

# Reveal

**THERMAL IMAGING CAMERA  
BUILT FOR THE FIELD**

## KEY CAMERA SPECS

-  206 x 156 Thermal Sensor
-  36° Field of View
-  -40°F to 626°F Detection Range
-  500 ft Distance
-  Works Day & Night
-  300 Lumen LED Flashlight

**Seek**<sup>™</sup>  
thermal

[thermal.com](http://thermal.com)



With powerful thermal technology and rugged design, the standalone Seek Reveal handheld thermal imager combines a 206x156 sensor, a rechargeable battery that lasts more than 10 hours, and a large color display into an all-in-one durable device. Reveal's advanced technology lets you see thermal images day or night so you can see sources of heat even in an unlit room or crawl space. And when you need it, Reveal's powerful 300-lumen LED light makes sure you can see all around you, wherever you are. You can count on its durable, rubberized casing and intuitive controls to go to work where you do.

**Designed and Manufactured in Santa Barbara, California with Global Components.**

<b>Product Name:</b>	Seek Reveal
<b>Available Date:</b>	October 2015
<b>Product Type:</b>	Thermal Imaging Camera
<b>Seek Reveal Color: Blue</b>	UPC: 855753005242 Part Number: RW-AAA
<b>Export Regulations</b>	Subject to US Export Regulations

<b>Single Unit</b>	
<b>Included in the box:</b>	<ul style="list-style-type: none"><li>• Seek Reveal</li><li>• Wrist Lanyard</li><li>• Welcome Guide</li><li>• MicroSD Card &amp; USB Cable</li></ul>
<b>Device Dimensions (H x W x D)</b>	5 x 2.4 x 1.2 inches
<b>Device Weight:</b>	6.25 ounces
<b>Box Dimensions (H x W x D)</b>	6.25 x 3.75 x 3.25 inches
<b>Box Weight:</b>	18.5 ounces
<b>Master Pack</b>	
<b>Included in the Master Pack</b>	50 Units
<b>Master Pack Dimensions</b>	20 x 15 x 18 inches
<b>Master Pack Weight</b>	58 pounds

## KEY FEATURES

### Easy-to-Use Indoor Versatility

Wide, 36° field of view quickly scans the inside of any room

### High-Performance Thermal Sensor

206 x 156 thermal sensor accurately identifies heat signatures

### Best-in-Class Temperature Range

Measure temperatures from -40° to 626°F (-40° to 330°C)

### Long-Lasting Rechargeable Battery

Up to 10 hours of continuous thermal imaging on a single charge

### See Through the Dark. Light Optional.

300 lumen LED flashlight available at the touch of a button

### Intuitive Software

Continuous feature enhancements keep innovation at your fingertips

## BENEFITS & USES

### Durable, All-In-One Device

Rugged, rubberized casing and intuitive controls to go and work where you do

### Easily Monitor Home and Building Efficiency

Quickly spot energy loss and HVAC issues

### Accurately Inspect Mechanical and Electrical Equipment

Diagnose and assess the problem source quickly

### Time of Day Won't Slow You Down

Safely examine any job site in daylight or total darkness

### Keep An Eye on Things—Even Those You Can't See

It's a lot easier to stay safe when you can see in the dark

### Document Your Thermal Discoveries

Save thermal images directly to the included MicroSD card

## TECHNICAL SUMMARY

SPECIFICATIONS	DESCRIPTION
Thermal Sensor	206 x 156
Detection Distance	500 Feet (165 Yards, 150 Meters)
Field of View	36 Degree FOV
Temperature Range	-40°F to 626°F (-40°C to 330°C)
Frame Rate	< 9 Hz
Flashlight	300 Lumen LED
Focus	Fixed Focus
Lens Material	Chalcogenide
Microbolometer	Vanadium Oxide
Pixel Pitch	12 Microns
Spectral Range	7.5 - 14 Microns
User Interface	Self-Contained Device with 3 Button Navigation
Temp. Display Scale	Fahrenheit or Celsius
Color Palettes	7 Options
Storage Media	MicroSD Card Included
Battery	Up to 10 Hours Continuous Thermal Imaging

For support and user guides  
visit [support.thermal.com](http://support.thermal.com)

## KEY SPECIFICATIONS



206 X 156  
Thermal  
Sensor



36°  
Field  
of View



-40 to 626°F  
Detection  
Range



500 ft  
Distance



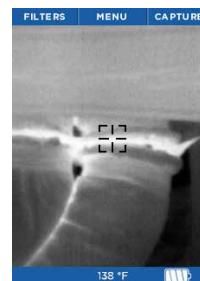
300 Lumen  
LED Flashlight

## USER INTERFACE



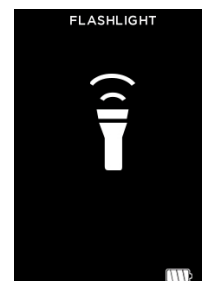
### PHOTOS

Capture and save thermal  
images directly to the  
included MicroSD Card



### THERMOGRAPHY

Displays a non-contact  
temperature reading  
wherever you aim



### FLASHLIGHT

High-powered 300  
lumen LED light with  
programmable brightness

## BUILT FOR THE FIELD



Life can get pretty dirty. So Reveal  
can, too. You can count on its rugged,  
rubberized casing and intuitive controls  
to go and work where you do—no matter  
what conditions you face

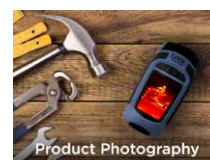
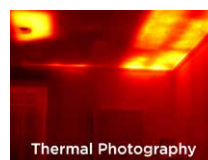
## COMMAND INFRARED AND VISIBLE LIGHT



Seek Reveal combines powerful thermal  
insight and a high-performance LED  
flashlight in one durable device.

▶ Learn more at [thermal.com](http://thermal.com)

## PRODUCT ASSETS



## Seek more at [thermal.com](http://thermal.com)

111 Castilian Drive, Santa Barbara, CA 93117 USA

Seek Thermal engineers, designs and manufacturers high quality thermal imaging products and core platforms for consumer, commercial, and heat sensing IoT data applications. With headquarters in Santa Barbara, California, the global hub of thermal imaging innovation, the company has developed breakthrough thermal imaging camera cores that will enable a range of affordable products for use at home, work and play. For more information visit [thermal.com](http://thermal.com) and follow #seekthermal on Instagram and @seekthermal on Twitter.



# Reveal Series User Manual

Welcome to the Reveal Series. Let's take a few minutes to quickly walk through the basics and learn how to use your device.

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## Reveal



Available with  
9Hz frame rate  
or  $\geq 15\text{Hz}$  (FF).

### At a Glance:

- 36° Field Of View
- 400ft detection distance
- 206x156 professional sensor
- 330 Lumen flashlight

### Great For:

Accurately and safely inspecting any job site.

## Reveal XR



Available with  
9Hz frame rate  
or  $\geq 15\text{Hz}$  (FF).

### At a Glance:

- 20° Field Of View
- 900ft detection distance
- 206x156 professional sensor
- 300 Lumen flashlight

### Great For:

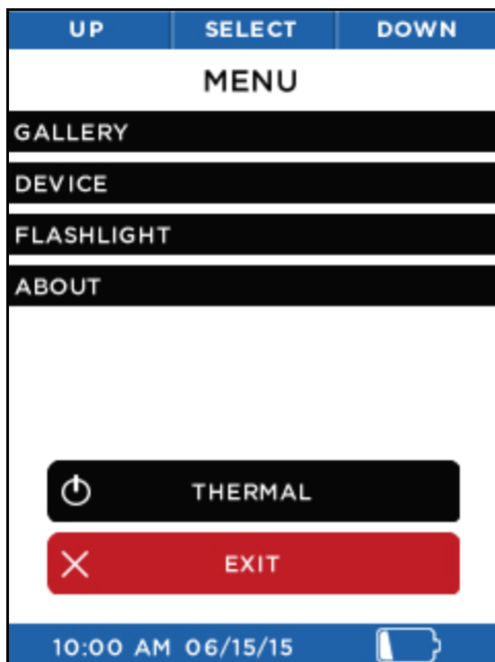
Hunters, safety and security professionals.



### Available Colors:

- Pure Black
- TrueTimber®
- Kanati Camouflage

## Menu



- View captured images.
- Set date, time, language, and auto power off settings.
- Control high and low flashlight intensity.
- Access device serial# and firmware version.
- Power off your device.
- Exit the menu.
- View time, date and battery Status.

To fully reset back to factory settings, choose **Device** then **Restore**.

Change reticle and temperature units by navigating to **Device** → **General**

## Fast Frame (FF)

Reveal and RevealXR Fast Frame devices operate at  $\geq 15\text{Hz}$  for smooth scanning on the go.



## Navigation







# RevealPRO User Manual

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Welcome to RevealPRO. Let's take a few minutes to quickly walk through the basics and learn how to use your device.

## Benefits of Registration:

By sharing your name, email, and serial number, you enable us to send you product updates and tips and techniques. We can also expedite your warranty inquiries by knowing when and where you purchased. Country information helps us to provide better local product support.

To read our data policy visit:

[www.thermal.com/datapolicy](http://www.thermal.com/datapolicy)

## Registration

UP	SELECT	DOWN
<b>PRODUCT/WARRANTY</b>		
Registration provides you many benefits including faster support and software updates for your device.		
<b>REGISTER</b>		
<b>BENEFITS</b>		
<b>REMIND ME LATER</b>		
<b>DECLINE, NO THANKS</b>		
<b>BACK</b>		

UP	SELECT	DOWN
<b>3 EASY STEPS</b>		
30 second registration on our website:		
1- Visit <a href="http://thermal.com/register">thermal.com/register</a>		
2- Enter your name, email, serial number, and purchase information		
3- Receive an email confirming your registration		
Serial #		
<b>DONE</b>		

Visit [thermal.com/register](http://thermal.com/register) to register your product to activate full warranty and service options.

## Changing your Registration:

Go to [thermal.com](http://thermal.com) and login to make changes to your user account.

## Set Date and Time:

Set date, time and language on first startup.

PREV	SELECT	NEXT
<b>SET DATE AND TIME</b>		
DATE MM DD YYYY		
TIME 12 HOUR 10 30 AM		
<b>BACK</b>		

UP	SELECT	DOWN
<b>LANGUAGE</b>		
ENGLISH ESPANOL		
FRANCAIS NEDERLANDS		
DEUTSCH ITALIANO		
PORTUGUES 简体中文		
繁體中文 日本語		

## Navigation

Use buttons to navigate through menus.

Select

Down

Up

Turn on the 300 Lumen LED flashlight.



The left two buttons have a quick navigation dropdown when selected.

## Zoom

UP	SELECT	DOWN
<b>ZOOM</b>		
Controls the digital zoom factor of the thermal image		
<b>x2.0</b>		
<b>BACK</b>		

While imaging, press and hold the left button to continuously zoom up to 4X. You can also set the zoom factor manually in settings.

## Filters

UP	SELECT	DOWN
<b>SPECTRA</b>		
PRISM		
IRON		
TYRIAN		
WHITE		
BLACK		
AMBER		
HI		
HI-LO		

Explore the various filters- from standard grayscale to spectra high contrast.

## Menu

SELECT	DOWN
<b>GALLERY</b>	
MODES	
ZOOM x1.0	
RETICLE	
EMISSION	
SETTINGS	
CANCEL	

View captured images.

Change the thermal imaging mode.

Zoom in up to 4x.

Toggle reticle on or off.

Adjust emissivity.

Access more settings and features.

Quickly access common settings from the dropdown menu.

## Capture

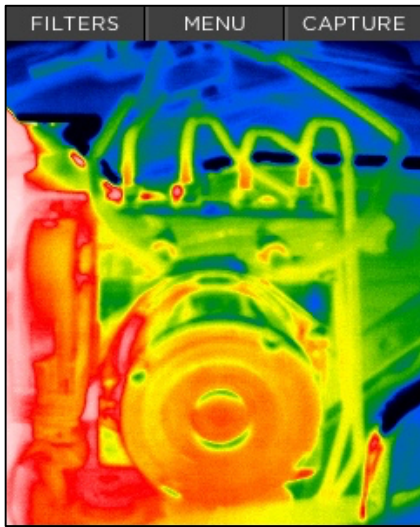
FILTERS	MENU	CAPTURE
$\epsilon = 0.97$ x1.0		

Press the **Up** button to capture images. Hold to capture multiple images.

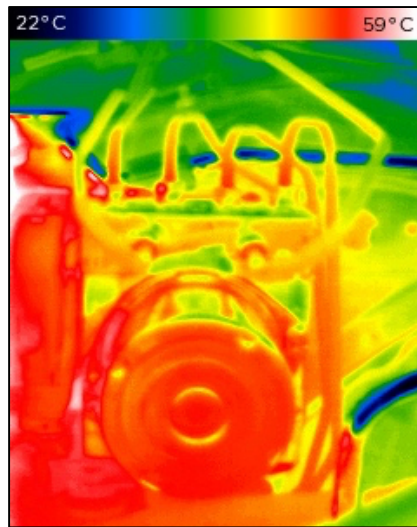


## Modes

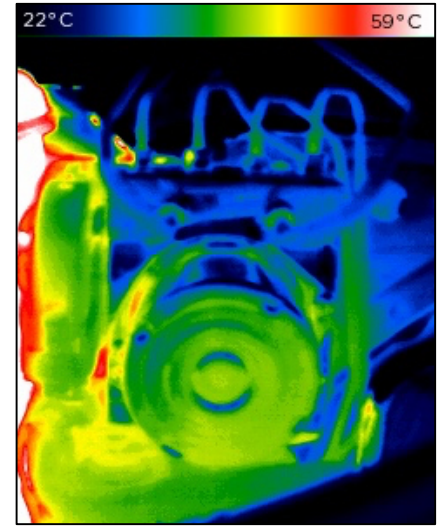
Optional, more advanced modes, that display all temperature data for maximum clarity.



Default mode that maximizes thermal image consistency using auto exposure control.

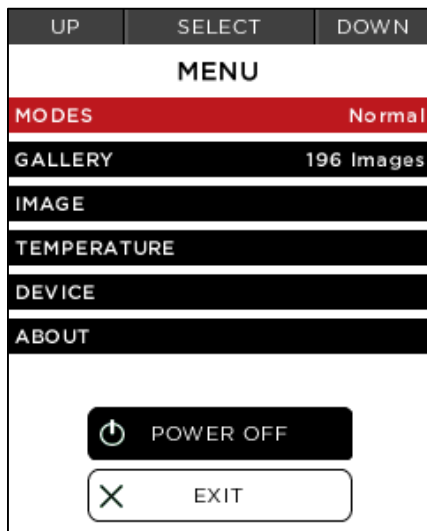


Displays all temperature data for maximum clarity.



Allows you to set and lock a temperature range to display the maximum thermal information of any object or scene.

## Settings



- Change the thermal imaging mode.
- View captured images.
- Control zoom, watermark and banner settings.
- Adjust units (°C, °F, K), emissivity and reticle.
- Set date and time, language, auto power off, and flashlight settings.
- Access device serial#, firmware version and registration information.

To fully reset back to factory settings, choose **Device** then **Restore**.

## Thermal Span and Level

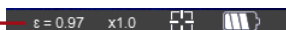
Individually adjust Span and Level range to meet your requirements. Choose reset to return to the default range.



## Emissivity Control

Emissivity is a material property that defines how much IR light is emitted from a particular surface. Calibrate for emissivity through four pre-defined settings to ensure accurate temperature readings and reporting.

Current emissivity ( $\epsilon$ ) setting is visible in the lower banner.

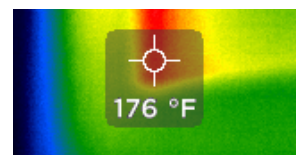


## Reticle

Enable the reticle for precise spot temperature readings.



-40 to 626°F (-40 to 330°C)  
Detection Range



### Warranty

thermal.com/warranty

**North America:** Email: support@thermal.com  
Phone: 1 (844) SEE-HEAT

**Support**  
support.thermal.com

**Europe:** Email: eusupport@thermal.com  
Phone: +44 (0) 1425 284267

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