



# BOOSTER

Instruction Manual

**a-Tronix Jump starter  
Booster 12/24V 10000/5000A**



**Article**

**Article number**

a-Tronix Jump starter Booster 12/24V 10000/5000A

9885377

## INTRODUCTION

The publication and copyright of this documentation remain with the company

AKKU SYS Akkumulator- und Batterietechnik Nord GmbH.  
Verbindungsweg 23 - 25469 Halstenbek / Hamburg - GERMANY  
Phone +49 4101 | 3 76 76-0 / Fax +49 4101 | 3 76 76-66  
[info@akkusys.de](mailto:info@akkusys.de) / [www.akkusys.de](http://www.akkusys.de)

### **Thank you very much,**

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

The booster is a compact mobile jump starter for 12V/24V lead batteries in cars, boats, lawnmowers, camping vehicles, trucks, etc. and 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.

### **All rights reserved.**

AKKU SYS Akkumulator- und Batterietechnik Nord GmbH cannot be held responsible for any inaccuracies or inappropriate information in this instruction manual.

The information in this document is subject to change without notice, but there is no obligation to update it on an ongoing basis.

We reserve the right to make design and equipment changes 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.

## Table of contents

	Page
<b>1. Symbols and abbreviations used in this guide</b>	4
<b>2. Important safety instructions</b>	5
2.1 Risk of explosive gases	5
2.2 Risk of electric shock or fire	5
2.3 Personal Precautions	6
2.4 Use Precautions	7
<b>3. How to charge the emergency starter</b>	8
<b>4. How to use the emergency starter</b>	9
<b>5. Override function</b>	10
<b>6. Using the Emergency Starter as a 12V or 24V Memory Saver</b>	12
<b>7. Error warnings</b>	13
<b>8. Protecting the environment</b>	14
<b>9. Specification</b>	15

# 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 order hotline +49 4101/376760, at [info@akkusys.de](mailto:info@akkusys.de) or use the QR code.



## 2. Important safety instructions

Please keep these operating instructions and read them before use. Follow these instructions and precautions carefully. These instructions explain how to use the machine safely and effectively. Failure to do so may result in serious injury or death.



Charge the emergency starter immediately after purchase and for at least 8 hours each time it is used. When the emergency starter is not in use, charge it at least every three months to keep the internal battery in perfect performance condition. Never leave the emergency starter uncharged for a long period of time as the performance of the internal battery could be severely affected and the operating efficiency of the unit could be compromised.

Our company accepts no liability for damage caused by failure to observe the safety instructions.

### 2.1 Risk of explosive gases

Working in the vicinity of a lead-acid battery is dangerous.



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

To reduce the risk of battery explosion, follow these instructions and those published by the battery manufacturer and the manufacturer of any equipment you intend to use in the vicinity of a battery. Review cautionary markings on these products and on the engine.

- Do not set the unit on flammable materials, such as carpeting, upholstery, paper, cardboard, etc.
- Never place the unit directly above battery being jumped.
- Do not use the unit to jump start a vehicle while charging the internal battery.

### 2.2 Risk of electric shock or fire

- Keep out of reach of children. This device may be used by children from age 8 and by persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge, provided that they are under supervision or have been told how to use the device safely and are aware of the potential risks. Children must not use the device as a plaything. Cleaning and servicing tasks may not be carried out by children unless they are supervised.

- Do not put fingers or hands into any of the unit's outlets.
- Do not expose the unit to rain or snow.
- Use only the original charger to charge the booster. Use of a non-original charger may result in a risk of fire, electric shock or injury to persons or damage to property.
- To reduce the risk of damage to the electric plug or cord, pull by the adaptor rather than the cord when disconnecting the unit.
- Do not operate the unit with damaged cables or clamps.
- Do not operate the unit if it has received a violent blow, been dropped or otherwise damaged. Do not disassemble the unit. Take it to a qualified service person for repair or maintenance. Improper reassembly may result in a fire or electric shock hazard.

## 2.3 Personal Precautions

- NEVER smoke or allow a spark or flame in the vicinity of a battery or engine.
- Remove personal metal items such as rings, bracelets, necklaces and watches when working with a lead-acid battery. A lead-acid lithium battery can produce a short-circuit current high enough to cause a severe burn.
- Be extra cautious, to reduce the risk of dropping a metal tool onto the battery. It might spark or short-circuit the battery or other electrical part that may cause an explosion.
- Do not permit the internal batteries of the unit to freeze. Never charge a frozen battery.
- To prevent sparking, NEVER allow clamps to touch together or contact the same piece of metal.
- Consider having someone nearby to come to your aid when you work near a lead-acid battery.
- Have plenty of fresh water, soap and baking soda nearby for use, in case battery acid contacts your eyes, skin, or clothing.
- Wear complete eye and body protection, including safety goggles and protective clothing. Avoid touching your eyes while working near the battery.
- If battery acid contacts your skin or clothing, immediately wash the area with soap and water. If acid enters your eye, immediately flood the eye with cold running water for at least 10 minutes and get medical attention right away.
- If battery acid is accidentally swallowed, drink milk, the whites of eggs or water. DO NOT induce vomiting. Seek medical attention immediately.
- Neutralize any acid spills thoroughly with baking soda before attempting to clean up.
- This product contains a lithium ion battery. In case of fire, you may use water, or a CO<sub>2</sub> extinguisher to extinguish the fire. Once the fire is extinguished, douse the product with water, an aqueous-based extinguishing agent, or other no alcoholic liquids to cool the product and prevent the battery from re-igniting. NEVER attempt to pick up or move a hot, smoking, or burning product, as you may be injured.

## 2.4 Use Precautions

- The Emergency Starter is designed to start up lead acid, lithium batteries.  
Do not use it for other purposes. Do not start or **charge non-rechargeable** batteries.  
Do not start up or charge frozen batteries.
- Do not start up or load batteries with voltages that are other than those specified for the starter.

**CAUTION:**



Voltage incompatibility between the emergency starter and the voltage of the vehicle's electrical system can cause explosions and damage the vehicle, product and people.

- Before starting up, switch off the vehicle lights and all other accessories.

**CAUTION:**



Never place the terminals of the two battery clips (red-positive and black negative) in contact with one another.

**CAUTION:**



Never switch polarity. Always connect the output conductor with a red battery clip (+) to the positive pole of the battery and the output conductor with a black battery clip (-) to the vehicle's earth (ground).



**CAUTION:**

Inverting polarity can cause explosions, damage the vehicle, product and people.



**NOTE:**

Improper use of the Emergency Starter or tampering with the electronic circuit inside the appliance void the warranty.

### 3. How to charge the emergency starter



#### **CAUTION:**

Charge the Emergency Starter for at least 8 hours immediately after purchase and each time that it is used. If the Emergency Starter is not in use, recharge it at least every 3 months to maintain the internal battery in perfect working order.

Charging the emergency starter using the 230VAC charger:

- Make sure that no appliance 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%). If the voltmeter gauge does not reach green, charge the battery of the Emergency Starter.
- Insert the plug of the 230V charger into the charging socket located on the front of the Emergency Starter.
- Insert the charger into the socket of the 230V domestic supply.
- If the Emergency Starter is not in use, recharge it at least every 3 months for 8 hours to maintain the internal batteries in perfect working order. The battery charger of the Emergency Starter is automatic, so it can remain connected to the Emergency Starter permanently when it is not in use.



#### **CAUTION:**

Use only the charger provided.



#### **CAUTION:**

If you decide to stop the charge before it is completed (Full), switch OFF the booster.

## 4. How to use the emergency starter

Using the Emergency Starter to start up vehicles:

- Always wear safety goggles and keep your face away from the battery when connecting it.
- Check that the emergency starter is in the OFF position.
- Check the voltage of the vehicle battery.
- Connect the output wire with the red battery clamp (+) to the positive pole of the battery and the output wire with the black battery clamp (-) to the negative pole of the vehicle (ground).

**CAUTION:**



Voltage incompatibility between the emergency starter and the voltage of the vehicle's electrical system can cause explosions and damage the vehicle, product and people

**CAUTION:**



never switch polarity. Always connect the output conductor with a red battery clip (+) to the positive pole of the battery and the output conductor with a black battery clip (-) to the vehicle's earth (ground).

**CAUTION:**



Inverting polarity can cause explosions, damage the vehicle, product and people.

**CAUTION:**



If the LED RED / REVERSE is set on, the polarity has been reversed. Disconnect the battery clips from the vehicle and connect them correctly.

**CAUTION:**



Check that the cables of the Emergency Starter are far away from fans, from moving parts and from the fuel conduit.

- Identify the pole corresponding to the earth of the vehicle; this is generally connected to the negative terminal
- Now PRESS „START/STOP“ button blue led lit on and display show „STRT“.
- The led lit in correspondence of the detected voltage (12V or 24V).
- If the detected voltage is 12V, but the battery is 24V, please use the „OVER RIDE“ function. (Remove the clips and follow the OVER RIDE FUNCTION procedure)
- Once the vehicle has been started up, emergency starter automatically turns off after 30 seconds. Otherwise press START/STOP button to turn off the emergency starter.

- Disconnect the output conductor with the black battery clip from the earth of the vehicle and replace output conductor with the black battery clip in its housing.
- Disconnect the output conductor with the red battery clip from the positive terminal (+) of the battery and return it immediately to its seat.

**CAUTION:**



If you are unable to start the vehicle within 5 seconds, do not continue with the starting attempt. Before trying to start up the vehicle again, let the Emergency Starter rest for at least 3 minutes to avoid damaging the appliance.

**CAUTION:**



Always recharge the Emergency Starter after each time that it is used.

**NOTE:**



Maintaining your vehicle's battery correctly prolongs its life. Once you reach your destination, remember to connect your battery to a battery charger for vehicles to restore it to maximum efficiency.

## 5. Override function

This mode is recommended when a vehicle with completely or extremely flat, absent or cut-off battery needs to be started.

**CAUTION:**



SOME PROTECTION ARE NOT ACTIVE! TAKE CARE!

- Always wear safety goggles and keep your face away from the battery when connecting it.
- Check that the emergency starter is in the OFF position.
- Check the voltage of the vehicle battery.

**CAUTION:**



Voltage incompatibility between the emergency starter and the voltage of the vehicle's electrical system can cause explosions and damage the vehicle, product and people.

- Be sure that the Battery Clips are disconnected.

**CAUTION:**



If the Battery Clips are connected, the „Err8“ error, will showed.

- Now PRESS „START/STOP“, the display show „SET“
- Select the correct tension, 12V or 24V, using the selection button
- Set „OVER RIDE“ function.

- Now PRESS „START/STOP“ for 3 seconds, until „ON“ blink on the display.
- Release the button and the display show „STR“
- Until 30“ you can connect the clamps and start up the vehicle.
- Identify the pole corresponding to the earth of the vehicle; this is generally connected to the negative terminal.

**CAUTION:**



Never switch polarity. Always connect the output conductor with a red battery clip (+) to the positive pole of the battery and the output conductor with a black battery clip (-) to the vehicle's earth (ground).



**CAUTION:**

Inverting polarity can cause explosions, damage the vehicle, product and people.



**CAUTION:**

If the LED RED / REVERSE is set on, the polarity has been reversed. Disconnect the battery clips from the vehicle and connect them correctly.



**CAUTION:**

Check that the cables of the Emergency Starter are far away from fans, from moving parts and from the fuel conduit.

- Once the vehicle has been started up, emergency starter automatically turns off after 30 seconds. Otherwise press START/STOP button to turn off the emergency starter.
- Disconnect the output conductor with the black battery clip from the earth of the vehicle and replace output conductor with the black battery clip in its housing.
- Disconnect the output conductor with the red battery clip from the positive terminal (+) of the battery and return it immediately to its seat.



**CAUTION:**

If you are unable to start the vehicle within 5 seconds, do not continue with the starting attempt. Before trying to start up the vehicle again, let the Emergency Starter rest for at least 3 minutes to avoid damaging the appliance.



**CAUTION:**

Always recharge the Emergency Starter after each time that it is used.

## 6. Using the Emergency Starter as a 12V or 24V Memory Saver

- Always wear safety goggles and keep your face away from the battery when connecting it.
- Check that the emergency starter is in the OFF position.
- Check the voltage of the vehicle battery.

### **CAUTION:**



Voltage incompatibility between the emergency starter and the voltage of the vehicle's electrical system can cause explosions and damage the vehicle, product and people.

- Be sure that the Battery Clips are disconnected.



### **NOTE:**

If the Battery Clips are connected, the „Err8“ error, will showed.

- Now PRESS „START/STOP“, the display show „SET“
- Select the correct tension, 12V or 24V, using the selection button
- Set „MEMORY SAVER“ function.
- Now PRESS „START/STOP“ for 3 seconds, until „ON“ blink on the display.
- Release the button and the display show „MEMO“
- Connect the Battery Clips and perform the Memory Saver activities.
- Identify the pole corresponding to the earth of the vehicle; this is generally connected to the negative terminal.

### **CAUTION:**



Never switch polarity. Always connect the output conductor with a red battery clip (+) to the positive pole of the battery and the output conductor with a black battery clip (-) to the vehicle's earth (ground).



### **CAUTION:**

Inverting polarity can cause explosions, damage the vehicle, product and people.



**CAUTION:**

If the LED RED / REVERSE is set on, the polarity has been reversed. Disconnect the battery clips from the vehicle and connect them correctly.



**CAUTION:**

Check that the cables of the Emergency Starter are far away from fans, from moving parts and from the fuel conduit.

- Once the activities are completed, press START/STOP button to turn off the emergency starter.
- Disconnect the output conductor with the black battery clip from the earth of the vehicle and replace output conductor with the black battery clip in its housing.
- Disconnect the output conductor with the red battery clip from the positive terminal (+) of the battery and return it immediately to its seat.



**CAUTION:**

Always recharge the Emergency Starter after each time that it is used.

## 7. Error warnings

Error	Description
Err 1	Reverse / Short-circuit / damaged battery
Err 2	Wrong tension
Err 3	High temperature of internal battery
Err 4	Discharge internal lithium batteries
Err 5	-
Err 6	Over load (start function)
Err 7	Over load (Memory saver function)
Err 8	Wrong procedure in „override“ or „memory saver“ function
Err 9	Damaged internal fuses

## 8. Protecting the environment

The appliance displays the recycling symbol. This means that when the product comes to the end of its life it must be disposed of separately in suitable collection points and not together with normal domestic refuse. This is an environmental advantage that benefits everyone.

- The batteries can be recharged many times. Dispose of them at the end of their life in compliance with environmental standards.

The batteries must be disposed of properly.



Do not throw them in the household waste.

Take advantage of the certified and professional recycling service offered by our AKKU SYS team.

For further information, please contact us on the Hotline +49 4101/376760, at [info@akkusys.de](mailto:info@akkusys.de) or use the QR code.

Do not short-circuit the battery terminals.



- If possible, operate the unit so that the battery is fully discharged before disposal.
- The packaging is recyclable. Please keep it after unpacking for reuse or dispose of it professionally.

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

## 9. Specification

Model	a-Tronix Jump starter Booster 12/24V 10000/5000A
Article number	9885377
Operating Voltage (V)	12/24
Continuous Current (A)	2000/1000
Start max. Amperage (A)	5000/2500
Peak Ampere (A)	10000/5000
Cable Length (cm)	160
Cable Size (mm <sup>2</sup> )	25
Max. Charge Voltage (V)	14,5
Clamp Output (A)	1000
Battery type	2 Pack Lithium LiFePo4
Reverse Polarity Protection	x
Short Circuit Protection	x
Oversupply Protection	x
Size (mm)	350 x 240 x 140
Net Weight (kg)	5

# Other manufacturers and product ranges you will find in our AKKU SYS complete catalogue:

Go to our catalogue:



**AKKU/SYS**

+ — UND DIE ENERGIE KOMMT — -

**AKKU SYS Akkumulator- und Batterietechnik Nord GmbH**

Verbindungsweg 23 · 25469 Halstenbek / Hamburg · GERMANY

Tel. +49 4101 | 3 76 76-0 / Fax +49 4101 | 3 76 76-66 / info@akkusys.de / www.akkusys.de