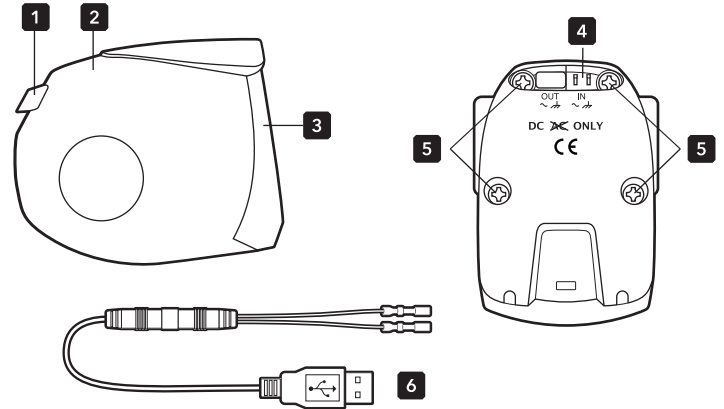
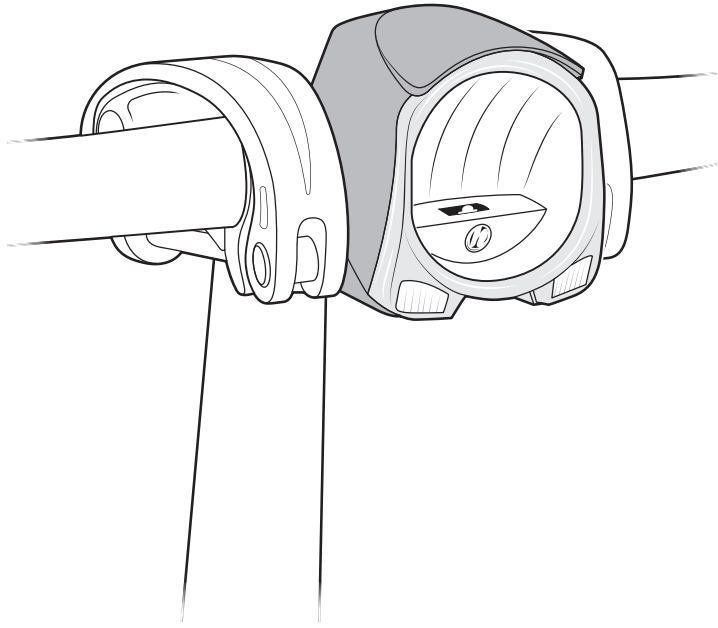




## Parts

1. On/Off Switch
2. Housing
3. Lens with Clarity™ Optics
4. Connection Terminals
5. Clamp Bolts
6. USB Cable



# Valo™ Direct

## Tools Required \*

- #2 Crosshead Screwdriver

## Optional Tools \*

- Needlenose Plier

## Parts Required \*

- Handlebar Stem (Either Tern Andros™ or Syntace VRO 47)
- Handlebar with a central-section diameter of 25.4 mm
- Direct current power source, such as a USB Power Bank or an E-Bike System with compatible voltage

## Optional Parts \*

- Tern RidePocket™ to hold USB Power Bank

## Compatibility

- ▲ Not for use with a hub dynamo or any AC voltage power source.
- ▲ Be sure to select a USB Power Bank or E-Bike System with a visual indication of remaining power.

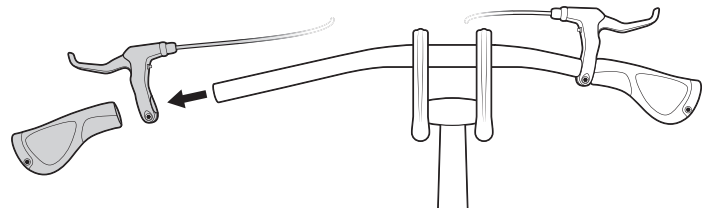
## General Warnings

- ▲ To prevent vision impairment, never look directly at the light.
- ▲ Do not submerge in water. The Valo Direct is designed for outdoor use, and can be used in heavy rain and snow but it is not waterproof.
- ▲ Before riding, always ensure Light is clean and functioning correctly so that you are visible to others on the road.
- ▲ Do not connect Rear Light to the output terminals. Leave the plug on at all times.

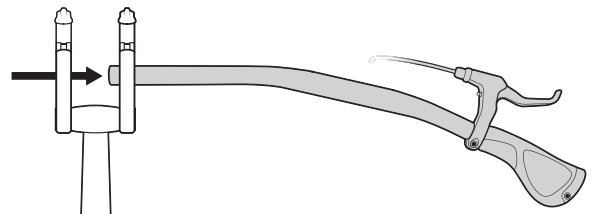
\* Not included

## Installation

1. Remove Grip, Brake Lever, and Gear Shifter from Handlebar.

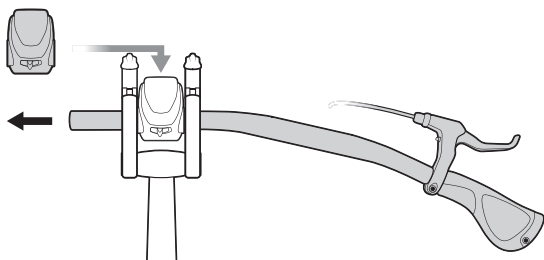


2. Loosen Stem and slide Handlebar halfway out. Remove existing light, if fitted.

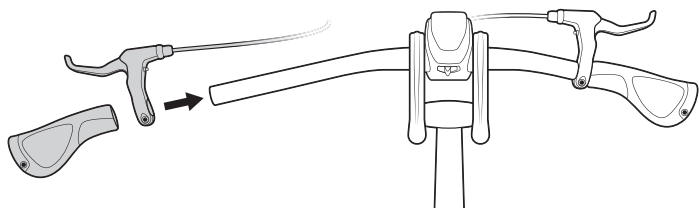


3. Position Valo Direct within Handlebar Stem and slide Handlebar through Clamp Hole.

▲ If Handlebar doesn't fit, loosen the four Clamp Bolts evenly until there is sufficient clearance.



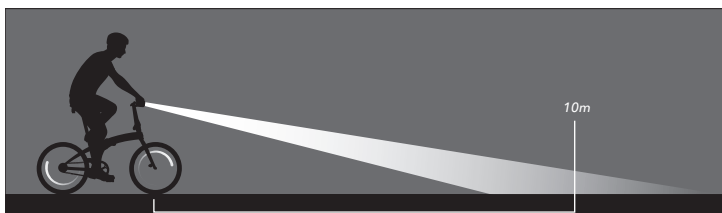
4. Tighten Handlebar Stem and install Grip, Brake Lever, and Gear Shifter. Tighten to manufacturers' specifications.



7. Switch on the Valo Direct and adjust to desired angle.

▲ Never angle beam in a way that blinds oncoming traffic; ideally, the center portion of the beam you see projected on the ground will be 10 meters (33 ft) in front of the bicycle.

▲ If Valo Direct cannot rotate, loosen all Clamp Bolts on Handlebar Stem by a 1/4 turn. Continue loosening until Light is loose enough to rotate.



## Maintenance & Daily Use

The electronics on the Valo Direct are maintenance-free; its lamp parts do not need servicing or replacing.

▲ To clean, wipe lens and cover with damp cloth using mild detergent. Do not use solvents or alcohol.

▲ Familiarize yourself with the capacity of your power system. Before each ride, ensure you have enough power to operate Light for the entire trip.

## USB Power Bank Selection & Use

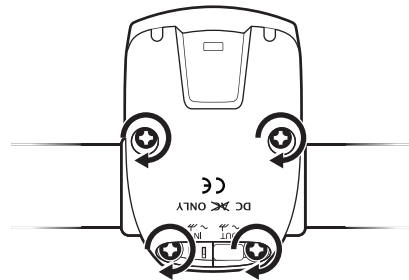
When selecting a USB Power Bank, consider how long you'll ride with it, and how often you'd like to recharge. See rough estimations below.

Power Bank Capacity (mAh)	Approximate Run Time
2600	3 hours
5200	6 hours
10000	12 hours

▲ Estimates are for reference only. Actual run time will vary based on Power Bank voltage and efficiency, and other factors.

5. Tighten the four Clamp Bolts evenly until Valo Direct remains in place.

▲ Do not over-tighten screws, otherwise plastic casing may break.

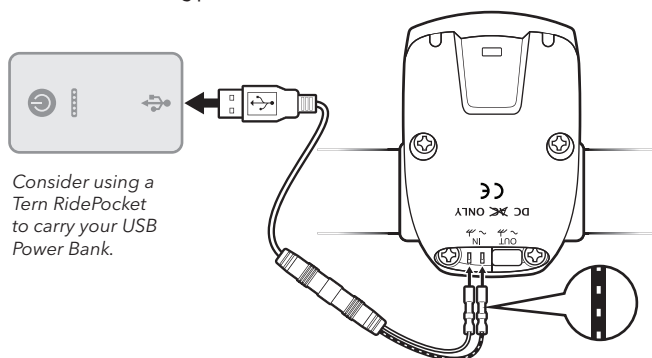


6. Connect the USB end of the cable to the pre-installed cable on Valo Direct. If the USB Cable comes loose at the Connection Terminals, reconnect by locating the Connection Terminals on the side marked "IN". Insert wire with white dashed marks into Connection Terminal with (~) symbol and other wire into Connection Terminal with (↔) symbol.

▲ Optional: Use Needlenose Plier to help insert and tighten wires. To prevent damaging the wires and Connection Terminals, take care not to use excessive force.

▲ Light will not turn on if Wires are reversed in Connection Terminal. The electronics are protected against reversed polarity but the input voltage from the battery must not exceed 6.0 VDC.

▲ To prevent rider injury or death, ensure that USB Cable is installed correctly and does not interfere with moving parts.



Technology by Herrmans™

## Specification

Max. Brightness	150 lumen, 40 lux at 10 m
Lens Type	Clarity™ Optics
Illuminant	Philips Luxeon Rebel (white LED)
Illuminant Lifespan	50,000 hours
Material	Cold-resistant ABS
Dimensions	77 x 60 x 63 mm
Weight	66 g   2.33 oz
Compatible Handlebar Diameter	25.4 mm (1")
StVZO Compliant	Yes, K1345
Temperature Range	-40°C ~ 50°C (-40°F ~ 122°F)
Power Consumption at 5VDC	3.2W
Power Consumption at 6VDC	4.5W
Input Voltage	5.0-6.0 VDC

Made in China

LIMITED PRODUCT WARRANTY INFORMATION: This Product comes with a ONE (1) YEAR Limited Warranty from the date of retail purchase by the original end-user. If a material or workmanship defect arises and a valid claim is received within the Warranty Period, this Product will be replaced. Mobility Holdings cannot be held liable for damages to personal property due to misuse or improper care and maintenance. This Product Warranty does not, under any circumstance, cover the replacement or cost of any third-party product used with or connected to the Product.

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