

# **Technaxx® \* User Manual**

## **Car Power Inverter with 2 USB Ports TE24**

**Do not use electric charge that need higher watts than maximum 300W continuously !**  
**This device is only suitable for vehicle with 12V electrical systems!**

**You can find a detailed manual under [www.technaxx.de/products](http://www.technaxx.de/products)**

Before using the appliance for the first time, please read the instructions for use and safety information carefully.

This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capacities, or by persons lacking in experience or knowledge, unless they are supervised or instructed on the use of this device by a person responsible for their safety. Children should be supervised to ensure they do not play with this device.

Keep this user manual for future reference or product sharing carefully. Do the same with the original accessories for this product. In case of warranty, please contact the dealer or the store where you bought this product.

***Enjoy your product \* Share your experience and opinion on one of the well-known internet portals.***

Specifications are subject to change without notice - please be sure to use the latest manual available on the manufacturer's website.

### **Support**

Service phone No. for technical support: **01805 012643\*** (14 cent/minute from German fixed-line and 42 cent/minute from mobile networks). Free Email: **support@technaxx.de**

The support hotline is available Mon-Fri from 9am to 1pm & 2pm to 5pm

### **Care and maintenance**

Clean the device only with a dry or slightly damp, lint-free cloth. Do not use abrasive cleaners to clean the device.

This device is a high-precision optical instrument, so in order to avoid damage, please avoid the following practice:

- Use the device in ultra-high or ultra-low temperature.
- Keep it or use it in moist environment for long.
- Use it in rainfalls or in water.
- Deliver or use it in strongly shocking environment.

**Warranty 2 years**

## Features

- Charges various electronic devices in a car
- 2x USB port, 1 x USB-A, 1 x USB-C (max. 12V, max. 5,4A)
- Schuko Plug with On/Off switch
- Converts 12V DC battery power into standard 230V AC (household) power, to run a variety of electronics, e.g. tablets, smartphones, laptop computers, game systems, small TVs, DVD/MP3 players, camping accessories, GPS units and much more
- Output power 300W (max. continuous) and 600W (peak)
- Automatic safety shutdown to secure the car battery (Alarm at ~10.5V)
- High/Low voltage & overload protection
- Overheating protection (built-in ventilation fan)

## Technical specifications

Input voltage (DC)	12V (10.2-15,8V)
Output power	300W (maximum, continuously), 600W (peak)
Output voltage USB (DC)	5V-12V
Output voltage Schuko (AC) / AC frequency	230V / 50Hz nominal
Output Waveform	Modified Sine wave
Nominal load efficiency	85%
Low battery voltage shutdown and alarm	at ~10.2V
USB output ports (DC)	~5,4A (share)
AC output	Schuko port
Circuit protection (DC overload)	40A internal car fuse
Weight / Dimensions	0.38kg / (L) 17,0 x (W) 11.0 x (H) 6cm
Package Contents	Car Power Inverter with 2 USB Ports TE24, 2x0.9m connection cable, connection cable for car adapter, User Manual

## Normal use

The power inverter is intended to convert 12 V direct current voltage to

- alternating current voltage 230 V/50 Hz and/or

- direct current voltage of 12 V/max. 5400mA (shared)

→ This device is not intended for use by children or persons with limited mental capacity or lacking experience and/or lacking expertise. Children should be supervised to ensure they do not play with the device.

→ This device is not intended for commercial use.

→ Any other use or modification of the device is considered improper and involves significant risks. The manufacturer assumes no liability for damages due to improper use.

## Intended sites

The power inverter is intended for installation in

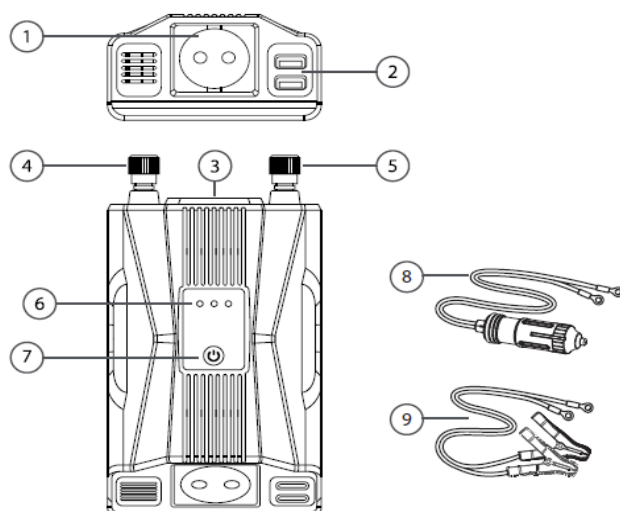
- Automobiles (and lorries)
- Caravans
- Boats

with 12V batteries.

Do not place the power inverter:

- near heat sources (radiators, direct sunlight), flammable materials, battery compartment or starter battery,
- moist locations or locations exposed to dripping or splashing water,
- in environments with explosion hazards

## Product Overview



1	Safety contact socket	6	LED indication
2	Two USB ports	7	Power Button
3	Built Fan	8	Cigarette lighter plug with 90cm cord
4	Positive Power Input Terminal	9	Battery cables with 90cm cord

5	Negative Terminal	Power	Input		
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(2) Both USB ports share the max. of 5400mA

(7) Turns the inverter ON and OFF

## Determine Battery Capacity

Battery type and battery size strongly affect the performance. Therefore, you need to identify the type of loads your inverter will be powering and how much you will be using them between charges. Once you know how much power you will be using, you can determine how much battery capacity you need. Technaxx recommends that you purchase as much battery capacity as possible.

**CAUTION:** Risk of inverter damage.

● The inverter must only be connected to a battery that has a nominal output of 12V. ● **Not operate** if connected to a 6/24V battery

## Voltage converter installation

Install the power inverter with suitable screws (not included) or by car adapter cable:

- in sturdy and even locations,
- on clean, dry and non-flammable surfaces,
- in well ventilated areas.

Please be sure not to cover the vent.

## Connecting the inverter

This unit contains a pair of DC input terminals to connect a 3ft. car adapter cable or option 3ft. battery cable with alligator connectors that directly attaches to a battery's DC terminals.

The order of steps in the following procedure minimizes the danger of sparking near the battery bank.

Option1

- Prepare all cable set ends with ring terminals at the battery ends
- Select the OFF position on the inverter
- Remove the red positive(+) screw connector cap
- Slide the red positive(+) cable lead onto the red positive(+) screw connector stud. Tighten the screw connector cap securely
- Remove the Black negative(-) screw connector cap
- Slide the Black negative(-) cable lead onto the Black negative(-) screw connector stud. Tighten the screw connector cap securely
- Securely connect the red positive (+) cable lead to the positive (+) terminal of the battery or power source
- Securely connect the black negative (-) cable lead to the negative (-)

terminal of the battery or power source

Option 2

- Plug the cigarette lighter into your 12V sources

**Note:** Sparking is normal for first connection.

## Operation

***Before using the power inverter determine your equipment's total watts!***

- Do not connect more watt than the Output Power (maximum continuous watt) of the device (→ see technical specifications).

- **Determine Total Wattage Required**, Watt ratings are usually listed in equipment manuals or on nameplates. If your equipment is rated in Amp, multiply that number times AC utility voltage to determine watts.

(mathematic example: a drill requires 1A →  $1A \times 230V = 230W$ . → No problem to use the drill.)

- Remember the vehicle's battery will be discharged when the vehicle is not running.

- To **Determine DC Battery Amps Required**, divide the total wattage required (from above) by the nominal battery voltage to determine the DC amps required.  $230W / 12V = 19.17A$  DC

- To **Estimate Battery Amp-Hours Required** Multiply the DC amps required (from above) by the number of hours you estimate you will operate your equipment exclusively from battery power before you have to recharge your batteries with utility- or generator-supplied AC power. Compensate for inefficiency by multiplying this number by 1.2. This will give you a rough estimate of how many amp-hours of battery power (from one or several batteries) you should connect to your Inverter/Charger.

$28.75A \text{ DC} \times 0.5h \text{ runtime} \times 1.2 \text{ inefficiency rating} = 17.25 \text{ amp-hours}$

- To **Estimate Battery Recharge Required**, Given Your Application You must allow your batteries to recharge long enough to replace the charge lost during inverter operation or else you will eventually run down your batteries. To estimate the minimum amount of time you need to recharge your batteries given your application, divide your required battery amp-hours (from above) by your Inverter/Charger's rated charging amps (depending on the ON/OFF settings).

$17.25 \text{ amp-hours} / 40A \text{ inverter/charger rating} = 0.43h \text{ recharge}$

## Operation

**Turn ON the inverter:** Press ON/OFF Button on the panel. The GREEN LED Indicator will light up verifying the inverter is receiving power

**Turn OFF the inverter:** Press ON/OFF Button on the panel.

When you have confirmed that the appliance to be operated is turned off, plug an appliance cord into a 230V AC outlets on the front panel of the inverter

**Note:** If you are going to operate several loads from the inverter, turn them on separately after you have turned the inverter on. This will ensure that the inverter does not have to deliver the starting current for all the loads at once.

## Temperature Protection

The Inverter is equipped with a cooling fan.

## TROUBLESHOOTING

Possible Cause	Remedy
An overload/over-temperature shutdown has occurred	Use an AC-powered device that a power rating of less than rated power. Allow the inverter to cool down, or try to reduce the ambient temperature and try again Do not cover the inverter's ventilation openings.
High starting surge has caused an overload shutdown.	Use an AC-powered device that has a surge power rating less than the surge power rating of the Inverter
Vehicle's ignition switch is turned Off thus the DC accessory socket is also off	Turn the vehicle's ignition switch to ON. Consult your Vehicle's manual for instruction
Poor contact with DC accessory Socket	Adjust the inverter's DC plug to ensure a snug fit. If needed, Clean the DC accessory socket
Vehicle battery is discharged	Recharge the vehicle battery
Vehicle fuse blown due to heavy load on the accessory socket	Replace the blown fuse. Consult your vehicle's manual for fuse location, fuse type, and instructions.
USB connector is not inserted properly into the USB port	Ensure that USB cable's connectors are properly fitted into the USB ports of either device.

## Warnings & Caution

● Use of the device in life support applications where failure of the device can reasonably be expected to cause the failure of the life support equipment or to significantly affect its safety or effectiveness is not recommended. ● Do not use the device in the presence of a flammable anesthetic mixture with air, oxygen or nitrous oxide, and also not near flammable materials, fumes or gases. ● Since the device requires adequate ventilation during operation, do not block fan or cooling vents and do not cover the device. Do not operate near car heating vents or in direct sunlight. ● Keep the device dry at all times and disconnect when not in use. ● Turn OFF connected equipment before (!) starting your engine. DO NOT plug a surge protector, line conditioner or UPS system into the device. If you attach AC extension cords, use the heaviest practical gauge. ● Before connecting a battery charger or adapter, check its manual to make sure that the technical specifications of the device fall within the recommendations of the external battery charger or adapter.

## Declaration of Conformity



The EU Declaration of Conformity can be requested at the following address: [www.technaxx.de/](http://www.technaxx.de/) (in the lower bar "Declaration of Conformity").

## Disposal



Disposal of the packaging. Sort packaging materials by type upon disposal.

Dispose of cardboard and paperboard in the waste paper. Foils should be submitted for recyclables collection.



Disposing of old equipment (Applies in the European Union and other European countries with separate collection (collection of recyclable materials) Old equipment must not be disposed of with household waste! Every consumer is required by law to dispose of old devices that can no longer be used separately from household waste, e.g. at a collection point in his or her municipality or district. This ensures that the old devices are properly recycled and that negative effects on the environment are avoided. For this reason, electrical devices are marked with the symbol shown here.

Made in China

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