Introduction

Thank you for making the decision to reduce your energy usage (and your energy bills). It’s not all about cutting use, homes need energy to function, but identifying waste and cutting it, is one way of helping the planet by reducing our emissions of greenhouse gases.

Current Cost is the leading global provider of real time in-home energy monitors. As an innovative manufacturer we have successfully distributed over 1,800,000 products throughout the globe.

The Current Cost ethos is to empower consumers with real time information that helps them identify energy usage and its cost, enabling them to change energy awareness and habits. We don’t want you to stop using... just wasting!

The beauty of the Current Cost energy monitor is that it shows how much energy you’re using right now. The EnviR also illustrates how much it is going to cost you everyday and every month. It’s easy; by making small changes you could receive some big savings.

Keep your EnviR monitor somewhere easy to observe and you’ll soon realise how simple it is to save money, turn your appliances off standby or switch the light off when you leave the room and see how much this changes the reading. Check the display before you leave the house or go to bed... it’s amazing how much energy you waste without realising.
Before you get started – Safety and care of your EnviR monitor

It's important you observe some simple precautions before using the product.

The EnviR monitor does not require you to carry out any electrical wiring. However, the transmitter has to be installed at the meter near the electrical supply to your property.

If you have any doubt about how to install it safely do not attempt to install it yourself, but consult a qualified electrician.

Similarly, if you notice anything unusual about your electricity supply, such as loose wires, exposed cabling, burn marks or holes in the insulating materials or damage to your meter then STOP immediately and consult a qualified electrician.

[X] Do not attempt to repair or service any part of the EnviR monitor. Contact our customer service department for assistance.

[X] Do not immerse the product in water, or any other liquids.

[X] Do not expose the product to heat, flame, steamy conditions or extreme cold.

[X] Do not open the equipment or touch any of its electronic circuitry.

[X] Do not hit, strike or drop the equipment. If the display gets broken take special care not to touch the liquid crystals.

[X] Do not use this product for any purpose other than for which it was intended.
Setting up your EnviR – CT Jaw Monitor

1) The display power adapter should be connected to the round socket found in the base of the display unit.
2) Plug the display power adapter into a convenient wall socket.
3) The ‘Energy Now’ value on the display will now show dashes. The EnviR energy monitor should be left powered on at all times to read energy correctly and run its clock.
4) Remove the plastic battery tab from the back of the black transmitter unit; the transmitter will now be activated.
5) If the display shows ‘0 Watts’ the display has already been paired and is ready to use. If it shows dashes the display and transmitter need pairing. It is good practice to uniquely pair your display to avoid cross communication with a neighbours monitor.

Pairing the EnviR display and transmitter

1) Place the transmitter and the display in the same room.
2) On the front locate the recessed tuning button in the centre of the transmitter.
3) Using a used match, pen or similar, push and hold the recessed tuning button or until the LED on the transmitter has flashed **ONCE** only.
4) Upon releasing, the red LED on the transmitter will rapidly flash for a minute. If it doesn’t, please try again.
5) Whilst the LED on the transmitter is flashing, press and hold the DOWN button on the display until the LED on the display flashes.
6) When you release the button, the screen will show a tuning signal indicating the display is tuning to the transmitter. When your monitor and transmitter are tuned, the middle right of the display will show ‘240’ (indicating UK domestic voltage).
7) Once the process is completed, your display will clear and then ‘0 watts’ will appear. This usually takes 1 to 2 minutes. The aerial icon will appear indicating pairing has been successful.

Sensor Type

The Current Cost EnviR now comes with a choice of 2 sensor types:

1) **CT Jaw**

How it works:
The EnviR monitor shows real time information; a wireless signal is sent every six seconds from a transmitter attached via a CT jaw to your meter and then to the display. This enables you to view your energy consumption easily, showing changes in power consumption when different electrical appliances are used.

Contents of your box

- EnviR Display
- S² transmitter with CT Jaw
- Power Adapter for Display
- Instruction manual
- 1 year Warranty (option to extend online)

2) **OptiSmart Reader**

How it works:
The EnviR monitor shows real time information; a wireless signal is sent every six seconds from a transmitter attached via an optical reader to your meter and then to the display. This enables you to view your energy consumption with 100% accuracy, easily showing changes in power consumption when different appliances are used.

Contents of your box

- EnviR Display
- C² White OptiSmart transmitter
- OptiSmart Reader
- Power Adapter for Display
- Instruction manual
- 1 year Warranty (option to extend online)

For installation instructions please refer to pages 7 - 10 and then 13 - 16

For installation instructions please refer to pages 11 - 16
‘Sensible’ Software – Voltage adjustment

The new ‘Sensible’ software found in the EnviR transmitter allows you to set your known voltage.

The default value shown on the display of 240 is correct for almost all homes in the UK and you do not
normally need to change it. If you do wish to change it, for example you have a 220V private electricity
supply, undertake the following steps:

1) Follow the steps 1 through to 6 for ‘Pairing the EnviR display and transmitter.’
2) When you release the button the screen will show a tuning signal indicating the display is tuning to
   the transmitter. When your monitor and transmitter are tuning, the middle right of the display will show
   ‘240’ (indicating UK domestic voltage).
3) At this point if you wish to adjust your voltage setting please undertake the following:
   (i) Press and hold the recessed tuning button on the transmitter for 3 seconds and then
       release.
   (ii) The display will now have changed and will indicate ‘250’.
   (iii) Repeat this process to select your known voltage (the range is from 200 to 260V
       starting at 240V).
   (iv) Each press cycles the voltage shown on the display, so press as many times as you need
       to reach the voltage value you want to use – for example if you wished to set 200V you
       will need to repeat steps (i) and (ii) three times and the display will show 250, 260 and
       then 200.
4) Once completed, your display will clear and then ‘0 watts’ will appear. This usually takes 1 to 2
   minutes. The aerial icon will appear indicating pairing has been successful.

*Please note that the voltage shown on the display is used for the EnviRs internal calculations, this has
nothing to do with the display power adapter. The power adapter is designed to work in all UK homes
with no adjustment.

‘Sensible’ Software – Pairing additional C² enabled displays to the transmitter

The new ‘Sensible’ software found in the EnviR transmitter allows you to set up additional C²
enabled displays within the home. To pair additional displays please undertake the following steps:

1) Follow steps 1 and 2 for ‘Pairing the EnviR display and transmitter.’
2) Using a used match, pen or similar, push and hold the recessed tuning button until the LED
   on the transmitter has flashed exactly TWICE.
3) Upon releasing, the red LED on the transmitter will rapidly flash for a minute (if it doesn’t, please
   try again) indicating that the transmitter is now ready to pair with any additional C² enabled displays,
   at the same time as remaining paired with the existing EnviR display.
4) Whilst the LED on the transmitter is flashing, at the additional display(s) press and hold the
   DOWN button on the display until the LED on the display flashes.
5) When you release the button on the additional display(s) the screen will show a tuning signal
   indicating the display(s) is tuning to the transmitter.
6) Once tuning is completed, all displays will clear and then ‘0 watts’ will appear. This usually takes
   1 to 2 minutes. The aerial icon will appear indicating pairing has been successful.

Fitting the transmitter to your meter

1) Now that the transmitter and display are paired plug the CT jaw into the middle socket on the
   underside of the transmitter. Take the black transmitter with its attached CT jaw to your mains meter.

   This is often on an outside wall or in your garage, utility room or porch. If you live in a flat, it can often be
   found outside your front door in the communal staircase. The EnviR display unit may be left in any room
   you wish to see it, for example the hall or kitchen.

   TIP: If you have one electricity meter, fit the sensor jaw as described below. If you have two electricity
   meters, choose the one, which supplies your household electricity, not the one which supplies your night
   storage heaters. If you do have a second meter you will need a second CT jaw to monitor this one.

2) Find the thick round wires connected to the electricity meter. The CT jaw should be placed around
   the live cable which runs from your meter to your fuse box, this is usually the fourth cable from the left.

   IMPORTANT: When looking at the cables leaving the bottom of the meter, they should be fully insulated
   and you should not be able to see any of the cable conductor or core. If you do see the live conductor,
   do not touch the cable and consult a qualified electrical installer for advice.

3) Choose a place on the cables length where there is some room around and behind it. Encircle the
   cable with the jaw of the CT. Please note, it should not be ‘clamped’ onto the cable. It is safe to ease
   the cable forwards to make room, provided this is done gently.

4) Place the transmitter in any suitable dry location, as high as possible where it will not fall within the
   length of its cable. As soon as this is done, the EnviR display will start to work. No electrical damage
   can occur to either the electrical installation or the transmitter by choosing the wrong cable.

   IMPORTANT: When looking at the cables leaving the bottom of the meter, they should be fully insulated
   and you should not be able to see any of the cable conductor or core. If you do see the live conductor,
   do not touch the cable and consult a qualified electrical installer for advice.
Understanding the EnviR display

When your EnviR display is properly installed you should see a screen similar to the image below:

1) Unpack the product. Plug the display screen into its mains adapter, and plug the mains adapter into a wall outlet. The display screen will start working and probably show dashes instead of numbers.

2) Plug the wire from the OptiSmart reader into the white OptiSmart transmitter box. Rotate the aerial on the white OptiSmart transmitter to the upright position.

3) Remove the plastic battery tab from the back of the white OptiSmart transmitter unit; the transmitter will now be activated.

4) The Sensor’s red light will start to flash every 6 seconds.

5) For the next step, you will need some information about your electricity meter. On its faceplate look for a label that says ‘xxxx imp/kWh’ and note the number.

Pairing the EnviR display and transmitter – electronic meter ‘appliance 9’ screen

1) Place the white OptiSmart transmitter and the display screen in the same room.

2) Using a used match, pen or similar, push and hold the small button in the hole on the front until the LED on the white OptiSmart transmitter has flashed ONCE, then release.

3) The LED will start to flash faster for about a minute.

4) At the display, use the UP or DOWN buttons to reach the ‘appliance 9’ screen. Now press and hold the DOWN button until the display’s red LED flashes, then release the button. The display screen 9 will pair to the transmitter. This will show 1000 (default imp/kWh).

5) If the number is different from the imp/kWh on the electricity meter, use a used match, pen or similar to press and release the small button in the hole on the sensor so that the number changes. (The options are 100, 500, 600, 800, 1000, 1250, 1600, 3200, 10000).

After about a minute, the transmitters LED will revert to flashing once every 6 seconds. The display’s appliance 9 screen will now say ‘DATA’. If the transmitter fast flashing stops before you are ready, do the Electronic Meter pairing again from Step 1.

Display/Sensor pairing 2 – Main screen (Energy Now Data)

1) Place the white OptiSmart transmitter and the display screen in the same room.

2) Using a used match, pen or similar, push and hold the small button in the hole on the front until the LED on the white OptiSmart transmitter has flashed three times, then release.

3) The LED will start to flash faster for about a minute.

4) At the display, use the UP or DOWN buttons to reach the main screen (this is the screen that shows Temperature and Time). Now press and hold the DOWN button until the display’s red LED flashes, then release the button. The main display screen will pair to the transmitter, clear and then revert to normal operation.

5) After about a minute, the sensor LED will revert to flashing once every 6 seconds. The display’s main screen will now show ‘0 Watts’. If the transmitter’s fast flashing stops before you are ready; start from the beginning again.
At the property’s electricity meter

1) Take the transmitter and its OptiSmart reader to the property’s electricity meter. On the electricity meter, locate the flashing red LED labeled ‘kWh’. Ignore any other flashing or steady LED’s. Clean the area thoroughly around the correct flashing LED using a dry paper tissue.

2) Take the supplied adhesive base and remove the paper backing. Carefully align the hole in the circle so that the flashing LED shines clearly through the hole, and stick the base to the electricity meter. When you are happy that it is aligned, apply firm pressure to fix the adhesive.

3) Put the transmitter in a convenient place clear of metal surfaces, where its radio antenna can work effectively.

4) Take the OptiSmart reader, which is plugged into the transmitter, and carefully place it over the base. When the alignment is correct, the LED inside the optical reader will flash at the same time as the one on the electricity meter.

When your EnviR display is properly installed you should see a screen similar to the image below:

The following information applies to both sensor types:

Setting the clock

To set the clock on the EnviR display

1) Press and hold the OK button until the LED flashes. (Approx. three seconds)
2) The screen will clear and the clock hours will flash.
3) Use the UP and DOWN buttons to alter the hours. (24-hour format)
4) Once the correct hour has been selected press the OK button.
5) The minutes will now flash, use the UP and DOWN button to set the correct minutes.
6) Push the OK button, the display will return to normal operation.

Adjusting your electricity price

The EnviR display has been programmed with a default p/kWh unit rate. If you wish to change the unit rate please follow these steps:

1) Push and hold the UP button on the EnviR display until the LED flashes then release.
2) Push the UP or DOWN button to change from pounds/pence to euros/cents.
3) Press the OK button to confirm.
4) The price will then start flashing (i.e. c/p/kWh). Push the UP or DOWN button to adjust the pence/cents price of the electricity.
5) Press the OK button to confirm.
6) Repeat this process to adjust the fraction of a pence / cents, i.e. 8.07 p/c
7) Press the OK button to confirm and the EnviR display will resume normal operation.

Setting an additional rate

There are several electricity tariffs available, if you pay different kWh unit rates for electricity consumed, the EnviR display can be set up as follows.

1) Press and hold the UP and DOWN buttons together until the LED flashes and release.
2) Using the UP and DOWN buttons you can now select your low rate unit cost.
3) Press the OK button to confirm when the correct price has been set – if you don’t change the cost, you will not see the time section.
4) You will then see the clock flashing. Using the UP and DOWN buttons you can now set the time that your low rate starts. Press the OK button to confirm when the time has been set.
5) Using the UP and DOWN buttons you can set the time your normal rate starts. Press the OK button to confirm when the time has been set.
6) Normal operation will now resume.
IAMs – Individual Appliance Monitor

In-home, real-time individual appliance monitors are a great addition to the Current Cost EnviR energy monitor. The IAM plug-in device transmits energy usage data of specific appliances to the display (the amount of Watts consumed and the associated cost). The EnviR can record up to nine IAMs so you can discover the cost and usage of your electrical appliances in the home.

PC Connectivity

Using the Current Cost RJ45 to USB Data Cable, you can download data from your EnviR monitor to your PC.

Current Cost HomeSmart Software ** Exclusive to all EnviR users**

This free software has been developed with the first time user in mind. Easy to set up and use, the HomeSmart software allows you to track your energy data day and night, helping to understand usage patterns and more importantly identify where wastage is occurring. When used with the Current Cost Data Cable you can download your historical data as often as you wish. It’s easy to get started, simply email us at smartssoftware@currentcost.com and we will send you the link.

NetSmart

The Current Cost NetSmart device, allows you to send real time energy usage data to the Current Cost Web Dashboard by connecting your monitor to your broadband connection. With this device you no longer have to have your Current Cost display connected to your PC or laptop to send real time data information.

Current Cost Web Dashboard

The Current Cost Web Dashboard is an online service that receives data from ENVI and EnviR models. The Dashboard allows users to remotely view and interrogate their energy usage via their PC, laptop or Smart phone, wherever they might be in the world. As well as having the ability to view the data from up to 9 additional channels, customers can also share energy usage on social media platforms such as Facebook and Twitter.

**Customers will require a NetSmart device to access their data on the Current Cost Web Dashboard.

Fascias

Accessorise your Current Cost EnviR with a range of changeable fascias. The EnviR can now complement any room with a range of colours. All accessories for the EnviR are available at www.currentcost.com

C² or S² Technology

Wherever you see the C² or S² logo, you know it’s a member of a family of products that enables you to manage your energy consumption.

Look out for the logo on other Current Cost products as well as our partner organisations. When you buy a C² or S² product you can feel safe in the knowledge that it is of the highest standard and that it will communicate with your other C² or S² equipment.
Technical Information

Monitor Model: EnviR
Product Size: 140mm x 170mm (base) x 105mm
Receiver: 433MHz SRD band
Sensor Coding Recognition: 10 channels (digital and analogue reception)
Subordinate Services: 24hr Clock / °C / PC Connectivity. All relevant CE approvals

Manufactured in China for Current Cost Ltd.

CE Approvals:

(1) 15.105 statement
This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
• Reorient or relocate the receiving antenna. • Increase the separation between the equipment and receiver. • Connect the equipment into an outlet on a circuit different from that to which the receiver is connected. • Consult the dealer or an experienced radio/TV technician for help.

15.19 statement
This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

15.21 statement
changes or modifications not expressly approved by the party responsible for compliance could void the user’s authority to operate the equipment.

How to contact us

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Further information is available at www.currentcost.com