



USER MANUAL



Thank you for choosing a Serfas TRUE Series light! We know you will be happy with the performance and value you are getting in this product. This manual is intended to help get you started on your journey down that well lit path. Please read this manual completely and use the recommended care precautions before using this product. If you have any further questions regarding this product please go to our website at www.serfas.com or call us at 1-623-888-5841.

SPECIFICATIONS

- * HIGH PERFORMANCE CREE LED
- * CNC ALUMINUM HEAT SINK LIGHT CAP (MTB Models)
- * LAST MODE MEMORY FUNCTION
- * QUICK RELEASE RECHARGEABLE LITHIUM ION BATTERY
 - TSL-1000 (SAMSUNG® 1-Cell Li-Ion, 3200mAh)
 - TSL-750 (SAMSUNG® 1-Cell Li-Ion, 2600mAh)
 - TSL-500 (SAMSUNG® 1-Cell Li-Ion, 2200mAh)
- * HIGH PRECISION OPTICAL LENS
- * WATER RESISTANT (IPX6)

CONTENTS INCLUDED

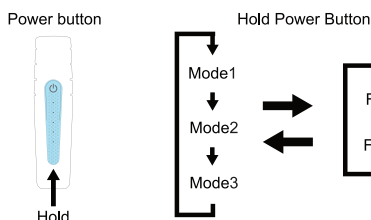


Contents:

- TRUE Series Headlight
- Lithium Ion Battery
- Handlebar Bracket
- Helmet Mount
- Go-Pro Adaptor
- USB Charging Cable
- Manual

LIGHT OPERATION

1. Your new light has two different modes (solid beam and flashing). Holding the power button will switch the mode between solid and flashing.
2. To turn light on press power button.
3. With each press of the power button the light will change its power setting.
4. Press and hold the power button about 1 second to switch off. (With mode memory, the light will resume previous mode upon next usage.)



Remember to turn off the light when not in use. You must turn light off when storing. To turn light off in any mode press and hold the power button for 1 second.

FAILURE TO TURN LIGHT OFF CAN LEAD TO LIGHT TURNING ON DURING STORAGE. THIS CAN LEAD TO THE LIGHT OVERHEATING AND CAUSE PERMANENT DAMAGE.

UNIVERSAL MOUNTING BRACKET

INSTALLATION / ADJUSTMENT / RELEASE:

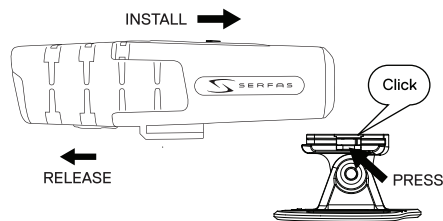
1. Open bracket by pulling thumb lever down, then unclip the thumb lever from the cam hook.
2. Rubber strap length can be adjusted to fit the handle bar by moving the strap up and down the rungs located under the swivel light mount.
3. Adjust bracket correctly for your bar size. It should be easy to flip the thumb lever into place. Bracket is designed to fit snug not tight- the rubber will prevent the bracket from moving once installed.
4. Once strap length has been adjust to the correct fit install around handle bar by inserting the thumb lever into cam hook, then rotate thumb lever upwards towards swivel mount to lock.
5. Check your bar size. If you have 31.8 bars your bracket should be on the largest setting of the UNI-BRKT. If you have an oversized 35mm bar you need to purchase the UNI-OS for proper fit.
6. **Remove bracket from handlebar when not in use.** The quick release design makes it easy to keep the bracket out of the elements when not in use to avoid damaging the rubber. We recommend keeping the light attached to the bracket as a reminder to store the bracket in a cool environment to extend the life of the bracket. You'll be able to charge the light with your bracket attached.
7. If you store your bike inside and choose to leave your mount on the bike *release the pressure on the thumb lever when not in use. This will extend the life of the bracket.
8. Your handlebar bracket should last for years with proper installation and care.



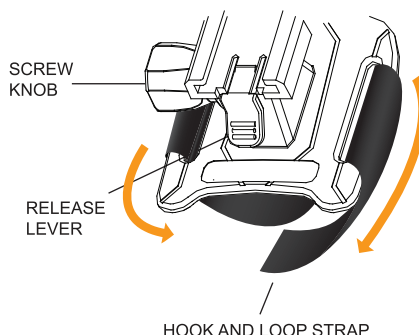
- * Turn Thumb Lever up when in use to lock into place.
- * Turn Thumb Lever down to release pressure when not in use to prevent premature wear.

Rubber will break down eventually if left under pressure for extended periods of time losing its elastic property.

HOW TO MOUNT THE HEADLIGHT TO HELMET



1. Remove the belt from one side of the helmet mount.
2. Place the helmet mount on to the desired location of helmet.
3. Wrap belt around helmet and tightly attach the end of the belt to itself.
4. Insert the headlight into the helmet mount until it clicks into place.
5. Press down release lever to remove.

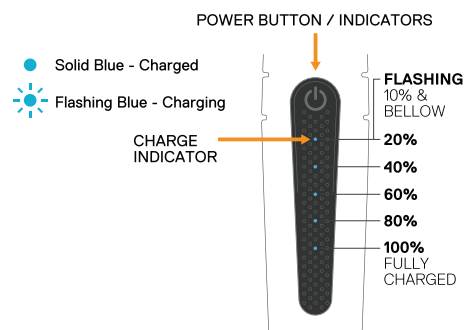


To adjust the vertical beam angle when mounted on the helmet, loosen the screw knob and rotate the light up or down to your preferred angle, then tighten the screw knob to secure the light in place.

BATTERY CHARGING INSTRUCTIONS

Attention: If you do not use the battery for a long time, be sure to fully recharge every 3 months. Please store the battery in a cool and dry place. Recharge battery after each long use.

CHARGING INDICATOR



1. Find the charging port underneath the light.
2. To ensure stable charging please be sure the USB Type C male connection is fully and firmly clicked into place in the headlight's charging port (an audible click will not always be heard).
3. Lights can be charged by connecting charging cable to your computer USB port wall charger (wall outlet 100 to 240 volts)
4. Charge time will vary depending on computer or wall charger.
5. When battery is fully charged, unplug the USB cable or wall charger. Replace the charging port rubber cover.

• USB CHARGING PORT



CAUTION

- * Do not charge over 5V.
- * Always charge your battery in a well-ventilated space.
- * Keep away from flammable objects while charging as this may lead to fire or battery explosion.
- * Do not smoke while charging as the battery may release hydrogen gas.
- * Never connect or disconnect the plug or cord with wet hands while charging.
- * Do not connect or disconnect the plug or cord when they are wet, it may lead to electric shock.

BATTERY CHARACTERISTICS

1. It is normal that the battery may heat up during charging (up to 104°F/40°C), as the chemicals in battery are undergoing a reaction.
2. Several factors can influence the battery's performance: type of cell strain, the maintenance routine, the temperature and number of charges, etc.
3. Under normal usage the battery capacity is reduced to 80% effectiveness after 300-500 charge/discharge cycles. Batteries may have a 3 year life span under good care.
4. The battery voltage and capacity decrease at low temperatures, especially near or below the freezing point. The capacity decreases 5%-10% at freezing (burn time decreases 50%). At -20°C, the capacity decreases 30% (burn time decreases 70%). The battery performance will return to normal when the temperature gets up to 70°F/20°C.
5. The battery will lose around 1% of its capacity per day when you store the battery at normal room temperature. Battery temperature should never exceed 104°F/40°C, it will lose about 5% of its capacity per day.
6. Batteries need to fully recharge every 3 months.
7. Batteries should be stored in a cool and dry place.

BEAM ADJUSTMENT

To adjust the horizontal beam, spin the headlight left to right for your best side to side beam angle. To adjust the vertical beam angle, loosen the mount and rotate the light up and down to your best vertical beam angle, then re-tighten the mount.



The beam is widely dispersed and very bright. To prevent blinding of oncoming vehicles on public roads, it is best to adjust the angle downward.

HOW TO CLEAN AND CARE FOR THE LIGHT

- *Make sure to clean the dust and dirt on the light with a soft damp cloth after every ride.
- *Water resistant is for rain water only. Do not submerge the battery or the whole light into water when cleaning.



CAUTION: When riding at night, please follow the guidelines below:

- *Use of appropriate bike lighting is recommended & in some places required by law.
- *Use caution when handling, the light may get hot.
- *Unplug USB connector by the plug, never by the cable.
- *Do not dismantle the headlight or battery.
- *Provide sufficient airflow to the headlight for cooling during use.
- *Not for use under water.
- *Do not look directly at light.
- *Do not leave the light on and unattended.
- *Keep headlight and battery away from fire and combustible materials.
- *Do not store head unit when hot or immediately after use.
- *Unplug the light, charger and cable once the battery is fully charged.
- *This light is for bicycle use only.

RUNTIMES MTB

TSL-1000M

MODE	LUMEN	RUNTIME
High	1000	up to 2 hrs
Medium	500	up to 4.25 hrs
Low	250	up to 8.75 hrs
Daytime Flash	1000	up to 18 hrs
Low Flash	150	up to 50 hrs
CHARGING TIME:		1.75 HRS At 2 Amp

TSL-750M

MODE	LUMEN	RUNTIME
High	750	up to 2 hrs
Medium	350	up to 3.25 hrs
Low	180	up to 7.75 hrs
Daytime Flash	750	up to 17 hrs
Low Flash	100	up to 45 hrs
CHARGING TIME:		2.75 hrs At 1 Amp

TSL-500M

MODE	LUMEN	RUNTIME
High	500	up to 2.5 hrs
Medium	250	up to 4.5 hrs
Low	130	up to 10 hrs
Daytime Flash	500	up to 18 hrs
Low Flash	80	up to 45 hrs
CHARGING TIME:		1.75 HRS At 1 Amp

RUNTIMES

ROAD

TSL-1000R / TSL-1000RW

MODE	LUMEN	RUNTIME
High	1000	up to 1.75 hrs
Medium	500	up to 2.75 hrs
Low	250	up to 7.25 hrs
Daytime Flash	1000	up to 14 hrs
Low Flash	150	up to 38 hrs
CHARGING TIME:		1.75 hrs At 2 Amp

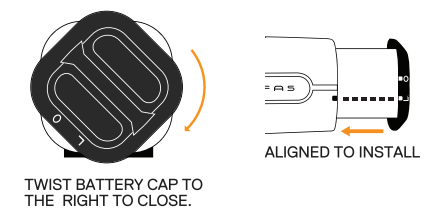
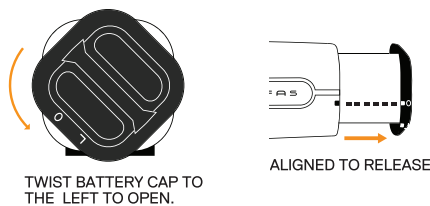
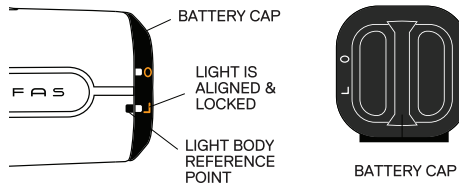
TSL-750R / TSL-750RW

MODE	LUMEN	RUNTIME
High	750	up to 1.75 hrs
Medium	350	up to 3 hrs
Low	180	up to 7.15 hrs
Daytime Flash	750	up to 13 hrs
Low Flash	100	up to 30 hrs
CHARGING TIME:		2.75 hrs At 1 Amp

TSL-500R / TSL-500RW

MODE	LUMEN	RUNTIME
High	500	up to 2 hrs
Medium	250	up to 3.5 hrs
Low	130	up to 7.5 hrs
Daytime Flash	500	up to 13 hrs
Low Flash	80	up to 27 hrs
CHARGING TIME:		2.5 hrs At 1 Amp

HOW TO INSTALL AND RELEASE THE BATTERY



Battery Installation

1. Align the "point O" to the light body reference point. Install the battery cover into the light body.
2. To lock turn the battery cover clockwise until the "point L" aligns with the light body reference point.

Battery Release

1. Turn left to open the battery and the battery will pop out slightly.
2. Pull the battery out from the light body.

***Attention:** To maintain smooth battery installation / release, use bicycle friendly grease to lubricate the battery cover opening and battery o-ring.

OVERHEAT PROTECTION

The overheat protection circuitry in your light ensures that it operates at safe temperatures to insure a long life. Continued heat build up is the biggest enemy of LED's and causes lower lumen output and lifespan when operated too hot. Under proper operating conditions your LED should last 50,000+ hours. (See battery info for battery lifespan)

When your light is on many factors can cause it to get too hot (inadequate airflow, mud, dirt, walking up that hill). When this happens the circuitry in this device will automatically go into "Medium" mode. Once the air flow over the light has improved and the running temperature is reduced the circuitry will kick the light back into the previous mode.

TROUBLESHOOTING

1. Problem: The light is not on

Solution: Check if the battery still has power
Check if the power button was pressed hard enough
Check if the battery is installed correctly

2. Problem: The light turns off over rough terrain

Solution: Check if the battery is fully inserted.

WARRANTY

LIMITED LIFETIME WARRANTY REQUIRES ONLINE REGISTRATION.

Go to www.serfas.com/warranty for warranty details and online registration. Limited Lifetime Warranty covers manufacture defects.

Serfas warrants to the original purchaser of this product that the product is free from defects in material and workmanship for the lifetime of the product **with online registration**. This warranty does not apply to damage due to heat, physical damage (crashing) resulting from abuse, neglect, improper repair, improper fit, or alterations of the fixture. This warranty is in lieu of all other agreements and warranties, general or specific, express or implied and no representative or person is authorized to assume liability on behalf of Serfas in connection with the sale and use of this product.

Serfas reserves the right to request the return of any product submitted for warranty consideration. All customers should contact Serfas directly for warranty service.

Battery Warranty: Batteries are covered by a one year warranty from date of purchase.

To make a claim, please e-mail warranty@serfas.com. If e-mail is unavailable please call Serfas at 623.888.5841.