



REMOTE CONTROL
FOR POWER INVERTERS



RC PRO

Remote Control for
ECTIVE PRO Power Inverters

Installation and
Operating Instructions

ECTIVE

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► Ready to get ECTIVE!

Quick-Start Guide

1. First familiarise yourself with the safety instructions on p. 2.
2. Install your ECTIVE PRO inverter in accordance with the corresponding operating instructions.
3. Install the ECTIVE RC PRO remote control in a suitable location.
4. Connect the inverter and remote control using the RJ12 cable supplied.

Welcome

Hi, nice to meet you! Ready to get ECTIVE?

Thank you for choosing the ECTIVE RC PRO remote control!

This remote control was developed for use with inverters from the ECTIVE TSI PRO, CSI PRO and SSI PRO series. Connected via the supplied RJ12 cable, the ECTIVE RC PRO displays different values and statuses of the inverter and the system connected to it. This makes it easy to keep a clear overview of the power supply, even if the inverter is installed in an inaccessible location.

The inverters in the three ECTIVE PRO series have different functions: All three series offer mains and battery priority switching functions, and can therefore supply 230 V consumers with power from the connected supply battery as well as feed shore power through to the energy supply if it is present. The CSI-PRO series also has an integrated battery charger that charges the supply battery with shore power. Finally, the SSI-PRO series models also allow the batteries to be charged with solar power, as these devices are equipped with a modern MPPT solar charge controller.

The ECTIVE RC remote control displays different values depending on which series the connected inverter belongs to. Therefore, please observe the relevant sections of these operating instructions that apply to your device.

Please note that the RC PRO remote control is only compatible with inverters whose product designation bears the suffix 'PRO'. It is not intended for use with inverters of the conventional ECTIVE SI, TSI, CSI or SSI series.

Scope of Delivery

Please check that the scope of delivery is complete before installation and commissioning:

- **1 × ECTIVE RC PRO Remote Control**
High-quality remote control for inverters of the series ECTIVE TSI PRO, ECTIVE CSI PRO and ECTIVE SSI PRO.
- **1 × RJ12 Cable (3 m)**
Cable for connecting the remote control to the inverter, also known as ISDN cable.
- **1 × Quick-Start-Guide**
Quick start guide with important safety instructions

Safety Instructions

Read these operating instructions carefully before installing and using your ECTIVE RC PRO remote control. Only use the device in accordance with the intended use described therein and observe the following safety instructions:

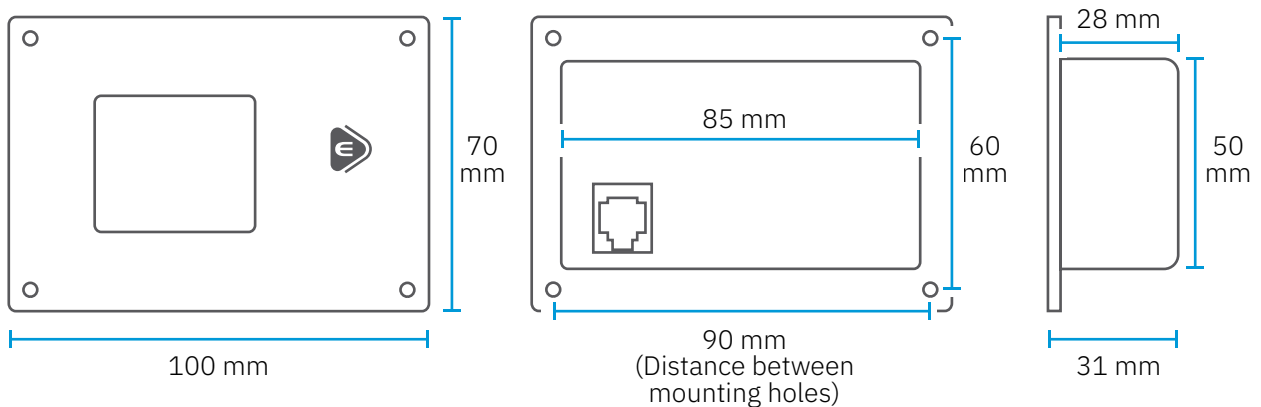
- Only use the ECTIVE RC PRO remote control with ECTIVE brand inverters that have the suffix 'PRO' in the product designation. The RC PRO remote control is not compatible with inverters from the regular ECTIVE SI, TSI, CSI and SSI series.
- Be sure to observe all safety instructions in the operating instructions for your inverter and follow the instructions for installation and operation given there.
- Keep the remote control away from naked flames, sparks, heat sources, dust and moisture. Protect the device from direct sunlight, impacts and other damage.
- Keep children away from the remote control.
- Never open the housing of the remote control inverter.
- When not in use, switch off the inverter at the main switch after disconnecting it from the shore power and, if necessary, from the solar power (ECTIVE SSI PRO). Even when idle, the inverter draws current, which may result in deep discharge of the connected battery.
- ECTIVE PRO inverters have various safety functions that indicate problems and faults and automatically switch off the AC output if necessary. If the message 'FAULT' appears on the display of the RC PRO remote control, please follow the instructions for fault diagnosis and rectification in the manual for your inverter.
- Protect the cable from damage caused by sharp edges, e.g. by using the conduits.
- Never lay the RJ12 connection cable in the same conduit as power cables from other devices.
- The remote control may only be operated if the device itself and the associated inverter are not damaged in any way.
- Corrosion damage can occur, particularly when installing the remote control on boats, if errors are made during installation. The installation should therefore be carried out by specialised personnel who are trained in equipping boats.
- Failure to comply with these safety instructions and the operation described in the manual will invalidate the warranty provided by the manufacturer. The manufacturer accepts no liability for damage caused by improper use.

Product Overview

The values and symbols shown on the display differ depending on which series the connected inverter belongs to. Observe the information applicable to your inverter in the section 'The LCD Screen'.



1. LCD display
2. Mounting holes
3. Button for switching between ECO and UPS mode and for switching off the inverter (if neither shore nor solar power is present)
4. Connection for RJ12 cable for connection to the inverter



Installation and Operation

During installation, be sure to observe the safety instructions on p. 4 as well as the instructions and safety information in the manual for your inverter.

- Disconnect the inverter from the power supply before installing or working on the device.
- Never open the housing of the inverter or the RC PRO remote control.
- Only mount the inverter and the remote control on solid surfaces.
- Install the inverter and the remote control in a location where they are protected from direct sunlight, heat sources, dust and moisture.
- Lay the cables so that they are not under tension or pull on the connections.
- Use empty conduits or cable bushings to protect the cables.
- Never lay the 230 V output power and DC supply cables together in the same cable duct.
- As the inverter radiates heat during operation, it should be installed away from temperature-sensitive objects.

Install the ECTIVE RC PRO remote control in a location where you can easily view the status of your inverter and the system connected to it.

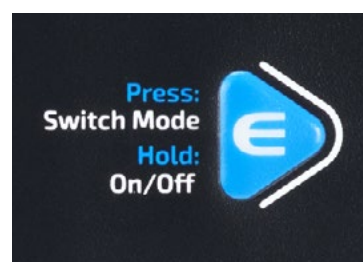
Then use the supplied RJ12 cable to connect the remote control to the inverter. Make sure that the cable is not exposed to sharp edges or mechanical stress.

Mode button

You can use the blue button on the ECTIVE RC PRO remote control to set the mode in which the inverter operates.

Press the button to switch between 'ECO mode' (battery priority circuit) and 'UPS mode' (mains priority circuit).

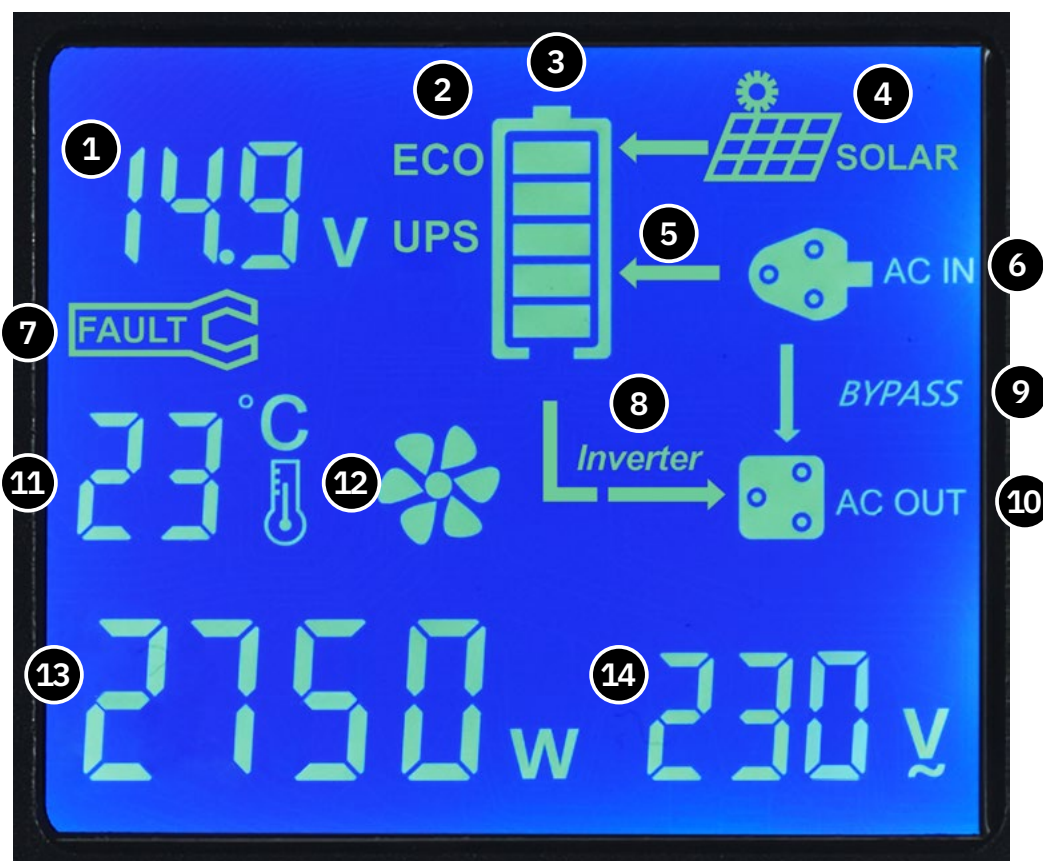
Press and hold the button for several seconds to switch off the inverter. Please note that the inverter can only be switched off if neither shore nor solar power (SSI PRO models) is present.



The LCD Screen

Depending on the model and range of functions of the connected inverter, different values and symbols are shown on the display of the ECTIVE RC PRO remote control.

The following illustration shows all the elements that can appear on the ECTIVE RC PRO display. The exact meaning of the individual symbols when using your specific inverter model is explained on the following pages.



1. Input voltage (battery)
2. Current mode (ECO, UPS)
3. Battery charge level (not for LiFePO4)
4. Solar power is present
5. Battery is being charged via shore power
6. Shore power is present
7. Error. See operating instructions for the inverter!
8. Inverter function active (current from the battery is converted into alternating current to supply 230 V consumers)

9. Bypass function active (shore power is channelled directly to consumers)
10. Alternating current consumers are supplied
11. Temperature of the inverter
12. Fan function
13. Current output power*
14. Output voltage

*The displayed value serves as a rough guide. Depending on the percentage utilisation of the inverter, this value may deviate significantly from the actual consumption or the actual power.

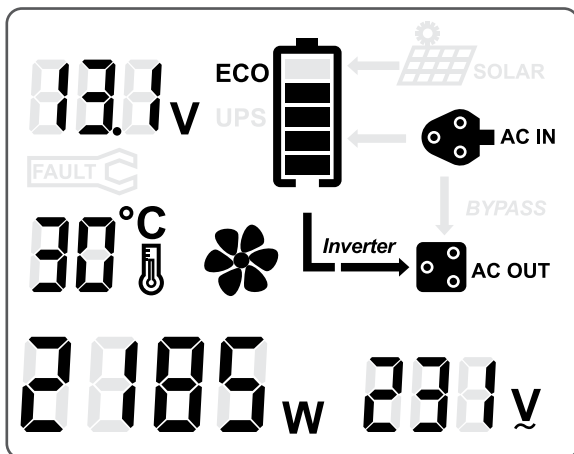
ECTIVE TSI PRO Inverters

Inverters in the ECTIVE TSI PRO series can be operated with battery priority switching ('ECO mode') or mains priority switching ('UPS mode'):

In **ECO mode** (battery priority circuit), the inverter supplies the loads with power from the connected battery, even if the system is connected to shore power. If the battery voltage drops below 11 V, the inverter automatically switches to UPS mode.

The **UPS mode** (mains priority circuit) provides an uninterruptible power supply: Connected 230 V consumers are supplied with shore power as a priority. If the connection to the shore power is disconnected, the inverter switches to battery operation within 16 ms.

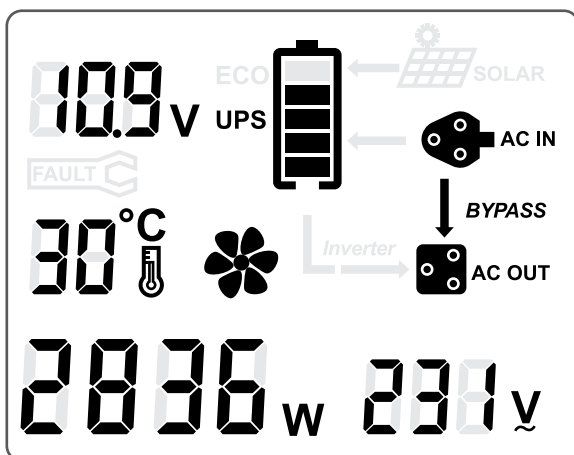
Please observe the operating instructions in the manual for your ECTIVE TSI PRO inverter.



TSI PRO in ECO Mode

- Shore power available

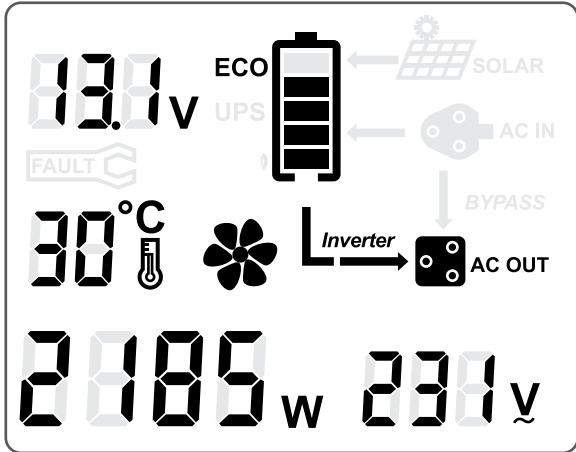
Consumers are still supplied with battery power (inverter function).



TSI PRO in ECO Mode

- Shore power available
- Battery voltage has fallen under 11 V

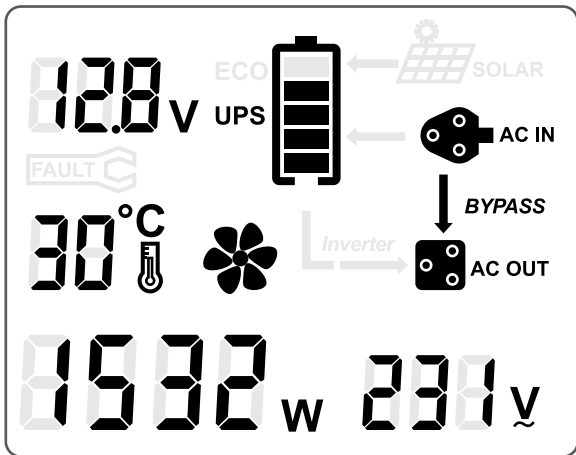
The inverter has automatically switched to UPS mode: Consumers are supplied with shore power (bypass function).



TSI PRO in ECO Mode

- No shore power

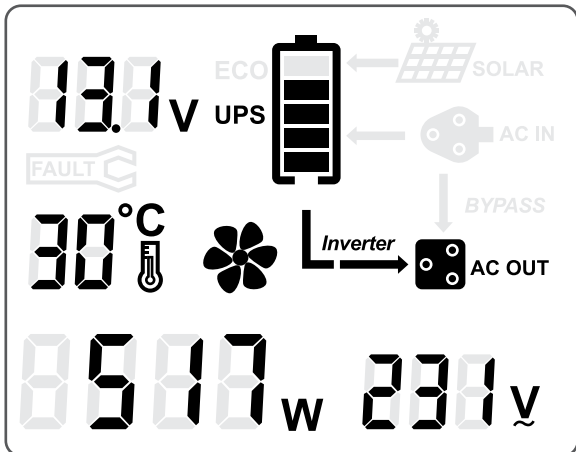
Consumers are supplied with battery power (inverter function).



TSI PRO in UPS Mode

- Shore power available

Consumers are supplied with shore power (bypass function).



TSI PRO in UPS Mode

- No shore power

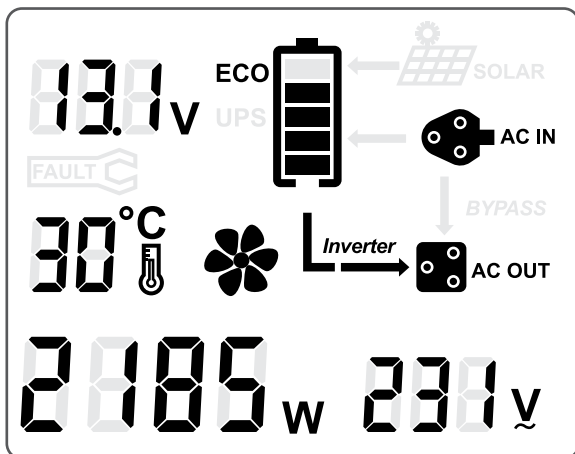
The inverter has automatically switched to battery operation (inverter function).

ECTIVE CSI PRO Inverters

As inverters in the ECTIVE CSI PRO series have an integrated battery charger, shore power can be used to charge the connected batteries and supply consumers with power.

In **ECO mode** (battery priority circuit), the inverter supplies the loads with power from the connected battery, even if the system is connected to shore power. If the battery voltage drops below 11 V, the inverter automatically switches to UPS mode. If the battery is then charged so that the battery voltage returns to 14.2 V, the system switches back to ECO mode.

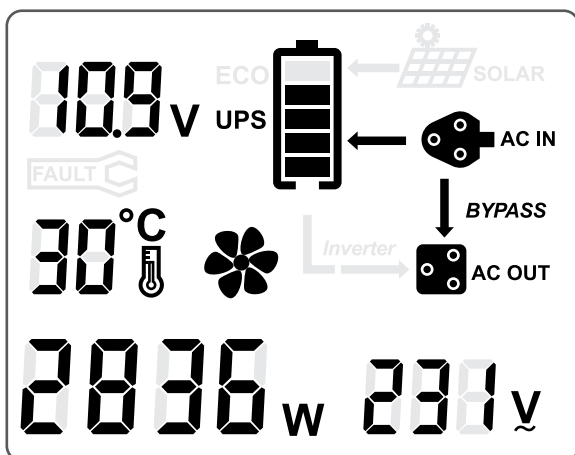
The **UPS mode** (mains priority circuit) provides an uninterruptible power supply: Connected 230 V consumers are supplied with shore power as a priority, while surplus shore power is used to charge the connected batteries. If the connection to the shore power is disconnected, the inverter switches to battery operation within 16 ms.



CSI PRO in ECO Mode

- Shore power available

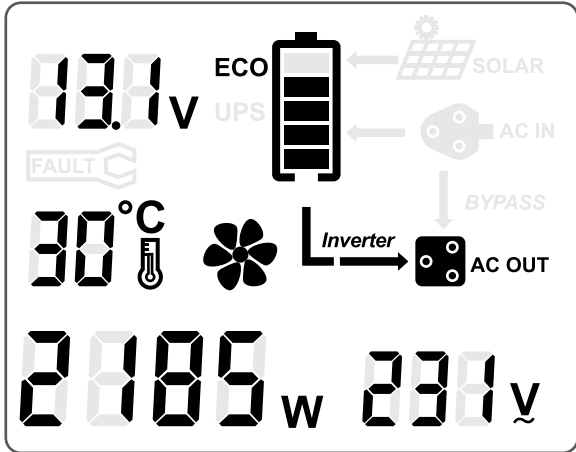
Consumers are still supplied with battery power (inverter function).



CSI PRO in ECO Mode

- Shore power available
- Battery voltage has fallen under 11 V

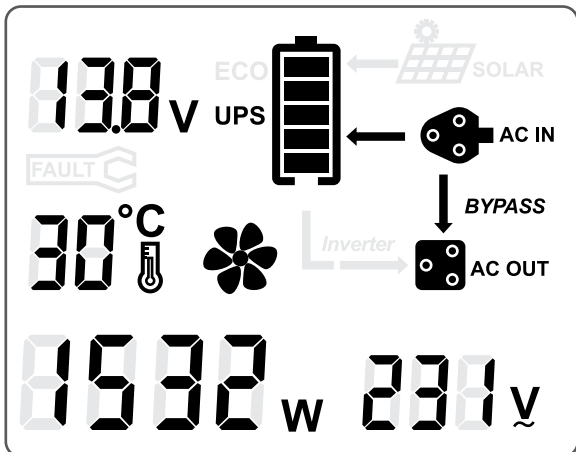
The inverter has automatically switched to UPS mode: Consumers are supplied with shore power (bypass function).



CSI PRO in ECO Mode

- No shore power

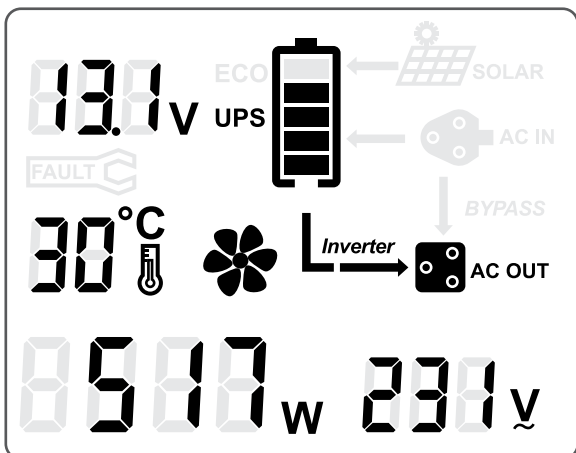
Consumers are supplied with battery power (inverter function).



CSI PRO in UPS Mode

- Shore power available

Consumers are supplied with shore power (bypass function), battery is charged with shore power.



CSI PRO in UPS Mode

- No shore power

The inverter has automatically switched to battery operation (inverter function).

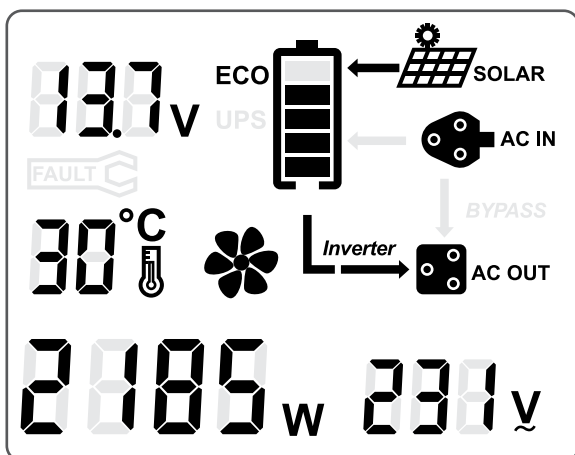
ECTIVE SSI PRO Inverters

Inverters in the ECTIVE SSI PRO series can be operated with battery priority switching ('ECO mode') or mains priority switching ('UPS mode'). As they have an integrated battery charger and an integrated MPPT charge controller, shore and solar power can be used to charge the connected batteries or to supply loads with power.

In **ECO mode** (battery priority circuit), the inverter supplies the loads with power from the connected battery, even if the system is connected to shore power. This can be useful, for example, if there is plenty of solar power available. If the battery voltage drops below 11 V, e.g. because there is no more solar power available, the inverter automatically switches to UPS mode. If the battery is then charged so that the battery voltage is 14.2 V again, the inverter switches back to ECO mode.

The **UPS mode** (mains priority circuit) provides an uninterruptible power supply: Connected 230 V consumers are supplied with shore power as a priority, while available solar power and shore power is used to charge the connected batteries. If solar power is no longer available, the inverter switches to battery charging using shore power after approx. 30 seconds. If the connection to the shore power is disconnected, the inverter switches to battery operation within 16 ms.

Please observe the operating instructions in the manual for your ECTIVE SSI PRO inverter.

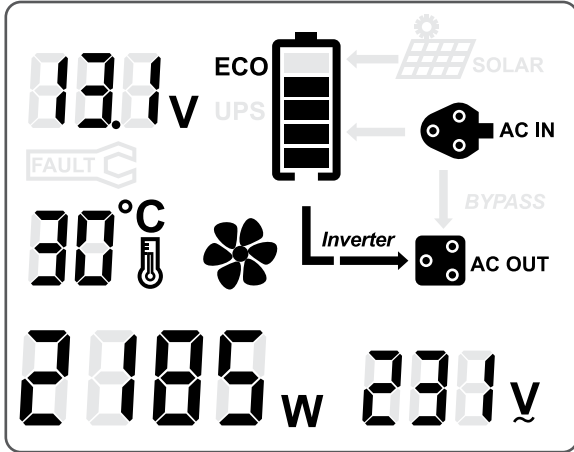


SSI PRO in ECO Mode

- Shore power available
- Solar power available

Consumers are supplied with battery power despite shore power (inverter function).

Batteries are charged with solar power.

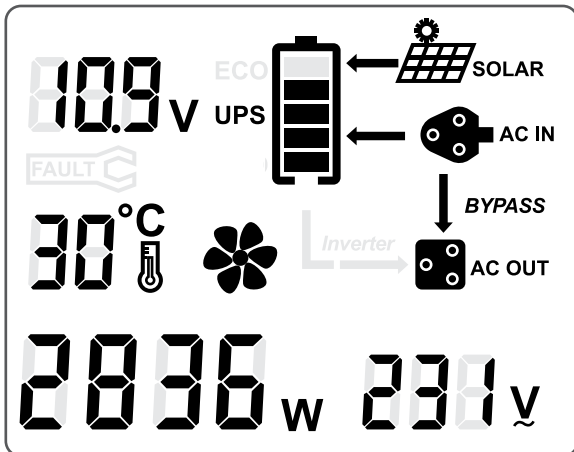


SSI PRO in ECO Mode

- Shore power available
- No solar power

Consumers are supplied with battery power despite shore power (inverter function).

The battery is not charged.

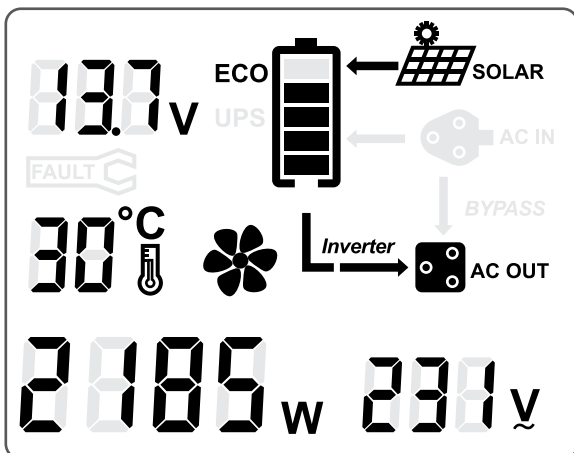


SSI PRO in ECO Mode

- Shore power available
- Solar power available
- Battery voltage has fallen under 11 V

The inverter has automatically switched to UPS mode: Consumers are supplied with shore power (bypass function).

Battery is charged with shore and solar power.

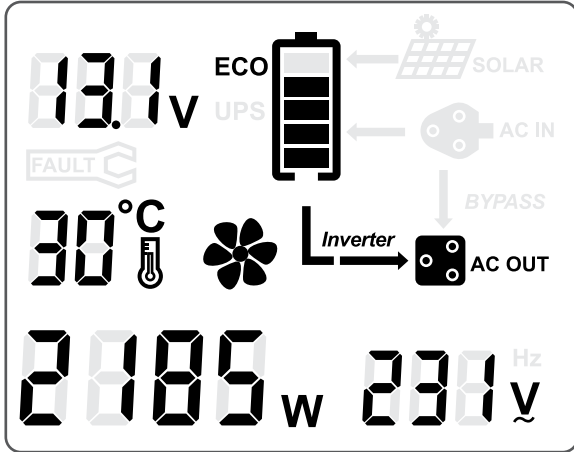


SSI PRO in ECO Mode

- No shore power
- Solar power available

Consumers are supplied with battery power (inverter function).

Batteries are charged with solar power.

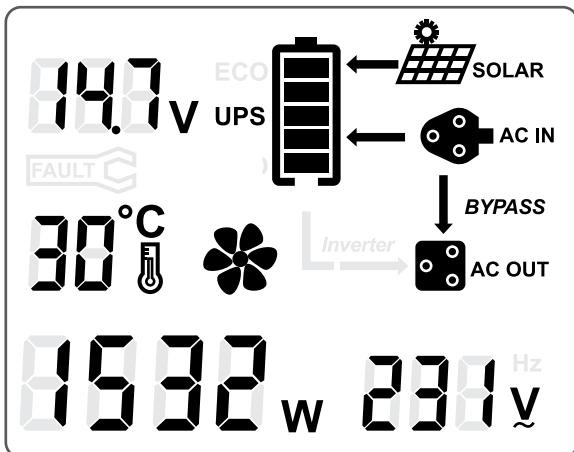


SSI PRO in ECO Mode

- No shore power
- No solar power

Consumers are supplied with battery power (inverter function).

The battery is not charged.

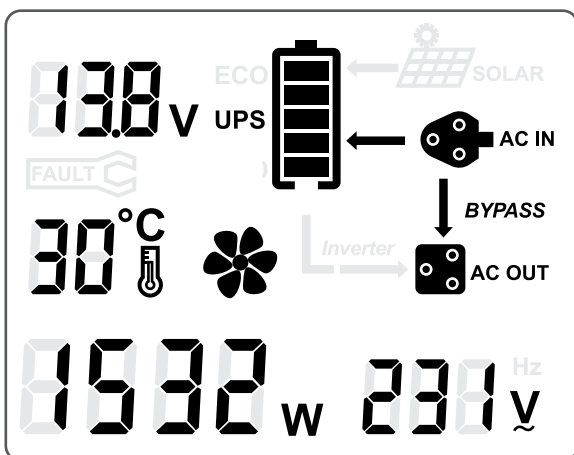


SSI PRO in UPS Mode

- Shore power available
- Solar power available

Consumers are supplied with shore power (bypass function).

Battery is charged with shore and solar power.

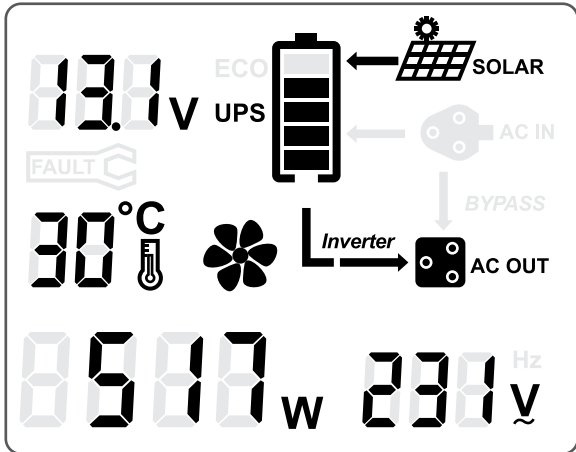


SSI PRO in UPS Mode

- Shore power available
- No solar power

Consumers are supplied with shore power (bypass function).

Battery is charged with shore power.

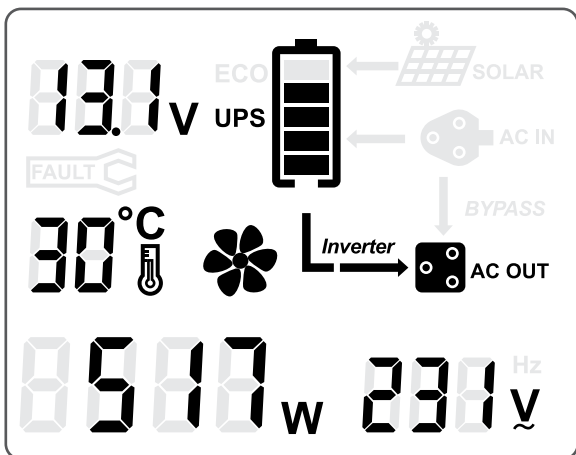


SSI PRO in UPS Mode

- No shore power
- Solar power available

Consumers are supplied with battery power (inverter function).

Batteries are charged with solar power.



SSI PRO in UPS Mode

- No shore power
- No solar power

Consumers are supplied with battery power (inverter function).

The battery is not charged.

Troubleshooting

ECTIVE PRO inverters are equipped with a protection system that displays a code on the RC-PRO display in the event of a fault. This enables the problem to be identified quickly. Here you will find an overview of the displayed codes and their meaning:

Error Code	Description	Possible Cause	Solution
E-1	Undervoltage protection	The input voltage is too low.	Check the power supply and ensure that the voltage meets the requirements of the inverter.
E-2	Overvoltage protection	The input voltage is too high.	Check the power supply and ensure that the voltage meets the requirements of the inverter.
E-3	Overheating protection	The inverter is overheated.	Ensure that the inverter is sufficiently ventilated and is not exposed to direct sunlight. Reduce the load if necessary.
E-4	Overload protection	The inverter is overloaded.	Reduce the load on the inverter. Check the connected devices and disconnect any loads that are not required.
E-5	Short-circuit protection	There is a short circuit.	Check the cabling and the connected devices for short circuits.

Service and Complaints

If you have any questions about your device after purchase or during operation, we are happy to help you. To speed up the process, please provide information by email in advance, whenever possible with an explanation of the issue and photos. To contact us and for product returns, please use the following service address:

batterium GmbH, Robert-Bosch-Straße 1,
71691 Freiberg am Neckar, Germany
T: +49 7141 / 560 90 40
info@ective.de
ective.de

Tip: When contacting us directly, please have your customer or invoice number and the article number ready.

In case you would like to return a product to us, please follow these guideline to ensure a quick and secure handling of the issue

- If possible use the original packaging as shipping carton.
- If you no longer have the original packaging, please use suitable (UN-certified) packaging to ensure adequate protection during transport.
- If the goods are not shipped in the original packaging or a UN-certified packaging, the goods are considered damaged and will therefore need to be billed when the item is returned.

Please enclose the following with the return shipment:

- Copy of the invoice
- (Service Form)
- Reason for return
- An exact and detailed error description

Disposal

- Please dispose of all packaging material correctly or recycle it.
- In Germany, the Electrical and Electronic Equipment Act [ElektroG] regulates the placing on the market, disposal and disposal and recycling of electrical and electronic appliances.
- When decommissioning the appliance, please contact the nearest recycling centre or your point of sale and ask for information about the current disposal regulations.



Stay in Touch!

You would like to learn more about ECTIVE and our products? Visit our [Website!](#)

You want to stay up to date or are looking for inspiration for your next camper conversion? Follow us on [Instagram!](#)

Still have a specific question? Our [Customer Service Team](#) will be happy to take care of you. There you will receive fast, qualified help with concerns about our products!

Our goal is to make your life easier with our ECTIVE products. No matter if you are on the road with your camper, your boat or just your backpack. No matter if it's a trip, a festival or a professional photo shoot: You should be able to fully concentrate on your adventure or project. A reliable power supply that runs efficiently and safely in the background strengthens your back and you can take care of the essentials: Experiencing unforgettable moments and creating priceless memories.



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