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This product may be protected by patents, design patents, patents pending, or design patents pending.

If you have questions that are not covered in this manual, or need service, contact FLIR Systems, Inc. customer support for additional information prior to returning a product.

Phone: 888.747.3547, select option 2 at the prompt (“Handheld Products”)
Email: PVS.support@flir.com

This documentation is subject to change without notice.

**Proper Disposal of Electrical and Electronic Equipment (EEE)**

The European Union (EU) has enacted Waste Electrical and Electronic Equipment Directive 2002/96/EC (WEEE), which aims to prevent EEE waste from arising; to encourage reuse, recycling, and recovery of EEE waste; and to promote environmental responsibility.

In accordance with these regulations, all EEE products labeled with the “crossed out wheeled bin” either on the product itself or in the product literature must not be disposed of in regular rubbish bins, mixed with regular household or other commercial waste, or by other regular municipal waste collection means. Instead, and in order to prevent possible harm to the environment or human health, all EEE products (including any cables that came with the product) should be responsibly discarded or recycled.

To identify a responsible disposal method where you live, please contact your local waste collection or recycling service, your original place of purchase or product supplier, or the responsible government authority in your area. Business users should contact their supplier or refer to their purchase contract.

**Important Instructions and Notices to the User:**

Modification of this device without the express authorization of FLIR Commercial Systems, Inc. may void the user’s authority under FCC rules to operate this device.

Note 1: 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 the 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 of the receiver
- Consult the dealer or an experienced radio/television technician for help.

**Industry Canada Notice:**

This Class B digital apparatus complies with Canadian ICES-003.

**Avis d’Industrie Canada:**

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada

**FLIR Systems, Inc.**

25 Esquire Road
N. Billerica, MA 01862
Phone: 888.747.3547
Email: PVS.support@flir.com

This product is an export controlled item. Authorization by the US government must be obtained prior to any shipment outside the United States.

When shipping from manufacturer internal Lithium battery state of charge (SOC) does not exceed 30% of rated capacity, in compliance with IATA UN 3480, PI 965, Section IA and IB.
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SECTION 1. INTRODUCTION

1.1 SCOPE
This manual covers the FLIR SCOUT III Series and all applicable components. It is recommended that you read and understand this manual to optimize the monocular’s operation.

1.2 INTRODUCTION
FLIR’s Scout III Series thermal handheld monoculars give hikers, hunters, and outdoor enthusiasts the ability to see clearly in total darkness, providing a wealth of information during any nighttime excursion.

SCOUT III Features
- Rugged design – Built to withstand the demands of outdoor use.
- Microbolometer sensor for excellent image quality and clarity
- Palm-Sized Portability and Light Weight – Only 12 Ounces
- Embedded LED Task Light
- Battery charging via USB Cable
- USB/Video Adapter Cable for video out – Scout III 640 & 320 only.
- Rechargeable Internal Li-Ion battery – Provides up to 5 hours of camera operation on a single charge

The SCOUT III Series monocular makes images from heat, not light, a feat impossible for the naked eye or image intensified (I^2) night vision devices. This allows you to see clearly without any visible light. People, animals, and objects all generate or reflect heat and are clearly seen by the Scout III Series camera in even the most adverse conditions.

Scout III series monocular enables the outdoor enthusiast to:
- See animals and difficult terrain in reduced visibility or total darkness
- See through smoke, dust, and light fog
- See camouflage and foliage in any lighting conditions
- See more – and see farther – than with low-light night vision goggles

1.3 REGISTER YOUR SCOUT III
You can register your product online at: www.flir.com/scout/registration
SECTION 2. GETTING STARTED

2.1 UNPACKING AND INSPECTING

The FLIR SCOUT III Series monocular is available with the features, options, and accessories described in this manual. Refer to the packing list enclosed with your product to determine the actual contents of your product package.

In addition to the product the following items are included in the product package:

- FCC Declaration of Conformity
- CE Declaration of Conformity

Quick Start Guide
Thank You Card
Wrist Strap
Lens Cap
USB to RCA Cable
(320 & 640 models only)
USB Cable
USB Power Adapter
Molle-Compatible Belt Holster
2.3 CHARGING THE SYSTEM

To assure proper charging, SCOUT III Series monoculars should be turned OFF throughout the charging cycle. Charging MUST only be done when the camera temperature is from 0 to 40°C (32 to 104°F), or battery damage may occur.

The monocular battery should be fully charged prior to use. To charge the monocular, lift the cover from the USB port, plug in the USB cable provided with the monocular, and plug other cable end into a USB power source.

- When charging the charging indicator will be lit orange.
- When fully charged, the charging indicator will light solid green. The initial charge time is approximately 5 hours.

2.4 BATTERY

Your Scout III Series monocular is equipped with a sophisticated power system that uses a rechargeable internal Li-Ion battery.

**BATTERY STATUS INDICATOR**

While the monocular is ON, a battery status indicator is always shown in the corner of the display image. This indicator provides an estimation of the remaining battery charge.

**BATTERY SAFETY INFORMATION**

The SCOUT III Series monocular is a sealed unit with sensitive electronics and contains no user-serviceable parts. Service or repair is to be performed only by the manufacturer. The monocular must never be opened or modified by the user. The monocular contains no user-serviceable components. The battery used in this device may present a risk of fire or chemical burn if mistreated. Do not disassemble the monocular, store above 60°C, or incinerate. The battery is replaceable only in the factory. Return the product to the manufacturer for battery replacement.
SECTION 3. OPERATING THE SYSTEM

3.1 SYSTEM CONTROLS AND BUTTONS

3.1.1 Diopter Adjustment
While looking through the eyepiece, adjust the position of the diopter lever to optimize the sharpness of the image in the viewfinder.

3.1.2 Power Button
The Power Button performs the following functions:

<table>
<thead>
<tr>
<th>SYSTEM STATE</th>
<th>SHORT PRESS</th>
<th>LONG PRESS</th>
</tr>
</thead>
<tbody>
<tr>
<td>System OFF</td>
<td>Turns Power ON</td>
<td>N/A</td>
</tr>
<tr>
<td>System ON</td>
<td>Access User Menu</td>
<td>Turns Power OFF</td>
</tr>
</tbody>
</table>

3.1.3 Display Brightness Button
Use this button to cycle through the five levels of display brightness. Each press of the button advances to the next level of brightness.

When the highest brightness level is reached, subsequent button presses advance to the next lower brightness levels. When the lowest brightness level is reached, subsequent button presses advance to the next higher brightness level. One of the following icons is displayed for approximately 3 seconds after the button is pressed indicating the current brightness level:

<table>
<thead>
<tr>
<th>SYSTEM STATE</th>
<th>SHORT PRESS</th>
<th>LONG PRESS</th>
</tr>
</thead>
<tbody>
<tr>
<td>System OFF</td>
<td>Flashes LED Task light</td>
<td>Turn on LED Task Light</td>
</tr>
<tr>
<td>System ON</td>
<td>Changes Current Display Brightness</td>
<td>N/A</td>
</tr>
</tbody>
</table>

3.1.3 Color Palettes
Use this button to toggle between the available color palettes. Please see the following images for examples of SCOUT III’s color palettes.

**White Hot**
Most commonly used palette. Hot objects appear white. Good for scenes with either high or low contrast.
**BLACK HOT**
Hot objects appear black. Scenes appear more lifelike than White-Hot, especially at night.

**InstAlert™ Level 1**
The hottest 5% of things in the image are colored and everything else is greyscale.

**InstAlert™ Level 2**
The hottest 10% of things in the image are colored and everything else is greyscale.

**InstAlert™ Level 3**
The hottest 15% of things in the image are colored and everything else is greyscale.

**InstAlert™ Level 4**
The hottest 20% of things in the image are colored and everything else is greyscale.

**GRADED FIRE**
The hottest things in the image are colored with a gradient color of yellow’s and oranges and everything else is greyscale.
3.2 USING USB/ANALOG VIDEO ADAPTER CABLE (Scout 640 and 320 models)

To obtain analog video out, insert the adapter cable into the USB connector. The monocular will detect the adapter cable and provide the video stream. Use an RCA cable to connect to a monitor or a video recorder.

3.3 SCOUT III POWER MANAGEMENT

Your SCOUT III Series monocular is equipped with a power management system that provides up to five hours of continuous operation. When left in the Off state the battery will hold a charge for up to two months. To use the product it is important to understand the basic power states of the product.

- When the monocular is turned on from the Off state, it takes about five seconds to become operational. During the bootup process, the FLIR splash screen is shown. Pressing the Power button will toggle the monocular between On and Off.
- The camera shuts down after about five minutes if no buttons are pushed.

<table>
<thead>
<tr>
<th>SYSTEM STATE</th>
<th>HOW DO YOU KNOW?</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFF</td>
<td>The display is off and the Task Light comes on when the Brightness button is pressed.</td>
</tr>
<tr>
<td>ON</td>
<td>The display is on and the LED Task Light is disabled. If the image appears blank, make sure the lens cover is removed.</td>
</tr>
</tbody>
</table>

3.4 AUTO POWER OFF OPERATION

Auto Power Off is a feature of the SCOUT III Series monocular that helps to guard against draining the battery prematurely by inadvertently leaving the camera on.

Auto Shutdown turns the camera off if the following conditions are met:

- The product is On
- No buttons have been pressed for five minutes

Once these conditions are met, you will see the following message in the display: “Auto Power Off 30s.” After counting down for 30 seconds, the monocular will shutdown.

Press any button during this countdown to terminate Auto Power Off and resume normal operation.

3.5 SCOUT III/LS-X/LS-XR END USER TOOL

The SCOUT III/LS-X/LS-XR end user tool is a graphical user interface (GUI) that is used with the following FLIR handheld thermal imaging monoculars:

- SCOUT III Series
- LS Series

To download the GUI go to: www.flir.com/hunting-outdoor, and then click the resource tab and select product literature.
SECTION 4. SYMBOLOGY

The SCOUT III user interface has a clear and simple on-screen symbology that allows the user to easily navigate through the settings, and optimize the image quality based on certain variables. From the zoom function to palette choice the symbology on-screen matches the button symbology so the user becomes instantly familiar with how to manipulate and operate all of SCOUT III’s functions.

See the reference points below to get a solid understanding of the onscreen functionality.
SECTION 5. MAINTENANCE

5.1 SOFTWARE UPDATE
Software updates for your FLIR SCOUT III can be found at www.flir.com/hunting-outdoor/ under the “Resources” tab.

5.2 BATTERY SERVICE AND REPLACEMENT
If the battery will not hold a charge and requires replacement, please contact FLIR Systems for details on returning the unit for service. For instructions on charging the battery refer to Section 2.3 Charging the system.

5.3 CLEANING THE SCOUT III
Wipe the housing with a damp cloth, as needed. Use a high quality lens wipe to remove dirt or smudges from the lens and display window. Do not use abrasives or solvents to clean the housing, lens, or display window.

5.4 WARRANTY INFORMATION
Get detailed warranty information on your SCOUT III by visiting: www.flir.com/scout/warranty

5.5 CAUTIONS
- Do not disassemble the monocular enclosure. Disassembly can cause permanent damage. The battery is not user-replaceable
- Do not point the monocular at high-intensity radiation sources, such as the sun, lasers, or arc welders
- Do not leave fingerprints on the monocular’s infrared optics. Clean only with low pressure fresh water and a lens cloth
- All service must be provided by the manufacturer
### SECTION 6. SPECIFICATIONS

<table>
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<tr>
<th>SENSOR SPECIFICATIONS</th>
<th>SCOUT III 240</th>
<th>SCOUT III 320</th>
<th>SCOUT III 640</th>
</tr>
</thead>
<tbody>
<tr>
<td>Detector Type</td>
<td>240 × 180 VOx Microbolometer</td>
<td>336 × 256 VOx Microbolometer</td>
<td>640 × 512 VOx Microbolometer</td>
</tr>
<tr>
<td>Video Refresh Rate</td>
<td>30Hz NTSC</td>
<td>60Hz NTSC</td>
<td>30Hz NTSC</td>
</tr>
<tr>
<td>Field of View (H x V)</td>
<td>24° × 18°</td>
<td>17° × 13°</td>
<td>18° × 14°</td>
</tr>
<tr>
<td>Focal Length</td>
<td>13 mm Fixed Focus</td>
<td>19mm Fixed Focus</td>
<td>35mm Fixed Focus</td>
</tr>
<tr>
<td>Start up</td>
<td>&lt; 1.5 seconds</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Image Processing</td>
<td></td>
<td>FLIR Proprietary Digital Detail Enhancement™</td>
<td></td>
</tr>
</tbody>
</table>

### USER INTERFACE

<table>
<thead>
<tr>
<th>Zoom Button</th>
<th>Freeze Frame</th>
<th>2X Zoom</th>
<th>2X, 4X Zoom</th>
</tr>
</thead>
<tbody>
<tr>
<td>Video Detection Palettes</td>
<td>User Selectable: Black Hot, White Hot, InstAlert™ and Graded Fire</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brightness</td>
<td>Multiple Brightness Levels</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Task Light</td>
<td>LED (operational when imager power off)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### SYSTEM SPECIFICATIONS

<table>
<thead>
<tr>
<th>Display</th>
<th>640 X 480</th>
</tr>
</thead>
<tbody>
<tr>
<td>Video Output</td>
<td>N/A</td>
</tr>
</tbody>
</table>

### POWER

<table>
<thead>
<tr>
<th>Battery Type</th>
<th>Internal Li-Ion Cell</th>
</tr>
</thead>
<tbody>
<tr>
<td>Battery Life (Operating)</td>
<td>&gt;5 hours, Auto-off after 5 minutes of non-use</td>
</tr>
<tr>
<td>Battery Power</td>
<td>3.7 V 2400mAh</td>
</tr>
</tbody>
</table>

### ENVIRONMENTAL

<table>
<thead>
<tr>
<th>Rating</th>
<th>IP-67, Submersible</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating Temp.</td>
<td>-4°F to 122°F (-20°C to 50°C)</td>
</tr>
<tr>
<td>Storage Temp.</td>
<td>-40°F to 140°F (-40°C to 60°C)</td>
</tr>
</tbody>
</table>

### PHYSICAL

<table>
<thead>
<tr>
<th>Weight (incl. lens)</th>
<th>12 oz (340 g)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size (L x W x H)</td>
<td>6.70&quot; x 2.31&quot;x 2.44&quot;</td>
</tr>
<tr>
<td>Color (housing)</td>
<td>Flat Dark Earth</td>
</tr>
<tr>
<td>Country Of Origin</td>
<td>USA</td>
</tr>
</tbody>
</table>

### RANGE PERFORMANCE

| Detect Man (1.8 m × 0.5 m)             | 380yd (350m) | 600yd (550m) | 1200yd (1140m) |

### PACKAGES INCLUDE

- Handheld Thermal Monocular
- USB Power Adapter/Charger
- Wrist strap
- Custom Video out cable (320 & 640 version)
- USB Cable
- Quick Start Guide
- Molle bag