

BOOSTER

Instruction Manual

a-TroniX Jump starter Booster 12V 4000A



Model

Article number

a-TroniX Jump starter Booster 12V 4000A

9885376

INTRODUCTION

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Thank you very much,

for purchasing our a-TroniX series jump starter booster series.

As a compact mobile jump start device for 12V lead-acid batteries in cars, boats, lawn mowers, camping vehicles, trucks and much more, the booster is an ideal emergency helper.

Read carefully before use!

Read this manual carefully before installation.

It contains important regulations and instructions for the use of this product and provides technical support for the operator of the unit.

Pay particular attention to the safety instructions.

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We reserve the right to make design and equipment changes that serve to improve the production process or the product.

AKKU SYS GmbH accepts no liability for errors in this operating manual and any consequences resulting therefrom.

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1. Symbols and abbreviations used in this guide

Batteries are also colloquially referred to as accumulators or rechargeable batteries. Warnings and notes are indicated by the corresponding symbols (pictograms) and must be observed:



CAUTION:

Warning of dangerous electrical voltage.



CAUTION:

General warning of danger points.



CAUTION:

Warning when handling accumulators.



NOTES:

This symbol indicates texts, notes or tips. Failure to take precautionary measures may result in damage to the product and/or its functions or to an object in its vicinity.



ENVIRONMENT:

Indicates recycling information.



Indicates assemblies or parts that must be disposed of properly. Do not dispose of them in the household waste. Defective accumulators must be disposed of in an environmentally friendly manner. Do not throw them in the household waste under any circumstances and observe the local disposal regulations.

Use the certified and professional recycling service of our AKKU SYS team. For more information, contact us on the hotline +49 4101/376760, at info@akkusys.de or use the QR code.



2. Important safety instructions

Please keep these operating instructions and read them through before use. Follow these instructions and precautions carefully. This guide explains how to use the device safely and effectively. Failure to do so can result in serious injury.

- Before using the jump start device, make sure that it is not damaged, that it has no exposed cables or worn parts.
Charge the device for at least 8 hours immediately after purchase or after each use. To keep the internal battery working efficiently, charge it for 8 hours every two months. Jump-starting that is left uncharged for too long impairs the proper operation of the internal battery.
- Never damage or change the electronic circuit of the jump starter.

Our company assumes no liability for damage caused by non-compliance with the safety instructions.

2.1 Safety in the work environment

Working near a lead-acid battery is dangerous.



CAUTION:

Batteries generate explosive gases during normal operation. It is important that you follow these instructions every time you use the device.

To reduce the risk of a battery explosion, follow these instructions as well as the instructions from the battery manufacturer and the manufacturer of any equipment that you intend to use near a battery. Check the warning labels on these products and on the engine.

- Do not place the device on flammable materials, such as B. carpeting, upholstery, paper, cardboard, etc.
- Never place the device directly above the battery to be bridged.
- Do not use the device to jump-start a vehicle while the internal battery is charging.
- Do not use the jump starter in an explosive environment as sparks can develop which could ignite dust or vapors.
- Make sure that there are no children or visitors in the vicinity when you are working with the jump starter. This could create a distraction.
- Do not inhale harmful gases released by the vehicle's battery when the engine is started.

Keep your face away from the vehicle battery during connection processes. The one in the battery.

The liquid contained is corrosive or caustic. In the event of accidental contact of the acid with the skin or Rinse eyes immediately with water and contact a doctor.

Do not drop metal tools on the vehicle battery, as this can short-circuit the battery.

- Use the device in a dry environment and avoid moisture.

2.2 Personal precautions

- NEVER smoke or allow sparks or flames near a battery or motor.
- Remove personal metal items such as rings, bracelets, necklaces and watches when working with a lead-acid battery. A lead-acid lithium battery can generate a short circuit current high enough to cause severe burns.
- The utmost caution and concentration is required when working with this device. Do not use the jump starter if you are tired or under the influence of drugs, alcohol or medication.

- Always wear the following personal safety equipment:
 - safety shoes;
 - safety glasses;
 - Protective gloves against physical influences.



- Carry out all intended work in a suitable, ventilated and dry environment.
- Never bring the terminals of the two pliers (red pliers (+) plus, black pliers (-) minus) into contact with one another.
- Make sure that the cables of the jump starter are out of reach of fans, moving parts and the fuel line.
- Do not wear baggy clothes, bracelets, necklaces or metal objects when working on the vehicle.
- Before putting the jump start device away, make sure that it has cooled down to ambient temperature. If battery acid gets on your skin or clothing, wash the area immediately with soap and water. If acid gets in your eye, immediately flush the eye with cold running water for at least 10 minutes and seek medical attention immediately.
- If battery acid is accidentally swallowed, drink milk, egg white, or water. DO NOT induce vomiting. See a doctor immediately.
- Thoroughly neutralize any acid spills with baking soda before attempting to clean it up.

- This product contains a lithium-ion battery. In the event of a fire, you can use water or a CO₂ extinguisher to put out the fire. Once the fire is out, extinguish the product with water, a water-based extinguishing agent, or other non-alcoholic liquid to cool the product and prevent the battery from re-igniting. NEVER try to pick up or move a hot, smoking, or burning product as you could injure yourself.

3. Correct use of the jump starter

The Emergency Starter is designed to start vehicles with 12 V lead-acid batteries. Do not use it for any other purpose.

- Do not start or charge batteries with voltages that differ from the voltages specified for the starter.



CAUTION:

Voltage incompatibility between the emergency starter and the voltage of the vehicle electrical system can lead to explosions and damage the vehicle, the product and people.

- Use as a battery charger is not permitted.
- Do not insert any objects into the slots or other openings on the surface of the device.
- Use that does not comply with the technical regulations contained in the SPECIFICATION table is not permitted;
- Do not start batteries with voltages other than those given in the SPECIFICATION table.
- Do not expose the device to rain or snow.
- Avoid using the device in damp, wet or weathered environments;
- Use for all applications that are not listed here is not permitted.
- Do not start or charge non-rechargeable batteries.
- Do not start or charge frozen batteries.
- Turn off the vehicle lights and all other accessories before starting the engine.



CAUTION:

Never bring the poles of the two battery terminals (red-positive and black-negative) into contact with one another.



CAUTION:

Never reverse the polarity. Always connect the output conductor with the red battery terminal (+) to the positive pole of the battery and the output conductor with the black battery terminal (-) to the vehicle earth (ground).



CAUTION:

Never reverse the polarity. Reverse polarity can lead to explosions, damage to the vehicle, to the product and to people.



NOTES:

Improper use of the emergency starter or manipulation of the electronic circuit in the device will void the guarantee.

- Only use the charger supplied to recharge the device. Charge in adequately ventilated, dry areas that are not exposed to snow or rain.
- Never use the device if the case, the pliers, the cables or the charger are damaged.
- The same applies if you hear unusual smells or the device is excessively hot.
- The device must not be converted. The changes can reduce the effectiveness of the safety devices and thus increase the risk for the operator.
- Repairs may only be carried out by qualified personnel and only using original spare parts.
- The jump starter is designed for starting lead-acid batteries. Do not start non-rechargeable batteries or frozen batteries. Do not use for any other purpose, such as charging batteries.
- Never connect the jump starter to a vehicle with already active functions. These functions may only be activated after the clamps have been connected to the vehicle battery, as this is used to check the polarity and any short circuits.
- Use a dry cloth for cleaning and disconnect the device from the power supply. Never use damp or wet cloths.

4. Internal auxiliary battery 9V of the jump starter

- The jump starter is equipped with a 9V auxiliary battery, which is essential to power the control processor.
- When the „Err 5“ alarm turns on, replace the battery.
- To replace, open the flap on the back of the device housing, remove the battery, disconnect the poles and insert a new battery.
- Close the flap again.

5. How to charge the jump starter



CAUTION:

Charge the emergency starter for at least 8 hours immediately after purchase and each time you use it. When the emergency starter is not in use, charge it for 8 hours at least every 6 months to keep the internal battery in good condition.

Charge the emergency starter with the 230VAC charger:

Make sure that no device is connected to the emergency starter. Use the TEST button to check the charge level on the voltmeter (red = battery at 30% – yellow = battery at 60% – green = battery at 100%).



NOTES:

If the voltmeter display is not green, charge the emergency starter's battery.

- Plug the charger into the socket of the 230 V household network.
- Insert the charger plug into the charging socket on the front of the „Input Charge“ starting help.
- After the charging process is complete, do not leave the jump starter connected to the battery charger for a long time.
- Do not use the device while it is charging.



CAUTION:

Use only the charger supplied.

6. How to use the jump starter

Use the jump starter to start vehicles:

- Check that the jump starter is switched off.
- A mismatch between the voltage of the jump starter and the voltage of the vehicle system can cause explosions, damage to the vehicle, to the device and to people.
- Identify the vehicle's ground terminal; usually it is connected to the negative terminal.
- Always connect the output conductor with red pliers (+) to the positive pole of the battery and the output conductor with black pliers (-) to the vehicle ground.
- Never reverse the polarity; Reversing the polarity can cause explosions, damage to the vehicle, to the device and to people.
- When the RED „Reverse“ LED is switched on, it indicates that the polarity has been reversed.
- Disconnect the pliers from the vehicle and connect them correctly.
- Make sure cables are out of reach of fans, moving parts, and the fuel line.
- Press the START / STOP button, the blue LED will turn on and „STRT“ will appear on the display.
- Start the engine within 30 seconds.
- The jump starter switches off automatically after 30 seconds.
- If it does not activate when the START button is pressed, the vehicle battery is likely to have a voltage below 6 volts, which is necessary for the protections to activate. In this case, you must switch to the „FORCED START“ mode described in the next section in order to be able to start the vehicle.
- To switch off the device, press the START / STOP button.
- First disconnect the output conductor from the vehicle ground with black pliers (-) and immediately store it in its holder.
- Then disconnect the output conductor from the positive pole (+) of the battery with red pliers and also immediately store it in its holder.
- If it is not possible to start the vehicle with the first few attempts, under no circumstances should you continue with further attempts. Before restarting, the device should rest for at least 3 minutes so that it is not damaged.
- Charge the jump starter after each use.

7. Forced start for batteries with a voltage below 6 V

This mode is recommended when starting a vehicle with a fully discharged, extremely discharged, missing, or switched-off battery.



CAUTION:

SOME SECURITY FUNCTIONS ARE DISABLED,
PLEASE BE CAREFUL WHEN USING THE JUMPER.

- Check that the jump starter is switched off.
- Identify the vehicle's ground terminal; usually it is connected to the negative terminal.
- Always connect the output conductor with red pliers (+) to the positive pole of the battery and the output conductor with black pliers (-) to the vehicle ground.
- Never reverse the polarity; this can cause explosions, damage to the vehicle, to the device and to people.
- If the LED ROT / REVERSE lights up, the polarity has been reversed. Disconnect the battery terminals from the vehicle and connect them properly.
- Make sure the cables are out of the reach of fans, moving parts, and the fuel line.
- Press the START / STOP button for 7 seconds, then the blue LED turns on and the word „STRT“ flashes on the display. From now on some protective devices are deactivated.
- Start the engine within 30 seconds.
- The jump starter switches off automatically after 30 seconds.



CAUTION:

IMMEDIATELY AFTER STARTING THE ENGINE, SWITCH OFF THE STARTING
AID AND DISCONNECT THE PLIERS.

- To switch off, press the START / STOP button.
- First disconnect the output conductor from the vehicle ground with black pliers (-) and immediately store it in its holder.
- Then disconnect the output conductor from the positive pole (+) of the battery with red pliers and also immediately store it in its holder.
- If it is not possible to start the vehicle with the first few attempts, under no circumstances should you continue with further attempts. Before restarting, the device should rest for at least 3 minutes so that it is not damaged.
- Charge the jump starter after each use.

8. 12 V MEMORY SAVER



CAUTION:

Some safety functions are deactivated in the „MEMORY SAVER“ operating mode. Use caution when using the jump starter.

- Check that the device is switched off.
- Always check the voltage of the vehicle battery.
- The mismatch between the voltage of the jump starter and the voltage of the vehicle system can cause explosions, damage to the vehicle, to the device and to people.
- Identify the vehicle's ground terminal; usually it is connected to the negative terminal.
- Always connect the output conductor with red pliers (+) to the positive pole of the battery and the output conductor with black pliers (-) to the vehicle ground. From now on some protective devices are deactivated.
- Never reverse the polarity; Reversing the polarity can cause explosions, damage to the vehicle, to the jump starter and to people.
- If the LED ROT / REVERSE lights up, the polarity has been reversed. Disconnect the battery terminals from the vehicle and connect them properly.
- Disconnect the pliers from the vehicle and connect them correctly.
- Make sure the cables are out of the reach of fans, moving parts, and the fuel line.
- Press the START / STOP button for 5 seconds, then the blue LED and the yellow LED turn on and the word „MEMO“ appears on the display.
- Start with the intended activities.
- When you have finished, press the START / STOP button to switch off the device.



CAUTION:

Recharge the emergency starter after each use.



CAUTION:

The following operations must not be carried out with the „MEMO“ function:

- Do not use the „MEMO“ function to start vehicles.
- With the „MEMO“ function, the jump start does not switch off after 30 seconds.
- Before disconnecting the pliers, make sure that the jump start is switched off.
- At the end of the work process, keep the jump starter in a dry place without moisture.
- Use a dry cloth to clean the outer housing.

9. Error warnings

One of the following fonts appears on the display with the „Error“ LED on the switch. Check for the following possible errors:

Error	Description
Err 1	REVERSED POLARITY / SHORT-CIRCUIT / BATTERY IS DAMAGED / STARTER IS NOT CONNECTED
Err 2	VOLTAGE IS INCORRECT (e.g. YOU ARE CONNECTED TO A 24V BATTERY)
Err 3	HIGH TEMPERATURE IN 12V INTERNAL BATTERY (Lithium LiFePO4)
Err 4	12V INTERNAL BATTERY IS FLAT (Lithium LiFePO4)
Err 5	9V ADDITIONAL BATTERY IS FLAT
Err 6	OVERLOAD IN START MODE
Err 7	OVERLOAD IN MEMORY SAVER MODE

10. Environment

The device is marked with the recycling symbol. This means that the product must be disposed of separately at suitable collection points at the end of its service life and not together with normal household waste.



- The batteries can be recharged many times. Dispose of them at the end of their service life in accordance with environmental standards. The batteries must be disposed of properly.

Do not throw them in the trash.

Make use of the certified and professional recycling service of our AKKU SYS team.

For more information, contact us at hotline +49 4101/376760, at info@akkusys.de or use the QR code.

Do not short circuit the battery terminals.



- If possible, operate the device so that the battery is completely discharged before disposal.
- The packaging is recyclable. Please keep this after unpacking for reuse or dispose of it properly.

Starters only need to be charged regularly (as described in these instructions) using the charger supplied. Improper maintenance of the batteries will void the guarantee. If the jump starter is sent in for repair, always include this manual with the recorded charging data.

11. Specification

Model	a-TroniX Jump starter Booster 12V 4000A
Article number	9885376
Operating Voltage (V)	12
Starter charger – Voltage rating	230V – 50/60 Hz
Internal Battery (Lithium LiFePo4) V	13,2
Additional battery V	9 (6LR61)
Ideal operating temperature	-10°C ± +40°C
Continuous Current (A)	800
Start max. Amperage (A)	2000
Peak ampere (A)	4000
Cable length (cm)	50
Cable size (mm ²)	10
Max. charging voltage (V)	14,5
Terminal output (A)	850
Battery-Type	4 cells Lithium LiFePo4
Polarity reverse protection	x
Short circuit protection	x
Overvoltage protection	x
Dimensions (mm)	260 x 135 x 72
Net weight (kg)	2,5

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