

Manual and installation instructions for Transformer 90VA 75W

ATTENTION! Please read this manual and the installation instructions carefully, before installation or use of the transformer. Save this information for possible later use.

Warning:
The inverter is only suitable for use inside a caravan or motorhome. Don't open the transformer.
Only connect as indicated in the paragraph 'Connect'. The main power supply (230V) is always the last to be connected. Always remove the main power supply first, when changes in the connections have to be made (for example the connecting/disconnecting of a battery at the "Input" connection, or the connecting/disconnecting of devices at the "Output" connection) or when checking/changing the fuse.

Introduction:
The transformer is meant to be used inside a caravan or motorhome. The transformer can be connected to the main power supply of 230V AC with the Euro plug. A battery can also be connected to the transformer.
On the remaining connections, a water pump or lighting can be connected, up to a maximum usage of 75W. When the transformer is connected to both the main power supply and the battery, the transformer will select the most appropriate power supply, main power or battery, to supply the best possible output voltage to the connected pump or lighting.

Technical specifications:
AC input voltage: 230V
DC input voltage: 11-15V
Output voltage: 11-15V
Maximum output current: 6.2A
Fuse type: 5x20mm 6.3A T
Material: Plastic
Colour housing of transformer: white
Cable length: 70cm
Cable type: H03VVH2-F 2x 0.5mm²
Measurements without packaging: 129x84x83mm
Net weight: 1.9kg
Gross weight: 1.95kg

Installation:
Make sure that the surface for the placement of the transformer is flat and dry. Make sure that after installation, the transformer is easily accessible from the inside of the caravan or motorhome. The installation and connection of the transformer should only be done by a skilled person.

- Connect:**
1. Connect the load, a pump or lighting of the caravan, to the connection marked "Output". Pay attention to the proper connection of the "+" (plus) and "-" (minus). The maximum load should not exceed 75W.
 2. In case you want to connect a battery, check the nominal battery voltage, before connecting it to the transformer. The correct nominal battery voltage should be 12V. When the battery has the correct nominal voltage, connect it to the connections marked "Input". Pay attention to the proper connection of the "+" (plus) and "-" (minus).
 3. Finally connect the Euro plug to the main power supply (230V). Check if the main power supply is 230V AC.

Functioning:
After following above steps for installation and connecting, the transformer should operate well.

There is going to be tension on the connection of the pump and the lighting, when the transformer is connected to 230V AC with the Euro plug. Therefore the pump and lighting should function.

As long as the main power supply of 230V AC is connected, the transformer will transform the power to 11-15V and supply the connected pump or lighting through the connections marked "Output" with this power of 11-15V.

When a battery is also connected at the "Input" marked connections, the transformer will automatically connect the battery power to the pump or lighting, if the main power supply is removed (the Euro plug has been removed from the main power). This means that at the moment that there is no power supply from the main power supply, but with a connected battery, there will still be tension on the connection marked "Output" for the lighting and pump. At the moment the main power supply is back on, the transformer will redirect the power supply to the main power supply and transform it to 11-15V for the connections marked "Output" (pump or lighting).

The transformer can't be used to charge a connected battery. The battery is just functioning as a backup power supply.

Overview yes/no output voltage at the connections marked with 'Output':

230V AC	Battery 12V DC	"Output" to connected device(s)
Yes	Yes	11-15V
No	Yes	11-15V
Yes	No	11-15V
No	No	No tension

Malfunctioning:
If there is no tension to the connection marked "Output", while main power supply is available or a battery is connected, please check the fuse. Open the housing of the fuse as is described below:

1. First, remove the main power supply (take the Euro plug out of the socket)
2. Then remove the wiring of the battery, if a battery is connected to the "Input" connections
3. Open up the housing of the fuse, by pulling the cover upward
4. Replace the fuse, when it is defect (fuse 20x5mm, 6.3A T).



If the problem is not resolved after replacing the fuse, please consult an expert.

Maintenance
This product virtually doesn't need any maintenance. Check the housing of the transformer at least once a year and remove any dust or other dirt.

Storage and transport
In a dry surrounding with temperatures between -10°C and 50°C.

Environment
Think of the environment. Use the local regulations regarding the disposal of this product.

Please contact your supplier if the transformer has defects.

