

## 1. INSTALLATION GUIDELINES

### Step A.

Determine the location in the vehicle with access to the 12-volt car power supply. Note: Make sure the fuel tank will not be damaged. Mount the protective unit firmly at the right in the vehicle. Keep in mind a bit of space above the protective case in order to take the units from the charging stick easily.

### Step B.

Take the Twister-Lights® light units of the battery-charging unit. On the protective container mark the mounting holes of the battery-charging unit. Drill the holes in the body of the charging unit. You may use Velcro or double-sided tape instead. Attach the battery-charging unit to the protective container. Make sure the indicator light on the battery charging unit is visible after installation in the vehicle.

### Step C.

Mount the protective unit into the vehicle at the place you have determined in step 1. Make sure not to damage any wiring or the fuel tank.

### Step D.

Determine the required electrical connections (maximum current drain is 6.4 AMP per Twister-Lights® set). Use the correct connections to connect the positive (red) and the negative (black) to the power source. A switched power supply is recommended. Observe the correct polarity. If the battery-charging unit is correctly connected, the red indicator LED on the battery-charging unit will illuminate when the supply is switched ON.

## 2. CHARGING UNIT

The Twister-Lights® uses a unique battery charging unit. This charging unit can also be used as a storage unit. For most applications, this charging unit is intended to be permanently mounted in a vehicle. The installation requires an electrical supply from the 12-volt battery to the charging unit.

Note the following specifications for an external power supply: Voltage requirements: 12 VDC, max. 13.8 A. Current requirements: 6.4 AMP minimum per set Twister-Lights®.

### \*\* Important \*\*\*

These units are equipped with Ni-Mh batteries, which have a high capacity. Before being used for the first time, it is imperative that first charging cycle is for at least three hours in order to make sure that the performance of the batteries matches the specifications. Do not expose batteries to extreme temperatures.

The performance of a fully charged battery is only attained after it has been charged and discharged two to three times.

## 3. CHARGING THE Twister-Lights® UNITS

**Keep the Twister-Lights® Unit upside down (with the bottom side up!) and slide the unit on the charging stick. If you try to slide the unit on the charging stick faced up you may damage the unit!** If you have your charging unit built into a vehicle the red LED on the charging unit should illuminate. If you dismount the charging unit from the protective unit you need a transformer to connect to the charging unit. The average charging time to charging an empty battery is approx. three hours.

## 4. USING Twister-Lights®

In order to switch the Twister-Lights® Units on just turn the unit upside down on any surface. After turning the unit approx. 130 degrees the unit will switch on automatically. Turn it again for switching the unit off.

You can change the light pattern by removing the cover and select another pattern pushing the button on the electronics board.

## 5. WARNINGS

**THE USE OF (SPECIFIC COLORS) SAFETY LIGHTS CAN BE PROHIBITED OR LIMITED BY LOCAL LAW OR REGULATIONS. PLEASE MAKE SURE TO CHECK LOCAL REGULATIONS BEFORE USING TWISTER-LIGHTS ON PUBLIC ROADS.**

**TWISTER-LIGHTS IS NOT TO BE USED WITHIN AIRPLANES.**

**DO NOT ALTER OR MODIFY ANY PART OF THE TWISTER-LIGHTS UNIT, ELECTRONICS, CHARGING UNIT OR BATTERY.**

**USED BATTERIES SHOULD BE TREATED AS CHEMICAL WASTE. PLEASE REFER TO YOUR LOCAL WASTE DISPOSAL REGULATIONS.**

## 6 . BATTERY REPLACEMENT

You can replace the battery of the Twister-Lights® Unit. You need:

- Phillips screwdriver.
- Twister-Lights® Battery Pack TL-BATT-4.

Please note we can not guarantee the correct operation of the Twister-Lights® if you do not use original battery packs. To replace the battery, follow these steps:

Remove the transparent cover of the Twister-Lights® unit by the four screws on the bottom of the unit. Keep in mind that rubber isolation rings may come off and should be attached before putting back the cover.

Remove the screw on the circuit board from the housing. Be careful not to touch any parts. Lift the circuit board carefully.

Disconnect the battery from the board by gently removing the small white connector. Connect the new battery in the same reversed way and store the new battery into the (foam) recess in the housing.

Attach the screw to secure the board, place back rubber or foam parts and finally mount the transparent cover with the four screws in the bottom of the unit.

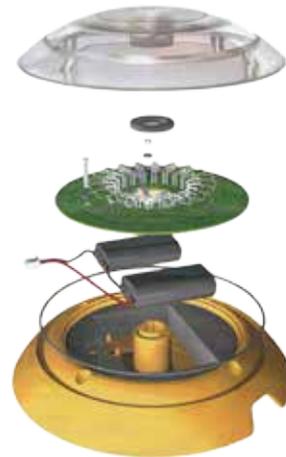
Charge your new battery before you start using the product for approx. three hours.

## 7 . REPAIR OR REPLACEMENT

If you wish to repair a defect outside the guarantee, you can initiate a return procedure on our website [www.twister-lights.com](http://www.twister-lights.com)

Go to the Online Shop and select the option Returns at the bottom of the page. We will give you an indication of costs for repair and/or replacement advice.

Did you buy your product with a Distributor, Reseller or Agent? Do not return your product to us, but instead ask the company you have bought the product what the return procedure is.



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