

FOX ESS EC & EQ SERIES BATTERY EXPANSION GUIDE

Adding slave modules to an existing battery stack



SIMPLE, VISUAL, STEP BY STEP

16 clear steps

Shut down, expand the stack, restart and check the system.

ALL FOX EC & EQ BATTERIES

Before you begin: both old and new batteries must be at 45-55% SoC.

Photos show an EC2900 example; the same overall process applies across the EC and EQ ranges.

READ THIS FIRST

Before you start

A few quick checks will prevent most problems.

1

CHECK COMPATIBILITY

The new module must be approved for the existing EC or EQ stack and match the required version and connector type.

2

SET THE SoC

The existing stack and every new battery module must each be between 45% and 55% SoC.

3

GET READY

Have suitable gloves, a standard screwdriver, a small flat-blade screwdriver and help lifting the modules.



Installer responsibility

This guide is for general reference only. The installer is responsible for checking compatibility, following the current Fox ESS instructions and completing all work safely and correctly. To the fullest extent permitted by law, The Eco Supermarket accepts no liability for errors, damage, loss or injury resulting from work carried out using this guide. If anything is unclear, stop and seek help from a suitably qualified professional.

1-4

SHUT DOWN

5-12

ADD BATTERY

13-16

RESTART

FINAL

CHECK

Photographs show an EC2900 system. Component positions and DIP behaviour can vary across EC and EQ models.

STEP 1

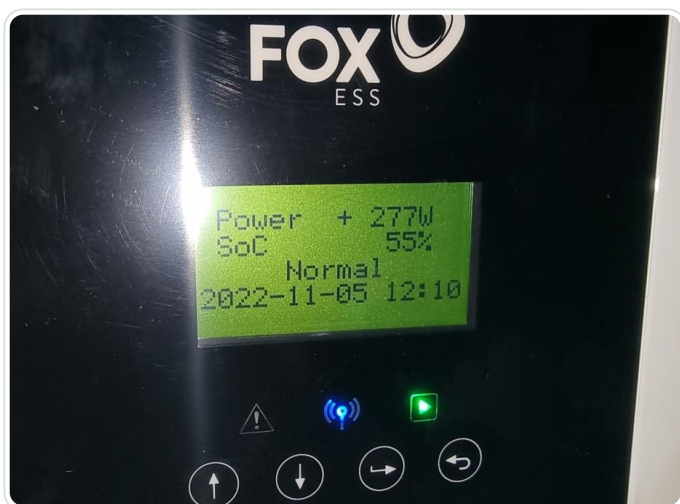
Stop the inverter

Use the inverter display to stop the system before switching off any isolators.

- 1 Go to Settings → Start/Stop.
The photographed system uses password 0000.

- 2 Select Stop and confirm the request.

- 3 Check the main screen shows 0 W and Off Mode.



Open Settings / Start-Stop



Select Stop



Confirm the stop request



Confirm Off Mode and 0 W

STEPS 2-4

Isolate the system

Switch off every relevant source before touching the battery connections.

2 Turn every PV DC isolator to OFF.

3 Turn the AC isolator(s) and breaker OFF.

4 Press battery POWER, then set its DC breaker OFF.

! Prove safe isolation

Do not disconnect anything until the system has been safely isolated.



PV DC isolator: OFF



AC breaker: OFF



AC isolator: OFF



Battery power and DC breaker: OFF

STEPS 5-7

Disconnect and remove the master

Record the cable positions first and never force a connector.

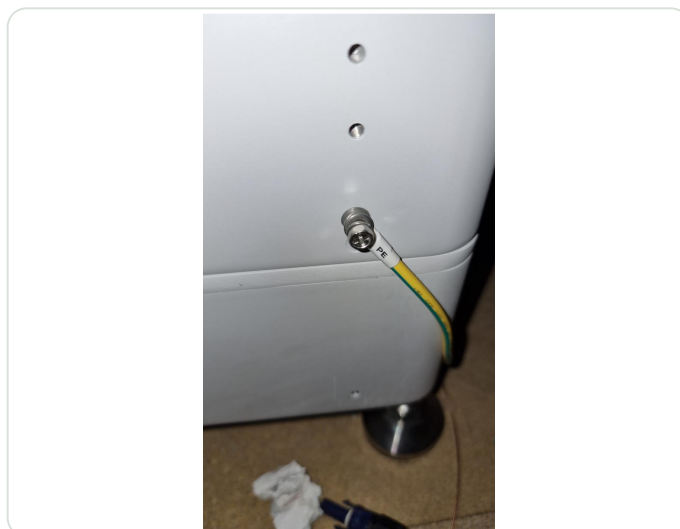
5 Unplug both DC cables and CAN, then remove the earth lead.

6 Remove the two master retaining screws.

7 Lift the master clear and place it safely aside.



Disconnect the DC and CAN cables



Remove the protective earth lead



Remove the master retaining screws



Lift off the master module

STEPS 8-10

Add the new module(s)

The new slave batteries sit above the existing slaves and below the master.

8 Align the connectors and lower each new slave gently into place.

9 Return the master module to the top of the stack.

10 Refit all screws and reconnect the master earth lead.



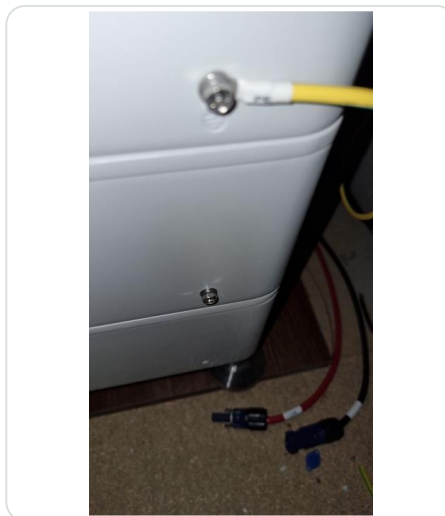
Existing slave stack



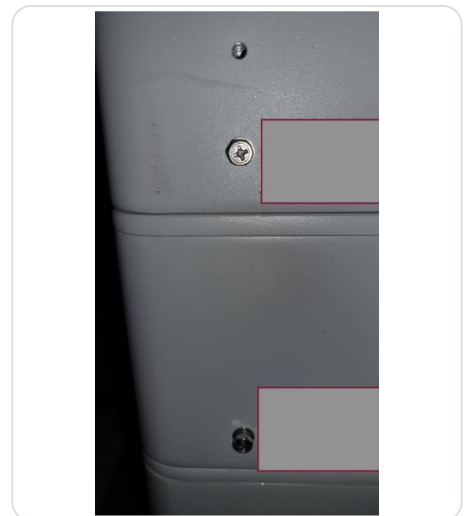
New slave added



Master back on top



Earth reconnected



Retaining screws fitted

STEP 11

Set the DIP switch

The master must know how many slave batteries are fitted.

For the photographed EC system, the DIP position is one less than the number of slave batteries: one slave uses position 0, two slaves use position 1, and so on.



Before: position 0 for one slave



After: position 1 for two slaves

EC LEGACY DIP MAPPING

0	1	2	3	4	5
1 slave	2 slaves	3 slaves	4 slaves	5 slaves	6 slaves
DIP POSITION	DIP POSITION	DIP POSITION	DIP POSITION	DIP POSITION	DIP POSITION

i Check your exact model

Some newer EC and EQ batteries can detect the stack automatically or use different settings. If the master, DIP switch or connectors differ from these photographs, follow the instructions for that battery model.

STEP 12

Reconnect the master

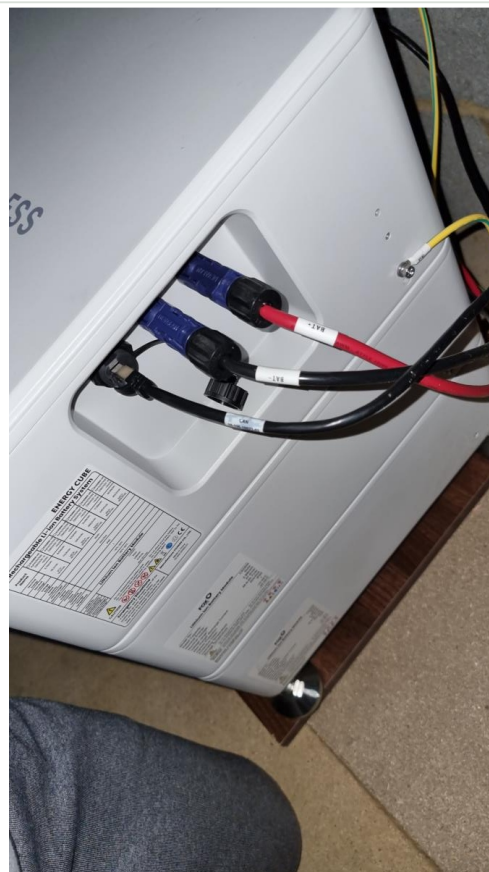
Check every connection before restoring power.

1 Reconnect the protective earth lead.

2 Reconnect the positive and negative DC plugs.

3 Reconnect the CAN communication cable.

4 Check every connector is fully seated and secure.



All master connections restored

✓ Quick check

Stack stable • all screws fitted • earth secure • DC and CAN fully connected • correct DIP setting

STEPS 13-15

Restore power

Switch the system back on in the order shown below.

- 13** Turn the PV DC isolator(s) ON.

- 14** Turn the AC breaker and isolator(s) ON.

- 15** Turn the battery DC breaker ON, then press POWER.



PV DC isolator: ON



AC breaker: ON



AC isolator: ON



Additional isolator: ON



Battery power: ON

STEP 16

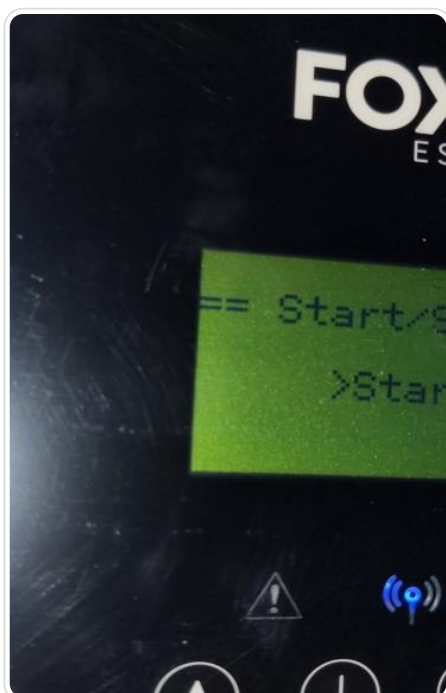
Start the inverter

Once the batteries are showing normal green status, start the inverter.

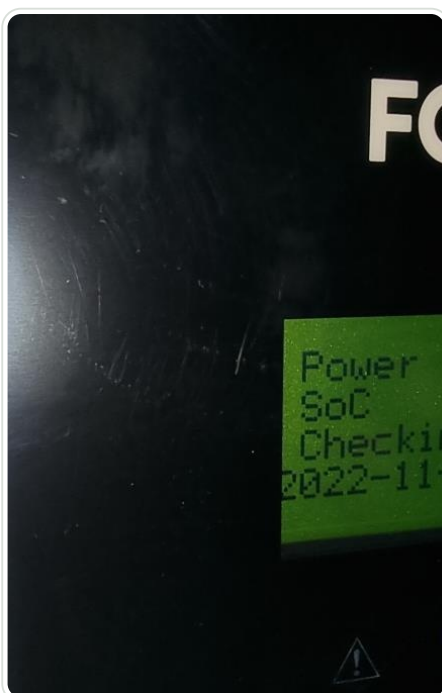
1 Open Settings → Start/Stop and select Start.

2 Wait while the inverter displays Checking.

3 Confirm the inverter reaches Normal status.



Select Start



Wait for Checking



Confirm Normal status

! If a red warning remains

Switch the system off safely and recheck the DIP setting, DC connectors, CAN cable and module compatibility. Do not keep restarting the system. If the warning remains, contact the installer or Fox ESS technical support with the error code.

FINISHED

Check the expanded system

The upgrade is complete when all four checks below are satisfied.



Inverter status: Normal



All battery modules:
green



No active warnings



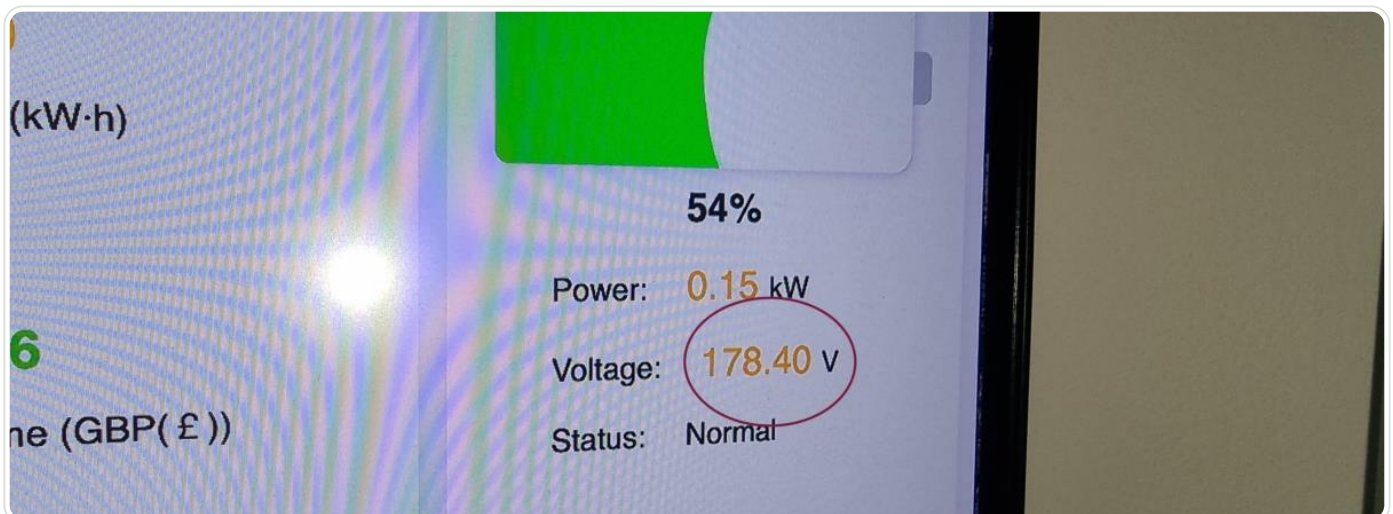
Monitoring shows the
expanded stack



Battery modules showing green



Completed expanded battery stack



Monitoring reflects the updated battery voltage / capacity



Expansion complete

Keep this checklist with the system records.

FINAL CHECKLIST

- ☐ Compatible EC / EQ module fitted
- ☐ All screws and the earth lead secured
- ☐ DIP setting / automatic detection confirmed
- ☐ DC and CAN connections checked
- ☐ All batteries and inverter showing normal status
- ☐ Monitoring updated with no active errors

NEED HELP?

Speak to The Eco Supermarket

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Excellent 4.9 on Trustpilot

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Original photographic walkthrough: Prasanna Bhasuru. Simplified and presented by The Eco Supermarket. This guide is for general reference and does not replace the current Fox ESS instructions. Installation remains the responsibility of the installer. If you are unsure at any stage, stop and seek help from a suitably qualified professional.

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