

enistic



Portable Energy Audit Kit (“PEAK”) Instruction Manual

Version 1.1

D.K.Mattocks

March 2014

Enistic Limited

T 0844 875 1600 | W www.enistic.com | E info@enistic.com

Contents

Step 1 – Plug in your sensors BEFORE powering the unit.....	3
Step 2 – Wait 2 minutes for the display screen to appear	4
Step 3 – Configure your clamps	5
Unused channels should be turned off.....	5
Clamp sizes should be selected.....	5
Step 4 – Check that the GPRS communications are working.....	6
Step 5 – Configure your PEAK with Energy Manager Online.	7
Create an account	7
Enable the software subscription	7
Register your controller	7
Name each channel.....	7
Absolute maximum electrical ratings	8
Physical specifications.....	8
Metrology.....	8



IMPORTANT WARNING

THIS EQUIPMENT IS DESIGNED FOR PROFESSIONAL USE ONLY.

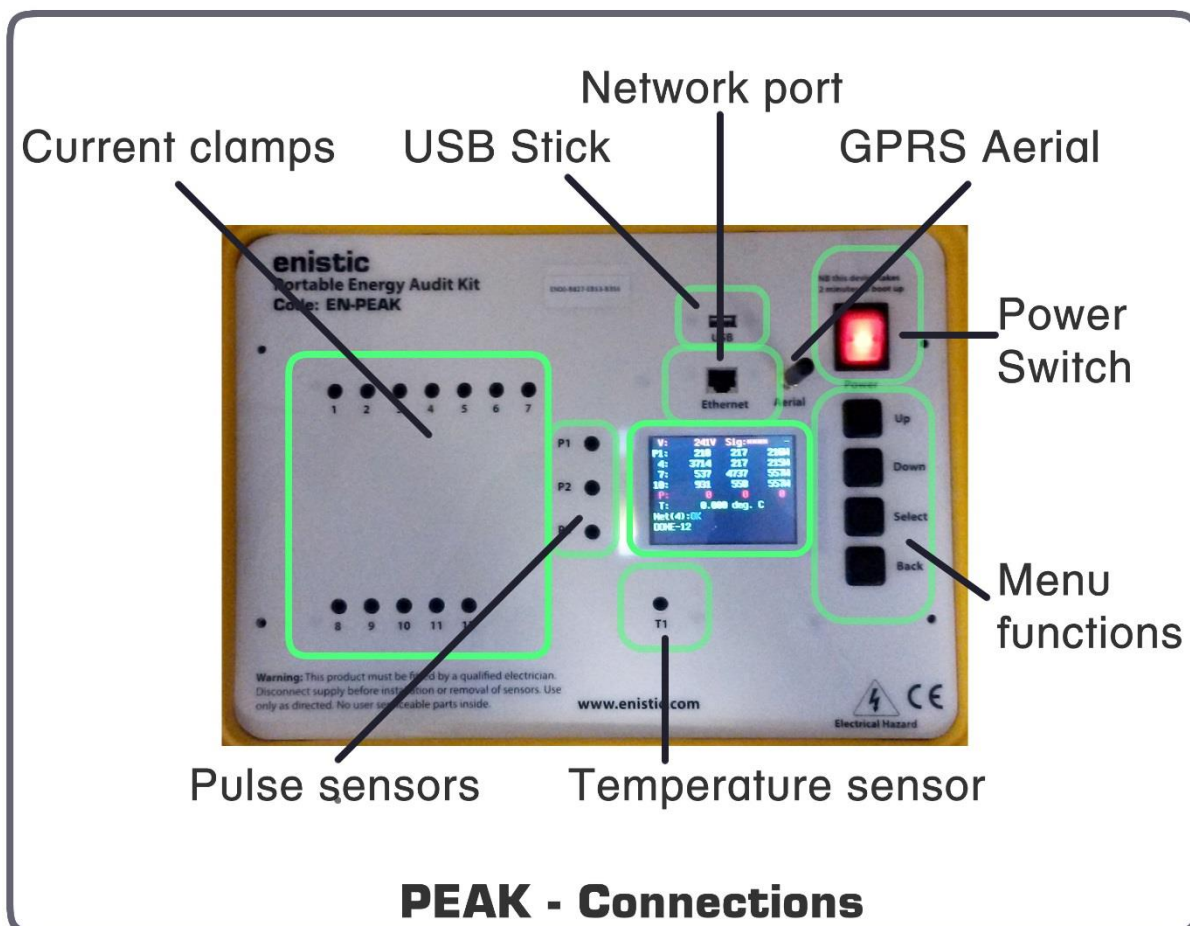
THIS EQUIPMENT MUST BE FITTED BY A QUALIFIED ELECTRICIAN.

THIS EQUIPMENT USES HIGH VOLTAGES AND CAN CAUSE SERIOUS HARM OR DEATH IF NOT FITTED IN ACCORDANCE WITH INDUSTRY STANDARD PRACTICES OR USED IN ACCORDANCE TO THE EQUIPMENT'S INSTRUCTIONS.

Step 1 – Plug in your sensors BEFORE powering the unit

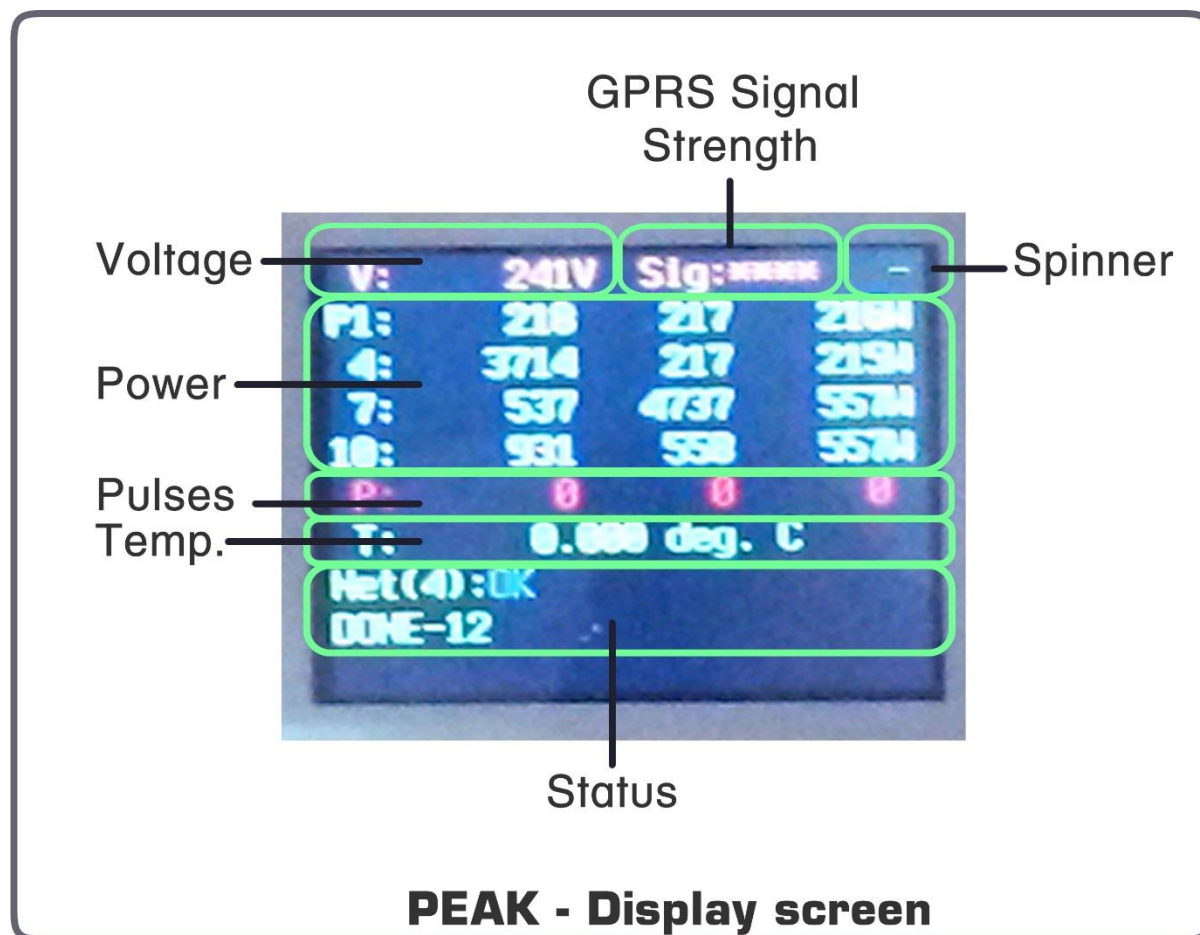
Before you power up the PEAK, plug in your clamps, USB stick (if required) and temperature sensor (if required).

NB DO NOT plug in or unplug the clamps or sensors whilst the PEAK is powered up.



Step 2 – Wait 2 minutes for the display screen to appear

Plug in your power cable and wait 2 minutes whilst it powers up. Once powered the following screen appears and a spinning line appears in the top right hand corner.



Item	Description	Units
Voltage	The voltage of the power coming into the unit from the kettle plug connector.	V
GPRS Signal Strength	The strength of the cellular signal	
Spinner	A spinning line indicating that the unit is operating	
Power	The power of each channel.	If in 1 phase mode: W If in 3 phase mode: VA
Pulses	The number of pulses on each pulse input	
Temp.	The temperature of the temperature probe	Degrees C
Status	The operational status of the PEAK	

Step 3 – Configure your clamps

Use the menu functions and configure each of the channels for your clamps.

Unused channels should be turned off

Menu -> Clamps -> [Choose which channel] -> Turn on or off -> Off

Note that due to manufacture tolerances, channels that are not connected to clamps may read small amounts of spurious power. To prevent this, turn them off.

Clamp sizes should be selected

Menu -> Clamps -> [Choose which channel] -> Clamp size -> [Select which clamp you are using]

Step 4 – Check that the GPRS communications are working

On the Status screen, you should see the words:

“Net: OK”

or

“Net(4): OK”

If you see this, then a reading has been sent to our server and an acknowledgement received back – i.e. everything is working OK.

It may take 2-3 minutes for this message to appear.

If you do not see this message after 2-3 minutes, please check the GPRS signal strength and if necessary fit the larger GPRS aerial.

Step 5 – Configure your PEAK with Energy Manager Online.

Create an account

To do this, go to www.enistic.com and either log into your existing account or create a new account.

Enable the software subscription

Enable your subscription by clicking on Settings->Subscriptions and selecting “PEAK”. Fill in your credit card details where required.

Register your controller

Once in your account, go to Settings->Controllers

Type in the serial number of your PEAK

Then click on “Live view”

Each of your PEAK’s measuring channels should now be visible.

Name each channel

One by one, select each channel and name it as required.

Absolute maximum electrical ratings

Item	Minimum	Typical	Maximum	Units
Voltage	105	230	250	V
Current per channel	0		3000	A
Pulse input voltage	2.7	3.3	4.0	V

Physical specifications

Item	Minimum	Typical	Maximum	Units
Weight		3,350		g
Dimensions		36x30x18		cm
Storage temperature	-10	15	50	Degrees C
Operating temperature	0	15	40	Degrees C

Metrology

Item	Minimum	Typical	Maximum	Units
Power measurement accuracy*	1	2	5	% inaccurate
I(base)**			10	%
I(max)**			90	%
Reading interval	5	8	10	Seconds
Reporting interval		60		Seconds
Voltage measurement accuracy		1	2	% inaccurate
Pulse measurement accuracy	0.0	0.0	1.0	% inaccurate
Temperature range	-50	20	120	Degrees C
Power factor	0.0	0.97	1.0	

* Assuming power factor of 1.0

** This means that whilst the PEAK will record values below 10% or above 90% of the rated current of any clamp the accuracy is not guaranteed under I(base) or above I(max)