wattson

Contents

What does wattson do?

Congratulations on choosing wattson, your personal energy-saving device. Wattson lets you monitor your electricity consumption, giving you the motivation to use less.

With both numbers and colours, wattson shows you how much electricity your home is using at any given moment. Wattson can also store up to 4 weeks of energy-use history which can be downloaded to your computer and viewed using software available from our website.
www.diykyoto.com/holmes

For such an ingenious device, wattson is really easy to install and even easier to use and the instructions are completely free of techno-babble.

We hope you'll experience your wattson to the full and that you'll find a nice spot for it in your home.

Wattson itself is a very safe product but installing wattson could be dangerous if done incorrectly. Extreme care must be taken when working with electrical equipment as touching exposed electrical wires or components may result in electrocution causing death.

Warning: Never pull on the electricity cables while fitting the clip, watch out for any exposed wiring and if in any doubt consult a qualified electrical installer for advice.

What's in the box?

1 / Sensor clip
The sensor clip measures the amount of electricity coming into your home. It only takes a minute or two to install and requires no expert skills or tools. (For people with three-phase or sun/wind power systems, extra sensors clips can be purchased from www.diykyoto.com).

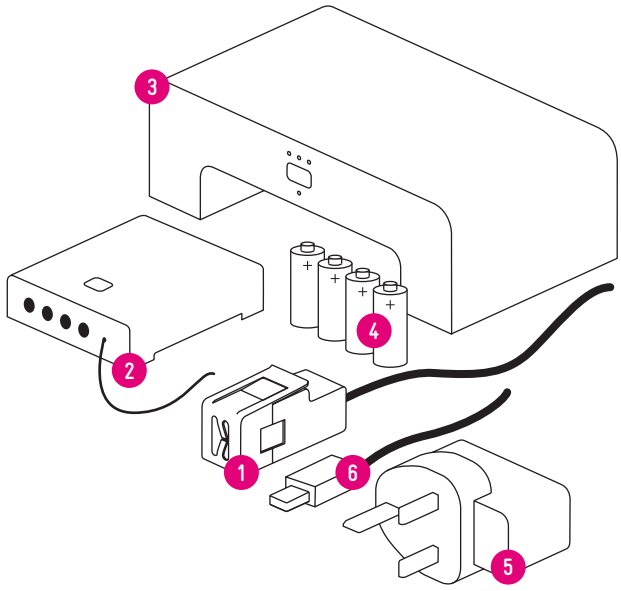
2 / Transmitter
The transmitter takes the signal from the sensor clip, converts it to a digital signal and sends it wirelessly across your home to the wattson display.

3 / Wattson display unit
The wattson display unit receives data from the transmitter and shows your total electricity usage at any given time in watts, £s, or colour changing light.

4 / Transmitter batteries
We have included 4 AA alkaline batteries that will power the transmitter for up to 6 months.

5 / Display charger
The charger supplies power to the wattson display as well as charging its internal batteries.

6 / The USB lead
The USB lead connects your wattson to your Mac/PC so you can view your energy-use history with our software. (Available for download at www.diykyoto.com/holmes)



HERE ARE MY BITS

How does wattson work?

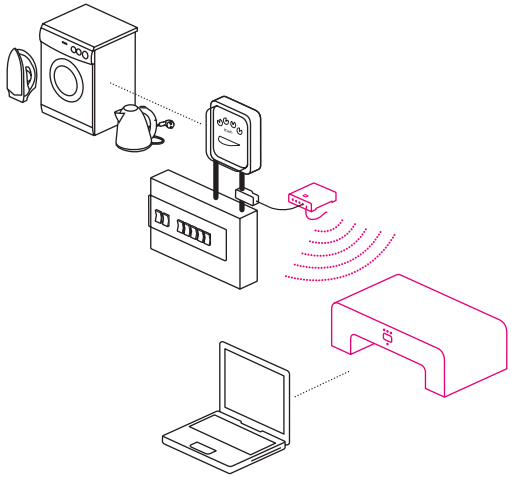
Wattson measures the total amount of electricity being used in your home at any given time, and shows this value on an easy-to-read display.

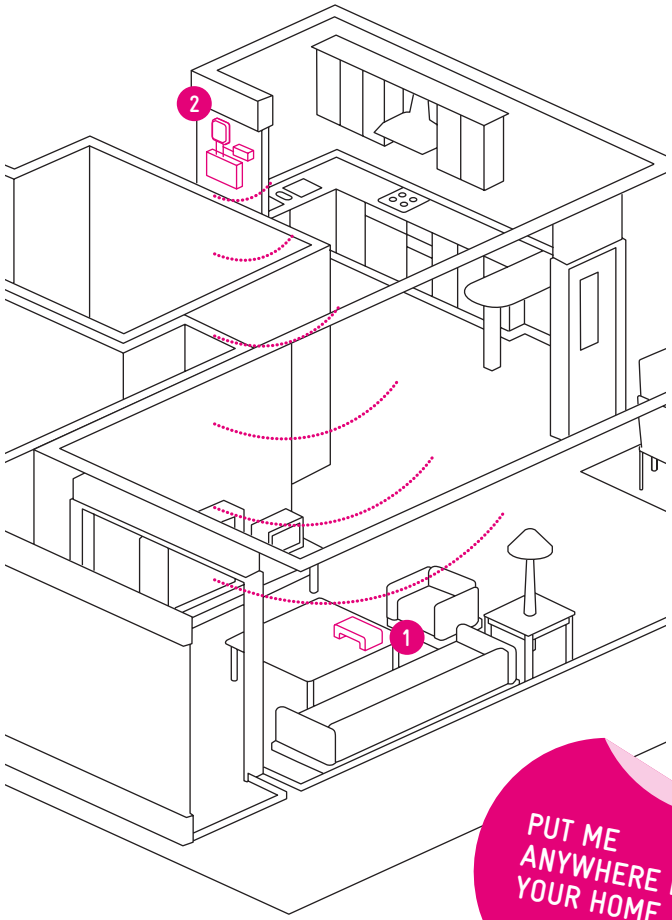
A home's electrical system is made up of several circuits, such as ring mains, lighting circuit, cooker circuit etc. These circuits are all connected together at the main electricity entry point to your home, through the meter and the fusebox. This is where the sensor clip measures the power entering your home.

The sensor clip is connected to the transmitter which sends the data wirelessly to the wattson display. The display is portable, so can be located anywhere in your home (up to 100 meters away through air, or 30 meters through walls).

The wattson display unit can be positioned anywhere you like in your home **1**, as long as it is within range of the transmitter **2**. We think the best place for it is somewhere in your living room, so you can watch the pulsing coloured lights and keep an eye on your consumption.

Wattson works with any type of UK domestic electricity meter (240V/415V, single or 3 phase).





Installing the sensor and transmitter.

1 / Insert the batteries into the transmitter.
The transmitter takes 4 AA batteries. Make sure the end of the battery marked **+** goes in the end of the tray marked **+**.

2 / Make sure the aerial on the transmitter is extended.

3 / Plug in the sensor lead.
There are 4 sockets on the transmitter. Plug the sensor lead into the one marked (1).

Warning: Do not connect to the socket marked which is reserved for renewable energy systems.

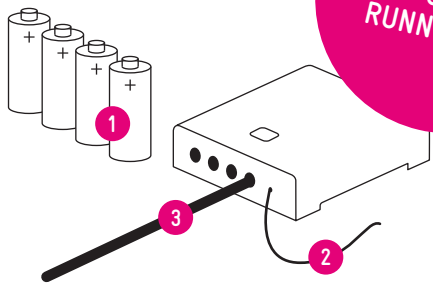
4 / Attach the sensor clip.
The sensor clip can be attached to either of the 2 cables running from the electricity meter to the fusebox. If your meter is a long way from your fusebox (as you might find in a block of flats), connect the clip to the cable where it enters the fusebox, so that the transmitter is as near as possible to where you will be using the wattson display. Simply undo the clip and fit it around the cable. Make sure the clip top is firm and secure in the clip base.

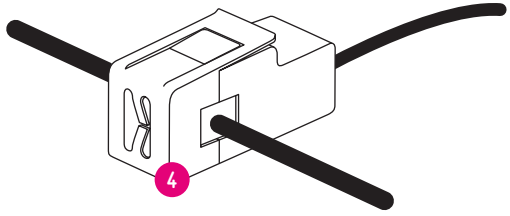
Warning: The leads running from the meter to the fusebox must be accessible for the sensor clip to be fitted - if they are not, please consult a qualified electrician. Further information on www.diykyoto.com

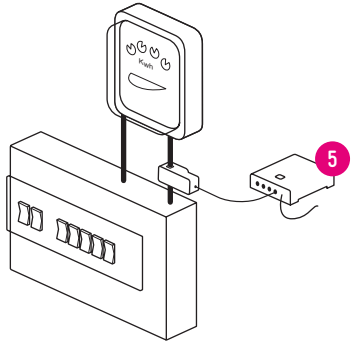
5 / Place the transmitter.
The transmitter can go on the wall next to the meter (or fusebox), or on a nearby shelf if there is one. If your meter is in a meter box, the transmitter may work best if it's outside of it. If the sensor lead does not reach outside, it will work from inside the box but the range may not be as good.

Warning: The transmitter must not be left hanging from its lead as this puts strain on your wiring and may result in the transmitter coming loose or falling. The transmitter must be protected from water and the elements and must not be used outdoors - this will invalidate your warranty.

HOW TO GET UP AND RUNNING

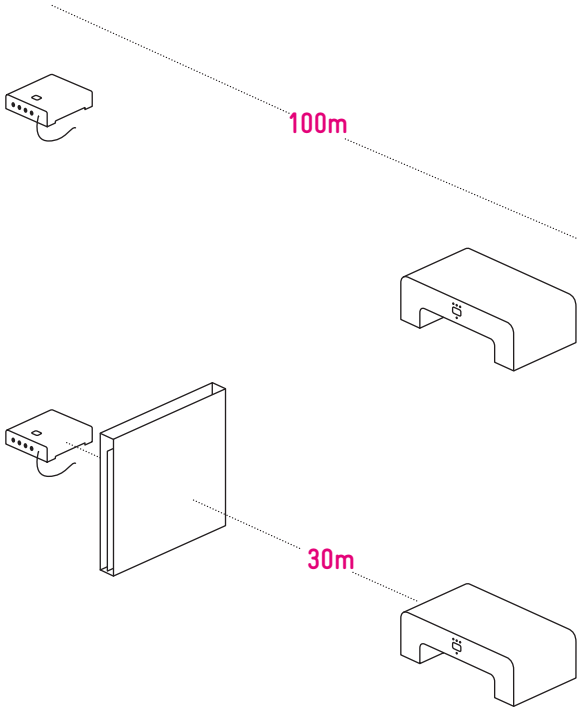






How far does the signal go?

The transmitter uses an AM radio module and can transmit up to 100 meters through air and up to 30 meters through walls, depending on the structure of the building. The range will be shorter in buildings with thicker walls.



What is the transmitter button for?

The button on the transmitter changes the rate at which the transmitter sends new information to the wattson display unit (the update rate). The update rate can be set to low, medium or high. The slower the rate, the less often the information will change on your wattson display but the longer your batteries will last. Using the low update rate could extend the life of your batteries by up to 12 months. The light on the transmitter will indicate the update rate by pulsing in time.

How is the wattson display powered?

Wattson has an internal battery pack that will provide power for between 5 hours and several weeks depending on what mode it is set to (see pages 14-15 for more information).

The power charger supplied will charge the batteries fully in 12 hours. Alternatively it can be used as a permanently connected power supply.

Wattson can also be powered via it's USB lead (though the batteries will not be charged this way).

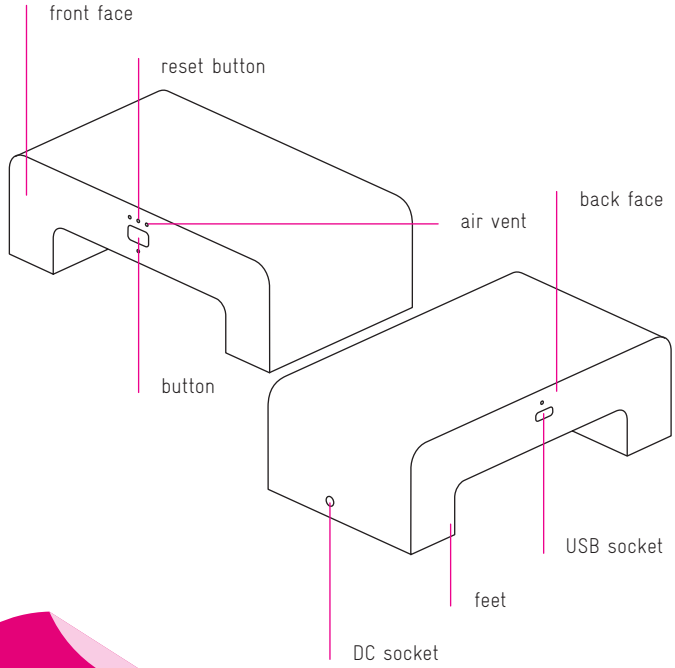
How much power does wattson use?

4-5 watts in modes 1, 2 and 3 and less than 1 watt in low power mode (see page 14-15 for more information).

WHAT'S GOING ON INSIDE

The wattson display unit.

Once you have installed the transmitter and found a nice place for wattson display unit, connect the power charger and switch wattson on by pressing the button once.

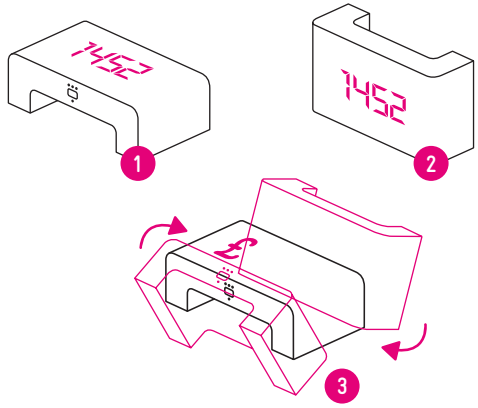


HERE'S HOW I WORK

Display options using tilt technology.

Wattson has been designed to be positoned on its feet **1**, or on either face **2**. Through the magic of tilt technology the digits will always be positioned the correct way up. A backward tilt changes between £s and watts **3**.

By tilting wattson the unit of measurement changes from watts to '£s per year', and a £ sign will appear. This figure indicates how much the electricity would cost if you left everything in the house exactly as it is for a whole year. The figure is calculated using an average tariff that is factory set (currently 13p/kwh). This can be easily updated with the tarriff from your supplier via the wattson software.



Display options using the button.

HOW I COMMUNICATE

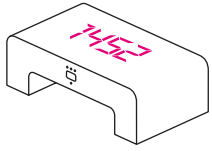
Wattson only has 1 button.

When you first turn wattson on, the display will show the amount of power your home is using in watts. This is the total number of watts your home is consuming at that given moment.

By pressing the button once changes between the 4 main display modes. To turn the display unit off, press and hold the button down for a few seconds.

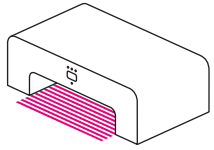
(If renewable energy functionality has been activated via the software then more modes are made available through the pressing of this button. These modes will be listed in the special renewable energy manual).

Mode 1 / Numbers only.



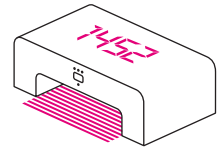
1 / Numerically in watts or £s (how much your electricity would cost if you left everything in the house exaclty as it is for a whole year).

Mode 2 / Colours only.



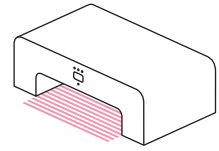
2 / In softly glowing coloured light, which changes from blue, low usage through purple, medium to red, high. This option turns wattson into a rather lovely mood light.

Mode 3 / Colours and numbers.



3 / Both numerical display and coloured light together.

Mode 4 / Night Mode.



4 / This mode turns off the number display and reduces the number of lights that are on as well as their brightness. Wattson continues to receive and store data in this mode.

People measuring their wind/solar generated electricity have a further 3 options, Net Power (Used-Generated), Generated and Total Generated to date. These options on wattson are turned on via the software, available from www.diykyoto.com/holmes

How do I turn wattson off?

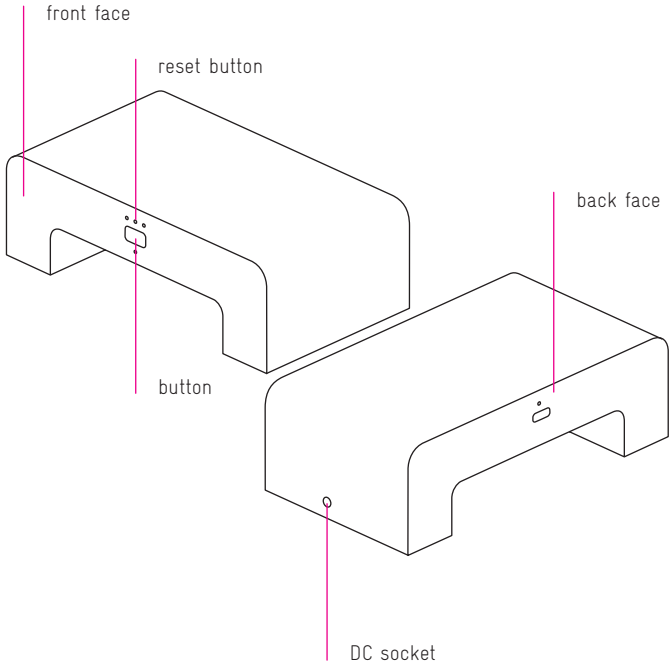
To turn the display unit off, press and hold the button down for a few seconds.

How do I reset wattson?

If you need to reset the display unit for any reason (see Troubleshooting on page 19), insert a pin into the middle air vent hole above the button.

How do I charge wattson?

To charge wattson plug the charger into the DC socket.



Colour display.

The wattson has a lovely system of coloured lights which can change to reflect the amount of electricity being used at the time.

Low Usage.
A pure blue colour with a gentle breathing behaviour indicates that the electricity being used is low, maybe just a light or two.

Mid Usage.
If the colour is showing purple and is a little more active, then maybe the TV or stereo are on.

High Usage.
If the light is bright red and it is very active then a lot of electricity is being used - one or more high power appliances may be on, such as kettles, cookers, heaters or tumble dryers.

Special messages.

Wattson also displays the following messages:

OUT OF RANGE Means there is no communication from the transmitter.

LOW SENSOR BATTERY Means the transmittor battery is running low.

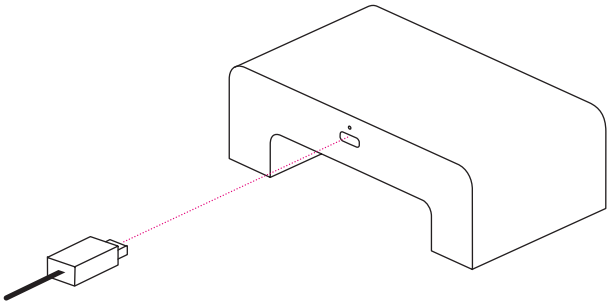
LOW MAIN BATTERY Means the wattson display unit battery is low. Note: when the battery gets within 5 minutes of going dead the wattson will drop into low power mode.

View your energy-use history.

Wattson can store up to 4 weeks of energy-use history which can be uploaded to your computer via the USB lead.

We have developed easy-to-use software (holmes) for your PC/Mac which will allow you to look at the history of your electricity use over a period of days, weeks or months. Please visit the users' page on www.diykyoto.com/holmes to download the software.

The USB lead connects via the socket on wattson's face.

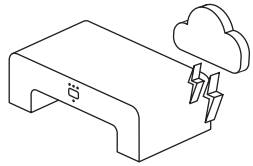


Troubleshooting.

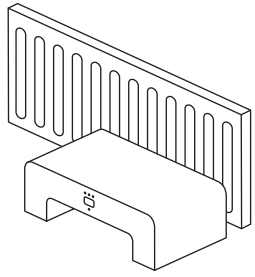
If this	Try this
No lights on your wattson when you switch it on.	**1 /** Make sure the display unit is fully charged. Full battery charge takes around 12 hours but wattson can still display your energy use whilst it charges. **2 /** Reset wattson manually (as described on page 16)
Your wattson displays 'out of range'	If wattson hasn't heard from the transmitter for a little while it will show 'out of range' on its display. The display turns itself off after 30 seconds, but will turn itself on when it hears from the transmitter again. **1 /** Take wattson closer to the transmitter. **2 /** Check the batteries in the transmitter are correctly inserted and if necessary change the batteries.
The sensor clip is chattering.	Try reconnecting the clip. Make sure the clip top is secure in the clip base.
Can't attach the sensor clip to your electricity wire.	If there is not enough space to simply attach the clip to one of the wires please consult a certified electrician. They may be able to fit the clip within your fusebox or distribution unit. DO NOT under any circumstance attempt this yourself.

Safety guide.

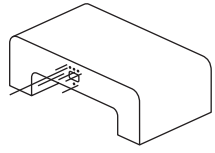
To avoid power surge disruption, disconnect the cable between the sensor clip and transmitter during any electrical storm.



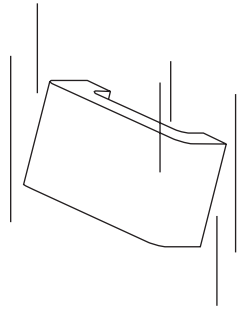
Keep wattson away from heat sources such as radiators, stoves, heaters and any other heat-generating products.



Do not obstruct the holes on wattsons face, doing so can cause overheating and lasting damage.

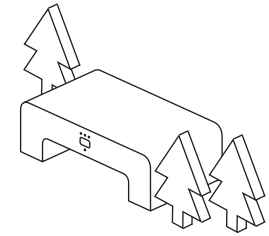


Do not subject your wattson to impact or shock.

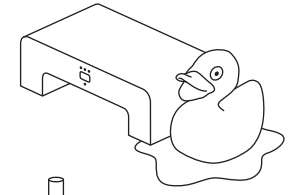


If wattson is misused or you do not follow these instructions DIY Kyoto ltd can not be held responsible for any losses or injury that may result.

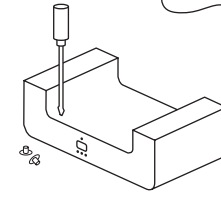
Do not use the sensor clip and transmitter outside. Outside usage of the wattson will invalidate your warranty.



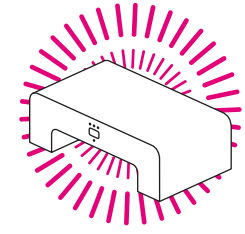
Do not use wattson in or near water or in high moisture areas such as the bathroom.



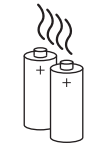
Do not expose or touch the electronic circuitry of your wattson. Doing so may result in electric shock.



Sufferers of epilepsy should be aware that wattson has bright flashing lights that could potentially trigger a seizure.



Do not leave old/used batteries in the transmitter unit for any length of time as they may leak and cause corrosion.



Looking after wattson.

To get the best out of wattson for years to come, please follow these guidelines:

Clean the plastic parts of wattson with a damp cloth only.

The holes are designed to keep wattson cool and should not be blocked or covered. Blocking the vents can cause wattson to overheat and damage the circuitry.

Please contact us or an authorised repair agent if any repairs are needed, and use only the replacement parts we recommend. For details on returns policy please check the customer service section on our website www.diykyoto.com or email customerservice@diykyoyo.com

Please do not attempt to repair the product or modify the circuitry yourself as this will invalidate your warranty.

Find out more information about using your wattson and join the online community of wattsowners at www.diykyoto.com

Warranty

The DIY Kyoto team is confident of the quality of its products. We offer a 1-year warranty, which is in addition to and in no way prejudices your statutory rights. This warranty is valid for products purchased in the UK.

If a DIY Kyoto product becomes defective due to faulty materials, workmanship or lack of conformity within 12 months from the date of purchase, DIY Kyoto guarantee to replace defective parts (except replaceable batteries), repair products subject to fair wear and tear or replace such products to ensure minimum inconvenience to the customer unless:

1 / The product has been used for trade, professional or hire purposes.
2 / The product has been subjected to misuse or neglect, such as installing it outdoors.
3 / The product has sustained damage through foreign objects, substances or accidents.
4 / Repairs have been attempted by persons other than authorised repair agents or DIY Kyoto staff.
5 / The product was used outside of the UK and Ireland or attached to an electricity supply that is not single phase 240V, 50Hz.

DIY Kyoto will not be responsible for indirect, consequential or incidental damages, and reserves the right to change specifications or designs described in this manual without notice or obligation.

To claim this warranty, you will need to submit proof of purchase to the seller or an authorised repair agent. For details on our returns policy please check the customer service section on our website www.diykyoto.com or email customerservice@diykyoto.com

DIY Kyoto declares that this wattson conforms to:
EN 61558-1:1998
EN 61558-2-17:1998

The Restriction of Hazardous Substances (RoHS) Directive
EN 55014 Part 1 Emissions
EN 55014 Part 2 Immunity
BS 1363 Plugs

Signed:

Jon Sawdon Smith, Director
DIY Kyoto Ltd
1 Temple Yard
Temple St
London
E2 6QD