CAM520

User Manual

FCC NOTICE (Class A)

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.

Federal Communications Commission Statement

NOTE- This equipment has been tested and found to comply with the limits for a Class A 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 tuning the equipment off and on, the user is encouraged to try to correct the interference by one or more 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/television technician for help.

Class A ITE

Class A ITE is a category of all other ITE which satisfies the class A ITE limits but not the class B ITE limits. Such equipment should not be restricted in its sale but the following warning shall be included in the instructions for use:

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.

TRADEMARKS

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NOTICE

SPECIFICATIONS ARE SUBJECT TO CHANGE **WITHOUT** PRIOR NOTICE. THE INFORMATION CONTAINED HEREIN IS TO BE CONSIDERED FOR REFERENCE ONLY.

WARNING

TO REDUCE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE. WARRANTY WILL BE VOID **IF** ANY UNAUTHORIZED MODIFICATIONS ARE DONE TO THE PRODUCT.

Remote Control Battery Safety Information

- Store batteries in a cool and dry place.
- Do not throw away used batteries in the trash. Properly dispose used batteries through specially approved disposal methods.
- Remove the batteries if they are not in use for long periods of time. Battery leakage and corrosion can damage the remote control. Dispose of batteries safely and through approved disposal methods.
- Do not use old batteries with new batteries.
- Do not mix and use different types of batteries: alkaline, standard (carbon-zinc) or rechargeable (nickel-cadmium).
- Do not dispose of batteries in a fire.
- Do not attempt to short circuit the battery terminals.

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Contents

Package Contents

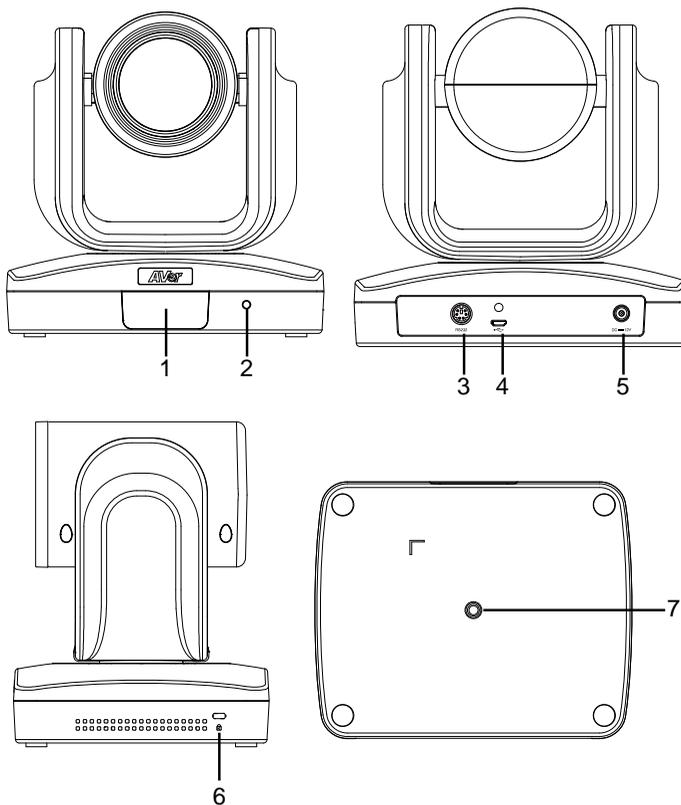|					
1		2		3	
4		5		6	
7		8		9	
10					

1.	CAM520 unit	6.	Quick Guide
2.	L-Mount (mounting screws are included)	7.	Warranty card
3.	Power Cord* & Power adapter	8.	Drilling paper
4.	Remote Controller	9.	AAA Batteries (x2)
5.	USB cable	10.	Tripod screw

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

Product Introduction

Camera

1. IR Sensor
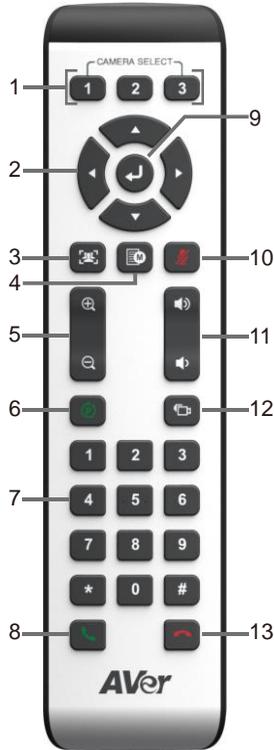2. Power indictor
3. RS232 connection*
4. USB port

5. Power Jack
6. Kensington lock
7. Screw hole for mounting

* If you need a converter or instructions on how to use RS232, please contact AVer USA.

Remote Controller

Name	Function
1. Camera select	One remote can control up to 3 AVer VC/Cam. Please use the AVer PTZApp to set cameras to buttons 1 to 3. Once set, camera may be selected by a simple press of the camera select button.
2. Camera direction control	Position of the camera lens may be adjusted through the direction buttons. Long press of the button allows continuous pan or tilt of the camera.
3. FaceLumi	Enhance facial features by correcting skin tone and activates auto focus and auto exposure. This feature may be disabled when tilting, panning, zooming, or disconnecting camera.
4. OSD menu**	Press to bring out the OSD menu.
5. Zoom in/Zoom out	Press to zoom in or zoom out.

| Name	Function
6. Preset	■ This feature allows user to go to a set position. ■ To save the camera at the desired position, press and hold the preset button until the "saved message" is displayed. Select preset position button 0 to 9 to save. ■ Pressing Preset + Preset Position Button (0 ~ 9) will move the camera to the saved position.
7. Preset position	Preset position button is used in conjunction with the Preset button to save positions. There are a total of 0 to 9 saves.
8. Call/answer*	Answer a call or start a call.
9. Enter**	To confirm the selection in the OSD menu.
10. Mute/Unmute Speakerphone**	Mute/Unmute the speakerphone.
11. Volume up/down**	Adjust volume up or down.
12. Far site camera control***	Press the Far/Near button to control the far site camera for pan, tilt, or zoom functions.
13. Hang up*	End the call.

* Function requires AVer PTZApp

** Not support for CAM520

*** Future support

Setup CAM520

Device Connection
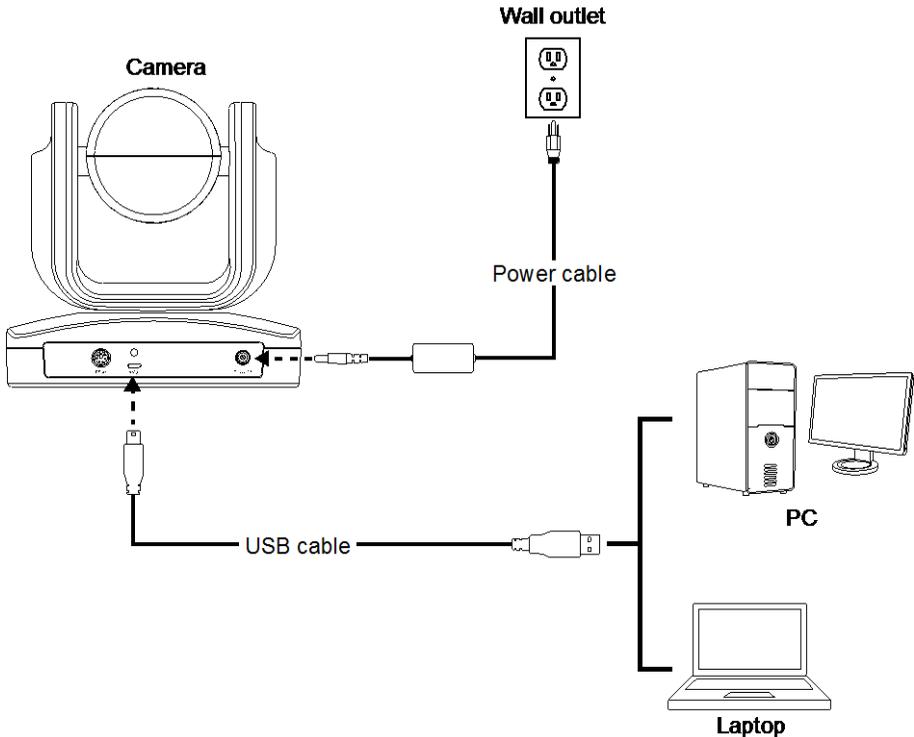
1. Use USB cable to connect the CAM520 to your PC/laptop (refer to diagram above).
2. Connect the power to the CAM520; power indicator will light up and camera head will rotate.
3. Install AVer PTZApp on laptop or PC that is connected with CAM520. The app can be used to adjust and setup the parameters of the camera (refer to section of AVer PTZApp)
4. To make a call, run your video application (Skype^{TM}, Microsoft ®Lync^{TM}, Skype for Business, Google Hangouts^{TM}, Cisco WebEx®, GoToMeeting^{TM}, WebRTC, and etc.) select CAM520 as your video device.

Wall Mount Installation

1. Paste the drilling paper on the wall where you want to mount the camera. Then, according the drilling paper to drill the hole on the wall for installing the wall mount bracket on the wall. After drilling, the drilling paper can tear off.
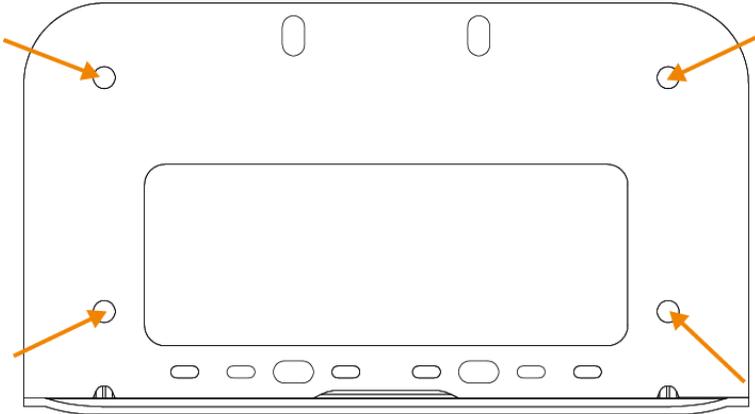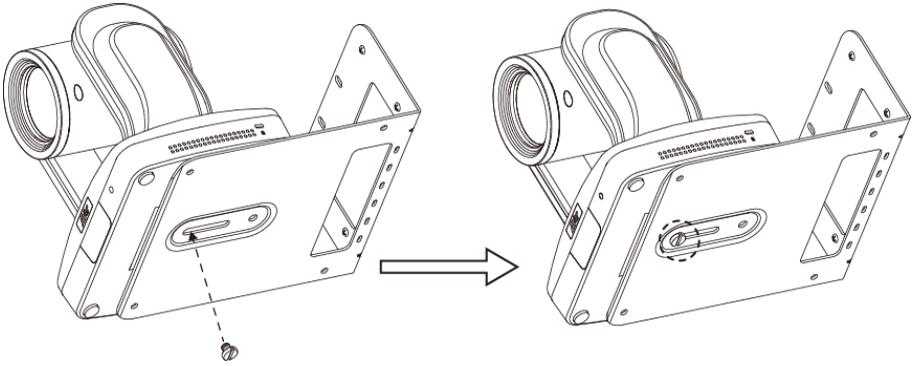

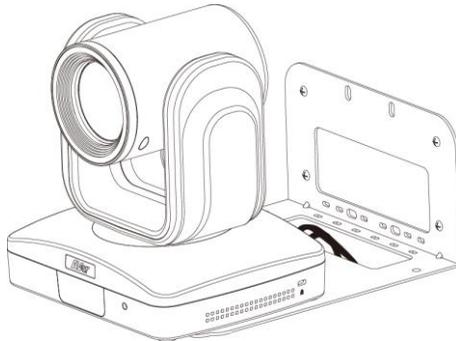2. Secure the wall mount bracket on the wall within screws.
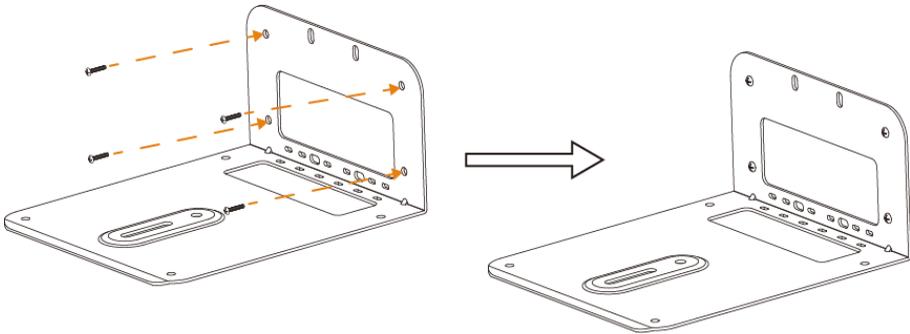
3. Secure the camera on the wall mount.

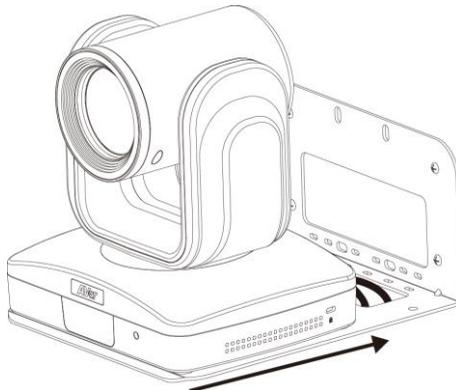**[Note] DO NOT** screw tight, leave some space for push camera in the end later.

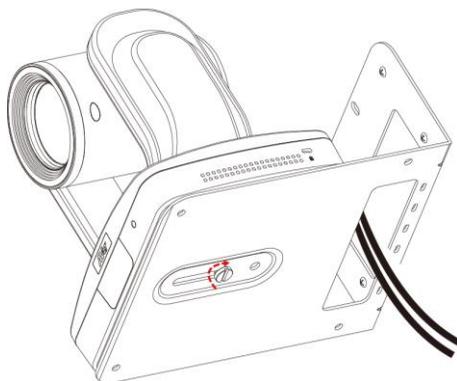4. Connect the necessary cables to the camera.

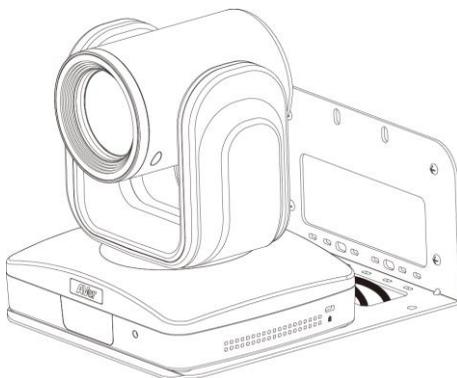**[Note]** You may use cable ties to organizer cables.

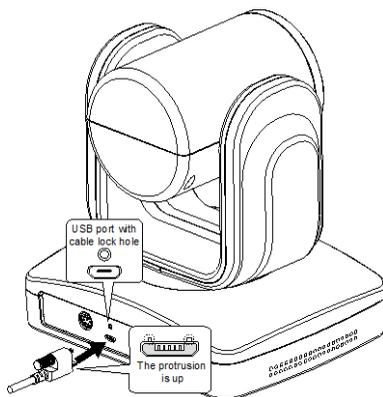5. After connecting all cables, slide the camera in the end.

6. Screw tight the screw to secure the camera on the wall mount.

7. Complete the wall mount installation.

Secure the USB cable

Use CAM520

Make a Video Call

1. Make sure CAM520 and PC/laptop are well connected and power is on.
2. Run your video application (Skype™, Microsoft ®Lync™, Google Hangouts™, Cisco WebEx®, GoToMeeting™, WebRTC, and etc.) on your PC or l laptop.
3. Set the CAM520 camera as the primary camera for your video application (refer to your video application user guide). You can now make your call.
4. The CAM520 is a plug-and-play conference camera. The system requires no special drivers, but we do recommend installing the AVer PTZApp for a better user experience. For information on how to install and use the AVer PTZApp, refer to the AVer PTZApp section in this user manual.

LED Indicator

Status	LED
Starting	Flashing blue and camera head is rotating
Normal	Solid blue
Camera is not being used by the computer	Solid orange
Camera is not connected	Solid orange and camera head is down.

AVer PTZApp

Install AVer PTZApp

Please go to http://www.aver.com > **Support** > **Download Center** > **Video Conferencing** to download the AVer PTZApp. After downloading, double-click on the file and follow the on screen instructions to complete the installation.

After installing the AVer PTZApp, double-click on the AVer PTZApp icon to run the application.

Use AVer PTZApp

1. Run you video application..

   If you have the Skype plug-in checked during the installation, a plug-in request will be displayed in Skype. Click on the Skype plug-in request to accept the plug-in; this enables and funcationality on the Remote Control.

2. During your video call, you can use the AVer PTZApp to pan, tilt and zoom the camera in/out and enable/disable the backlight feature.

3. For the first time use, you can check the connection, camera, and setup the camera's parameters. Each function will be described below:
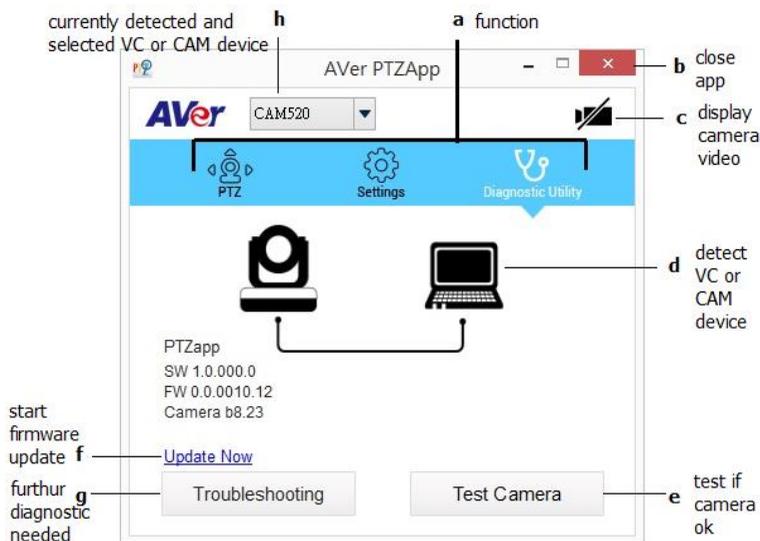
a. **Function icon:** Click it to switch to the function's page.
   - **PTZ:** To control the camera direction, zoom in and out, and to enable/disable the backlight compensation during your video call.
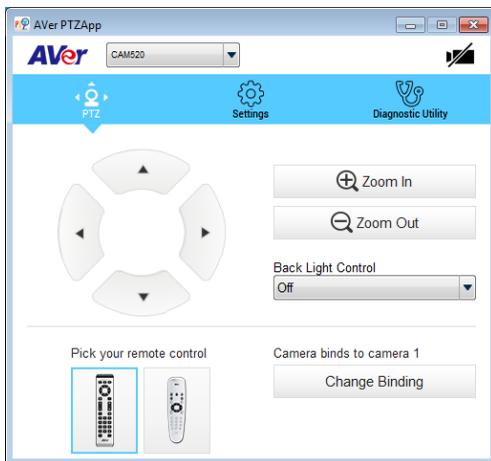
   - **Settings:** To setup parameters of the camera – White balance, noise filter, frequency, brightness, sharpness, flip, mirror, ADDR, baud rate, H.264 stream, and numeric key control. ADDR and baud rate is for RS232 connection setting. Click the **Save** button to save all settings. To change all the settings, back to the default values, click the **Factory Default** button.
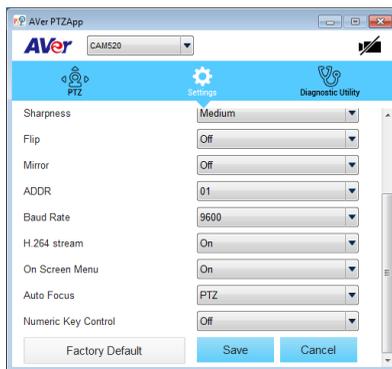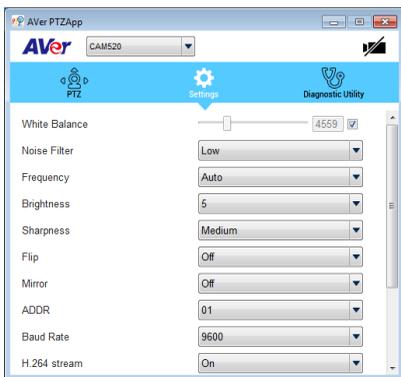
- **Diagnostic Utility:** To display the S/W and F/W version and the devices connection status. You can also update the firmware of the camera.
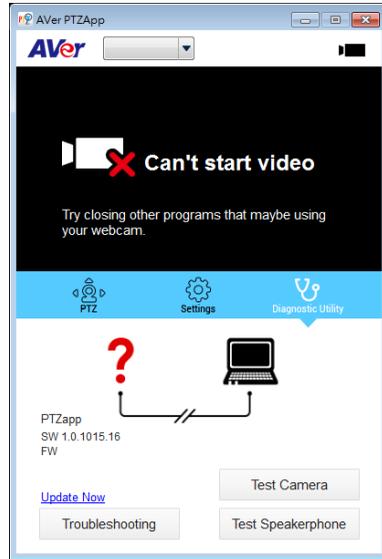

b. **Minimize:** Minimize the app to system tray. To quit the application, right-click the icon on the system tray and select "**Quit**".

c.   **▌■ (Camera):** Click it to view the camera live view. Click the camera icon again to close the camera live view. If the live video did not appear, please check the camera and the laptop/PC connection to make sure all are corrected and well connected.


Normal   Un-normal

d. **Connection diagnostic:** Display devices connection status.   If the AVer PTZApp has detected that camera and laptop/PC are not connected well, the diagram will display an "**X**" on the camera to indicate the connection has a problem. If the camera is in use by another application, it will display "Can't start video" warning.

e. **Test Camera:** Click the "**Test Camera**" to check the camera video display status. You can adjust the camera direction and view of the zoom in/out. To leave the page, click the **Abort Diagnostic** button.
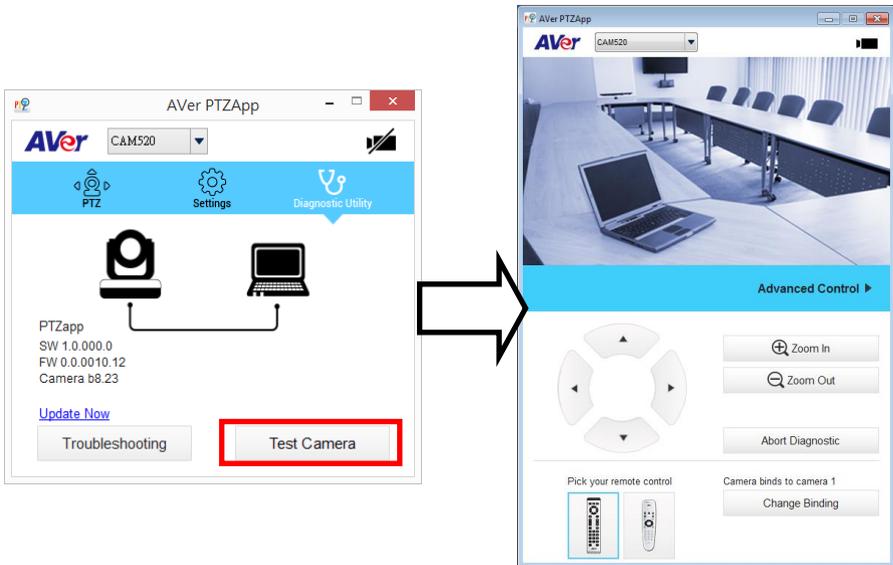
f. **Update Now:** Allows the user to update the CAM520 camera's firmware.
   1. Click" **Update Now**".
   2. A dialog will display the current firmware version and available new firmware version (internet connection is required).
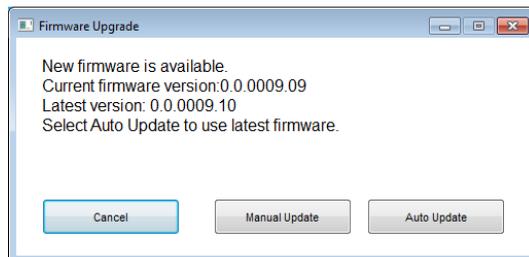
   3. To auto update, click "**Auto Update**" and update process will start. The new firmware will be downloaded first; then, the new firmware will be uploaded to camera.
   [Note] Please make sure camera, power, and laptop/PC are all well connected and stay connected during the entire process.

Firmware Upgrade	
Uploading to camera..	
[progress bar]	2%
	Cancel

Firmware Upgrade	
Reprogramming camera..	
[progress bar]	36%
Please make sure USB & Power are connected!	

Download new firmware   Update new firmware to camera

4. To update the firmware manually, click "**Manual Update**" and locate the new firmware to start the process.

g. **Troubleshooting:** collect more system information for troubleshooting before you contact AVer technical support.

h. **Currently selected device:** This field displays currently selected VC or CAM device controlled by PTZApp. If you have more than one AVer VC or CAM devices connected to this PC/Mac PTZApp is running, you can click on the drop down list to select other AVer VC or CAM device.
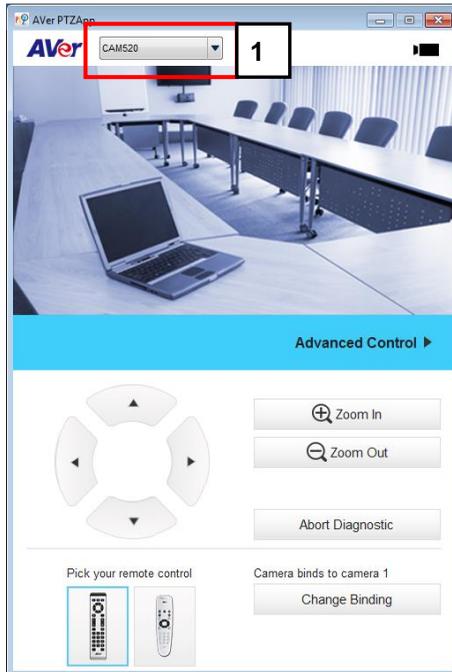
Select Remote Controller

CAM520 supports two different remote controls. Please select your remote.
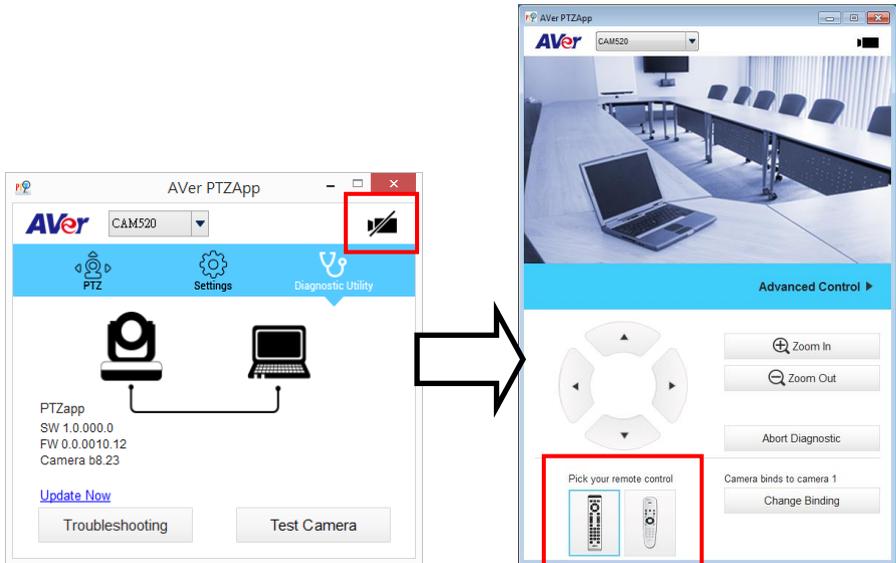
Set the Camera Number

With multiple cameras connected, users can set each camera to buttons 1 to 3 on remote control.

1. If PTZApp detects computer connects to multiple VC/CAM, you can select which camera you like to control through the dropdown list.
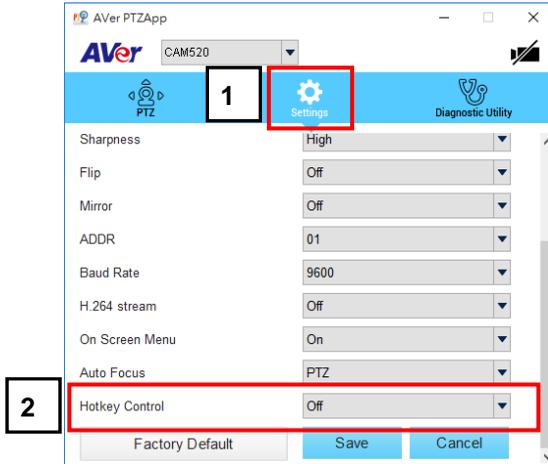2. Next, Click **Change Binding** button.

3. Select which camera number of remote control it maps to.
4. Click **Save** to save settings. To un-save the settings, click **Abort**.
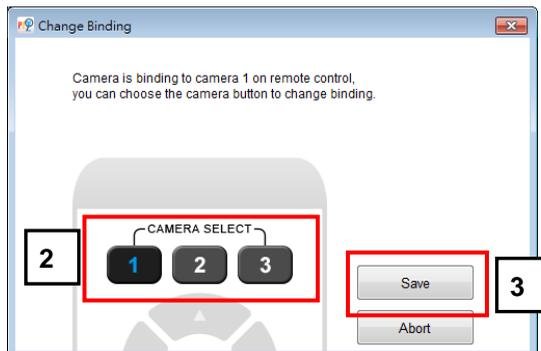
Hotkey Control

Enable hotkey control to use keyboard control camera's movement and backlight.
1. Select "**Settings**"
2. Set Hotkey Control to "**On**".

3. A hotkey description as below figure shown: