VC320

User Manual
Federal Communication Commission Interference 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.

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.

Radiation Exposure Statement:
This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

Europe – EU Declaration of Conformity

This device complies with the essential requirements of the R&TTE Directive 1999/5/EC. The following test methods have been applied in order to prove presumption of conformity with the essential requirements of the R&TTE Directive 1999/5/EC.

Industry Canada statement

This device complies with RSS-210 of the Industry Canada 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.

Ce dispositif est conforme à la norme CNR-210 d'Industrie Canada applicable aux appareils radio exempts de licence. Son fonctionnement est sujet aux deux conditions suivantes: (1) le dispositif ne doit pas produire de brouillage préjudiciable, et (2) ce dispositif doit accepter tout brouillage reçu, y compris un brouillVa susceptible de provoquer un fonctionnement indésirable.

Radiation Exposure Statement:
This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

Déclaration d'exposition aux radiations:Cet équipement est conforme aux limites d'exposition aux rayonnements IC établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de 20 cm de distance entre la source de rayonnement et votre corps.
低功率電波輻射性電機管理辦法

第十二條
經型式認証合格之低功率射頻電機，非經許可，公司、商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能。

第十四條
低功率射頻電機之使用不得影響飛航安全及干擾合法通信。經發現有干擾現象時，應立即停用，並改善至無干擾時方得繼續使用。前項合法通信，指依電信法規定作業之無線電通信。

低功率射頻電機須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。

Battery Caution
Risk of explosion if battery is replaced by an incorrect type.
Dispose of used batteries in a safe and proper manner.

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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.

QDID:83671
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### Package Contents

1. VC320 camera unit
2. Remote control
3. HDMI cable
4. USB cable
5. Power adapter*
6. Quick Installation Guide

*The power plug will vary depending on the standard power outlet of the country where it is sold.
1. Power on/off button & LED
2. Camera lens with ±10 degree tilting
3. NFC
4. Microphone
5. Mute and status LED*
6. Bluetooth and status LED*
7. Video conference and status LED*
8. Presentation and status LED*
9. IR receiver
10. Speaker

* Buttons are capacitor touch sensitive.
1. 2.1A (reserved)  
2. HDMI input  
3. HDMI output  
4. USB to PC/Mac  
5. Reset button  
6. Power adapt input  
7. Kensington lock  
8. Tripod mount hole
LED Indicator

<table>
<thead>
<tr>
<th>Function</th>
<th>LED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power while charger connected</td>
<td>- Blinking orange: battery is charging</td>
</tr>
<tr>
<td></td>
<td>- Steady orange: battery charge is completed</td>
</tr>
<tr>
<td></td>
<td>- Blink Blue: powering up or powering down</td>
</tr>
<tr>
<td></td>
<td>- Steady blue: powered up</td>
</tr>
<tr>
<td>Power from battery</td>
<td>- Blink green: powering up or powering down</td>
</tr>
<tr>
<td></td>
<td>- Steady Green: powered up</td>
</tr>
<tr>
<td></td>
<td>- Blink alternate orange blue: low battery, can’t power up</td>
</tr>
<tr>
<td>Mute (🔇)</td>
<td>- Blue: unmute</td>
</tr>
<tr>
<td></td>
<td>- Red: mute</td>
</tr>
<tr>
<td>Bluetooth (.bluetooth)</td>
<td>- White: on</td>
</tr>
<tr>
<td></td>
<td>- Light off: off</td>
</tr>
<tr>
<td></td>
<td>- Blinking white: VC320 is pairing with mobile phone</td>
</tr>
<tr>
<td>Video conference (المؤتمرات)</td>
<td>- White: on</td>
</tr>
<tr>
<td></td>
<td>- Light off: off</td>
</tr>
<tr>
<td></td>
<td>- Blink white: Video conference is use</td>
</tr>
<tr>
<td>Presentation (معرض)</td>
<td>- Blue: on</td>
</tr>
<tr>
<td></td>
<td>- Light off: off</td>
</tr>
</tbody>
</table>

Take out the Remote Control from VC320

The remote control is located on back side of VC320; you need to take it out from VC320 to use it. Please remove film between remote control battery compartment before first use.
**Remote Control Battery**

[Note]
Remove the battery film tab before first use.

1. Push and press remote cover toward back end.
2. Lightly touch battery and completely pull out the film tab blocking the battery.

To remove or replace the battery.

1. Press clip holder toward back end to release the battery.
2. Place new CR232 battery + side up under the triangle contact and clip.
# Remote Control

<table>
<thead>
<tr>
<th>Name</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Power</td>
<td>Turn on/off VC320 when charger connected.</td>
</tr>
<tr>
<td>2. Layout</td>
<td>In Video Conference and Presentation modes, press it to switch between HDMI input and camera input on screen.</td>
</tr>
<tr>
<td>3. Pan and tilt</td>
<td>To pan and tilt camera view in Zoom in mode.</td>
</tr>
<tr>
<td>4. EZCrop</td>
<td>In Video Conference mode, EZCrop automatically crops camera video to fill faces detected into frame, detected into full frame.</td>
</tr>
<tr>
<td>5. Camera Privacy shutter</td>
<td>In Video Conference mode, press it to stop camera video.</td>
</tr>
<tr>
<td>7. Zoom in/out</td>
<td>Press to digital zoom in or zoom out.</td>
</tr>
<tr>
<td>8. Volume up/down</td>
<td>Adjust volume up or down.</td>
</tr>
<tr>
<td>9. Bluetooth mode</td>
<td>Press it to turn on/off Bluetooth mode.</td>
</tr>
<tr>
<td>10. Video conference mode</td>
<td>Press it to turn on/off video conference mode. The default is “ON”.</td>
</tr>
<tr>
<td>11. Presentation mode</td>
<td>Press it to turn on/off presentation mode.</td>
</tr>
<tr>
<td>Name</td>
<td>Function</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>--------------------------------------------------------------------------</td>
</tr>
<tr>
<td>12. Call/answer*</td>
<td>Answer a call or start a call.</td>
</tr>
<tr>
<td>13. Hang up*</td>
<td>End the call.</td>
</tr>
<tr>
<td>14. Battery compartment cover</td>
<td>Press (toward down) it to open for battery installation.</td>
</tr>
</tbody>
</table>

* Function requires AVer PTZApp
Setup VC320

1. Use the USB cable connects VC320 and PC/laptop.
2. Connect the power (DC12V) to a standard 100V~240V AC power outlet. The VC320 has recharged battery inside, please fully charge for the first time use.

   [Note] 1. When power LED turn to steady orange, the battery is fully charged.
2. If power LED is in blinking orange instead green while power on, it means VC320 battery is low. Please plug in power adapter and power on VC320 again; charging may take few minutes before starting power up.
3. In battery powered status, if power LED blinks orange and blue alternatively, power VC320 from wall outlet immediately.

3. Install Aver PTZApp on laptop that is connected with VC320. The VC320 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.

   [Note] AVer PTZApp version is 1.2.1028.30 at least or above.
4. Power on the VC320.

   [Note] 1. When power on with wall power, the power LED is blue.
2. When power on by battery power, the power LED is green.
5. To make a call, run your video application (Skype™, Microsoft® Lync™, Google Hangout, Cisco WebEx®, GoToMeeting™, WebRTC, and etc.); select VC320 as your video and audio device.
Use VC320

Video conference mode, presentation mode, and Bluetooth mode can be used independently or combined together. Each function mode is described in following.

Video Conference Mode

1. Make sure all devices (camera and laptop) are well connected and are powered on.
2. Run your video application (Skype™, Microsoft® Lync™, Google Hangout, Cisco WebEx®, GoToMeeting™, WebRTC, and etc.) on your laptop.
3. Select VC320 camera, microphone and speaker in device settings of your video communication applications.
4. You can now make your call.
Presentation Mode

During conferencing call, present the content on your laptop screen, mobile phone, or pad device to participants.

Press button on VC320 or remote control to turn on presentation mode.

There are three ways to use presentation mode and are described in the following.

- **HDMI connection**: two ways to use present function.
  - Use presentation mode to display computer content locally while using VC320 camera and speakerphone for communication app.
  - Use presentation mode to show camera capture to HDMI display.
■ Chromecast 2: Through the Chromecast 2 to wireless screen mirror mobile phone/pad device on HDMI display.

Bluetooth Mode

Use Bluetooth to connect to VC320 and use it as a hands free speakerphone.

[Note] You need to manually pair the mobile phone to VC320 before first usage of this VC320 function.

1. Power on the VC320.
2. Press Bluetooth button (장치) on VC320 or remote control to turn on Bluetooth function. The Bluetooth LED will light up. And, Press Bluetooth button over 3 second to start pairing. The Bluetooth LED will be flashing and ready to make a pairing.
3. Turn on the Bluetooth function on your mobile phone. And then, find the name “AVer” to make a connection.
   [Note] The Bluetooth LED must in flashing for pairing.
4. Once your mobile phone has connected with VC320 through Bluetooth; the VC320 will make a connection automatically next time when Bluetooth function is on.

   [Note]
   a. VC320 will memorize four mobile phones for automatically pairing.
   b. To clear pairing memorize, use AVer PTZApp. For more detail, refer to section “Test Bluetooth”.
   c. Remember to disconnect from VC320 to disable hands free call function.
**NFC connection**

Through NFC to pair VC320 with mobile phone.

1. Power on the VC320.
2. Press Bluetooth button (.bluetooth) on VC320 or remote control to turn on Bluetooth function. The Bluetooth LED will light up.
3. Turn on the NFC function on your mobile and put the phone on NFC icon (N) to make a connection.

[Note] While connecting, the Bluetooth LED light will flash.

**EZCrop Function**

In Video Conference mode, press (ezcrop) button on remote control can automatically detect up to 8 faces and zoom in to fit faces detected to full frame.

[Note] The EZCrop only can detect faces up to 30° angle each side.

**Battery Operation**

If battery is running low while you are using VC320, it will beep low power warning every 5 seconds. We suggest you plug in power charger promptly. Otherwise, it will automatically shutdown to protect battery health.
Adjust Camera Lens

VC320 camera lens can be manually tilted up or down up to 10 degrees.
AVer PTZApp

Install AVer PTZApp

Please go to http://www.averusa.com/video-collaboration/support/downloads.asp to download the AVer PTZApp. After downloading, double-click on the file and follow the on screen instructions to complete the installation.

[Note] AVer PTZApp version must be 1.2.1028.30 or above.

Remember to select the “Skype plug-in” option during installation.
After installing the AVer PTZApp, double-click on the AVer PTZApp icon to run the application.

Use AVer PTZApp

1. To use certain remote control buttons within selected video communication application, a plug-in needs to be installed and an approval request will be prompted.
2. 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 functionality on the Remote Control.
3. 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.
4. Each function will be described as following.
   - **Currently selected device**: Displays currently selected VC or CAM device controlled by PTZApp. If there is more than one AVer VC or CAM devices connected to one PC/Mac PTZApp is running, you can click on the drop down list to select other AVer VC or CAM device.
- **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 hotkey 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.

![Settings and Diagnostic Utility Sections](image)

- **Diagnostic Utility**: To display the S/W and F/W version and the devices connection status. Also test the camera, speakerphone, Bluetooth mode, and present mode status, and update the firmware of the camera.
- **Minimize**: Minimize the app to system tray. To quit the application, right-click the icon on the system tray and select “Quit”.

- ![Camera](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 laptop’s connection to make sure all are correct and well connected.
- **Connection diagnostic**: Display devices connection status. If the AVer PTZApp has detected that camera and laptop are not connected well, the diagram will indicate the connection has a problem and display “Can’t start video” warning.

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

Click the **Test Camera** button to check the camera status. Click 📹 to view camera live video. Also, you can adjust the camera direction and view of the zoom in/out. To leave the page, click the **Abort Diagnostic** button.

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**Test Speakerphone**

Click to check the speakerphone status. It will require the user to record a short message and play it back to ensure the speakerphone is working.
**Test Bluetooth**

Make sure the Bluetooth function is enabled (press Bluetooth button 📣 on VC320 or remote control).

Click "Test Bluetooth".

You can refer to instruction and diagram to make a Bluetooth connection.

- **Currently Paired Device**: Display the currently connected mobile phone information.
- **Remembered Paired Device**: Four mobile phones can be memorize by VC320 and are listed in "Remembered Paired Devices "column.

- **Manual Pairing**: Click it to pair with mobile phone manually.
- **Clear Pair Device Memory**: To clear the memorized mobile phone from Remembered Paired Devices list.
- **Abort Diagnostic**: exit the dialog.
**Test Present**

Check video source status in present mode. Make sure the present mode is on (Press present mode button on VC320 or remote control).

Click “Test Present”.

AVer PTZApp will detect current mode status and display on dialog box as below shown. Click “Toggle Source” can switch video source between HDMI input and USB input. To exit the dialog, click “Abort Diagnostic” button.
Update Now

Allows the user to update the VC320 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] Before updating the new firmware to the camera, please make sure camera and laptop are all well connected and stay connected during the entire process.

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

<table>
<thead>
<tr>
<th>Action</th>
<th>Hotkey Combination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pan / Tilt</td>
<td>Ctrl + ↑ / ↓ / ← / →</td>
</tr>
<tr>
<td>Zoom In / Out</td>
<td>Ctrl + + / -</td>
</tr>
<tr>
<td>Backlight Control</td>
<td>Ctrl + L</td>
</tr>
<tr>
<td>Preset Load</td>
<td>Alt + 0~9</td>
</tr>
</tbody>
</table>