



# DEFEND 360 INSTRUCTION MANUAL

**DEFENDCELLCAM.COM** 



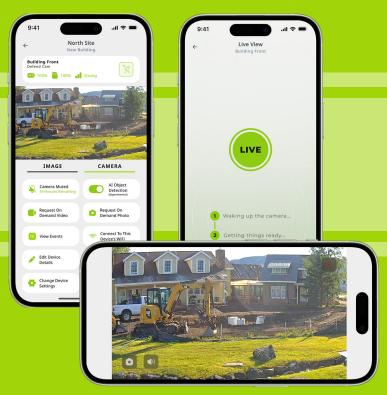
#### **VISIT YOUR APP STORE TO DOWNLOAD**













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## **INTRODUCTION**

#### WHAT'S IN THE BOX

- DEFEND 360
- Camera Mount
- Mounting Hardware
- Battery
- Solar Panel
- Antenna
- USB-C Charging Cable
- Quick Start Guide

#### WHAT YOU WILL NEED

Power Drill









## INTRODUCTION

#### **OVERVIEW**

- Antenna
- 2 Solar Panel
- 3 Speaker
- 4 Motion Detection Lens
- 5 IR Window (x2)
- 6 Camera Lens
- 1 Light Sensor
- 8 Microphone
- 9 Status LED
- 10 Mount
- Battery Cover
- 12 Access Panel
- 13 USB-C Input
- Power Switch
- 15 Reset Button
- 16 USB Indicator



# **BUTTONS**



CAMERA CONTROLS			
Key Name	Key Function		
POWER	Slide to ON to power on device		
	Slide to OFF to power off device		
RESET	Turn the device off. Then turn the device back on to enter setup mode. When the SOLID BLUE LED appears, hold the reset button for 10 seconds to reset the device.		

## LIGHTS



INDICATOR GUIDE					
LED Name	Color	Indication	Description		
USB	RED	Device Charging	When first plugged in the GREEN LED will Flash before changing to RED. It will stay RED while charging.		
	GREEN	Device Fully Charged	When the device is fully charged, the light will stay GREEN.		
	RED/GREEN FLASHING	No Battery Found	If no battery is found in the camera, the LED will Flash RED and GREEN.		
STATUS	SOLID RED	Device Powered On	When the device is powered on, the status light will be SOLID RED. The FLASHING RED LED will appear as the camera searches for a cellular network.		
	FLASHING RED	Searching For Network			
	FLASHING BLUE	Connecting To Server	When there is a FLASHING BLUE LED, the camera is connecting to the server. Once a SOLID BLUE LED appears, the camera is connected to the server and in Set Up mode for 2 minutes.		
	SOLID BLUE	Connected To Server, In Setup Mode For 2 Minutes			
	Both BLUE and RED (PURPLE)	Device Updating	When the LED appears PURPLE, both the RED LED and BLUE LED are on and the camera is updating.		

### **SETTING UP THE CAMERA**

1. Install the antenna by screwing it to the gold connector on the side of the camera.

#### 2. Fully Charge the Pre-Installed Battery.

Open the gasket on the back of the camera and insert the charging cable directly into the camera. Alternately, charge just the battery by removing it from the battery compartment before inserting the charging cable to the battery.

#### **NETWORK SELECTION**

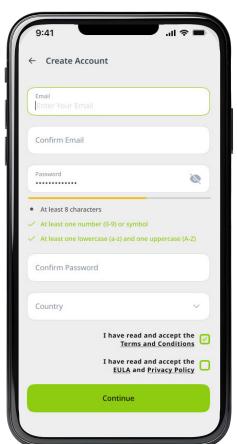
#### **Automatic Network Selection**

**Pre-installed SIM Card:** The DEFEND 360 is equipped with a pre-installed SIM card inside the camera. Upon activation, the camera automatically searches to determine the strongest network signal between multiple carriers, ensuring reliable service in diverse environments.

**Auto-Carrier Selection:** Every time the camera is powered on, it undergoes Auto-Carrier Selection to ensure it connects to the optimal network available at that moment.

#### **SETTING UP YOUR ACCOUNT**

If this is the first DEFEND camera you will be activating, please create an account through the mobile app or on the DEFEND Web Portal at **account.DEFENDcellcam.com**. Once the account is created, select a subscription plan to be able to receive images to your app. On Apple devices, you must purchase a plan through the Web Portal. If you already have a DEFEND account with ACTIVE cameras, you can simply log in to your app and add your new camera.



## **SETTING UP THE CAMERA**

#### **DOWNLOADING THE APP**

In your Apple App Store or Google Play Store, download the DEFEND by Tactacam app and sign in using the same TactaID account email and password you created on the web portal.

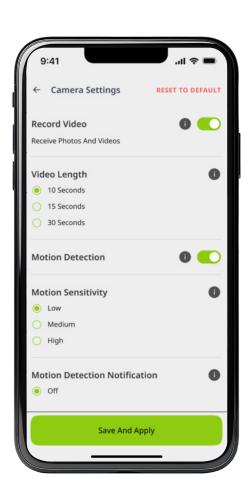
#### ADD CAMERA TO THE APP

- 1. Once on the Home page, click on the left-side menu icon.
- 2. From the menu, click the "+ Add a Camera" option.
- 3. Choose an existing subscription plan and select your camera model.
- 4. The app will prompt you to scan the QR code located on the top of the DEFEND 360 Camera.
- 5. Follow the in-app prompts to activate your DEFEND 360 camera.

# REMOTELY CHANGE THE CAMERA SETTINGS FROM THE APP

From the Home screen, click on the name of camera, this will take you to the Camera Settings page. Scroll down to "Change Device Settings". From here you can scroll through and adjust a wide range of camera settings with a simple tap.

Make sure to select "Save and Apply" when done to save your changes.



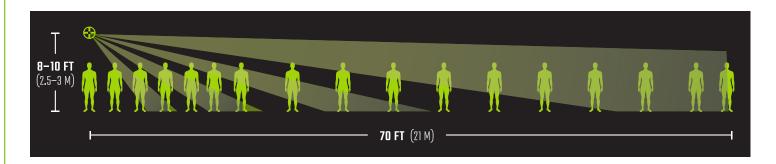
# SETTINGS / SPECIFICATIONS

FEATURE	SPEC			
Image, Video, and Motion Detection				
Camera Mode	Photo Only or Photo + Video			
Image Resolution	Up to 4k			
Video Resolution	Up to 1080p, 30 FPS			
Video Duration	Up to 30 Seconds			
Picture Format	.jpg			
Video Format	.mp4			
Camera Field of View	60 Degrees			
Motion Detection Distance	Up to 75 Feet			
Day/Night Mode	Daytime: Color   Nighttime: Black & White			
IR Range	Up to 75 Feet			
IR Flash	Low-Glow IR LED			
Trigger Speed	0.5 Seconds			
Pan Range	355 Degrees			
Tilt Range	75 Degrees			
Storage				
Internal eMMC	8 GB			
Controls				
Operating Keys	Power Switch; Rest Button			
Status Indicator	1 LED for Status, 1 LED for Battery			
Power				
Battery	10k mAh Li-lon (Included)			
Solar Panel	6.6 V, USB-C (Included)			
External	12 V, 2 A, USB-C Input			

## **BEST PRACTICES**

#### PROPER CAMERA PLACEMENT

- 1. Location and placement is critical for optimal camera performance.
- 2. See image for ideal installation configuration. (See Below)
- 3. Installation tips:
  - a. Optimal installation height ~8-10 feet
  - b. Avoid placing in direct sunlight when possible
  - c. Avoid aiming at active backgrounds (busy streets, moving branches, etc.)
  - d. Adjust motion sensitivity setting to best fit your environment
  - e. Place camera perpendicular to the movement you expect to see for optimal motion detection: with expected movement going across the viewing area instead of towards the camera.



#### **BATTERY AND CAMERA PERFORMANCE**

The included lithium battery will offer long-lasting life! When paired with the included solar panel, the solar panel will recharge the lithium battery.

## **TROUBLESHOOTING**

#### **CAMERA SENDS PICTURES OF NOTHING**

**Motion sensors** Motion sensors (PIR sensors) are actually heat sensors. They "trigger" when detecting a heat differential across the sensor. 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.
- Motion sensitivity recommendations:If sensitivity on app is set to High, decrease sensitivity in your cameras settings.

#### **Motion Detected Icon**

# CAMERA STOPS TAKING IMAGES OR WON'T TAKE IMAGES

- 1. Make sure your battery has sufficient power and the camera is on.
- Make sure the Motion Detection settings are ON in the App.



## **TROUBLESHOOTING**

#### INTERNAL CONDENSATION ON LENS

The DEFEND 360 is rated IP65. This means the camera is water resistant against powerful jets. The only way the DEFEND 360 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 battery door seal. Follow these at home instructions to alleviate this issue if need be:

- Let the camera sit open for 3-4 days 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 seals well and tighten your antenna.
- · Place back in the field.

#### **SOLAR PANEL NOT CHARGING THE BATTERY**

- 1. Double check the installation: make sure the solar panel is connected firmly into the USB-C port on the back of the camera, through the weatherproof gasket.
- 2. Make sure the solar panel is facing South and is getting good sunlight. If conditions are such, that sunlight is not received for an extended period of time, it is normal for the battery level to drop according to the use of the camera. It can take over 20 hours of continuous sunlight to fully charge the battery.

### LIMITED WARRANTY

## HOW LONG DOES THIS COVERAGE LAST?

One year from the date of purchase.

#### WHAT IS COVERED?

This limited warranty covers: manufacturer defects in materials and workmanship including but not limited to:

- · Defective buttons
- Cracked/chipped glass lens
- Broken USB port

Covered cameras will either be repaired by a certified technician or replaced.

#### WHAT IS NOT COVERED?

- This limited warranty does not cover any damage caused by the owner modifying, attempting to fix, or otherwise altering the product.
- This limited warranty excludes damage caused by people or animals, including but not limited to: antenna, 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.

## **FCC COMPLIANCE**

#### 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 note cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.



# 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@DEFENDCELLCAM.COM





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