



## AXIS® RECHARGEABLE LED HEADLAMP



### Operating and Maintenance Instructions

#### ENGLISH:

##### Battery Charging – See Figure 1

Supplied with headlamp: Self-contained lithium rechargeable battery, micro-USB charging cable.

Princeton Tec suggests using a charger with output of 5V, 1A. This charger will fully charge the battery pack in 3 to 4 hours. Slower charging will be achieved with a charger rated with lower amperage. Some computer USB ports may not have sufficient output to charge this or any USB rechargeable product. Under normal usage, the supplied lithium ion battery pack will last for approximately 1,000 charge / discharge cycles.

- Red battery charge level LEDs indicate battery state. Red LEDs pulse when charging is in progress.
- Charging has completed when both LEDs are illuminated.
- Low Battery Indication: When the battery level reaches 25% the light will blink once indicating the charge is low. Once battery level drops below 20% the light will blink twice and drop to the lowest setting in the current mode. Dial functionality will be disabled to provide the maximum amount of time before the battery is completely drained and the light shuts off.

#### WARNING ⚠

Do not disassemble; no user serviceable parts.

#### General Care and Warnings

- Properly charge the battery to maximize its lifespan. Lithium ion batteries do not suffer from a “memory effect,” and for battery longevity it is preferable to charge more frequently if possible, rather than to fully deplete the battery’s charge.
- To avoid damaging your lighting system, use only chargers that meet the approved specifications.
- Axis Rechargeable is not submersible. Submerging in water will damage the lighting system and void the warranty.
- To keep your lighting system looking new, use a mild soap and water solution with a rag or sponge to periodically wipe off dirt.

#### Switch Operation – See Figure 1

- A single press activates **red mode** at 70% output.
- Double press activates **white spot mode** at 70% output.
- Triple press activates **white flood mode** at 70% output.
- In any mode, the dial is used for dimming.
  - Clockwise dims to 10% output. Once minimum is achieved, further rotation will not do anything.
  - Counter clockwise brightens to 100% output. Once maximum is achieved, further rotation will not do anything.
  - Counter clockwise from flood mode activates **dual-beam mode**.
- A single press occurring more than two seconds after the previous button press will turn the light off.
- **Lock out Mode** to prevent accidental activation: Can only be activated during OFF mode. To enter Lockout mode, press and hold button for three seconds. To indicate success, two red LEDs will flash according to battery voltage chart (see figure 2).

#### Troubleshooting

If the Axis Rechargeable fails to light:

- Check the charge state of battery by either 1. Locking out the light by holding down the power button, or 2. Plugging light into power source and observing battery charge level LEDs.
- To reset headlamp if there are any functional errors, press and hold the button for 20 seconds.

Figure 1 – Battery Charging



Figure 2 - Operation

**Press 1x:** Red 70% output

**Press 2x:** White spot 70% output

**Press 3x:** White flood 70% output

**Press 1x from on:** Off

**Press 3 second hold:** Lock-out & battery indicator  
*If button is pressed while in lock-out mode, one flash of the red LEDs will indicate the light is locked*

**Press 3 seconds from lock:** Unlock & battery indicator  
*Red LEDs will flash indicating battery level*

**Red LEDs will flash indicating battery level**

- 4 flashes: 80-100%
- 3 flashes: 51-79%
- 2 flashes: 31-50%
- 1 flash: <30%

**Counter clockwise:** Brightens to 100%  
*Once maximum is achieved, further CW rotation will NOT do anything*

**Clockwise:** Dims to 10% output  
*Once minimum is achieved, further CCW rotation will NOT do anything*

**Counter clockwise from flood mode:** Dual-beam mode  
*Once maximum is achieved, further CW rotation will NOT do anything*

Figure 3 – Performance

Modes	Lumens	Runtime	Beam Pattern	Reserve
DUAL BEAM HIGH	450	1.3h		-
SPOT BEAM HIGH	240	2h		1.2h
SPOT BEAM LOW	55	10h		-
FLOOD HIGH	100	5.5h		1.5
FLOOD LOW	30	15h		-
RED HIGH	5	28h		-
RED LOW	1	50h		-
DISTANCE (m)			0 5 7 13 16 18 30 35	

#### (ANSI FL-1 Standard)

**Runtime** is defined as the duration of time from the initial light output value—defined as 30 seconds after the point the device is first turned on—using fresh batteries, until the light output reaches 10% of the initial value.

**Reserve time** is the duration of time from 10% of initial light output value down to 0.25 lux

