N	Name	^	Date modified	Туре	Size
	D-PTC145_NE	DI_SY20X_V2.1.9_R_2024	4010 1/9/2024 9:15 AM	MRG File	29,313
	TC-145 Rele	ase Note.docx	1/19/2024 1:29 PN	f Microsoft Word 文.	. 25
	PTC145_ARM	_V2.1.3_20240105.mrg	1/9/2024 9:15 AM	MRG File	139
~ <					>
ame:	D-PTC145_NDI_S	Y20X_V2.1.9_R_202401	07.mrg ~	All Files (*.*)	~
				Open C	ancel
					đ
		System			
da	oebiv at a	Design Name			
		Device Name	PTC-145NDI		
-					
		Language	English ~		
		Language Tally Mode	English ~ Red Green ~		
(+)		Language Tally Mode Firmware	English ~ Red Green ~		
(.)		Language Taily Mode Firmware Version	English ~ Red Grom ~ SOCV.2.1.9-ARMv2.1.3		
(•) (•)	Camera Setup Video Output Stream Network Atalio	Language Taily Mode Firmware Version File Path	English Red Green SOCV.2.1.9-ARMV2.1.3 p-PTCH8_MOL_9728C_V2.15_R_222441	Browne Update	
	Camera Setup Video Output Stream Network Audio System	Language Tally Mode Firmware Version File Path Account and Password	English ~ Red Green ~ SOCv.2.1.9-ARIM/2.1.3 oPTC165_NO[5Y25K_V2.19_R_232861	Browne Updat	
	Comera Setup Video Output Stream Network Audio System Auto Tracking	Language Taily Mode Fermiare Version File Path Account and Password Admin Password	English v Rad Grow v SOCV2.1.9-ARIM/2.1.3 o=rtc16_N0_51205(V2.11,B_N20241) mmx	Browse Update	•
	Cumera Setup Video Output Stream Network Andio System Auto Tracking	Language Taily Mode Fismware Version File Path Account and Password Admin Password	English Common C	Browse Update	
	Cumera Setup Video Output Stream Network Audio System Audio Tracking	Language Tatly Mode Fitzmeare Version File Path Account and Password Admin Password	English California Californi	Browse Updat	
	Cumers Setup Video Output Stream Autio Autio Spatem Auto Tracking	Language Taily Mode Firmsare Version File Path Account and Password Admin Password	Exploit Exploi	Browse Update	•
	Cumers Setup Video Output Stream Autio Autio Spatem Auto Tracking	Language Taily Mode Fitmware Version Fite Path Account and Password Admin Password	English English Edd Gown SOCV-2.1.9-ARBM/2.1.3 preticite_NDL_SYSB_VV115_R_334444	Browne Updat	•
	Contra Setup Video Output Stream Network Audio System Auto Tracking	Language Taily Mode Fitmware Version Fite Path Account and Passeord Admin Passeord	Englob	999	•
	Cuaran Serap Video Output Stream Network Andio Pyton Tracking	Language Tally Mode Fitmane Version File Path Account and Passeord Admin Passeord	Гарак • • RacCom • • 500-213-8499/213 500-213 500-210 500-200 500-200-200 500-200 500-200 500-200 500-200 500-200-200 500-200 500-200 500-20	Boom	•
	Cunters Setting Video Output Stream Network Audio Patrone Audio Tracking	Language Taily Mode Fremare Version File Path Acrossed Password Admin Password	Exploit - Rad Group - SOOV213.44894213 - preton_exploration_softs1.0_state - mm -	Browne Updat	•

2. Press the "Update" button and the firmware update process for the camera and AF autofocus will start automatically.

	System			# Marn 💷 = Sub 💷 Viewe Output: 1666959 Ergint 🗸 Egged
datavideo	Device Name	PTC-145NDI		
🚛 Camera Setup	Language	English		
 Video Output 	Tally Mode	Red/Green ~		
((*)) Stream	Firmware			
Network	Version	SOCv.2.1.9-ARMv2.1.3		
†‡† Audio	File Path	D-PTC145_NDI_SY20X_V2.1.9_R_2024010	Browse Update	
System	Account and Password		Tes	
Al) Auto Tracking	Admin Password		Is upgrading, please wait After the success of the upgrade, please login again!	
	Factory Default	Apply		Reboot
			Constitute D 2023 Datasides all rights reserved	

3. After the camera and AF firmware have been successfully updated, the PTC-145 will automatically reboot. After the reboot is complete, press the "Yes" button and log in to the PTC-145 Web UI again. After that, the entire camera and AF firmware update process will be completed successfully.

	System			· Main RIME · SLO RIME	Video Cutout: 1080F139 English 🗸 🚺	•
data video	Device Name	PTC-145NDI				٦
🗯 Cemera Setup	Language	English ~				
▶ Video Output	Tally Mode	Red Green 🗸				
((+)) Stream	Firmware					- 1
Network	Version	SOCv.2.1.9-ARMv2.1.3				
†#† Audio	File Path	D-PTC145_NDL_SY20X_V2.1.9_R_202401	Browse Update			
System	Account and Password		Tape			- 1
Aj Auto Tracking	Admin Password	••••	evice has relocated.			
	Factory Default	Apply			Reboot	I

12. Frequently-Asked Questions

This section describes the problems you may encounter when using this product. If you have any problems, please refer to the relevant section and try the suggested solutions. If the problem persists, please contact your local dealer or service center.

No.	Problems	Solutions
1.	Important Points for	1. If the camera is not used for a long
	Product Maintenance	time, unplug the 12V DC power plug and
		autor and a subject from the AC
		2 Use a soft cloth or paper towel to
		wine the dust off the camera case
		3 If the lens of the camera has been
		cleaned, wipe it with a soft and dry
		cloth. Wipe the camera with a neutral
		detergent, not a strong, corrosive
		detergent, to avoid damage to the
		camera lens.
2.	No output screen	1. Make sure that the transformer and
		power plug are properly connected and
		that the power LED is on.
		2. Make sure the device can self-test
		properly after powering off and
		restarting.
		3. Make sure the camera is properly
2	Imaga shaka accurs whan	1. Make sure the camera is properly
5.	the camera lens is	installed
	zoomed	2 Make sure there is no vibrating
	2001100.	machinery or objects around the
		camera.
4.	The remote control does	1. Set the CAM ID to 1 and test the
	not work.	remote control to see if it works (the
		CAM ID will be set to 1 when the camera
		is restored to the factory default
		settings).
		2. Make sure that the battery of the
		remote control is properly installed and
		that the battery is sufficiently charged.
		3. Make sure the operating mode of the

		device is normal.
		4. Make sure the OSD menu is closed.
		The remote control can only be used
		when the OSD is closed.
5.	The camera cannot be	1. Please make sure the cables are the
	controlled through the	standard connection cables provided by
	serial port.	our company.
		2. Make sure that the protocols,
		baudrates and addresses of the
		connected devices are the same.
		3. Make sure the cables are connected
		correctly.
		4. Make sure the operating mode of the
		device is normal.
6.	You cannot log in to the	1. Please check your Ethernet
	Web Control Panel.	connection.
		2. Please check your network settings
		such as IP address.
7.	The camera screen	1. If you are using Microsoft Internet
	cannot be viewed on the	Explorer, the preview screen will not be
	preview screen.	displayed normally. If you are using
		Google Chrome, Firefox or Microsoft
		Edge, the preview screen will be
		displayed normally.
		2. If your browser is idle for a long time,
		the preview screen may stop
		responding. Try refreshing the page or
		logging into the Web UI again to resume
		normal playback.

13. Dimensions

Unit: mm











14. Specifications

Product Model	PTC-145
Product Name	HD Tracking PTZ Camera
Video format/Resolution	1080p 60/59.94/50/30/29.97/25 1080i 60/59.94/50 720p 60/59.94/50
Image Sensor	1/2.8 inch high quality HD CMOS sensor
Effective Pixels (approx.)	2.07 Mega pixels
S/N Ratio	≥50dB
Min. Illumination	0.5Lux (F1.8, AGC ON)
Electronic Shutter	1/30s ~ 1/10000s
Zoom Ratio	20x Optical Zoom, 8x Digital Zoom
Gamma Control	N/A
Iris Control	Auto / Manual
Digital Noise Reductions	3D
On-Screen Display (OSD)	English, Traditional Chinese, Simplified Chinese
White Balance	Auto/Indoor/Outdoor/Manual/One Push
AGC / Gain Control	Yes
HDR/WDR	N/A
Mirror / Flip Image	Yes
Focus Mode	Auto / Manual
Panning / Tilting Range	Pan: 340° , Tilt: +90° to -30°
Panning / Tilting	Pan: 0.1~60°/sec
Speed	Tilt: 0.1~30°/sec
Preset	255 Position
Focal Longth	f = 5.05mm (wide) to 91.49 mm (tele)
Focal Length	F1.8(Wide) ~ F2.9(Tele)
Field of View (Horizontal, Wide)	60°

Image Compensation	Backlight Compensation
Video Output	HDMI x 1 3G-SDI x 1 RJ-45 PoE x1
Audio Input	3.5mm Line in
Tally LED	Dual color (Red, Green)
Lens Filter	M52.0 x 0.75 Thread with UV Protection
Control Protocol	Pelco-D, Peldo-P, VISCA, VISCA over IP, DVIP, ONVIF
Remote Control Interface	IR Web GUI RS-422 /RS-232/RS-485 (RJ45)
Video Compression Format	H.264/H.265/MJPEG
Audio Compression Format	AAC, G711
Audio Bitrate	96Kbps, 128Kbps, 256Kbps
HD IP Interface	10/100/1000M (RJ45)
Streaming Protocols	RTSP, RTMP(S), ONVIF, SRT(caller & listener), Multicast
First Stream Supported Resolution	1920x1080 1280x720 1024x576 960x540 640x480 640x360
Second Stream Supported Resolution	720x480 640x480 640x360 320x240
Video Bitrate	32Kbps ~ 50Mbps (Single Stream)
Video Bitrate Mode	VBR, CBR
Encoding Frame rate	50Hz: 1-50fps 60Hz: 1-60fps
POE	IEEE 802.3af

F/W Update	Via Web UI
IR Control	Yes
Camera Control Unit	RMC-180 series/ RMC-300 series/ PTZ View Assist APP
Tripod Mount	1/4-20 UNC
Optional Accessories	WM-1/ WM-10/ WM-11
Color	Dark Blue/White
Dimension (LxWxH)	156 x 184 x 186 mm
Weight	1.6Kg
Operating Temp. Range	0~40 °C
Storage Temp. Range	-10~60 °C
Power	DC 12V

Note

Note

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.

Please visit our website for latest manual update.

www.datavideo.com/tw/product/PTC-145





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