

## Congratulations

Congratulations on the purchase of your new TacSight S2 Thermal Imager from Bullard. The TacSight S2 Thermal Imager combines advanced thermal imaging technology with our expertise in impact and element resistant engineered materials to bring you the most durable thermal imager on the market. The TacSight S2's innovative, compact design and logical, easy-to-use interface presents the latest innovation in thermal imaging for law enforcement, tactical, patrol and surveillance applications.

Some of the many uses for your TacSight S2 Thermal Imager include:

- Vehicle Pursuits and Fugitive Searches
- Perimeter Surveillance
- Search and Rescue
- Hidden Compartments in Vehicles
- Marine and Ground Surveillance
- Environmental Law Enforcement
- Officer Safety

Bullard stands ready to support your department with industry leading thermal imager training materials and Law Enforcement Thermographers Association (L.E.T.A.) certified instructors.



### NOTE

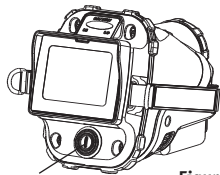
To help us better serve you, please fill out the warranty card enclosed with your TacSight S2 Thermal Imager.

### ⚠ WARNING

Read all instructions and warnings before using this product. Failure to observe this information could result in death or serious injury.



Figure 1

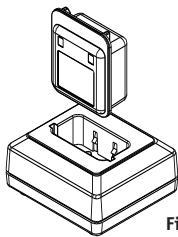


Power Button **Figure 2**

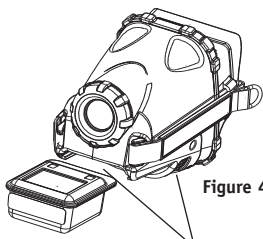
## Use and Operation

### Power

To turn on the TacSight S2 Thermal Imager, simply depress the large, dark gray power button under the LCD display (**Figure 2**). Upon pressing the power button, the thermal imager will initiate a short calibration sequence. The image will appear in approximately five seconds. To turn off power, depress the power button.



**Figure 3**



Battery Locking Buttons **Figure 4**

**CAUTION**

During use, avoid pointing the camera directly at the sun as this may damage the microbolometer detector elements. While not in use, take precautions to store the camera so that the lens is protected from direct exposure to the sun or intense heat sources. Failure to observe this instruction may result in equipment damage.

### NOTE

You will periodically observe a momentary freeze in the image. This is normal and is a function of the self-calibration shutter. The shutter will activate every 30 seconds to three minutes depending on the environment.

### Using the Battery Charger

The battery should be charged in the battery charger using either the AC or DC adapter provided (**Figure 3**). To charge the battery, simply insert battery into the charger so that the metal connectors on the battery are aligned with the metal connectors in the charger. A red light will illuminate on the charger to indicate that the battery is charging. When the light on the charger turns to green, your battery is fully charged. You may leave the battery in the charger indefinitely as the battery will not overcharge. For maximum battery life and performance, you should remove the battery from the charger and completely discharge it on a monthly basis.

**CAUTION**

An AC Adapter is supplied with the unit for powering the battery charger. When using AC power, do not substitute an adapter with a different specification. Failure to observe this instruction may result in equipment and/or property damage.

### Loading/Unloading the Battery

Loading and unloading the battery on the TacSight S2 is easy (**Figure 4**). To install a battery, slide the battery into the groove on the bottom of the unit and ensure that the battery is properly seated. To remove a battery, depress both battery locking buttons simultaneously and slide the battery out of the unit. Since it can only be loaded one way, the battery is easily replaced in the dark.

Additionally, as with all batteries, your rechargeable battery will experience a slow drain of its charge during storage. The amount of drain varies widely based on storage conditions. For best performance, charge each of your batteries every week.

### NOTE

Bullard provides an optional AA Alkaline Battery case which can be used as an alternative to the standard 10 volt NiMH rechargeable batteries. The AA alkaline battery case requires eight AA alkaline batteries. Once the batteries are installed, the case loads into the unit in the same manner as the standard NiMH battery.

Due to the unique way that alkaline batteries disperse power to the unit, the LED indicators will report battery levels that are not necessarily indicative of the the battery's actual remaining charge.

### Display Brightness Control Switch

TacSight S2 has a display brightness control switch (**Figure 5**). It is located on the left side of the camera housing, just above the hand strap, toward the rear of the housing, close to the display frame. This is a three position switch. The top position allows a full bright display. The middle position results in a full off display. The bottom position allows a dimmed display. Full detail image transmission to a remote receiver, with the TacSight S2 transmitter installed, occurs in all three display switch positions.

### Lens Options

TacSight S2 is available with an 11 degree field of view (FOV) lens generally desirable for longer-distance viewing such as surveillance and patrol applications or a 50 degree FOV lens for close-up operations, such as tactical use. The TacSight S2 logo on the exterior of the unit will include the designation "WA" for "wide-angle" if the TacSight S2 is equipped with the 50 degree FOV lens.

### Side Straps

The side straps are designed to be field replaceable. Users can order replacements and install them without having to return the thermal imager to the factory.

### Removing/Installing the Side Straps

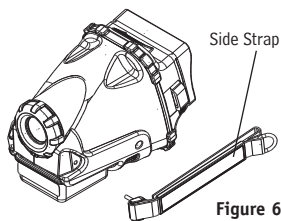
To remove either of the right or left side straps, loosen the strap and pull it through the strap loop located on either side of the LCD display (**Figure 6**). Remove the screw that holds the strap to the imager. To install, fasten the strap to the unit using the screw provided. Feed the strap through the strap loop and adjust to the desired length.

### Adjusting the Side Straps

To adjust a side strap, loosen the hook and loop and set to the desired length.



**Figure 5**



**Figure 6**

# TacSight S2 Thermal Imager User Manual

## Care Instructions

The TacSight S2 Thermal Imager requires little maintenance. For best results, periodically:

- Clean 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 side straps and display cover.
- Store your TacSight S2 in the vehicle mount, or in the rugged hard case.

## Cleaning the Lens

The TacSight S2 lens is recessed in an impact resistant bezel. The lens can be cleaned with a soft cloth and soapy water as required.

### CAUTION

Do not use solvents or paint thinners to clean your TacSight S2 Thermal Imager as they could permanently mar the surface or degrade the properties of the outer shell. Failure to observe this instruction may result in equipment damage.

## Replacing the Video Display Cover Window

The display cover (**Figure 7**) has a scratch resistant hard coating to minimize marring. However, if heavy scratching or gouging does occur, the cover window can be replaced. To do this, simply remove the four screws along the top and bottom of the window. Remove the plastic display cover window and replace with a new one making sure that the countersink slots around the mounting holes are facing outward.

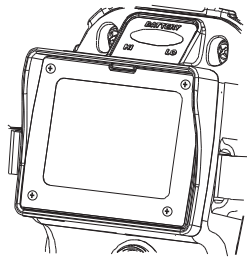


Figure 7

### WARNING

The TacSight S2 Thermal Imager is not certified as intrinsically safe. Vapors from organic solvents and high dust concentrations can create potentially explosive atmospheres that can be triggered by a spark from equipment such as a thermal imager.

Failure to observe this warning could result in death or serious injury.

## Service

If your Bullard Thermal Imager is not performing properly, please contact Bullard Customer Service at 877-BULLARD (285-5273). Outside the US & Canada, call 1-859-234-6611. Describe the problem to the Bullard representative as completely as possible. For your convenience, your representative will try to help you diagnose or correct the problem over the phone. Before returning your Bullard thermal imager, 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 number.

If the return is a non-warranty repair, a Bullard Customer Service Representative or your local distributor will provide you with a repair invoice estimate. To authorize repair, you must provide a purchase order to your distributor for the amount of the estimate. Once Bullard receives authorization from your local distributor, we will issue you a return authorization number so that you can return the unit to Bullard. Bullard will repair the unit and ship it from our factory within 48 business hours (two business days). If the cost of repairs exceeds the stated quote by more than 15% or by more than \$100, a Bullard representative will re-estimate your repair and your local distributor will contact you for authorization to complete repairs. After repairs are completed and the goods have been returned to you, your distributor will invoice you for the actual repair amount.

### NOTE

Do not attempt to disassemble the sealed case of your Bullard TacSight S2 Thermal Imager. If the unit is not functioning properly, return it to Bullard (as described in the Service section) for evaluation. Disassembling the unit voids all warranties.

Prior to retraining, decontaminate and clean your Thermal Imager to remove any hazardous or contaminated materials that may have settled on the product during use. Laws and/or shipping regulations prohibit the shipment of hazardous or contaminated materials. Products suspected of contamination will be professionally decontaminated at the customer's expense.

Returned products will be inspected upon return to the Bullard facility. If the repair is under warranty, Bullard will repair the unit and ship it from our factory within 48 business hours.

## Warranty

Bullard warrants to the original purchaser that the TacSight S2 Thermal Imager, transmitter, MobileLink, Mobile Command Center, Powerhouse and Battery Chargers if applicable, are free of defects in materials and workmanship under intended use and service for a period of one (1) year from date of manufacture. Bullard's obligation under this warranty is limited to repairing or replacing, at the Company's option, articles that are returned within the warranty period and that, after examination, are shown to the Company's satisfaction to be defective, subject to the following limitations:

- a) Article must be returned to Bullard with shipping charges prepaid. Bullard's repair policy may cover inbound freight charges.
- b) Article must not be altered from its original configuration.
- c) Articles must not have been misused, abused, or damaged in transport.
- d) Maintenance and field replaceable items, if defective, are covered under warranty for a ninety (90) day period.

These items include:

- Batteries
- Straps
- Display covers
- AC/DC adapters
- All accessories except transmitter, MobileLink, Mobile Command Center and Powerhouse

Bullard provides a limited lifetime warranty on the TacSight S2 Thermal Imager outer shell. This warrants that the outer shell is free of defects in materials and workmanship under intended use and service for the original purchaser. Bullard's obligation under this warranty is limited to repairing or replacing, at the Company's option, articles that after examination are shown to the Company's satisfaction to be defective, subject to the following limitations:

- a) Article must be returned to Bullard with shipping charges prepaid. Bullard's repair policy may cover inbound freight charges.
- b) Article must not be altered from its original configuration.
- c) Article must not have been misused, abused, or damaged in transport.
- d) When the outer shell is obsolete and Bullard no longer stocks the part, the limited lifetime warranty will be terminated.

In no event shall Bullard be responsible for damages, loss of use, or other indirect, incidental, consequential or special costs, expenses or damages incurred by the purchaser, notwithstanding that Bullard has been advised of the possibility of such damages.

Any implied warranties, including warranties of merchantability and fitness for a particular purpose, are limited in duration to one (1) year from the date of manufacture of this product.

Some states do not allow the exclusion or limitation of incidental or consequential damages or allow limitations on how long an implied warranty lasts, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights, and you may have other rights which vary from state to state.

## Extended Warranty

The extended warranty has all the same terms and conditions as the one-year warranty, except it is for the period of two years. This warranty can be purchased directly from Bullard or through any authorized Bullard distributor. The extended warranty must be purchased within 30 days of the original order.