fosera.

Power Line

IGNITE
USER MANUAL

INSTALLATION AND MAINTENANCE

✔ DO'S:

- Place the solar panel in direct sunlight for maximum efficiency. Mount the IGNITE on the wall with the screws and dowel provided

- All appliances are designed for indoor use with the exception of the solar panel. Protect them from rain, liquids and direct sunlight. Keep the battery box and the appliances clean.

- Place the lamps at your desired location and use the hook screw, which is included in your IGNITE package. Make sure the cable is not pulled too tightly. If you need to extend the cable please use a cable provided by Fosera.

- Clean the solar panel from time to time to ensure proper power output.

- Keep all Fosera products in a safe place and make sure the panel is installed securely, so it can not fall down.

- The ideal temperature for the functional capability of all fosera products is between 0°Celsius and 50°Celsius.

✘ DONT'S:

- Do not open or repair any component of the solar system by yourself. This should be only done by an authorized technician. Otherwise the warranty will be void.

- If the cables are damaged, make sure that they are repaired or replaced.

- Do not use loads and appliances that are not designed or certified for the system by Fosera (except for the USB port).

- Only use the provided panels to charge the battery. Other panels or chargers will harm the system and therefore result in a loss of warranty.

- The system components, including the solar panel, are not fire resistant. Keep away from fire.

- The battery contains a high amount of electrical energy. It is important that all short circuits are prevented.

- Protect your TV remote from any liquids. If it got wet, remove the batteries and let it dry.

> ⚠ If the system is stored longer time, it has to be recharged regularly with the solar panel. Please note that battery failures caused by inappropriate system storage are not covered by warranty.

Fosera appliances are designed to last a long time and are extremely efficient. The appliances can therefore be used for many hours every day.

Fosera appliances can operate at any voltage of the system and in a wide range of temperatures.

OPERATION
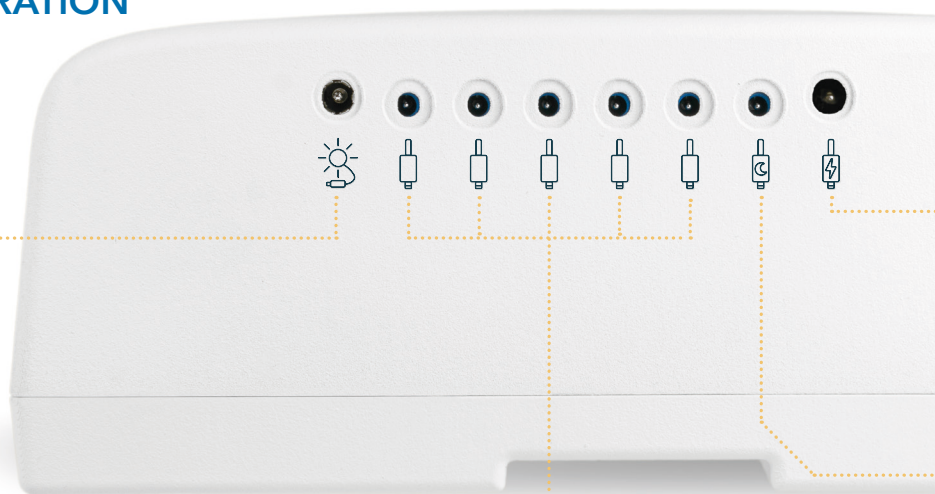
5X REGULAR OUTPUT

SOLAR PANEL INPUT

Connect the solar panel to the solar input socket of the IGNITE. Place the solar panel in direction of the sun for maximum performance.

- Avoid any shading of the panel.
- The angle should be at least 15 degrees to ensure that the rain can wash dirt from the panel.
- Make sure that the solar panel is securely mounted to withstand heavy winds and storms.
- Clean the panel regularly.

As soon as the IGNITE is connected to the solar panel, the solar charging light indicates that the systems battery is charging and is well connected to the solar module.

CONFIGURABLE OUTPUT AND HIGH POWER OUTPUT

The Configurable Output ⊂ and the High Power Output ⚡ can be used as a special outlet with four different functions. These functions can be changed by introducing a fosera code into the keypad.

HIGH POWER OUTPUT

* 2 2 0 # Normal mode

* 2 2 1 # Night light

* 2 2 2 # Priority outlet
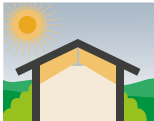
* 2 2 3 # Excess outlet

CONFIGURABLE OUTPUT

* 2 1 0 # Normal mode

* 2 1 1 # Night light

* 2 1 2 # Priority outlet

* 2 1 3 # Excess outlet

x3 Type in code, green blinks three times: code has been accepted.

x3 Typed in code, red blinks three times: code is incorrect or code has not been accepted.

Normal outlet mode:

The outlet acts like a normal outlet and provides power as long as there is energy in the battery.

Night light mode:

The outlet switches on as soon as it gets dark outside. During daytime the outlet is switched off. This outlet can be used to power a security light during the night.

Priority outlet:

When the battery is nearly empty the outlet switches off automatically. This outlet can be used to power low priority loads like a TV and in case of a low power battery, there is still energy left for light.

Excess outlet:

This outlet is always on when the battery is full, meaning it will turn on when all battery bars are on.

SOLAR CHARGING INDICATOR

The solar charging indicator is turned on as long as the system recieves energy from the panel.

Green light:
Indicates maximum charging power.

Red light:
Indicates low charging power, e.g. in the morning, a cloudy day or a shaded panel

Orange light:
Indicates medium charging power.

Light off:
The system is not charging or the solar panel is not connected.

BATTERY STATUS

To check the battery status, press the test **T** button. The SOC battery display will illuminate.

6 green bars:
Indicates full battery charge
(100% – 83%)

2 green bars:
Indicates low battery charge
(32% – 17%)

5 green bars:
Indicates high battery charge
(82% – 67%)

1 green bar:
Indicates very low battery charge
(16% – 0%)

4 green bars:
Indicates sufficient battery charge
(66% – 50%)

1 red bar:
Indicates the battery is **empty**.
All outlets will switch off automatically.
Connect to the solar panel to recharge the IGNITE system.

3 green bars:
Indicates medium battery charge
(49% – 33%)

BOX MODE

During and after delivery or storage the system is in box mode where all functions and outlets are switched off. The box mode will be also engaged if the system is not used for 24 hours, this means there is no charging, discharging or buttons pressed. To activate the system to normal operation simply charge the system with the solar module or press the test **T** button.

During the daytime the charging light should be always on as long as the solar panel is connected. It indicates that the system is being charged and is well connected to the module.

2X USB OUTPUT

TEST BUTTON

KEYPAD

PAYG RECHARGING CREDIT

Once the credit of the system is low or empty you need to purchase new credit from your distributor.

Once you received your token (e.g. *123456789#) you need to enter the token into the integrated keypad to recharge your system. The system gives the feedback via a green indication each time a button is pressed and once the code is typed it will give the following messages:

Orange light:
The system is checking the validity of the token.
It can take up to five seconds.

x3 Three green blinks:
Code has been accepted.

x3 Three red blinks:
code is incorrect or code has not been accepted.

PAYG DISPLAY

To check the PAYG credit status, press the test T button. The PAYG display will illuminate.

→ Green light:
More than 2 days of charge left.

→ Red light:
No more credit. Outlets will switch off automatically. Please top up

→ Orange light:
0 – 2 days of charge left.

SYSTEM COMUNICATION

The IGNITE keypad allows the user to get information as how many exact days of PAYG credit are left or recieve the PAYG ID code in case it's lost by using specific Fosera codes.

DAYS OF PAYG CREDIT LEFT
Code: ✱ 1 2 6 #

PAYG ID NUMBER
Code: ✱ 1 2 3 #

The remaining PAYG credit can be showed by entering the code. The system will give back the number of days of credit left as it is explained below (with a maximum of x99 days):

In case the PAYG ID number is lost, the fosera. IGNITE system can provide it to you. Just type the code and the system will blink the serial number as it is explained below:

x3   Type in code, green blinks three times, code has been accepted.

x3   Typed in code, red blinks three times, code is incorrect or code has not been accepted.

After typing any of theese Fosera codes, when accepted the PAYG Display will blink three times green and one orange, and then it will start a green and red bliking pattern, to indicate the requested number.

This number is shown by green blinkings (1st, 2nd, 3rd... number) separated by red blinkings, as in the example below:

x3 + x1   x1   x2   x1   x4   x1   = 24

Code accepted and will start   1st number = 2   Next number   2nd number = 4   End pattern
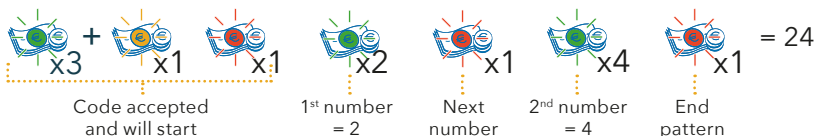
Number 0 is represented by two red blinkings in a row

x3 + x1   x1   x2   x1   x1   = 20

Code accepted and will start   1st number = 2   Next number   2nd number = 0   End pattern
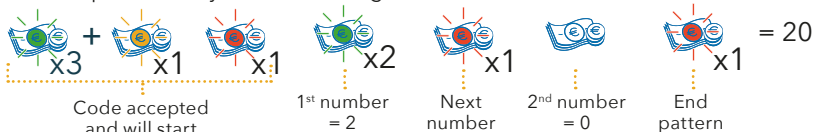
When there is no more credit left and the days of credit left code is typed the system will blink:

x3 + x1   x1   = 0

Code accepted and will start   Next number   End pattern
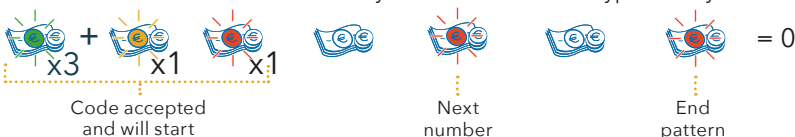
Note: For credits over 99 days, the system will show just 99 days of remaining credit.

ERROR INDICATION

The IGNITE system will switch off automatically when an error occurs and it will automatically restart after 30 seconds. The errors are the following:

OVERLOAD

Display   All SoC battery display blink green

Error   The Fosera. IGNITE notices an output power consumption bigger than it can provide

Solution   Disconnect one or more appliances from the system

SHORT CIRCUIT

Display   All SoC battery display blink green and the first bar in red

Error   The Fosera. IGNITE notices a short circuit. Most probably one appliance is broken

Solution   Disconnect appliances until finding the broken one

OVERCURRENT

Display   The solar charging indicator blinks red

Error   The Fosera. IGNITE notices an input solar charging bigger than it can handle

Solution   Use an smaller solar panel

DEEP DISCHARGE

Display   First bar of the battery display turns red when pressing the test **T** button

Error   The battery state of charge is under its minimum to work

Solution   Connect the Fosera. IGNITE to the panel for charging

DATASHEET

fosera® IGNITE	50	100	150	200	250	units
Nominal system voltage			12.8			V
Battery capacity	3.8	7.6	11.4	15.2	19.0	Ah
Battery energy capacity	48.6	97.3	145.9	194.6	243.2	Wh
Battery type			LiFePO$_4$			
Protection features		Overcharge, deep discharge, overcurrent, short circuit				
Appliance outlets**	5x 3A regular 1x 3A configurable 1x 3.8A high power	5x 3A regular 1x 3A configurable 1x 8A high power				
Appliance outlets total current**	3.8	8.0				A
USB outputs		2x 2A USB / Max. 2A total				
Max. input current	3.8	8.0				A
Weight	1.00	1.41	1.78	2.17	2.53	kg
Dimensions		233.0 x 172.5 x 90.0				mm
PAYG *(optional)*		OpenPAYGO Token				

AVAILABLE APPLIANCES

	50	100	150	200	250	
Fosera. Lamps	●	●	●	●	●	
Fosera. Radio 100	●	●	●	●	●	
Fosera. Standing Fan	●	●	●	●	●	
Fosera. TVs		● 24"	● 24"	● 32"	● 32"	

OPERATION TIME

	50	100	150	200	250	
Solar runtime* *With 4 Lamp 200*	7:20	15:00	25:30	25:30	37:00	hrs

*additional phone charging will reduce the runtime

**at low battery charge, the output power might be reduced

RECYCLING INFORMATION

Do not throw any of the components or the controller box into the regular trash when discarding. Please recycle to help minimize pollution and to protect the global environment. All Fosera components used for manufacturing the system are recyclable. For more information on the Waste from Electrical and Electronics Equipment (WEEE) regulations, please visit the following webpage:

http://ec.europa.eu/environment/waste/weee/index_en.htm

WARRANTY

We trust in the quality of our products. All fosera battery boxes, PV modules and lighting products come with 3 years warranty. During this period, we guarantee that our products are free from defects in material or workman-ship.

Please contact your dealer or local fosera sales agent if you experience any problems with the product. Your local dealer will then assess the defect and decide whether the product can be repaired or has to be replaced. If the warranty period is expired, Fosera will charge service and material fees to continue to provide repairs and other customer support. Fosera shall not be responsible for any consequential damage or damage that exceeds the value of the product. A warranty repair does not extend the warranty period.

Appliances, like radio, TV or fans are not included in the overall fosera warranty for electronic components and are covered by a one-year warranty.

The warranty becomes invalid if the device is used other than intended by the manufacturer. This warranty does not cover failures caused by wrong installation or set up or unusual use. The warranty is also void in case of repairs by any unauthorized or untrained person.

WARRANTY CARD

Name of the product:

Date and place of purchase:

Name and contact of local retailer:

For support please contact your local retailer or our headquarters via service@fosera.com

CONTACT

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