

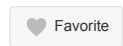


How to Make a 12v Battery Charger




By Steve Willson Kujur in [Circuits](#) > [Electronics](#)  364,934  476  39  Featured



By **Steve Willson Kujur**

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About: Hi my name is Steve and i'm a Creative and I got Technical skills i can build anything just stick to my account . I'm a YouTuber so you also can see my all videos here <https://www.youtube.com/SteveWillsonKujur> [More About Steve Willson Kujur »](#)

Hey! everyone My name is Steve .

Today i'm going to show you How to Make 12v Battery Charge

With this charge you can charge any type of 12 v battery even your car battery

it is very necessary in cold days because battery drains out very quickly .


This Charger features 2 step Charging 1. Constant Current 2. Constant Voltage

it is very safe and stable for daily use "it's very standard "

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Let's Start

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Step 1: Stuff I Used

- Dc to Dc Step Down Converter - [click](#)
- Alligator Clip - [click](#)
- Multi-meter - [click](#)
- Laptop charger

Dc to Dc Step Down Converter

- it's will convert 19 volts from your charger to 14 volts to charge the battery
- it'll provide constant voltage and constant current. (very necessary)
- it comes with 3 indicators led (red, blue and green) red show constant current blue show load and green show constant voltage "full charge"

Features




- Input voltage range:6-38 VDC (Note: input voltage not exceeding 38V)
- Output voltage range:1.25-36VDC adjustable
- Output current: 0-5A
- Output power: 75W
- High efficiency up to 96%
- Built in thermal shutdown function
- Built in current limit function
- Built in output short protection function

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Step 2: Prepare the Adapter

Follow the Steps

1. Cut down the jack of the adapter
2. Remove the outer shield with a blade (Carefully)
3. you'll see 2 wire red and black , black is negative and red is positive (see the image)

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Step 3: Connection

You can see the label over the board

- The red wire of adapter will go to "IN+" positive of the board (see the image)
- The black wire of adapter will go to "IN-" negative of the board
- tight the screw terminal with a screw driver

Now connect alligator clip

- Red alligator clip wire will go to "OUT+" Positive of the Board (see the image)
- Black alligator clip wire will go to "OUT-" Negative of the Board

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Step 4: Configuration

Now you need a multi-meter to set it up

- Plug the power to the adapter

- Connect the black alligator clip to negative lead of multi-meter and red alligator clip to positive lead
- you can see 2 Potentiometer over the board (see the image)
- first one is voltage and second one is current
- Now select the DC voltage reading on your multi-meter and turn the Potentiometer with a screw driver until you get 14 volts reading on multi-meter
- Now select the Current Reading on your multi-meter and turn the second Potentiometer with a screw driver until you get 2 amps reading on multi-meter (you can go up to 5 amps all it depend upon the battery capacity if you have a bigger battery "like a car battery you can go up to 5 amps "

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Step 5: You Are Good to Go

Just plug the red alligator clip to positive of the battery and black alligator clip to negative of the battery

and plug the power to the adapter

You'll see blue led will glow there it means it is charging If you see green led glows after some time it means the battery is fully charged

If You see Red led with Blue led that means it is in constant current charging

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Ultrasonic Levitator by aanvi50 in Arduino

O3-enabled BLE Weather Station Predicting Air Quality W/ TensorFlow by

DIY Solar Bottle Lamp - V2.0 by opengreenenergy in LEDs

39 Comments

- EricE2Question6 weeks ago on Step 5

AnswerUpvote

Can I make battery charger with a power wheel charger??
- angasawanjalatan01Question1 year ago on Introduction

AnswerUpvote

What computer did the chip come out of
- KennyK30Question2 years ago

AnswerUpvote

I wonder can we put digital voltmeter ammeter at output for cleary view and another thing is can we add a fan at laptop charger input as cooling purpose?

1 answer
- pemazzei2 years ago

ReplyUpvote

Hi, vey nice article and battery charger! I need a 24V - 2 amp charger. What are the mods to get this voltage? Thanks, Paulo, from Brazil.

1 reply
- marulananthamQuestion2 years ago

AnswerUpvote

Afternoon, can someone help me please. I need an off the shelf item(s) to do the following:

Running voltage operates at 12V:
LoadExternal DC SupplyBatteryONONCharge if requiredONOFFDischargingOFFONCharge if required
The load needs a constant voltage. The item also requires the appropriate under/over voltage protection, indicator lights etc.
- gt350mkQuestion3 years ago on Step 4

AnswerUpvote

Hello,
Great work up and inexpensive way to charge batteries. I have an absorbed glass mat battery, Redtop from Optima. I believe when it is fully charged it puts out 16 volts even though it states it is a 12 volt battery with 720 AH. Will your step down charger charge this battery? Will your charger set-up charge AGM batteries.

Thank you,
Marc Kay
- lucky_duck4 years ago on Introduction

ReplyUpvote

Most batteries require an unstable (cyclic) charging rate or the battery will develop Dendritic growth and self discharge. How does your charger avoid this issue?

1 reply
- Mr_raja3 years ago

ReplyUpvote

Bro i need charger for 6v battery

mechrekt Question 3 years ago

Answer

▲ Upvote

I bought two of these modules but didnt worked for me. I only see green light when connected to battery.

OptimisticPessimist 3 years ago

Reply

▲ Upvote

I'm surprised @instructables let this fly for so long...

msameer39 4 years ago

Reply

▲ Upvote

Excellent bro

laith mohamed 4 years ago

Reply

▲ Upvote

I must make one , thank you for sharing .

RodrigoR126 Question 4 years ago on Introduction

Answer

▲ Upvote

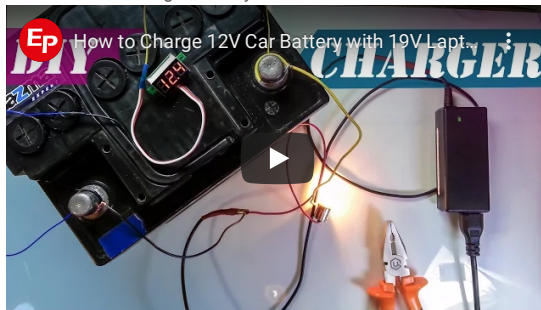
Can I have this plugged all the time charging the battery and also an arduino plugged on this battery acting as a nobreak for my arduino?

SerhiB1 5 years ago

Reply

▲ Upvote

You can use a 12V light bulb if you don't have a DC to DC converter.



2 replies ▾

AntonioC261 Question 4 years ago

Answer

▲ Upvote

This is a big mistake, NOBODY CONNECT THE AMMETER ON THE EXIT AS IT SAYS ON THE VIDEO ... IT WILL BURST !!!

Connecting the Amperimeter to the output will burst the XL4015E1 IC or Multimeter.

It seems to me another video to sell the regulating boards, these boards only regulate the Volts, if placing the meter in series with the battery only gives a maximum of 400mA, even with an Industrial Well of 12.5A Mean Well 12VDC.

Turning the potentiometer knob W 102 does nothing ...

It sucks this board.

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