

# **PTC500**

**User Manual** 



#### **IMPORTANT NOTICE**

- PLEASE READ THE INSTRUCTIONS IN THIS MANUAL BEFORE INSTALLING THE PTC500 TRACKING CAMERA.
- DO NOT DISASSEMBLE OR MODIFY THE ITEMS BY YOURSELF. CONTACT THE DEALER FOR HELP WHEN THE ITEMS IS FAILED TO WORK.
- ♦ CONNECT THE DEVICES WITH PROPER CABLES.
- ♦ TO REDUCE RISK OF ELECTRIC SHOCK ONLY USE INDOORS.
- ♦ AVOID INSTALLING AT HUMID ENVIRONMENT.

#### Federal Communication Commission Interference Statement

**FC** 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.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

#### **European Community Compliance Statement (Class A)**

This product is herewith confirmed to comply with the requirements set out in the Council Directives on the Approximation of the laws of the Member States relating to Electromagnetic Compatibility Directive 2014/30/EU.

**Warning** - This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures to correct this interference.

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The mark of Crossed-out wheeled bin indicates that this product must not be disposed of with your other household waste. Instead, you need to dispose of the waste equipment by handing it over to a designated collection point for the recycling of waste electrical and electronic equipment. For more information about where to drop off your waste equipment for recycling, please contact your household waste disposal service or the shop where you purchased the product.

[별표 4]

## 사용자안내문

사	용	자	안	내	문
이 기기는 업무용 환경에서	사용	할	목적으	으로	적합성평가를 받은 기기로서
가정용 환경에서 사용하는	경우	전.	파간석	길의	우려가 있습니다.

※ 사용자 안내문은 "업무용 방송통신기자재"에만 적용한다.

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# **INTRODUCTION**

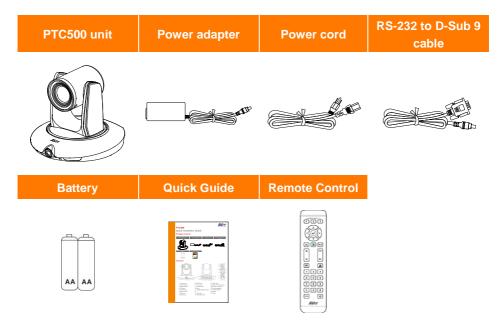
AVer PTC500 is a professional tracking camera which can be teacher mode or student mode depended on user's subject target. The PTC500 use body motion and image analysis algorithm to tracking target; the target subject no need to wear any signal transmit device. The PTC500 can communicate with recording system through RS232, RS485 or network interface. The PTC500 has stable system, easy to use, and suitable for classroom, meeting room, and any lecture or course environment.

## **Package Contents**

The following items are included in the package. Please check if each item is available and confirm if there are damage before using.

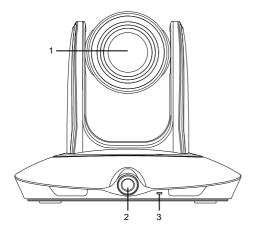
#### [Note]

- 1. Do not disassemble or modify the items by yourself. Contact the dealer for help when the items is failed to work.
- 2. Store the items in a dry place away from moisture.

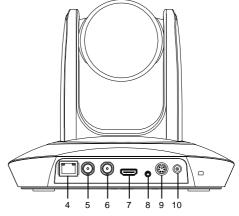


[Note] The power cord will vary depending on the standard power outlet of the country where it is sold.

## **Product Overview**

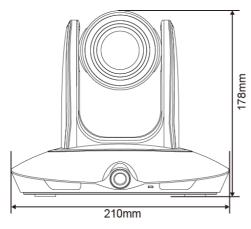


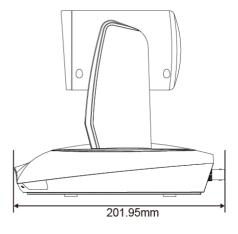
- 1. PTZ camera
- 2. Panoramic camera
- 3. Power indicator
- 4. RJ-45 port
- 5. 3G-SDI 2 port(Panoramic view)



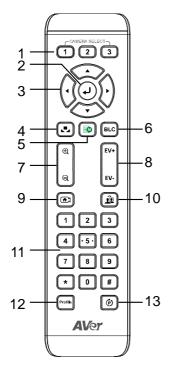
- 6. 3G-SDI 1 port(PTZ view)
- 7. HDMI port(PTZ view)
- 8. Video in port
- 9. RS-232 port
- 10. Power jack

## Dimension





## **Remote Controller**



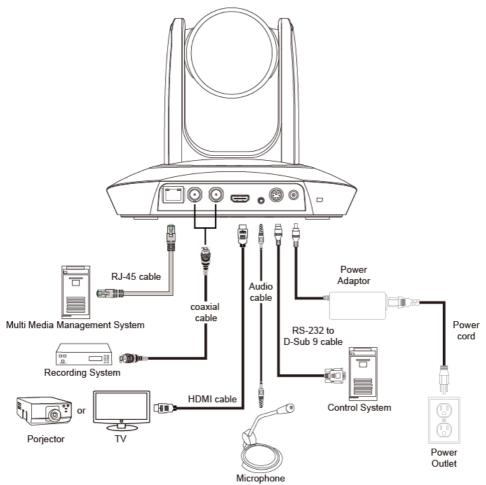
1. Camera select

**[Note]** Only channel No.1 is available. Before you use remote, please press channel 1 first.

- 2. Enter
- 3. Camera direction control
- 4. White balance
- 5. OSD menu
- 6. Back light control
- 7. Zoom in/out
- 8. Exposure compensation
- 9. Back to zero position((home preset)
- 10. Specifies tracking(Not available yet)
- 11. Number buttons
- 12. Profile
- 13. Preset

# **INSTALLATION**

## **Device Connections**

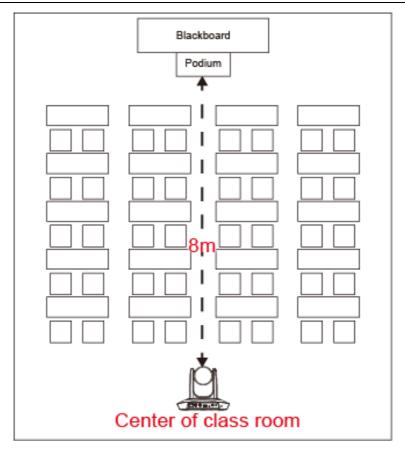


# Installation

Please refer to following suggestion to install the PTC500 in a proper position.

## **Teacher Mode**

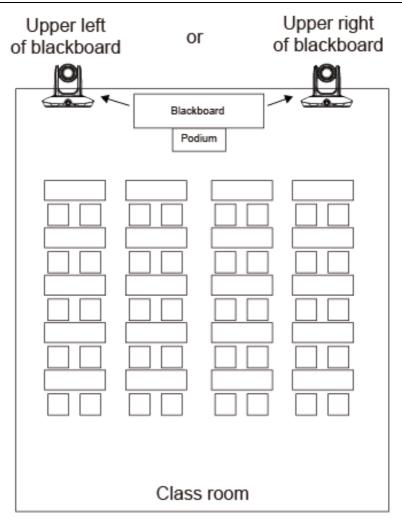
- Install height range (from floor): 2 ~ 3m; 2.4m is suggested.
- Distance range to podium: 4~15m; 8m is suggested.
- **Position:** Center of class room.



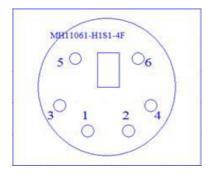
## **Student Mode**

[Note] Student mode is only available on AcuControl app.

- Install height range (from floor): 2 ~ 3m; 2.4m is suggested.
- **Position:** Upper left or right of blackboard.
- Make sure the view range includes all students.
- Class room size: Up to 15m x 8m



## **RS232 Pin Definition**



Definition
RS232_DTR
RS232_DSR
N.C.
RS232_TXD
GND
RS232_RXD

# OSD TREE MAP

## **Trigger OSD Menu**

Press button on remote controller to call out OSD menu. Use  $\blacktriangleright$  to enter sub-menu, use  $\blacktriangle$  and  $\checkmark$  to move to the selection and use  $\bigcirc$  to confirm the selection. Press  $\triangleleft$  button can back to previous level of menu.

1	Blue text indicates the current selection.
2	">" means has sub-menu or value selection.
3	Sub-menu
4	Column for enter value or value selections.

			3	3	
	Tracking	On			
1 ——	- Camera	>	Camera ID	>	PTC 500
	Video Format	>	DHCP	>	
	Advanced Setting	>	Static IP	>	
	Preset	>	PTZ Camera	>	4
	Language	>			
	Profile	>			
	Factory Default	>	2		
	Information	>			

## Main

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

# Tracking

- User can enable or disable auto-tracking.
- PTC-500 will not track on object automatically when the feature is disabled.
- To enable auto-tracking, please select "**On**".
- To disable auto-tracking, select "Off".

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

## Camera

In the section, users can change camera ID, network setting and adjust parameter of camera settings.

Tracking	On		
Camera	>	Camera ID	>
Video Format	>	DHCP	>
Advanced Setting	>	Static IP	>
Preset	>	PTZ Camera	>
Language	>		
Profile	>		
Factory Default	>		
Information	>		

## Camera ID

To change camera ID, please select **Camera > Camera ID**.

Tracking	On			
Camera	>	Camera ID	>	PTC 500
Video Format	>	DHCP	>	
Advanced Setting	>	Static IP	>	
Preset	>	PTZ Camera	>	
Language	>			1
Profile	>			
Factory Default	>			
Information	>			

## **DHCP**

To enable DHCP, select **Camera > DHCP**.

Tracking	On				
Camera	>	Camera ID	>		
Video Format	>	DHCP	>	DHCP10.1.0.1	ON
Advanced Setting	>	Static IP	>		
Preset	>	PTZ Camera	>		
Language	>				
Profile	>				
Factory Default	>				
Information	>				

## Static IP

To setup network as a static IP, select **Camera** > **Static IP** (Please set DHCP off before the Static IP setting)

Tracking	On				
Camera	>	Camera ID	>		
Video Format	>	DHCP	>		
Advanced Setting	>	Static IP	>	IP 10.1.0.1	>
Preset	>	PTZ Camera	>	Mask 255.255.0.255	>
Language	>			Gateway 10.1.0.1	>
Profile	>			DNS	>
Factory Default	>			Bito	
Information	>				

## PTZ Camera

To adjust the parameters of PTZ camera, select **Camera** >**PTZ Camera**.

Tracking	On	
Camera	>	Camera ID >
Video Format	>	DHCP >
Advanced Setting	>	Static IP >
Preset	>	PTZ Camera >
Language	>	
Profile	>	Camera Mode Full Auto >
Factory Default	>	Full Auto >
Information	>	Shutter Priority >
		Iris Priority >
		Manual >
		White Balance >
		Shading Correction >
		Pan/Tile Speed 1
		Zoom Speed Low
		Digital Zoom Limit 12
		PTZ Zoom Focus Off
		Power Up Home
		Frequency Auto
		Contrast 2
		Saturation 5
		Sharpness Medium
		NosieReduction Medium

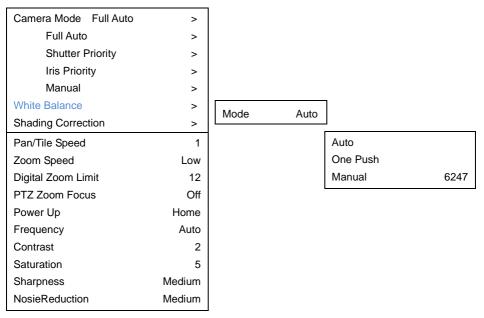
#### **Camera Mode**

There are 4 modes of camera mode, you can select one from Camera > PTZ Camera > Camera Mode.

Camera Mode Full Auto Full Auto Shutter Priority Iris Priority Manual White Balance Shading Correction	> > > > > > > > > > > > > > > > > > > >	Full Auto Shutter Priority Iris Priority Manual Full Auto Shutter Priority	> > > > > > > > > > > > > > > > > > >	Slow Shutter Maximum Gain Back Light compens Exposure	Off 24dB Off 0
Pan/Tile Speed	1 Low	Iris Priority	>	Maximum Gain	24dB
Zoom Speed Digital Zoom Limit	LOW 12	Manual	>	Exposure	0
PTZ Zoom Focus	Off				
Power Up	Home	Full Auto	>		
Frequency	Auto	Shutter Priority	>		
Contrast	2	Iris Priority	>	Slow Shutter	Off
Saturation	5	Manual	>	Iris	F6.8
Sharpness	Medium			Maximum Gain	24dB
NosieReduction	Medium			Exposure	0
		Full Auto Shutter Priority Iris Priority	> > >		
		Manual	>	Maximum Gain	24dB
			_	Speed	1/30
				Iris	F6.8

#### White Balance

To adjust white balance value, select Camera > PTZ Camera > White Balance.



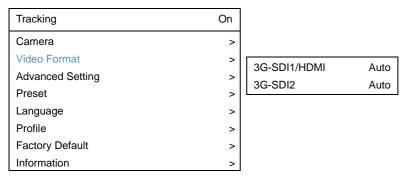
#### **Shading Correction**

To adjust shading correction, select **Camera** > **PTZ Camera** > **Shading Correction** (The option is for the screen corner shadow fixing.)

Camera Mode Full Auto	>		
Full Auto	>		
Shutter Priority	>		
Iris Priority	>		
Manual	>		
White Balance	>		
Shading Correction	>	Upper Left	Off
Pan/Tile Speed	1	Upper Right	Off
Zoom Speed	Low	Bottom Left	Off
Digital Zoom Limit	12	Bottom Right	Off
PTZ Zoom Focus	Off	<u> </u>	_
Power Up	Home		
Frequency	Auto		
Contrast	2		
Saturation	5		
Sharpness	Medium		
NosieReduction	Medium		
		l	

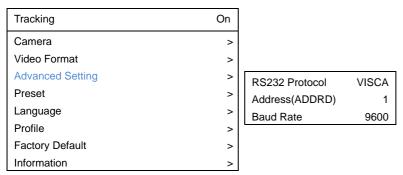
## **Video Format**

To adjust Video Format, select Video Format from OSD menu.



## **Advanced Setting**

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



## Preset

PTC-500 allows you to set 10 preset locations via remote controller.

#### To set up preset point:

- 1. Enter OSD and turn off the tracking function.
- 2. Move camera to the prefer location and zoom distance.
- 3. Press bottom > Preset > Set and use arrow key to assign a preset number and press enter button on remote controller.

[Tip] Shortcut of setting a preset location as following:

Press "**P**" button > press " $\uparrow$ " > press number you want to set, ex: 1 and press enter.

Tracking	On	
Camera	>	
Video Format	>	
Advanced Setting	>	
Preset	>	Set 1
Language	>	Call 1
Profile	>	
Factory Default	>	
Information	>	

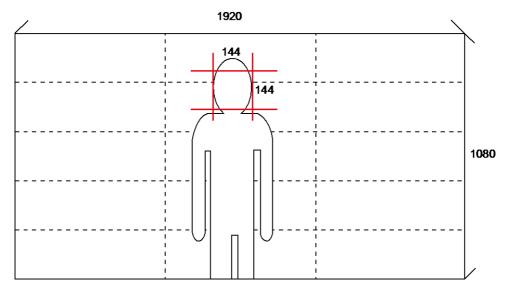
#### To call a preset location:

Press bottom > **Preset** > **call** and use arrow key to select which preset number you would like to recall -> press enter button on remote controller.

[Tip] Shortcut of calling a preset location: press "P" > press number you want to recall, ex: 1.

#### [Teacher Mode]

- Please adjust the target proportion in preset1. Set the person proportion more than the illustration. The photo shows the minimum request. If target proportion is smaller than the photo, it may cause the tracking failure.
- 2. 2. When PTC500 starts to track, the target proportion in the screen will be defined by preset1 setting.



#### [Student Mode]

- 1. Please adjust view of preset1 as panoramic view.
- 2. Please adjust optical zoom to the minimum level (panoramic view).

## Language

To change language, go to **OSD menu > Language**.



## Profile

PTC500 allows you to save 5 profiles.

To set the profile, go to OSD menu > Set and use arrow key to assign a number and press enter button.

To call the profile, go to OSD menu > **Apply** and use arrow key to call an assigned number and press enter button.

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

# **Factory Default**

To reset the PTC500 to default setting, go to OSD menu > **Factory Default** > **Yes** and press enter button.

Tracking	On	
Camera	>	
Video Format	>	
Advanced Setting	>	
Preset	>	
Language	>	
Profile	>	
Factory Default	>	
Information	>	Yes
		No

## Information

To check out information on the PTC-500, ex: FW version. Go to OSD menu > Information.

Tracking C	Dn		
Camera	>		
Video Format	>		
Advanced Setting	>		
Preset	>		
Language	>		
Profile	>		
Factory Default	>		
Information	>	Camera ID	PTC500
		Serial Number	0000
		Firmware Version	0.0.0002.12
		IP Address	10.1.0.1

# USING PTC500 via AcuControl

## **Before You Begin**

Make sure all connections are connected successfully before using the PTC500. Connections error will cause no image showing or no reaction. (For more information, please refer to INSTALLATION chapter.)

## For the First Time Use

### Setup IP Address

Setup IP address of PTC500 for a connection with iPad.

There are two ways to setup IP address of PTC500. Please follow the steps below to setup the IP address.

#### Dynamic IP Address(DHCP)

Get IP address from your local DHCP server.

- 1. After starting-up, press button on remote control to call out OSD menu.
- Use ▲ and ▼ buttons to select the Camera > DHCP > DHCP > On, then press ► or enter button to get IP address from local DHCP server.

Tracking	Off		
Camera	>		
Video Format	Camera ID	>	
Advanced Setting	DHCP >		
Preset	Static IP	DHCP	On
Language	PTZ Camera		On
Profile	>		Off
Factory Default	>		
Information	>		

3. Use  $\blacktriangle$  and  $\blacktriangledown$  buttons go to "Information" to check the IP address information.

Tracking	Off		
Camera	>		
Video Format	>		
Advanced Setting	>		
Preset	>		
Language	>		
Profile	^		
Factory Default	>		
Information	>		
		Camera ID	
		Serial Number	
		Firmware Version	
		IP Address	

#### Static IP Address

Assign a fix IP address for PTC500.

- 1. After starting-up, press **b** button on remote control to call out OSD menu.
- 2. Turn the DHCP off first. Go to **Camera** > **DHCP** > **DHCP** > **Off** then press ► or enter button to confirm the selection. The menu selection will switch to "**Static IP**" when DHCP off is applied.
- 3. Use ▲, ▼, Enter button, and on-screen keyboard to setup the "IP", " Gateway", "Mask" and "DNS".

Tracking	Off															
Camera	>															
Video Format	Camera ID															
Advanced Setting	DHCP															
Preset	Static IP															
Language	PTZ Camera	IP														
Profile	>	Gatev	vay										0			
Factory Default		Mask			1	2	3	4	5	6	7	8	9	0	•	=
Information	>	DNS			q	w	е	r	t	у	u	i	0	р	[	]
					а	S	d	f	g	h	j	k	1	1	•	
					z	x	С	v	b	n	m	•		1	1	Del
					A/a				(	Cancel	Back	space	+	$\rightarrow$	E	inter

## Make a Connection with iPad

User can uses iPad to setup tracking parameters of PTC500 (tracking zone area, shield zone area...etc.); no need to connect PTC500 to monitor for setup.

1. Have "AcuControl" app installed on the iPad. The "AccuControl" is available in App store.

[Note] The AccuControl app only supports iPad 4(2012) or advance models.

2. Run AcuControl on the iPad. Then, select "Add Camera".

6			
	+ Add Camera		

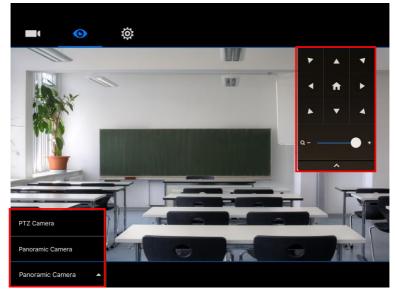
- 3. Enter the following information:
  - **Client Name:** Give a name of the camera for user to recognize on camera list.
  - **Camera ID:** The camera ID is shown on information section of PTC500 setup menu.
  - IP: Enter the IP address of PTC500. The IP address can be found on Information section of PTC500 setup menu.
  - Port: Enter the port for communicating between PTC500 and iPad. Default is "80".
  - Password: The password is used for authentication on PTC500. Default is "admin".

-				Add 1	racking car	nera				
Ellert Rame Caning a D IP Port Passiond										
				Cancel	Ē.	ок				
5 0	đ									
q	w	е	r	t	у	u	i	0	р	$\overline{\mathbf{x}}$
а	s	d	f	g	h	j	k	1	re	turn
¢	z	x	с	v	b	n	m	!,	?	¢
123		₽							123	Ň

- 4. After entering all information, select "**OK**" to add a camera. User should see the camera is shown on camera list.
- 5. Select the camera from the camera list and select "**Connect**" to make a connection with the camera.

Aver 10.100.91.59 Connect Delete Edit Cancel	+ Add Camera					
Delete Edit	PTC500					
Delete Edit						
Cancel						

6. When connection is successful, user should see the image view of PTC500 on screen. In view screen, user can use on-screen control panel to move camera view, zoom in/out, and switch camera view between PTZ camera and panoramic camera view.



7. For detail of using iPad to setup PTC500, refer to "Using iPad to Setup PTC500" chapter.

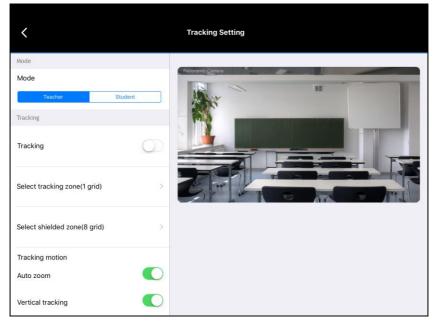
# USING iPAD to SETUP PTC500

Tracking zone, shield zone, and student heights setting only can be setup by AcuControl app on iPad. Setup can be divided to two modes – teacher and student mode and details will be described in following.

## **Teacher Mode**

Before setting, please make sure your iPad and PTC500 are connected (Refer to "Make a Connection with iPad" section).

- 1. Connecting to PTC500 through AcuControl app (Refer to Make a Connection with iPad section).
- Before starting to setup PTC500, please turn off the tracking function. Select (settings) > Tracking setting > Teacher > Tracking off.



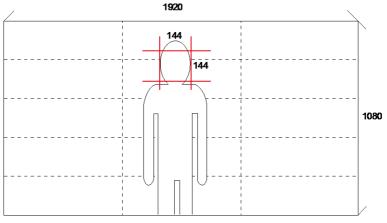
3. After completely all settings, remember to turn on the tracking function.

## Setup Preset Setting

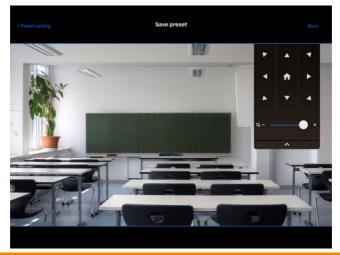
Setup preset position.

#### [Note]

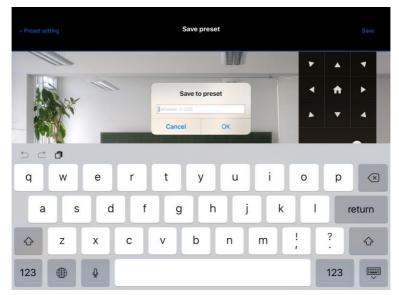
- When setup preset position, the camera view is based on PTZ camera view.
- Please adjust the target proportion in preset1. Set the person proportion more than the illustration. The photo shows the minimum request. If target proportion is smaller than the photo, it may cause the tracking failure.
- 2. When PTC500 starts to track, the target proportion in the screen will be defined by preset1 setting.



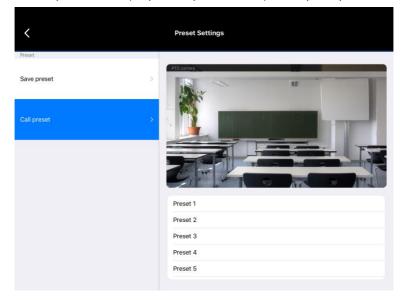
- 1. Select (settings) > Preset setting.
- 2. Select "Save preset" to setup preset position.



 In Save preset screen, use panel control to adjust the camera view to desire position and select "Save". Enter the number (1~255) of preset position and select "OK" to save. Total are 255 preset positions can be set.



4. After setting preset, back to Preset Settings screen and select "**Call preset**" to check preset position. Select preset number (ex: preset 1, preset 25...etc.) to view preset positon view.

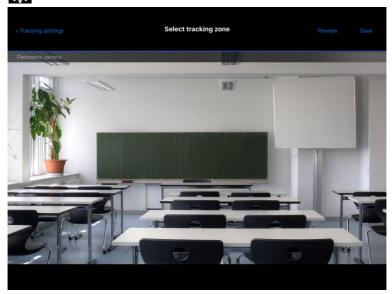


## **Setup Tracking Zone**

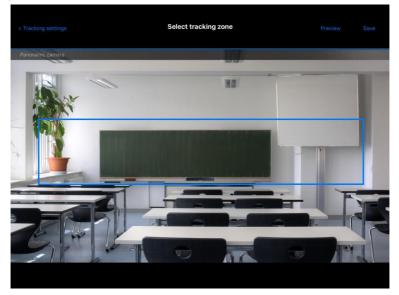
If PTC500 detects motions in the defined zone and PTC500 will be triggered to track. If tracking zone doesn't setup, then, all the panoramic view will be the default active zone.

[Note] The screen of tracking zone setting is based on panoramic camera view.

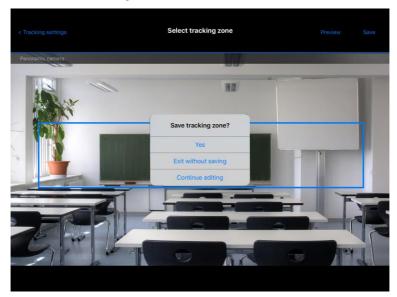




2. In Select tracking zone screen, select the area that wants to be tracking (a blue frame will show on screen). User can select "Preview" to see the view of the camera.



3. Select "Save" to save the setting.

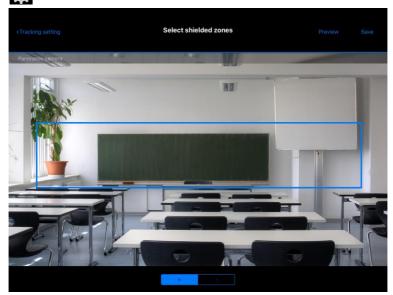


## **Setup Shield Zone**

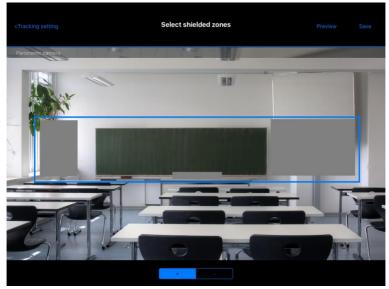
Define the area that user doesn't want camera to track. The shield zone should be within the active zone. 8 shield zones can be set.

[Note] The screen of shield zone setting is based on panoramic camera view.

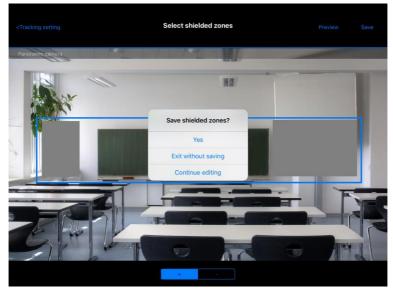
1. Select (settings) > Tracking setting > Teacher > Select shielded zone (8 grid).



2. In Shield tracking zone screen, select the area that don't want to be tracking (a gray block will show on screen). User can select "Preview" to see the view of the camera. To delete the shield zone area, select "-"and select the gray block area.



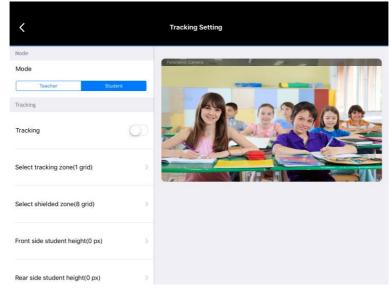
3. Select "Save" to save the setting.



# **Student Mode**

Before setting, please make sure your iPad and PTC500 are connected (Refer to "Make a Connection with iPad" section).

- 1. Connecting to PTC500 through AcuControl App (Refer to Make a Connection with iPad section).
- Before starting to setup PTC500, please turn off the tracking function. Select (settings) > Tracking setting > Student > Tracking off.



3. After completely all settings, remember to turn on the tracking function.

# Setup Preset Setting

Setup preset position.

#### [Note]

- When setup preset position, the camera view is based on PTZ camera view.
- Please adjust view of preset1 as panoramic view.
- Please adjust optical zoom to the minimum level (panoramic view).
- 1. Select (settings) > Preset setting.

<	Preset Settings
Preset	
Save preset	972 cannos
Call preset	- AREARA
	Preset 1
	Preset 2
	Preset 3
	Preset 4
	Preset 5

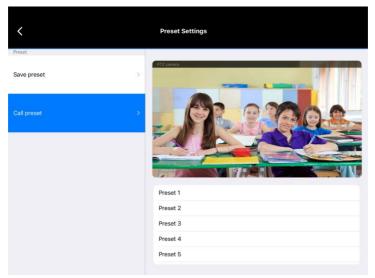
2. Select "Save preset" to setup preset position.



 In Save preset screen, use panel control to adjust the camera view to desire position and select "Save". Enter the number (1~255) of preset position and select "OK" to save. Total are 255 preset positions can be set.

< Preset se	tting			S	ave prese	t				Save
								۲		4
			-	Sa	ive to prese	et		•	A	•
	- /	A		botween 1-2 Cancel		ОК		•	•	4
5 C	0				1	· · ·		e		
q	w	е	r	t	у	u	i	ο	р	$\otimes$
а	s	d	f	g	h	j	k		r	eturn
¢	z	x	с	v	b	n	m	!	?	Ŷ
123	۲	Ŷ							123	Ť

4. After setting preset, back to Preset Settings screen and select "Call preset" to check preset position. Select preset number (ex: preset 1, preset 25...etc.) to view preset positon view.



### Setup Tracking Zone

User needs to define the active zone for PTC500 to detect. If PTC500 detects motions in the setup zone and PTC500 will be triggered to track. If tracking zone doesn't setup, then, all the panoramic view will be the default active zone.

[Note] The screen of tracking zone setting is based on panoramic camera view.

1. Select **K**(settings) > **Tracking setting** > **Teacher** > **Select tracking zone (1 grid)**.



2. In Select tracking zone screen, select the area that wants to be tracking (a blue frame will show on screen). User can select "**Preview**" to see the view of the camera.



3. Select "Save" to save the setting.



### **Setup Shield Zone**

Define the area that user doesn't want camera to track. The shield zone should be within the active zone. 8 shield zones can be set.

[Note] The screen of shield zone setting is based on panoramic camera view.

1. Select (settings) > Tracking setting > Teacher > Select shielded zone (8 grid).



 In Shield tracking zone screen, select the area that you don't want to be tracking (a gray block will show on screen). User can select "Preview" to see the view of the camera. To delete the shield zone area, select "-"and select the gray block area.



3. Select "Save" to save the setting.



## Setup Front Side Student Height

User needs to stand at the front side and define the whole height on screen.

- 1. Select (settings) > Tracking setting > Front side student height (0px).
- 2. Using "J" on screen to measure and set the student height. The number of height is displayed

when measure and set height.

3. Click "Save" to save the setting.

# Setup Rear Side Student Height

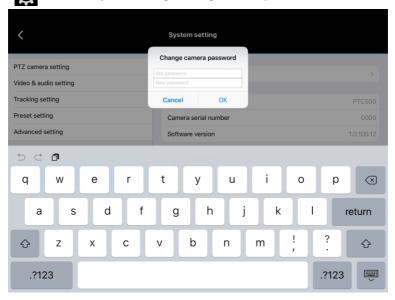
User needs to stand at the rear side and define the whole height on screen.

- 1. Select (settings) > Tracking setting > Front side student height (0px).
- 2. Using "\_\_\_\_" on screen to measure and set the student height. The number of height is displayed when measure and set height.
- 3. Click "Save" to save the setting.

# **Change Camera Password**

Change PTC500's password.

- 1. Sel
- Select (settings) > System setting > Change camera password.



2. Enter the old password and new password, then select "OK" to confirm the changes.

<	System setting	
PTZ camera setting Video & audio setting	Change camera password	>
Tracking setting	Camera	PTC500
Preset setting	Camera serial number	
Advanced setting	Success New password is applied.	
Profile setting	ОК	
System setting		
Factory default	Upgrade firmware	
	Last firmware version	
	Current firmware version	

# **Function Table**

Home Menu	Sub menu	2 <sup>nd</sup> sub menu	Note
		Client name	
		Camera ID	
Add camera	Add Tracking Comoro	IP	
Auu camera	Add Tracking Camera	Port	Default is 80.
		Password	Default is admin.
		Cancel/OK	
	Connect		
	Delete		
Camera	Edit	Client name	
(Select camera to		Camera ID	
setup)		IP	
		Port	Default is 80.
		Password	Default is admin.
		Cancel	

Live Menu	Sub menu	2 <sup>nd</sup> sub menu	Note
PTZ camera			Live Streaming of PTZ
Panoramic camera			Live Streaming of Panoramic

Setting menu	Sub menu	2nd sub menu	Note
		Exposure Compensation	
		Maximum Gain	
	Full Auto	Slow Shutter	
		BLC	On 2 (only workable under Full Auto)
		Exposure Compensation	
		Maximum Gain	
	Shutter Priority	Shutter Speed	
		Exposure Compensation	
	Lie Driving	Maximum Gain	
	Iris Priority	Slow Shutter	
PTZ Camera Setting		Iris	
	Manual	Gain	
		Speed	
		Iris	
	White Balance	Mode	
	Frequency	Auto, 50,60	
	Contrast	01234	
	Saturation	0 1 2 3 4 5 6 7 8 9 10	
	Sharpness	Off Low Middle High	
	Noise Reduction	Off Low Middle High	
		Upper Left	
	Shading correction	Upper Right	The option is for the screen corner shadow
	Shading correction	Bottom Left	fixing. It has 4 levels.
		Bottom Right	

Setting menu	Sub menu	2nd sub menu	Note
		1	
		2	
		3	
	Pan/Tilt Speed	4	The higher number
		5	means more sensitive
		6	
		7	
		8	
PTZ Camera Setting	Zoom Speed	High	Zoom speed adjustment
		Low	
	Digital Zoom Limit	X1,X2,X3,X4,X5,X6,X7,X	To disable digital zoom,
		8,X9,X10,X11,X12	please set the value at 1
	PTZ Zoom Focus	On	Auto focus when camera
		Off	is doing zoom in/out
	Power up ACT	Preset 1,Preset 2,Preset	Define the default
		3,Preset 4,Preset 5,Preset	location after PTC500
		6,Preset 7,Preset 8,Preset 9,HOME	power on.
		Auto	Auto is for HDMI. If there
			is no HDMI connection,
			the default value is
	Video Output 3G-SDI 1/HDMI: PTZ	1080P/60	1080p/60
		1080P/50	
Video & Audio Setting	Camera	1080P/30	
Video & Audio Setting		1080i/60	
		720P/60	
	Video Output	1080P/60	
	3G-SDI 2: PTZ Camera	1080P/30	
		720P/60	

Setting menu	Sub menu	2nd sub menu	Note
	Video Output	Auto	
		1080P/60	
	3G-SDI 2: Panoramic	1080P/30	
		720P/60	
	Audio Input		
Video & Audio Setting	Audio line in format: G.711		
	IP Streaming Mode	PTZ Camera	
	Mode 1	Panoramic Camera	
	IP Streaming Mode	PTZ Camera	1080P/30
	Mode 2	Panoramic Camera	1080P/30
	Mode	Teacher (default)	User can choose function
		Student	in this option.
	Tracking Tracking on/off		Tracking on/off
	Tracking Select tracking zone (1 grid) set	Preview	Define the active zone. Active zone is an area for panoramic lens motion
Tracking Setting (Teacher mode)		Save	detection. If you don't set it up. The default setting is all the screen is active zone.
		Preview	Define the shield zone. Shield zone is an area
	Tracking Select shielded zone (8 grid) set	Save	that you don't want to detect motion.
		+	Press + to add the new area
		-	Press - to eliminate the existed area.

Setting menu	Sub menu	2nd sub menu	Note
	Tracking Tracking motion: Auto zoom on/off		The option enables to zoom in/out the target depends on the distance from camera.
	Tracking Tracking motion: Vertical tracking on/off		If set the option as off, the tracking camera will only do the horizontal tracking.
Tracking Setting (Teacher mode)	Camera position of lost target: Preset 1		
	Advanced Setting Action sensitivity: 0~7		If the target moves quickly, suggest to adjust it higher.
	Advanced Setting Tracking lost time: 0~7		The time which the camera takes to go back preset 1 when it loses tracking target. 0>1 seconds, 7>8 seconds
	Mode	Teacher (default)	User can choose function
	Tracking Tracking on/off	Student	in this option. Tracking on/off
Tracking Setting (Student mode)	Tracking	Preview	Define the active zone. Active zone is an area for panoramic lens motion
	Select tracking zone (1 grid) set	Save	detection. If you don't set it up. The default setting is all the screen is active zone.

Setting menu	Sub menu	2nd sub menu	Note
	Tracking Select shielded zone (8	Preview Save	Define the shield zone. Shield zone is area that you don't want to detect motion.
	grid) set	+	Press + to add the new area
		-	Press - to eliminate the existed area.
	Front side student height(0 px) Rear side student height (0px)		To assure the close up screen consistency
Tracking Setting	Camera position of lost target preset 1		
(Student mode)	Image switch mode	tracking mode (default)	User can see the PTZ tracking procedures.
		Panoramic mode	The tracking screen will be directly transferred from panoramic view to close up view
	Motion sensitivity	0-7(low to high)	
	Overtime	35s to 280s	The time which the PTZ go back to panoramic view after lock the target.
	Advanced Correction	Installation Height	2.0m~3.0 (10 levels) default is 2.4
		Angle Compensation	-5 degrees ~+5 degrees (100 levels) default is 0
	Save preset		
	Call preset		
Preset Setting	ADDR (Gray out)	1	
	Baud rate (Gray out)	9600	Baud rate speed adjustment

Setting menu	Sub menu	2nd sub menu	Note
		VISCA	
	RS232 format protocol	Pelco D	Protocol choose
Advance Setting		Pelco P	
	ADDR (Gray out)	1	
	Baud rate (Gray out)	9600	Baud rate speed adjustment
		Profile 1	
		Profile 2	
	Save as current setting	Profile 3	
Profile Setting		Profile 4	Profile setting location
		Profile 5	
	Load other setting		
	Change Camera password		
	Camera ID: PTC500		
	Camera serial number		
System Setting	Software version: 1.XX.XX.XX		Software version
	Download firmware		When user would like to
	Upgrade firmware Last firmware version: X.XX.XX.X2 Current firmware version: X.XX.XX.X1		upgrade the firmware, please press "Download firmware" first. Then, press "Upgrade firmware" to do the upgrade.
Factory Default	Back to factory default	Yes	Please reboot the camera after setting factory default
		No (default)	

#### 1. How preset 1 has influence in the tracking settings?

Define the proportion of the tracking target in the screen. When tracking cam loses the target, the position camera will go back to.

#### 2. How to define the zoom level of tracking target?

It's determined by the preset 1 setting. You should stand on the assigned location as a proportional scale and zoom in/out to the proportion that you want. Then save it as preset 1, and the following tracking will based on this proportion.

#### 3. How can I let the camera know who has to track?

After preset 1 setting and turning on the tracking, if someone goes into the preset 1, camera will detect the motion and start to track him. Only let the person need to be tracked walk into the preset 1.

#### 4. How to avoid it start tracking other person in the same area?

It's hard to do it. The algorithm is based on what the camera see. It is not intelligent enough to judge who should track or not if 2 or more persons are in the preset 1 or active zone. It will randomly choose one to track.

#### 5. What is the difference with HOME position?

Home is the position that after power on

#### 6. What about Preset 2 ~9 are used for anything related to tracking?

If you turn off tracking, PTC500 is a regular PTZ. User can manipulate it to assign position via center control system command. The other presets are these usages.

#### 7. This camera supports several profiles; does each profile have a different PRESET1?

Each profile has its own preset definition.