



# DEFENDCAM



## INSTRUCTION MANUAL

[TACTACAM.COM](http://TACTACAM.COM)

DEER MANAGEMENT SYSTEMS, LLC



# DEFEND APP DOWNLOAD



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**DEFEND APP**

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# INTRODUCTION

## WHAT IS IN THE BOX?

- (1) Security Camera
- (1) Instruction Manual
- (1) Mount
- (1) Verizon & AT&T SIM Card

## WHAT YOU WILL NEED

- Full-size SD Card - Class 10, U3,
- 16GB-32GB
- Recommended Brands: Tactacam, Lexar, SanDisk *(Other brands that are lower end SD cards Reveal X 3.0 and willare incompatible with the Rev unexpected results)*
- (12) AA Batteries Required - Lithium Batteries recommended in colder temperatures

## RECOMMENDED CAMERA ACCESSORIES (NOT INCLUDED)



**SD Card**



**Solar Panel**



**No Trespassing Sign**



**Lithium Cartridge**



**Armoured Solar Cable**

**VIEW AND PURCHASE ALL ACCESSORIES AT [DEFENDCAM.COM](http://DEFENDCAM.COM)**

# INTRODUCTION

1 Antenna

2 PIR Motion Sensor

3 Lens

4 Device Status Indicator

5 Device Signal Indicator

6 Mount

7 Test Button

8 Reset Button

9 Power Button

10 Mount Attachment

11 External Battery In/DC Port

12 USB Port

13 Battery Door Latch



## SETTING UP THE CAMERA

1. Install camera's antenna.
  - Note: Do not over tighten the antenna, once it is secure stop tightening to prevent antenna port damage.
2. Install a Class 10 U3 SD card (16GB or 32GB).
  - Recommended brands are: SanDisk, Lexar and Tactacam
3. Install 12 AA batteries.
  - To eject the battery tray, open the battery door latch on the back of the camera. When inserting AA batteries correctly orientate + and - on the front and back of the tray. See battery details on page 13 under Best Practices.

### Verizon and AT&T SIM Card install

Locate the (Verizon and AT&T) Sim card located in the white envelope included in your package. Remove the desired SIM (Verizon or AT&T) from its holder and install into the Sim slot of your camera. Cell Phone Carrier vs. Camera Carrier: The carrier you choose (Verizon or AT&T) does not need to match your cell phone carrier. Just make sure you choose the carrier that has the best signal coverage in the area you will be keeping the camera.

### Here is the link to our Data Plans and Coverage Map

<https://www.revealcellcam.com/data-plans>

When activating the camera in the APP will need to select (Verizon or AT&T) depending on which Sim you selected for your camera.

**Note: The SIM cards are connected to your camera so do not mix or use SIM's from other cameras including other Reveals.**

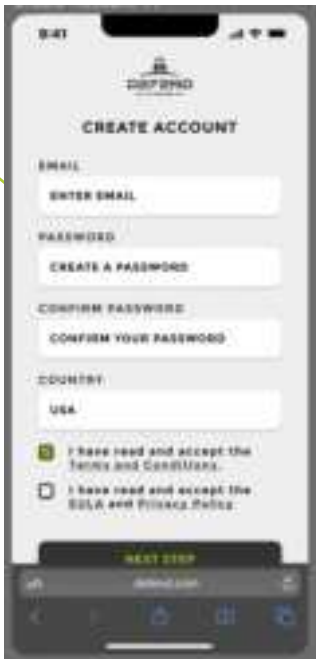


## SETTING UP YOUR ACCOUNT

If this is the first Defend camera you will be activating, please visit the Defend Web Portal at <https://account.defend.com/activation> to set up your account. You can also access the Web Portal directly from your app, by clicking **My Defend** on the account page in the app. If you already have a Defend account with ACTIVE cameras, you can simply log in to your app and add your camera following the instructions on page 8.

## DOWNLOADING THE APP

In your Apple or Google Play Store, download the **DEFEND** app and sign in using the same email and password you created on the website. <https://account.defend.com>



## ADD CAMERA TO THE APP

1. Navigate to the Defend app on your device and login using your Defend account credentials. Click the home icon.
2. Click the camera icon at the top.
3. From the camera page click the (+) in the bottom right hand corner.
4. Follow the in-app prompts to activate your Defend cam. Ensure the SIM selected (Verizon or AT&T) mirrors (or is the same as) the SIM card already inserted in the camera.
5. The app will prompt you to scan the QR code located inside the door of the camera.
6. After your camera is activated, turn your camera to setup, you will see the signal status indicator searching, and then connect showing the signal strength.





## PAIRING YOUR CAMERA TO YOUR PHONE THROUGH WI-FI

You can automatically change and apply the camera settings when your phone is connected to the camera's Wi-Fi. **This will not work unless you are next to the camera.**

1. Turn Defend to SETUP mode.
2. When the Wi-Fi light is blinking blue, it is ready to pair to your phone or tablet.
3. In the app go to the Account page and click Connect to Defend Wi-Fi.
4. Follow the in-app instructions and turn ALL slides to the ON position. You can also manually connect in your phone's Wi-Fi settings, select Defend and enter the password ( **DEFEND2024** ) This Wi-Fi password is case sensitive, no spaces.

5. See preview on screen
  - a. Red line on preview is point of focus
  - b. To send test picture, press "Test" button on camera

Also available in the app while connected to Wi-Fi:

- a. Instantly apply setting changes from the app
- b. Formatting SD Card

## REMOTELY CHANGE THE CAMERA SETTINGS FROM THE APP

From the camera page click the settings icon to make changes to the cameras settings. Make sure to select "Apply Settings" when done to save your changes.

**Note: In cameras SETTINGS > Settings Check, Daily will check settings every 24 hours. Instant will Receive settings Instantly but will consume more battery.**

## SENDING A TEST PICTURE

1. Allow the camera to connect to 4G signal. The LED signal indicator light will be constant green.
  - After your camera is activated, you will see the signal status indicator searching, and then connect showing the signal strength.
  - After the camera has connected, push the test button to send a photograph.
  - You will see the status light blinking as the image is sending.
  - When the test picture sends successfully, the status light will turn green.
  - If the status light turns red there may have been an issue trying to send the test photo. This is usually caused by signal strength or the SD Card.



# START USING THE REVEAL GEN3

## SENDING A TEST PICTURE (CONTINUED)

2. Refer to the app to be sure the picture has successfully sent.
3. While your camera is connected to your phone with Wi-Fi, you will be able to access a live preview to help with camera setup and proper placement.
4. Allow the camera to connect to 4G signal. The LED signal indicator light will be constant green.

## LEAVING YOUR CAMERA IN THE FIELD

1. While your camera is connected to your phone with Wi-Fi, you will be able to access a live preview to help with camera setup and proper placement.
2. Ensure the antenna is securely tightened.
3. Turn the camera ON.
4. As long as your phone picks up a signal, be sure a motion detected picture is sent to your phone via the app. This may take a few minutes.



## SETTINGS / SPECIFICATIONS

Camera Mode	Photo; Photo+Video
Day/Night Mode	Daytime: Color, Nighttime: B+W
IR Range	96+ Feet
PIR Angle	45*
Flash	Low Glow IR Technology effectively minimises visible flash
Operating Keys (2)	1x Power button; 1 x Test Button
Lens	F=6mm; F/No=2.0; FOV=60* Auto IR-Cut-Remove (at night)
SD Card	Class 10, U3, 16GB-32GB, minimum 90MB/Sec
Status Indicator	1 LED for Status, 1 LED for Signal
Picture Format	JPEG
Video	Optional
Trigger Speed	0.5 seconds
SD Card Loop	Optional
Operation Power	9-12V
Battery	X = 12xAA Cartridge Optional external power source (12V external battery pack or solar panel)
External DC	12V-2A

## PROPER CAMERA PLACEMENT

1. Location and placement is critical for optimal camera performance.
2. Avoid hanging the camera on small trees that are prone to moving with the wind.
3. Place the camera about 8 - 10' high.
4. We recommend having the camera pointing down about 10 degrees.
5. To achieve the best lighting conditions, face your camera North. Avoid facing your camera toward the sun.

## BATTERIES AND CAMERA PERFORMANCE

1. Use the recommended batteries for the Reveal:
  - Energizer Lithium batteries
  - Duracell Max Alkaline batteries
  - Rayovac UltraPro Alkaline batteries
2. In cold weather, use lithium ion batteries for optimal camera speed and performance.
3. Expected picture count with the proper batteries (in greater than freezing temps) are:
  - Lithium: 4,000+ pictures
  - Alkaline: 2,500+ pictures
4. If connecting the Tactacam External Solar Panel (sold separately), the lithium batteries would act as a backup power source.

## CAMERA SENDS PICTURES OF NOTHING

**Motion sensors** (PIR sensors) are actually heat and motion sensors. This is why on a hot and windy day, people get false triggers. People and animals are not the only objects that will trigger your camera; vegetation and precipitation can act as a moving target as well.

1. Be sure to clear any low hanging tree branches, brush, and weeds from the camera field of view.
2. Motion sensitivity recommendations:
  - To start set to High, and decrease sensitivity if you're getting too many false triggers (9 being the highest and 1 being the lowest).

## NIGHT VISION FLASH RANGE DOESN'T MEET EXPECTATION

1. Check to make sure that batteries are fully charged.
2. "Max Range" offers better IR flash range. Given IR flash range values are based on max range setting; adjust Night Mode to Max Range for better night vision flash range.
3. High quality 1.2V NiMH rechargeable AA batteries can also offer improved IR flash range. Note: If your camera will be used in cold weather, we do recommend lithium batteries to deliver consistent results.
4. Certain surroundings (like trees, walls, ground, etc.) within flash range can deliver you better night time images. To improve night images do not aim camera in an open field where there is nothing to reflect the IR flash back.

## **CAMERA STOPS TAKING IMAGES OR WON'T TAKE IMAGES**

1. Make sure that the SD card is not full. If the SD card is full, the camera will stop taking images. Users can turn on SD Loop to avoid such problems. This will cause the SD card to overwrite older images.
2. Make sure that alkaline or NiMH-AA batteries have enough power for the camera to work.
3. Format the SD card with the camera before using or when the camera stops taking images.

## **INTERNAL CONDENSATION ON LENS**

The Defend is IP66 rated waterproof. This means the camera is water resistant against powerful jets. The only way the Defend can get condensation in or behind the lens is if the antenna is not screwed in all the way, or if there is dirt or debris on the seal. Follow these at home instructions to alleviate this issue if need be:

- Pull the SD card out and let the camera sit for 3-4 days open, in an area where there is circulating air (fan or vent).
- You can also put in a sealed container with rice for 24 hours to draw out the moisture.
- Clean the seal well and tighten your antenna.
- Place back out in the field.

## **IF THE CAMERA HAS ACCIDENTALLY BEEN SUBMERGED IN WATER**

1. Do not open the camera right away.
2. Be sure to dry the outer housing of the camera, preventing water from entering the inside of the camera and causing internal damage.

# LIMITED WARRANTY

## HOW LONG DOES THIS COVERAGE LAST?

1. One year from the date of purchase.
2. Be sure to register your Defend under warranty at [\*\*\*https://www.defend.com/warranty-registration\*\*\*](https://www.defend.com/warranty-registration)

## WHAT IS COVERED?

1. This limited warranty covers: manufacturer defects in materials and workmanship including but not limited to:
  - Defective buttons
  - Cracked/chipped glass lens
  - Broken SD card or SIM card spring mechanism
  - Broken USB port
2. Covered cameras will either be repaired by a certified camera technician, or replaced.

## WHAT IS NOT COVERED?

1. This limited warranty does not cover any damage caused by the owner modifying, attempting to fix, or otherwise altering the product.
2. This limited warranty excludes damage caused by people or animals, including but not limited to: antenna, strap, Fresnel lens, glass lens, or camera housing. **If damage is caused to the camera by the owner or animal, contact customer support for repair options.**



## Federal Communications Commission - Part 15



This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the Federal Communications Commission 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 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/TV technician for help.

Changes or modifications to this equipment not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. 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 must be operated in a minimum of 20 cm separation distance to the user.

# **DO NOT RETURN THIS PRODUCT TO YOUR RETAILER**

For any warranty issues or questions on how to best watch over your property with Defend

**CALL 218-282-5650**

OR

**EMAIL [SUPPORT@TACTACAM.COM](mailto:SUPPORT@TACTACAM.COM)**

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