

# TOPDON®



# Tornado120000

Power Up High-End Car Programming



Battery charger

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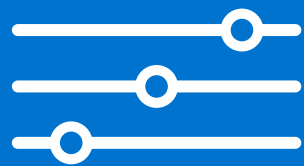
FAQs



# Tornado120000

Meet the TOPDON Tornado120000—a professional smart programming power supply designed to provide efficient charging and voltage stabilization for vehicles equipped with 12V batteries. It features intelligent current (5-120A) and voltage (11-16.8V) output adjustment and boasts a maximum power of 1700W to confidently handle every battery. With 3 major charging modes and 9-step smart charging, it seamlessly balances charging speed and quality. The dot matrix LCD screen ensures easy operation, while 8 built-in safety protection modes provide peace of mind with features like reverse connection protection, short circuit protection, and spark protection. Compatible with both 12V lead-acid batteries and lithium batteries, the T120A serves as your all-in-one charging solution for battery charging, automotive repair, and programming needs.





# Electrical Specifications



**Input Voltage:**  
90~240Vac

**Output Voltage:**  
11~16.8V 5-120A  
(adjustable), up to 1700W

**Charging Mode:**  
Supply, Lead-Acid,  
LiFePO4, Custom, NORM, AGM

## Parameters

**Input:** AWG18#, 2m  
(Note: The US version comes with two AC power cables. )

**Output:** Positive AWG4#, 2.2m or 5m  
Negative AWG4#, 2.2m or 5m

**Working Temperature:**  
14°F to 104°F (-10°C to 40°C)

**Storage Temperatue:**  
-4°F to 167°F (-20°C to 75°C)

**Note:** To switch the output line length, please change the settings in Output Line Settings.

## Safety

**Protection:** Over-temperature protection, input low voltage protection, overload protection, bad battery protection, short circuit protection, overvoltage protection, reverse connection protection, host abnormality protection.





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# Voltage Steady, Performance Ready

The T120A ensures a stable and reliable power supply for prolonged diagnostic sessions and ECU programming tasks. This capability becomes especially crucial when working with luxury vehicles such as BMW and Benz, where the T120A's maximum current of 120A comes into play. Say goodbye to interruptions caused by fluctuating power sources. The T120A delivers voltage and current consistency to keep your operations running smoothly.





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# Precision Power for Your Varied Demands

Meet the T120A charger, your solution for versatile charging needs. Designed to accommodate both 12V lead-acid and 12V lithium iron phosphate batteries, it effortlessly adjusts to diverse power requirements. And here's the kicker: with our innovative "Custom Mode," you have the power to tailor and save your unique charging preferences, guaranteeing a precise and personalized charging experience on every use.





# 9-Step Smart Charging

TOPDON's patented 9-step charging provides an optimized, maintained, and integrated charging process for your battery. This trickle charger not only replenishes your battery but also performs desulfurization and maintenance tasks, revitalizing your car battery and maximizing its lifespan.





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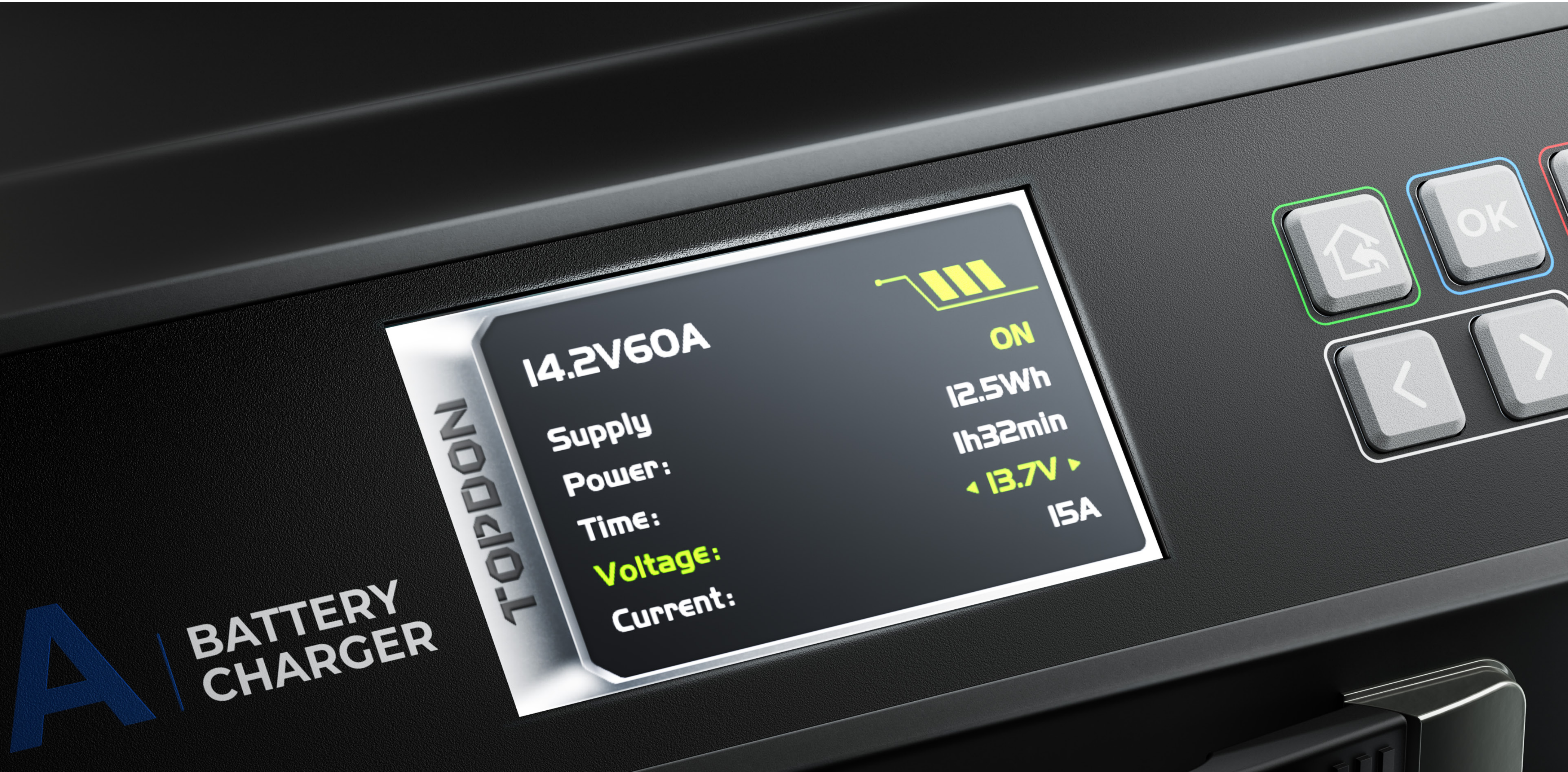
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# Adjustable Voltage and Current

The T120A allows real-time adjustment of output voltage and current, facilitating precise charging and providing flexible, reliable power support for maintenance tasks. It's also suitable for electronic load testing in laboratories.





# Safety First

Ensuring safe charging is our top priority for the T120A. We've incorporated eight advanced safety features to guard against mishaps like reverse connections, short circuits, overheating, overvoltage, overcharging, and even sparks. Our aim is to ensure a worry-free charging experience.





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# One Charger for All

With the TOPDON T120A 12V 120A charger, versatility meets power. It caters to a range of devices from vehicles to boats, making it indispensable for automotive technicians, electronics engineers, and battery manufacturers alike. Whether you require rapid charging or high-power supply, this charger ensures reliable power whenever and wherever you need it.

Car  
Repairman



Ship  
Maintenance



Battery  
Manufacturer



Electronics  
Engineer





Brief



# Functions

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2M or 5M Cable Optional



Replaceable AC Input Cable



Automatic Charge Recovery



Support 15 Languages



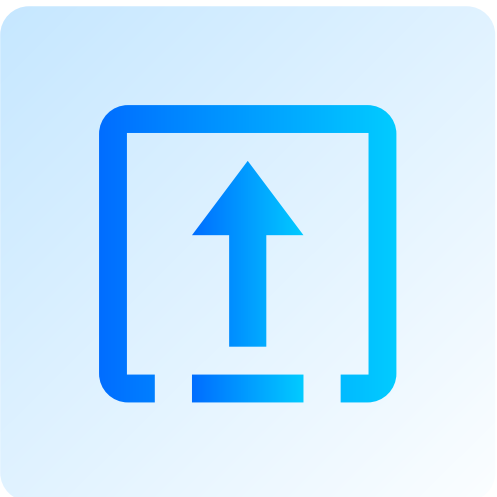
Export Detailed Charging Reports



Matrix Display Screen for Real-time Charging Data



Built-in Fan for Enhanced Cooling



Software Upgrade via PC

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Comparison

			
Subject	Tornado120000	Tornado90000	Tornado30000
Working Voltage AC	90-240VAC, 50-60Hz	USA (100-120VAC 50-60Hz) EU (200-240Vac 50-60Hz)	100-240VAC, 50-60Hz
Power	1700W Max	1500W Max	360W Max
Charging Current	5~120A (adjustable)	12V/10A-90A 24V/10A-45A	6V/15A, 12V/30A, 12V/10A, 24V/15A
Working Temp	14°F to 104°F (-10°C to 40°C)	14°F to 104°F (-10°C to 40°C)	14°F to 104°F (-10°C to 40°C)
Storage Temp	-4°F to 167°F (-20°C to 75°C)	-4°F to 167°F (-20°C to 75°C)	-4°F to 167°F (-20°C to 75°C)
Charger Type	9-Step Smart Charger	9-Step Smart Charger	9-Step Smart Charger
Type of Batteries	12V	12V/24V	6V/12V/24V
Battery Chemistries	Wet, Gel, MF, EFB, AGM,CAL,VRLA	Wet, Gel, MF, EFB, AGM,CAL,VRLA	Wet, Gel, MF, EFB, AGM,CAL,Lithium
Battery Capacity	20-3700Ah	20-2800Ah	50-1000Ah
AC Cable Length(m)	2	1.8	2.0
Clip Cord Length(m)	2.2 or 5	2.2	2.2
Screen Display	Color Dot Matrix LCD Display	Black and White LCD Display	X
Upgrade	Upgrade via PC	X	X
Report Export	√	X	X
Switch of AC & DC Cables	√	X	X
Package Dimension	485*356*263mm (19.09*14.02*10.35 inches)	419.2*274.6*140mm (16.50*10.81*5.51inches)	262.5*115.5*61mm (10.33*4.55*2.40inches)
Languages	15 Languages (Simplified Chinese, Traditional Chinese, English, German, French, Spanish, Italian, Portuguese, Russian, Polish, Czech, Turkish, Korean, Japanese, Finnish)	English	X

Comp Chart



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# What's In The Box?

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Tornado120000



2m or 5m Battery Clamps



USB-A to USB-B Cable



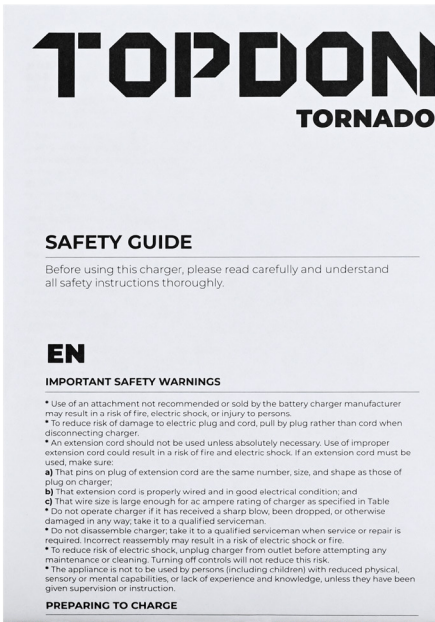
AC Power Cable



AC Power Cable 2 (US Only)



User Manual



Safety Guide



Brief



## FAQs

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### Question

How do I choose the charging current?

Features

### Answer

The optimal charging current is up to the battery capacity. We recommend that the current be no greater than 20% of the battery capacity. For example, for a 100Ah battery, the charging current should not be greater than 20A.

Functions

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### Question

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Will T120A automatically stop charging a battery after it is fully charged?

### Answer

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Yes. T120A follows a smart stepwise charging algorithm. When the battery is fully charged, T120A will automatically stop charging it. There is no risk of overcharging. If you still keep the battery connected after it is fully charged, the charger will continuously monitor its status and will automatically resume charging when the battery voltage falls below the threshold.

FAQs



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# FAQs

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Question

Why do some batteries not charge properly?

Features

Answer

In general, a 12V battery with a voltage below 8.5V may have been damaged and thus cannot get charged properly. You can try the SUPPLY mode for charging the battery.

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