

Cloud Cam Setup and Testing Instructions

OVERVIEW

Cloud Cam is a home monitoring camera with features such as 1080p live video feed and ability to notify its customers with motion and person detection alerts. For each alert, it also creates an associated video clip that can be accessed via the Cloud Cam mobile application & Cloud Drive Website. In this initiative, we ask for your help in understanding the motion and person detection features on Cloud Cam. As part of this, please setup your Cloud Cam using the following instructions and perform homework activities within 14 days of receiving your device.

OVERALL STEPS

1. Setup Cloud Cam using instructions in Section I.
2. Chose a location suitable for home monitoring. Examples of desired placements are listed in Section II.
3. Perform homework activities at each location, one per clip within 14 days of receiving device.
4. Isolate Homework Activities outlined in Section III
5. After completion of activities, rotate camera to next location and repeat steps 3-5 until you've completed activities for 4 total camera placements.

SECTION – I: Camera Setup

Please follow the instructions below to complete Cloud Cam setup.

SETUP

- 1) Connect the micro USB cable to the back of the camera and plug in the other end to an outlet
- 2) Download the Cloud Cam App from Google Play or iOS App Store
- 3) Login to Cloud Cam App using the provided Amazon account credentials.
DO NOT use a personal Amazon Account. If you did not receive your account or are unable to login, please contact cies-iotlab@sjsu.edu or call 408-924-8170.
- 4) Follow the instructions in the Cloud Cam App to complete set up. *If you encounter issues setting up your Cloud Cam, please refer to Section- IV: Troubleshooting*
- 5) Once you see the live stream on the phone and the indicator light is green, you can begin homework exercise in Section II.

CLOUD CAM INDICATOR LIGHTS

The following indicator lights are available on the Amazon Cloud Cam.

- **Blinking blue:** The device is starting up. **Note:** This can take 2-3 minutes.
- **Slow pulse between blue and green:** The device is in setup mode.
- **Blinking yellow:** The device has an error. To learn more, go to [Troubleshoot Your Amazon Cloud Cam](#).
- **Solid green:** The device is on.
- **No color:** The device is off.

SECTION – II: Cloud Cam Activity Homework

The objective of this study is to understand existing person and motion detection features on Cloud Cam. It is observed that in some cases person alerts can be falsely generated on pets, moving cars and other objects of home décor. As a result, we would like to obtain examples of when the classifiers correctly/incorrectly distinguish objects.

Prior to start of exercise, please complete SETUP Section and chose a location where you would place a home monitoring camera. After completing setup, follow the instructions below.

Camera Placement	
Indoors	Outdoors
Place camera indoors pointed at areas of moderate to heavy traffic.	Place camera outdoors (or indoor looking outdoors through a clean window*) pointing as you would place a security camera.
<u>Select two of the following locations below :</u>	<u>Select two of the following locations below:</u>
<u>Entryway/Hallway</u> : View should cover one or multiple rooms <u>Kitchen</u> : View should one or more appliances <u>Entertainment Room</u> : View should cover some seating area <u>Dining Room</u> : View should cover table and chairs <u>Family / Activity Room</u> : View should cover a gathering area <u>Pet room</u> : View should monitor some animal activity	<u>Entryway/Doorsteps</u> : View should cover main entrance to home <u>Garage</u> : View should cover vehicle parking area <u>Backyard</u> : View should cover some human interaction <u>Driveway</u> : View should display entering/existing property <i>ing through the window, please ensure to keep the camera at least 6 feet from the window and go to Settings -> Select "Night Vision" -> Select "Turn off Night Vision Lights".</i>
Activity Instructions	
For each camera placement, record:	For each camera placement, record:
<u>10 clips of diverse daytime</u> activities that typically occur inside the home AND <u>10 clips of diverse evening</u> activities when it is dark/operating in night	<u>10 clips of diverse daytime</u> activities that typically occur outside the home AND <u>10 clips of diverse evening</u> activities when it is dark/operating in night
Examples of activities include pet moving around, people waving, jumping, running, interacting with objects or animals around the house, etc.	Examples of activities include vehicle parking, mail/package deliveries, pets moving around, entering/exiting home, etc.

At completion of all homework activities, you should have 80 total clips. (2 Indoor placements x (10 daytime +10 evening activities)) + (2 Outdoor placements x (10 daytime +10 evening activities)) = 80 clips

SECTION – III: Isolate Homework Activities

This section describes how to isolate homework activity clips. Please follow the steps below

1. Perform each homework activity.
2. Wait until the video for that activity appears in your Cloud Cam app
3. Review the clip to ensure that there is good image contrast and activity is visible. If contrast bad and/or activity not visible, delete clip and repeat step 1.
4. Once all activities have been completed, delete any additional videos following the instructions below. At completion of all homework activities, you should have 80* clips total.
5. Notify <<SJSU Contact>>. After your completion of the activities has been confirmed, further instructions will be provided

**(2 Indoor x (10 daytime +10 evening activities)) + (2 Outdoor x (10 daytime +10 evening activities)) = 80 clips*

Delete Via Cloud Cam App

- Open Cloud Cam App on phone
- Tap Menu Icon
- Tap Name of Device
- Press and Hold a Saved Video
 - a. To delete multiple videos, press and hold a saved video, then tap on additional videos to select them
- Tap Trash icon

Note: Deleting videos from the Cloud Cam app will delete them from your Amazon Drive and will not require steps below.

Via Cloud Drive:

Delete from Cloud Drive:

- Visit <https://www.amazon.com/clouddrive>
- Select “Cloud Cam Clips” Folder
- Locate folder with Cloud Cam Name and click checkbox next to the video(s) you’d like to delete
- Select “Move To Trash” at top right

Please note that you will not retain access to any data or recordings made on the device during the study period

SECTION – IV: Troubleshooting

Please use the section below for issues you may face using during set up or use of your Cloud Cam. A complete User Guide can be also be accessed in the Cloud Cam App by opening the *Menu* (≡), selecting *Help* and then *User Guide*, or by visiting <https://www.amazon.com/gp/help/customer/display.html?nodeId=202160840>.

ISSUES WITH SET-UP/DEVICE PAIRING

If you have issues setting up the Cloud Cam, please try the following:

- Unplug the Micro-USB Cable from the Cloud Cam, wait 15 seconds, and plug it back in
- Restart your phone
- Uninstall & Reinstall the Cloud Cam App on your phone
- Reset the Cloud Cam
 - a. Use paper clip and push into hole in back of device (hold for 5-10 seconds until LED is turned off)
 - b. Wait 10 minutes after booting up
 - i. For initial setup connectivity: Device needs to be in setup mode - It must be flashing blue and green in order to be discovered.
 - ii. If it is blinking yellow, reset the device again (repeat step a)

RECONFIGURING WI-FI/RESETTING THE CAMERA

If you move the device to a new/different Wi-Fi network, you'll need to reset the camera. To Reset:

- a. Use paper clip and push into hole in back of device (hold for 5-10 seconds until LED is turned off)
- b. Wait 10 minutes after booting up
 - i. For initial setup connectivity: Device needs to be in setup mode - It must be flashing blue and green in order to be discovered.
 - ii. If it is blinking yellow, reset the device again (repeat step a)

DELETING A VIDEO

If you've captured any videos that you do not wish to be used as part of the study, please contact **us** and provide the date/time in question.