Technical Specifications	
Solar Panel	
Rated Power	10W
Open Circuit Voltage	18-22V
Cell Type	monocystalline
Ports	
Solar Port (6mm)	12V, up to 0.8A (10W max)
General	
Weight	2.9 lbs (1.3 kg)
Dimensions	16 x 12.25 x 1 in (40.6 x 31.1 x 2.5 cm)
Warranty	12 months
Tested and Certified	CE, FCC, RoHS
Charge Controller	
Built in PWM Lead-Acid controller with 3 charging	
stages: bulk, absorb, float	

This plug-and-play solar trickle charger prevents the natural battery drain in 12V lead acid batteries found in cars, boats, recreational vehicles, tractors, etc. This natural drain tends to happen when 12V batteries are left unused during an off season. Lead acid batteries last longer when kept fully charged at all times, even when not in use. Also includes a built-in charge regulator to avoid over-charging and reverse discharging.

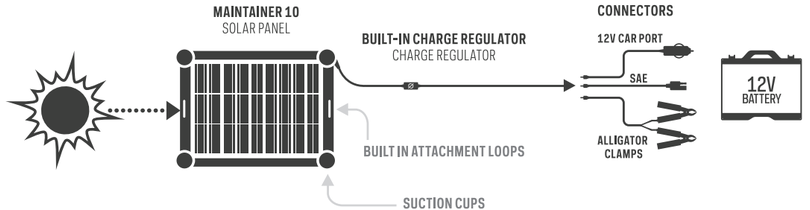
Position the solar trickle charger where it receives the most direct sunlight as possible and connect to the battery using one of the included connectors. Proven effective during all types of sunlight – including cloudy conditions.

MAINTAIN YOUR

- MOTORCYCLE
- SNOWMOBILE
- WATERCRAFT
- LAWNMOWER
- TRACTOR
- ATV
- AND MORE

MAINTAIN

THE CHARGE FROM SOLAR



Know Your Gear

MAINTAINER 10 TRICKLE CHARGER

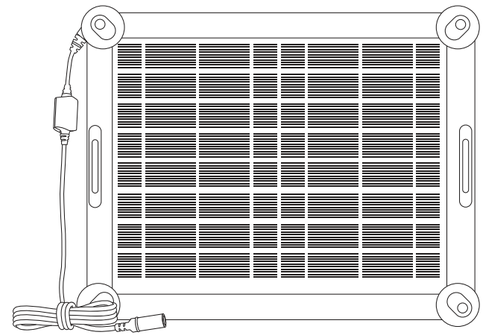
User Guide

- Register your product
- Watch demo video
- Download user manual

goalzero.com/warranty

Contact Us:
Toll Free: 888-794-6250
675 W. 14600 S.
Bluffdale, UT 84065
GOALZERO.COM

goalzero.com/sharethesun



Maintainer 10 Trickle Charger

Trickle charge, maintain, protect. Plug-and-play system to keep 12V batteries in boats, cars and ATVs healthy throughout the seasons. Never jump another battery.

Maintenance-Free Trickle Charger

Built-in solar panel for complete plug-and-play battery protection.
In-line charge controller never over-charges.

Easy Installation

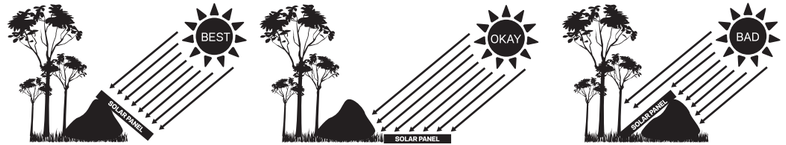
Removable suction cups and durable loops for quick attachment.
Long-lasting battery connectors.

Durable, Weatherproof Construction

Tempered glass and aluminum frame to withstand the elements.
Highly-efficient monocrystaline panel.

Frequently Asked Questions

Q: What type of batteries can I use?
A:The Maintainer can be used on any rechargeable 12V lead acid battery and is designed to provide a trickle charge over time.
Q: How do I know if the Maintainer is charging my battery?
A: The Maintainer's junction box has a light that will illuminate when the solar panel is working. For the best results, position the solar panel so it receives as much full, bright sunlight as possible.



Q: How does the Maintainer attach?
A: The Maintainer can attach to a vehicle's window with the included suction cups, or can be tethered to a vehicle with the built-in loops.
Q: How do I connect the Maintainer to my battery?
A: There are three different connectors depending on your situation – an SAE connector commonly used on motorcycle batteries, alligator clips to attach to typical 12V battery posts, and a 12V connector to charge a battery through the 12V car port. Plug the appropriate connector into the Maintainer's cable and then attach it to the battery.
Q: Can I extend the connection?
A: Yes, 6mm extension cables are available from Goal Zero. Although you can extend the cable, keep in mind a longer connection will decrease the efficiency of the Maintainer.
Q: Do I need a charge controller?
A: No, the Maintainer has an in-line charge controller to ensure you'll never over-charge your battery. This built-in protection makes the Maintainer an easy, plug-and-play solution to keep your batteries healthy when not in use.
Q: Can I use the Maintainer outdoors?
Yes, the Maintainer has been designed and engineered to be a durable charging system that can be used outdoors in any weather.
Q: How long does it take to charge my battery?
A: The Maintainer is designed to keep your battery at a healthy charge level when it's not in use, not to completely charge an empty battery. If you are looking for a way to charge a battery quickly (i.e. an RV battery after watching TV), we suggest the Guardian 12V Charge Controller.
Q: Can I start or drive my vehicle while the Maintainer is connected to the battery?
A: Yes, it is safe to operate a vehicle with the Maintainer attached. If you are using the suction cups on a windshield, make sure the Maintainer is not a distraction in your field of vision.