

**⚠ WARNING**

THIS MANUAL CONTAINS IMPORTANT SAFETY INFORMATION.
READ, UNDERSTAND AND FOLLOW ALL INSTRUCTIONS AND WARNINGS BEFORE USING THIS PRODUCT.
FAILURE TO FOLLOW THESE INSTRUCTIONS AND WARNINGS COULD CAUSE DEATH OR SERIOUS INJURY.

WELCOME TO THE TEAM!

**Congratulations on your purchase
of a Bullard Thermal Imager.**

This document is in English, Francais, Deutsch, and Espanol. To find this document in other languages please visit

<https://www.bullard.com/thermal-imaging/>

or scan the QR code below.

SCAN ME!



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1. SAFETY CONSIDERATIONS, GENERAL WARNINGS, AND LIMITATIONS OF USE

▲ WARNING

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▲ WARNING

DO NOT USE A BULLARD TXS THERMAL IMAGER WITHOUT THE CORRECT TRAINING. IMPROPER ANALYSIS OF THE IMAGES CAN OCCUR. **THERMAL IMAGING IS NOT A TECHNOLOGY DESIGNED TO REPLACE FIREFIGHTING TRAINING AND SAFETY TACTICS.** IT IS A TOOL WHICH ALLOWS THE FIREFIGHTER TO BE MORE EFFECTIVE AND TO MAKE BETTER INFORMED DECISIONS.

BEFORE USING A THERMAL IMAGER, FIREFIGHTERS SHOULD RECEIVE PROPER TRAINING ON HOW THERMAL IMAGERS WORK, THEIR USES AND LIMITATIONS, IMAGE INTERPRETATION, AND SAFETY CONSIDERATIONS FOR THERMAL IMAGING USE. THIS IS ESPECIALLY IMPORTANT FOR USERS WHO MAY USE A THERMAL IMAGER IN HAZARDOUS OR IDLH (IMMEDIATELY DANGEROUS TO LIFE OR HEALTH) ENVIRONMENTS.

FIREFIGHTERS MUST RELY ON AND USE THEIR FIREFIGHTING TRAINING AND SAFETY TACTICS, AT ALL TIMES. FAILURE TO FOLLOW THESE INSTRUCTIONS COULD CAUSE DEATH OR SERIOUS INJURY.

▲ WARNING

THE BULLARD TXS THERMAL IMAGERS ARE EXTREMELY SENSITIVE TO INTENSE, RADIANT HEAT SOURCES. NEVER POINT A BULLARD TXS THERMAL IMAGER AT THE SUN OR ANY OTHER SOURCE OF EXTREME RADIANT HEAT. THIS CAN CAUSE SEVERE DAMAGE, AFFECT THE ACCURACY AND RENDER THE PRODUCT UNSAFE FOR USE.

▲ CAUTION

LIMITATIONS WITH TEMPERATURE READINGS

THERMAL IMAGERS CANNOT DIRECTLY MEASURE THE TEMPERATURE OF AN OBJECT, INSTEAD THEY DETECT RADIATED HEAT. TEMPERATURE INDICATIONS IN THERMAL IMAGERS ARE AFFECTED BY DISTANCE, MATERIAL EMISSIVITY, AND EXTREME TEMPERATURES. BULLARD TXS THERMAL IMAGERS ARE DESIGNED FOR FIREFIGHTING APPLICATIONS AND ARE PRIMARILY IMAGING DEVICES, DESIGNED TO PROVIDE GENERAL INFORMATION ABOUT A SCENE. TEMPERATURE READING SHOULD BE INTERPRETED AS AN APPROXIMATION. **FIREFIGHTERS MUST CONTINUE TO RELY ON AND USE THEIR FIREFIGHTING TRAINING AND SAFETY TACTICS, AT ALL TIMES.**

Bullard TXS Thermal Imager User Manual

WARNING

DO NOT USE SOLVENTS OR PAINT THINNERS TO CLEAN THE BULLARD THERMAL IMAGER AS THEY COULD PERMANENTLY MAR THE SURFACE OR DEGRADE THE PROTECTIVE PROPERTIES OF THE CASING.

DO NOT INTENTIONALLY SUBMERGE THE UNIT UNDER WATER OR SUBJECT THE UNIT TO HIGH PRESSURE WATER.

FAILURE TO FOLLOW THESE INSTRUCTIONS COULD CAUSE DAMAGE AND RENDER THE PRODUCT UNSAFE FOR USE.

WARNING

ONLY USE CHARGERS APPROVED BY BULLARD TO CHARGE THE BATTERY. DAMAGE TO THE BATTERY CAN OCCUR IF YOU USE NON-BULLARD CHARGERS. FAILURE TO FOLLOW THIS INSTRUCTION COULD CAUSE DAMAGE AND RENDER THE PRODUCT UNSAFE FOR USE.

CAUTION

THE TEMPERATURE RANGE TO CHARGE THE BATTERY IS 32°F TO +113°F (0°C TO 45°C). IF YOU CHARGE THE BATTERY AT TEMPERATURES OUTSIDE OF THIS RANGE, IT CAN CAUSE SEVERE DAMAGE TO THE BATTERY.

WARNING

DO NOT CHARGE THE THERMAL IMAGER IN A HAZARDOUS LOCATION. FAILURE TO FOLLOW THIS INSTRUCTION COULD CAUSE DEATH OR SERIOUS INJURY.

WARNING

DO NOT SHORT CIRCUIT, CRUSH, INCINERATE, OR DISASSEMBLE THE THERMAL IMAGER OR BATTERY. FAILURE TO FOLLOW THIS INSTRUCTION CAN CAUSE SEVERE DAMAGE AND RENDER THE PRODUCT UNSAFE FOR USE.

WARNING

RISK OF FIRE, EXPLOSION OR BURNS IF USED IMPROPERLY.

WARNING

EXPLOSION HAZARD. DO NOT CONNECT OR DISCONNECT THE EQUIPMENT (THERMAL IMAGER) TO ANY CHARGER IN A HAZARDOUS LOCATION. DO NOT INSERT OR REMOVE A BATTERY IN A HAZARDOUS LOCATION. FAILURE TO FOLLOW THESE INSTRUCTIONS AND WARNINGS COULD CAUSE DEATH OR SERIOUS INJURY.





WARNING

ONLY USE ORIGINAL BULLARD BATTERIES (P/N: XSBATT) AND CHARGERS (P/N: XSCHARGER OR P/N: XSUSBCHARGER). FAILURE TO USE THESE SPECIFIC BATTERIES AND CHARGERS CAN DAMAGE THE BULLARD PRODUCTS AND RENDER THEM UNSAFE FOR USE.

WARNING

DO NOT ATTEMPT TO DISASSEMBLE THE BULLARD TXS THERMAL IMAGER. IF THE UNIT IS NOT FUNCTIONING PROPERLY, RETURN IT TO THE BULLARD SERVICE CENTER FOR EVALUATION.

2. TECHNICAL SPECIFICATIONS AND CERTIFICATIONS

	<p>This Thermal Imager 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.</p> <p>NOTE: 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 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:</p> <ul style="list-style-type: none"> —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.
	<p>This Thermal Imager complies with the Conformité Européenne. The letters 'CE' appear on many products traded on the extended Single Market in the European Economic Area (EEA). They signify that products sold in the EEA have been assessed to meet high safety, health, and environmental protection requirements.</p> <p>Standards: FCC Part 15B ICES-003 Issue 7 CISPR 32:2015+A1:2019, EN 55032:2015+A11:2020 CISPR 35:2016, EN 55035:2017/ IEC 61000-6-1:2016, EN IEC 61000-6-1:2016, IEC 61000-6-3:2020, EN IEC 61000-6-3:2020</p>
	<p>This Thermal Imager complies with the WEEE Directive marking requirements. The affixed label indicates that you must NOT discard this electrical/electronic product in domestic household waste. Product Category: With reference to the equipment types in the WEEE Directive Annex I, this product is classed as category 9 "Monitoring and Control Instrumentation" product. Do not dispose of this product as unsorted municipal waste. Email recycle@bullard.de for recycling information.</p> <p>Electrical and electronic equipment (EEE) contains materials, components and substances that may be hazardous and present a risk to human health and the environment when waste electrical and electronic equipment (WEEE) is not handled correctly.</p> <p>Equipment marked with the below crossed-out wheeled bin is electrical and electronic equipment. The crossed-out wheeled bin symbol indicates that waste electrical and electronic equipment should not be discarded together with unseparated household waste but must be collected separately.</p> <p>For this purpose, all local authorities have established collection schemes under which residents can dispose waste electrical and electronic equipment at a recycling center or other collection points, or WEEE will be collected directly from households. More detailed information is available from the technical administration of the relevant local authority.</p> <p>Users of electrical and electronic equipment must not discard WEEE together with household waste. Residents must use the municipal collection schemes to reduce adverse environmental impacts in connection with disposal of waste electrical and electronic equipment and to increase opportunities for reuse, recycling, and recovery of waste electrical and electronic equipment.</p> <p>WEEE Compliance: for your recycling needs please contact info@bullard.de WEEE Einhaltung: Fuer Ihren Recyclingbedarf wenden Sie sich bitte an info@bullard.de</p>
	<p>Bullard's Thermal Imager TXS complies with the requirements set forth in the regulation.</p> <p>California Proposition 65 ⚠ WARNING: Cancer and Reproductive Harm- www.P65Warnings.ca.gov.</p> <p>Proposition de la 65 ⚠ ADVERTISSEMENT: Cancer et Troubles de l'appareil reproducteur - www.P65Warnings.ca.gov.</p>

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<p>IEC (International Electrotechnical Commission) Certification</p>	<p>This Thermal Imager was tested for conformity using IEC certification standards. The IEC is a global, not-for-profit membership organization, whose work underpins quality infrastructure and international trade in electrical and electronic goods. The IEC brings together more than 170 countries and provides a global, neutral and independent standardization platform to 20 000 experts globally. It administers 4 Conformity assessment systems whose members certify that devices, systems, installations, services and people work as required.</p> <p>IEC 62133-2:2017 CB Test Certificate Reference Number: JPTUV-122195 IEC 62368-1:2014 CB Test Certificate Reference Number: US/9573/ITS IEC 60529:2013 Ed.2+A1;A2 IEC 61000-6-1, IEC 61000-6-3</p>
<p>U.S Export Administration Regulation (EAR)</p>	<p>Bullard Thermal Imagers are subject to the U.S Export Administration Regulation (EAR). Distributors/End-Users must comply with all applicable laws including the U.S. Export Administration Regulations, as well as end-user, end-use and destination restrictions issued by U.S. and other governments; ECCN: 6A003, Subparagraph b.4b.</p>
<p>Battery Specifications</p>	<p>Internal Li-Ion Battery Power Rating: 3500mAh / 12.71Wh Voltage: 3.63VDC Charging Temperatures: 0° C to 45° C (32° F to 113° F) Storage Temperatures: -20° C to 50°C (-4° F to 122° F)</p>

3. THANK YOU AND CONGRATULATIONS

Congratulations on your purchase of the advanced decision-making Bullard TXS Thermal Imager. Bullard TXS Thermal Imagers are built on more than 20 years of experience in designing tough imagers with a clear and sharp image. The benefits of using thermal imaging technology as a firefighting tool encompass nearly every aspect of a firefighter's job. This technology enhances images so that elements not visible to the naked eye are now seen. They can accelerate certain tasks by helping the user make more informed decisions. Some of the many uses for your Bullard TXS Thermal Imager include:

- Search and rescue
- Scene assessment
- Locating the seat of the fire
- Determining the spread of the fire
- Determining ventilation points
- Determining entry and exit points
- Determining ventilation points
- Overhaul
- Hazmat
- Wildland firefighting
- Incident investigation
- Training

CAUTION

THERMAL IMAGING IS NOT A TECHNOLOGY DESIGNED TO REPLACE OTHER FIREFIGHTING TACTICS OR TRAINING. RATHER, IT IS A TOOL THAT HELPS THE FIREFIGHTER BE MORE EFFECTIVE AND MAKE BETTER INFORMED DECISIONS

THIS MANUAL PROVIDES YOU WITH THE ESSENTIAL INSTRUCTIONS ON HOW TO PROPERLY USE AND MAINTAIN THE PRODUCT. ADDITIONAL RESOURCES INCLUDING GUIDES, TRAINING VIDEOS, AND TROUBLESHOOTING INFORMATION CAN BE VIEWED BY VISITING THE BULLARD THERMAL IMAGING PAGE AT: [HTTPS://WWW.BULLARD.COM/THERMAL-IMAGING.](https://www.bullard.com/thermal-imaging)

4. WHAT'S IN THE BOX

Look below to see what is included in your box.

- Bullard TXS Thermal Imager
- Bullard TXS User Manual
- Two Replacement Batteries
- Bullard USB Cable and Adapter (Black)
- Bullard TXS Quick Set Up Guide
- Bullard XS Series Dual Charger (if purchased as bundle)
- Bullard XS Retractable Lanyard (if purchased as bundle)

5. GENERAL OPERATION

5.1 POWER UP

Power ON your Bullard TXS Thermal Imager by pressing the green power button on top of the imager. The screen will turn on and the green power button will illuminate. See Table 1 for the power button indicators. The start-up logo will appear followed by the thermal image within a few seconds. This image will consist of black, white, and grey elements that indicate heat signatures of objects and scene dynamics. Warmer elements appear as lighter shades, and cooler elements appear as darker shades.



5.2 POWER DOWN

Press and HOLD the green power button to turn off your imager. A red power icon will appear on the display. When the countdown timer (3, 2, 1) completes the imager powers off.

Table 1 Power Button Indicators

Power Button LED	Imager State
Solid White	Imager is powered ON
Flashing Green	Imager is charging
Solid Green	Imager is fully charged (on charger)
Flashing Orange	Error condition (problem with the imager or charging system)

5.3 SUPER RED HOT (SRH) COLORIZATION

The Bullard TXS Thermal Imager utilizes easy-to-use Super Red Hot colorization which displays heat levels in yellow, orange, and red hues. This feature identifies specific heat layers, thus alerting firefighters to areas of intense heat through visual awareness of the hottest objects in a scene. The SRH feature automatically adds colorization at temperatures above 500°F/260°C.

SRH gives a semi-transparent color overlay to high-temperature areas of the scene, helping the visibility of structural detail, flow paths, or other objects. The Heat Color Reference Bar accompanies SRH and is adjacent to the Temperature Bar. The temperature is illustrated by the filled height of the Temperature Bar and by the Numeric Temperature Indicator. The Heat Color Reference Bar is a visual indicator to quickly allow the user to determine the meaning of the color displayed on the screen. The colors follow a gradient and correspond to the values in Table 2.

Table 2 Standard SRH Colorization Temperature

Color	Approximate Temperature
Yellow	500-799° F / 260-426° C
Orange	800-999° F / 426-537° C
Red	>1000° F / >537° C

Temperatures measured with thermal imaging can vary based on several factors (see Caution statement below). Use these features with caution and verify indicated heat levels through traditional means whenever possible.

⚠ CAUTION

Limitations with Temperature Readings

Thermal imagers cannot directly measure the temperature of an object, instead they detect radiated heat. Temperature indications in thermal imagers are affected by distance, material emissivity, and extreme temperatures. Bullard TXS Thermal imagers are designed for firefighting applications and are primarily imaging devices, designed to provide general information about a scene. Temperature reading should be interpreted as an approximation. **Firefighters MUST continue to rely on and use their firefighting training and safety tactics, at all times.**

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5.4 SENSITIVITY (GAIN) MODES

The imager automatically switches between high and low sensitivity (gain) modes based on ambient scene temperatures to avoid image saturation in high-temperature situations. The low sensitivity mode activates in high heat situations and deactivates as ambient heat decreases (i.e. lower temperatures). The low sensitivity mode indicator consists of a green triangle located in the upper left of the viewing area.

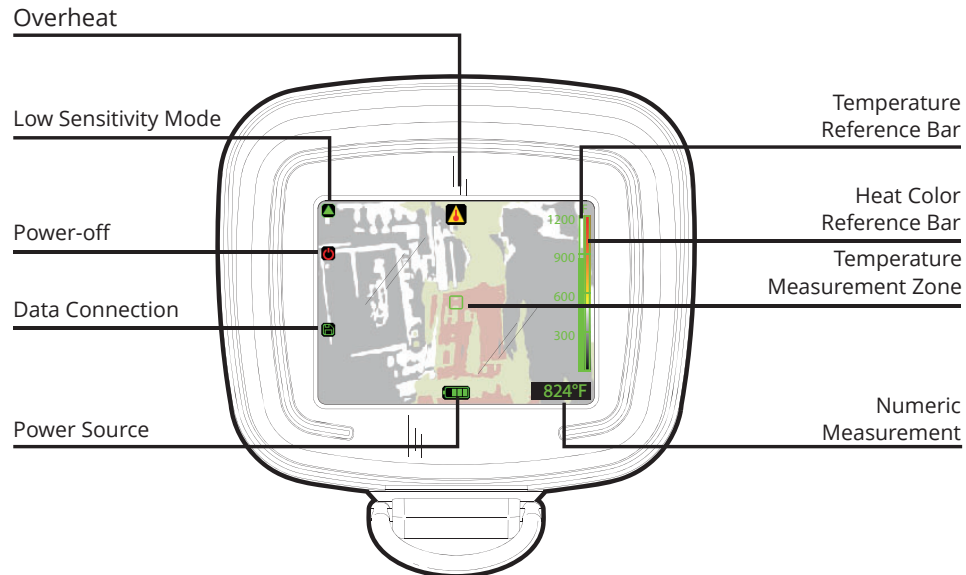
5.5 MAXIMUM SCENE TEMPERATURE

The Maximum Scene Temperature (dynamic range) is the temperature above which heat signature differences can no longer be distinguished. For the TXS the Maximum Scene Temperature is approximately 1022° F (550° C). As scene conditions approach the Maximum Scene Temperature, the display may show a large red zone where the temperature is at or above 1022° F (550° C). Also, the Numeric Temperature Indicator may not correctly display a temperature above 1022° F (550° C). Temperatures measured with thermal imaging can vary based on several factors (see Bullard's Limitations with Temperature Readings - Caution statement on p.6). Use these features with caution and verify indicated heat levels through traditional means whenever possible.

5.6 SHUTTER

You will periodically observe a momentary freeze in the imager. This is normal and is a function of the self-calibration shutter, the frequency of shuttering may depend on the environment and temperature.

6. ON-SCREEN INDICATORS



6.1 TEMPERATURE BAR

The Temperature Bar is a bar-graph style temperature gauge in the right portion of the display. The temperature bar represents the approximate temperature of the object viewed within the Temperature Measurement Zone in the center of the display. Accuracy of indication is dependent on numerous factors, including the distance from the object being viewed (accuracy decreases as distance increases) and its emissivity (heat radiation properties).

Your Bullard TXS Thermal Imager is factory-calibrated to emissivity corresponding with normal construction materials. Objects with emissivity varying greatly from these materials (particularly reflective objects such as metals and shiny materials) will see a reduced accuracy of the temperature indication.

Temperatures measured with thermal imaging can vary based on several factors (see Bullard's Limitations with Temperature Readings - Caution statement on p.6). Use these features with caution and verify indicated heat levels through traditional means whenever possible.

6.2 NUMERIC TEMPERATURE INDICATOR

The Numeric Temperature Indicator, displayed under the Temperature Bar, indicates the approximate temperature of an object in the Temperature Measurement Zone (center of the display). The indicator provides a quick reference to compare objects of similar emissivity, assisting with identification of intense heat sources. Temperatures measured with thermal imaging can vary based on several factors (see Bullard's Limitations with Temperature Readings Caution Statement.) Use these features with caution and verify indicated heat levels through traditional means whenever possible.






6.3 BATTERY LEVEL INDICATOR

The battery level indicator, located at the bottom center of the TXS Thermal Imager display, will show the current battery level of your imager. During operation, the bar will deplete from left to right. Table 3 explains the approximate operating time associated with each indicator stage.

 **NOTE:**

Battery performance may vary with age and temperature.

Table 3 Battery Level Indicators

Indicator		Time Remaining
	Full Green	4h30 - 6h00
	75% Green	3h00 - 4h30
	50% Yellow	1h30 - 3h00
	25% Red	0h05 - 1h30
	Flashing Red	<5 Minutes



6.4 OVERHEAT INDICATOR

If the thermal imager becomes too hot, an Overheat Indicator icon will appear on the top center of the screen. This indicates that the internal temperature of the imager has reached a level that could potentially cause damage. To protect itself, the imager will automatically switch to a limited function mode. In this mode, certain non-critical functions may be disabled to reduce heat generation. To restore full functionality, power off the imager and allow it to cool. Once the imager has been allowed to cool, power the imager back on and resume normal operation.

 **WARNING**

FAILURE TO FOLLOW THE INSTRUCTIONS FOR THE OVERHEAT INDICATOR COULD RESULT IN DAMAGE TO THE UNIT AND RENDER THE IMAGER UNSAFE FOR USE.

FIREFIGHTERS MUST ALWAYS RELY ON THEIR FIREFIGHTING TRAINING AND SAFETY TACTICS. FAILURE TO DO SO COULD CAUSE DEATH OR SERIOUS INJURY.

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7. DEPLOYMENT/OPERATIONAL LIFE

7.1 CHARGING THE BATTERY

Your Bullard TXS Thermal Imager can be charged with one of two charging systems: the included XS USB Wall Charger or the optional Bullard XS Series Dual Charger. To charge your imager with the XS Series Dual Charger, please refer to the XS Series Dual Charger User Manual.

To charge with the XS USB Wall Charger, open the USB cover located on the rubber boot at the top of the display side of the imager. Plug the USB power cord into a dedicated wall outlet using the included AC adapter. The battery pack must be at moderate temperatures to support charging.

CAUTION

USE CAUTION WHEN INSERTING THE MICRO-USB INTO THE IMAGER. THERE IS ONLY ONE CORRECT WAY IT CAN BE INSERTED. THE BULLARD LOGO SHOULD BE FACING THE DISPLAY WHEN THE MICRO-USB IS INSERTED. FAILURE TO PROPERLY INSERT THE MICRO-USB INTO THE IMAGER CAN DAMAGE THE PRODUCT..

WARNING

ONLY USE ORIGINAL BULLARD BATTERIES (P/N: XSBATT) AND CHARGERS (P/N: XSCHARGER OR P/N: XSUSBCHARGER). FAILURE TO USE THESE SPECIFIC BATTERIES AND CHARGERS CAN DAMAGE THE BULLARD PRODUCTS AND RENDER THEM UNSAFE FOR USE.

CAUTION

THE TEMPERATURE RANGE TO CHARGE THE BATTERY IS 32°F TO +113°F (0°C TO 45°C). IF YOU CHARGE THE BATTERY AT TEMPERATURES OUTSIDE OF THIS RANGE, IT CAN CAUSE SEVERE DAMAGE TO THE BATTERY.

WARNING

EXPLOSION HAZARD. DO NOT CONNECT OR DISCONNECT THE EQUIPMENT (THERMAL IMAGER) TO ANY CHARGER IN A HAZARDOUS LOCATION. DO NOT INSERT OR REMOVE A BATTERY IN A HAZARDOUS LOCATION. FAILURE TO FOLLOW THESE INSTRUCTIONS AND WARNINGS COULD CAUSE DEATH OR SERIOUS INJURY.

If your Bullard TXS Thermal Imager has been stored for an extended period, especially with a depleted battery, it may not boot. Storage of your TXS Thermal Imager, in extremely cold temperatures may also cause your imager not to boot. To avoid this behavior, leave the unit attached to a charging system when not in use. If you see a flashing orange LED power button indicator, remove the imager from the XS Series Dual Charger and reseal it on the charger, or disconnect the USB cable and reconnect. If this does not work, refer to the troubleshooting section of the manual.

NOTES ON CHARGING:

1. Do not use a computer USB connection to charge the thermal imager. Connection to a computer via USB is only intended for the purpose of downloading video and/or communicating with the imager. It is not guaranteed that a computer will supply the necessary power for appropriate charging.
2. Due to the variety of USB standards, Bullard cannot guarantee charging performance with non-Bullard chargers nor non-Bullard USB adapters.
3. Battery charging temperature range is 32° F (0° C) to +113° F (45° C).
4. Lithium-ion battery is designed for a maximum life when the battery is kept fully charged. For best performance, leave the TXS connected to your preferred Bullard charging system when the unit is not in use. For maximum life of the imager, avoid storing the batteries in an uncharged state for extended periods of time.
5. Power off the imager during charging.

8. CARE AND STORAGE INSTRUCTIONS

Bullard TXS Thermal Imager requires little maintenance. For best results, after each use:

- Clean and disinfect the outside of the unit with mild soap or detergent.
- Wipe the lens with a soft cloth.
- Clean the display with a soft cloth.
- Check screw tightness on cover window; torque is 5-inch pounds.
- Store your Bullard TXS Thermal Imager, powered off, on the provided USB charger, secured in the XS Series Dual Charger, in the XS Series Hard Carrying Case, or in the delivery case provided. For best performance, leave your imager charging when not in use.
- Always ensure the contacts on battery and imager are dry to avoid corrosion or malfunction.
- Maintain thermal imagers using a programmed system.

⚠ WARNING

THE BULLARD TXS THERMAL IMAGER IS EXTREMELY SENSITIVE TO INTENSE, RADIANT HEAT SOURCES. NEVER POINT A BULLARD TXS THERMAL IMAGER AT THE SUN OR ANY OTHER SOURCE OF EXTREME RADIANT HEAT. THIS CAN CAUSE SEVERE DAMAGE, AFFECT THE ACCURACY AND RENDER THE PRODUCT UNSAFE FOR USE.

8.1 Stickers and Markings

You may place department and/or company information on your Bullard TXS Thermal Imager. When adding stickers or other markings, do NOT cover the certification label, thermal imager lens, cover window, or display. Do not engrave in the plastic material as this can damage the unit and jeopardize sealing.

If placing stickers or labels on your imagers here are some things to know:

1. UL approved 2 Mil Polyester or Scotchlite material with High Heat adhesive works well.
2. Avoid metal/metalized stickers/labels.

⚠ WARNING

DO NOT USE SOLVENTS OR PAINT THINNERS TO CLEAN THE BULLARD THERMAL IMAGER AS THEY COULD PERMANENTLY MAR THE SURFACE OR DEGRADE THE PROTECTIVE PROPERTIES OF THE CASING.

DO NOT INTENTIONALLY SUBMERGE THE UNIT UNDER WATER OR SUBJECT THE UNIT TO HIGH PRESSURE WATER.

FAILURE TO FOLLOW THESE INSTRUCTIONS COULD CAUSE DAMAGE AND RENDER THE THERMAL IMAGER UNSAFE FOR USE.

9. REPLACEMENT PARTS AND INSTRUCTIONS

Thermal imagers are tools used in harsh environments and often undergo vast amounts of wear and tear. Knowing this, we have created several kits for the end user that can be used for quick replacements on your thermal imager.

To replace the front boot:

1. Remove the three Phillips screws along the sides of the metal plate.
2. Gently remove the metal plate and silicone boot covering the edges of the imager.
3. Place the new boot on the camera. Place metal plate over it
4. Replace the screws with the three included in your replacement kit. Do not re-use screws. Torque to 8 inch-pounds (0.9 newton-meters). Take care NOT to overtighten the screws during reassembly.

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Replacement Parts for Camera

TXSREFRESHERKIT – TXS Refresher Kit with front boot, display boot, fluorescent stickers, D-ring + bolts

Parts for Charging

XSCHARGER - TXS Dual Charger vehicle and desktop charger

XSACADAPTER - TXS AC Adapter for use with XS Dual Charger

XSACADAPTERE - TXS AC Adapter for use with XS Dual Charger (Europe)

XSACADAPTERUK - TXS AC Adapter for use with XS Dual Charger (UK)

XSACADAPTERAU - TXS AC Adapter for use with XS Dual Charger (Australia)

XSUSBCARGER - TXS AC USB adapter and USB cable

XSBATT - TXS rechargeable Li-ion battery

Accessories

XSHARDCASE – TXS Series Hard Carrying Case

XSRETRACT – TXS Series Retractable Lanyard

10. SHIPMENT

For all electronics with lithium-ion batteries, special considerations must be observed when shipping. When shipping the Bullard TXS Thermal Imager and/or battery, by regulation the exterior case must have a red-bordered announcement with the following text: “CAUTION – LITHIUM ION BATTERY – DO NOT LOAD OR TRANSPORT PACKAGE IF DAMAGED”. Additionally, further regulations stipulate that the imager must not have greater than two bars of battery charge if shipping by air. Please consult applicable shipping rules for your mode of transport or consult with your shipping provider.

Bullard Thermal Imagers are subject to the U.S Export Administration Regulation (EAR). Distributors/End-Users must comply with all applicable laws including the U.S. Export Administration Regulations, as well as end-user, end-use and destination restrictions issued by U.S. and other governments; ECCN: 6A003, Subparagraph b.4b.

11. TROUBLESHOOTING

If you experience any problems with your Bullard TXS Thermal Imager, please refer to our website (www.bullard.com/txs) for the latest information on fixes, updates, and best practices.

If the imager appears unresponsive, it may require a hard power-off. To accomplish this, press and hold the Power button for 10 seconds.

If the hard power-off does not solve the issue, removing and reinserting the battery pack is another way to force a camera reset. The Bullard TXS Thermal imager is also equipped with a safety feature which provides automatic shutoff to protect the electronics if they experience prolonged excessive temperatures.

WARNING

DO NOT ATTEMPT TO DISASSEMBLE THE BULLARD TXS THERMAL IMAGER. IF THE UNIT IS NOT FUNCTIONING PROPERLY, RETURN IT TO THE BULLARD SERVICE CENTER FOR EVALUATION. FAILURE TO FOLLOW THESE INSTRUCTIONS CAN CAUSE DAMAGE AND RENDER THE THERMAL IMAGER UNSAFE FOR USE.

12. SERVICE

If your Bullard TXS is not performing properly and you have tried the troubleshooting section on www.bullard.com/txs, contact Bullard Customer Service at 877-BULLARD (285-5273) or at info@bullard.com. Outside the US and Canada, call +1-859-234-6611. Describe the problem to the Bullard representative as completely as possible. For your convenience, your representative will attempt to help you diagnose or correct the problem over the phone. Before returning your Bullard TXS, you should verify with your representative that the product should be returned to Bullard. Bullard Customer Service will provide you with written permission and a Return Authorization (RA) number.

13. LIMITED WARRANTY

Bullard offers high-quality, tough, and durable thermal imagers worldwide. Please read this section carefully, as it contains information to help you protect and service your investment.

This section contains valuable information about the type of warranty, the purchaser's obligations, warranty coverage, limitations, exclusions, and other terms and conditions that may affect Bullard's obligations under this warranty.

Bullard warrants to the original purchaser that the Bullard TXS Thermal Imagers are free of defects in materials and workmanship under intended use and service for the periods stated in Table 4. This warranty is not transferable.

Bullard's obligation under this warranty is only to repair or replace, at Bullard's discretion, items returned within the warranty period and determined by Bullard to be defective, subject to the following limitations:

- a) the item must be returned to Bullard with shipping charges prepaid;
- b) the item must not be altered from its original configuration; and
- c) the item must not have been misused, abused, or damaged in transport.

13.1 WARRANTY PERIOD AND COVERAGE:

The warranty periods defined in Table 4 below are subject to the following limitations:

- a) the product registration date considered for warranty will be no more than three (3) months after the product manufacture date.
- b) repairs performed under warranty do not affect the warranty period.
- c) accessories not specifically detailed in Table 4 may have a limited warranty. If you are unsure about the warranty, please contact Bullard Customer Service for assistance.

Table 4 Warranty Periods

Warranty Coverage	Warranty Period
- Thermal imaging unit	5 years from the date of product manufacture or registration, whichever date is later
- Removable li-ion battery	2 years from the date of product manufacture or registration, whichever date is later.
- Chargers for thermal imagers	2 years from date of purchase
- Protective boots - AC/DC and USB adapters - Other thermal imaging accessories	90 days

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WARRANTY EXCLUSIONS DISCLAIMERS:

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CONTACT BULLARD

If you have any questions about service or warranty, or your Bullard Thermal Imager is not performing properly, contact your local distributor or your nearest Bullard Customer Service.

Table 5 Contact Information

Region	Contact
United States and Canada	+1.877.285.5273 info@bullard.com
Europe	+49.2642.9999.80 info@bullard.de
Asia-Pacific	+65-6745-0556 bullardasia@bullard.com
Other Regions	+1.859.234.6616 info@bullard.com

14. MAINTENANCE CHECKLIST

To Maintain Optimal Performance of Your Thermal Imager

Daily or After Each Use:

- Ensure unit is working properly.
- Verify all battery chargers and associated cables are functioning properly.
- Store in charging mode on the dual charger or connected via a designated USB adapter.
- Using a damp cloth, clean off large pieces of debris.

Weekly:

- Clean lens with soft cloth and mild cleaner.
- Clean LCD display cover with soft cloth and mild cleaner.
- Check for cracks, holes, or other damage to the unit's outer shell.

Monthly:

- Check tightness of all external screws, including those connecting the LCD display cover and those connecting any bumpers. Do not overtighten.
- Using a damp cloth and mild cleaner, clean the outer shell of the unit. Do not immerse the unit under water for cleaning.

Variable:

The frequency of these maintenance steps will be determined by the amount of use the unit receives in the field. While this is a guideline, users should replace any part when they notice a decrease in product performance or usability, rather than waiting for a specific period of elapsed time.

- Every 12 to 36 months: return the unit to Bullard for the Preventive Maintenance service.

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