Getting started with
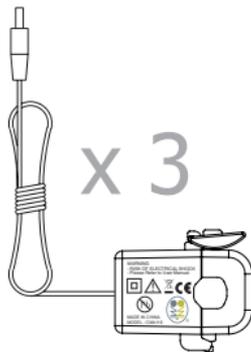
OWL® $i$ntuition-lc

Electricity consumption monitoring – three phase
for larger homes and light commercial premises

IN THE BOX:
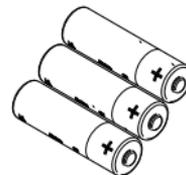

Transmitter unit
3 channel

x 3

3 x plug-in standard
Sensor clamp
(<10mm cable, <71A)
OR
3 x plug-in large
Sensor clamp
(<17mm cable, <200A)

3 x AA
alkaline battery

Introduction

This Electricity Transmitter is a part of the OWL Intuition range of cloud connected monitoring and control products. Its operation is dependant upon being paired to the broadband Internet connected Network OWL (supplied separately).

This version of the Electricity Transmitter is designed for monitoring three phase electricity consumption. It is suitable for use in larger homes and some smaller light commercial premises.

Access to both live and historic energy information collected by this Transmitter is via the OWL Intuition web dashboard, from any Internet connected computer anywhere in the World. iPhone and Android smartphone apps are also available for free download.

For details on using your new OWL Intuition-lc system, please download the Electricity Monitoring User Manual document by clicking on Support & Manuals on the web dashboard (lower right).
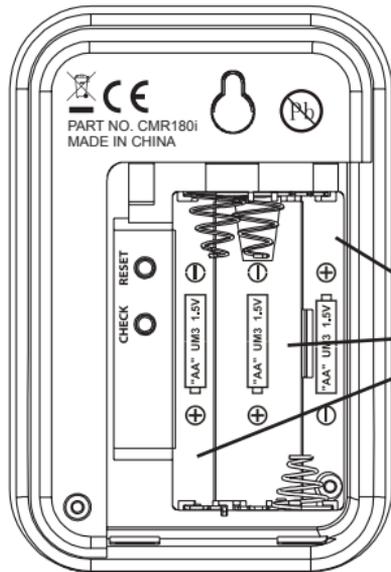
Installation Instructions

Network OWL installed and online

The Network OWL should already be installed. Refer to the Network OWL Getting Started guide for guidance if required. Check that it is powered-up and connected to the OWL servers (the top green LED should be flashing in a "triple blip pattern").

PART NO. CMR180i
MADE IN CHINA

RESET
CHECK

"AA" UM3 1.5V   "AA" UM3 1.5V   "AA" UM3 1.5V

INSERT 3 x AA BATTERY

## STEP ONE - Insert batteries into the Transmitter

Slide back cover off of the Transmitter and insert the batteries into the unit. Keep the Transmitter with you alongside the Network OWL until Step Three. You should NOT fit the Sensors at this time.

STEP TWO - Pair Transmitter to the Network OWL

- Ensure the Transmitter is next to the Network OWL.
- Unplug the power connector from the Network OWL for 2 seconds and then plug it back in.
- The green LED will flash rapidly. After about 30 seconds the blue LED will start a steady flash indicating that it is in Pairing Mode.
- Press the small "Check" button in the Transmitter battery compartment until the red LED on the front starts flashing.
- The Transmitter is now in Pairing / Check Mode and the red LED on the front will start flashing every 2 seconds (for 30 seconds).
- The pairing process will now take place and the blue LED on the Network OWL will start flashing a fraction of a second after the red LED flashes on the Transmitter.
- When the Transmitter Check Mode finishes, if the pairing was successful, the blue LED will flash every time it receives data from the Transmitter (every 12 to 60 seconds).
- Replace battery compartment cover.
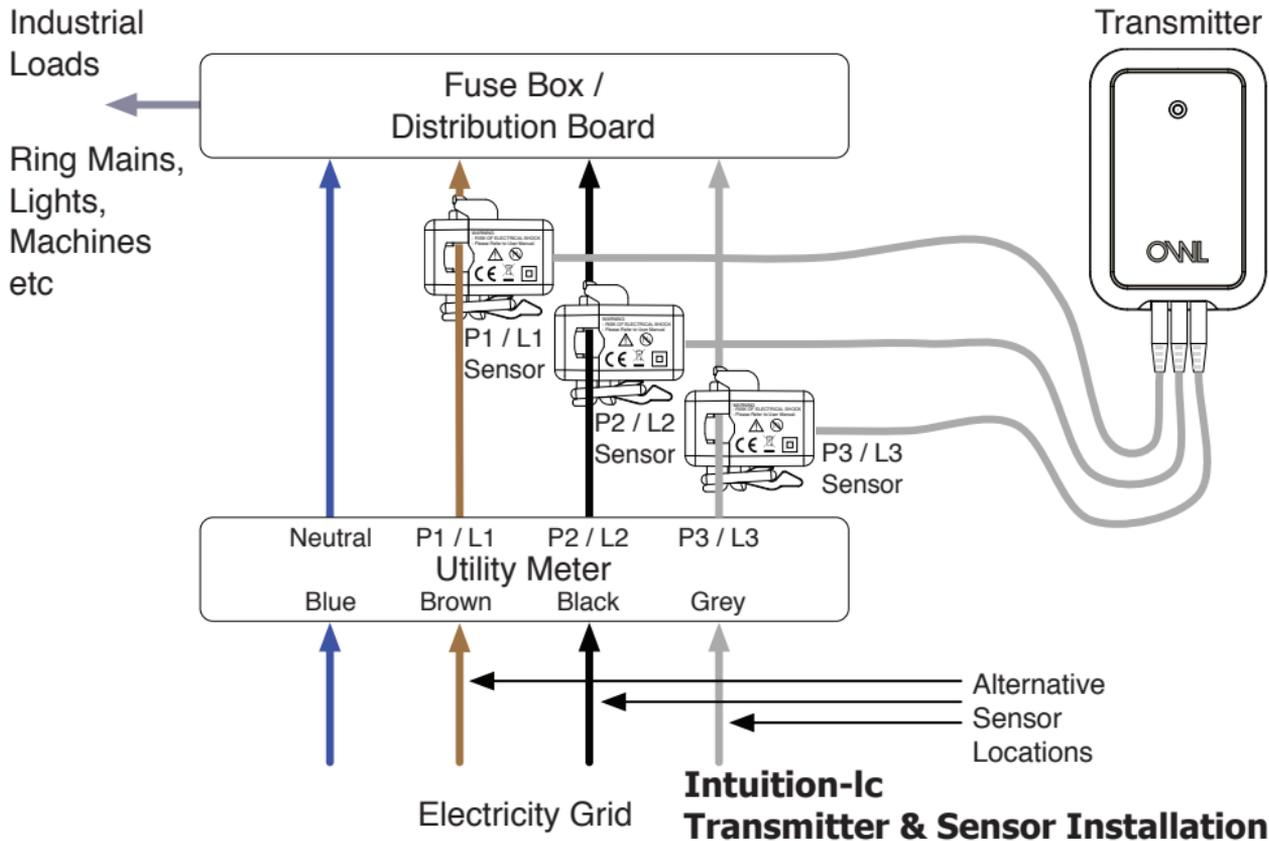
PRESS CHECK BUTTON

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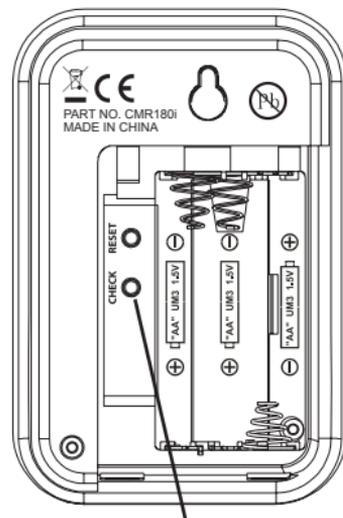
IMPORTANT Pairing Notes:

- If you don't complete the pairing process within 60 seconds of the Network OWL blue LED starting its steady flash, restart the process by removing and re-inserting the DC power jack.
- You can quickly check for correct pairing at any time by pressing the Transmitter "Check" button until the red LED starts flashing - if the Transmitter red LED and Network OWL blue LED flash within a fraction of a second of each other, they are correctly paired.
- If you remove / change the Transmitter batteries you will need to remove the existing pairing from the Network OWL and pair the Transmitter again.

STEP THREE - Install Transmitter and attach Sensors

- Locate the supply cables between your electricity meter and mains distribution board (fuse box). See diagram on next page.
- Using the latch, clamp the 3 Sensors around the insulated Live cables going into the meter as per the table below – Live cables either side of meter is acceptable.
- The Sensors must be a loose fit onto the cables.
- Plug the Sensors into the associated Transmitter socket.
- The Transmitter should be hung on the wall in a free area as far from large metal objects as possible.

Phase (Line) Number	IEC 60446 Wire Colour	Pre 2004 IEE Colour	OWL Transmitter Socket
1	Brown	Red	1 - Left
2	Black	Yellow	2 - Centre
3	Grey	Blue	3 - Right

Industrial Loads

Ring Mains, Lights, Machines etc

Fuse Box / Distribution Board

Transmitter

OWL

P1 / L1 Sensor

P2 / L2 Sensor

P3 / L3 Sensor

Neutral — Blue

P1 / L1 — Brown

P2 / L2 — Black

P3 / L3 — Grey

Utility Meter

Electricity Grid

Alternative Sensor Locations

Intuition-lc Transmitter & Sensor Installation

STEP FOUR - Update your OWL Intuition system type

- Using the web browser on your computer open up the following page: **https://www.owlintuition.com** (this is a secure connection).
- You should have previously created your account however you now need to repeat the process to update the system type.
- Click "Create Account"
- Set the System Type as Intuition-lc
- Reuse your existing username and password. Ensure you tick the Account Exists box.
- Now enter the remaining information again, as requested (refer to the Network OWL Getting Started guide if you need an explanation of the information required).
- Ensure your Network OWL is still online (the top green LED should be flashing in a "triple blip pattern")
- Press the "Create Account" button.
- Successful updating of your account configuration will be confirmed.
- Press the "Finish" button.

STEP FIVE - Log in to your OWL Intuition account

Please now log in to your OWL Intuition account with your username and password at:
https://www.owlintuition.com

- You should now have an Electricity and 3 Phase widget within your web dashboard.
- If you watch these new widgets, you should see the live total consumption in the Electricity widget and live individual phase consumption in the 3 Phase widget, updating every 12 to 60 seconds.
- Check the signal strength of the radio signal between your Transmitter and Network

Signal strength indicator   **Settings icon**
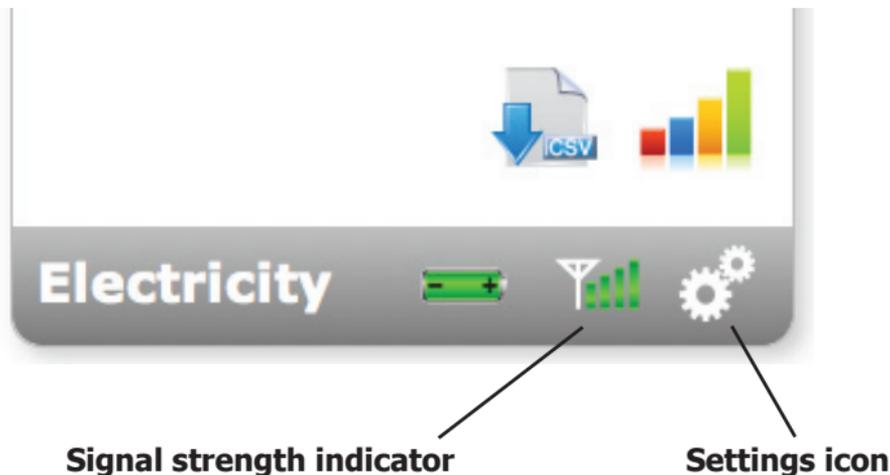
OWL:

- If the signal strength is only 1 or 2 bars, to reduce the chance of intermittent / inconsistent data reception it is suggested that you reposition the Network OWL so that it is physically closer to the Transmitter.
- The Network OWL should ideally be hung on the wall in a free area as far from large metal objects as possible. Position the antenna in a vertical orientation.
- If necessary you can replace the Ethernet cable with a longer cable (up to 100 meters long). If installing a long Ethernet cable is a problem, you can use a "Powerline Range Extender" or "Wireless Range Extender" - please search for these common products online.

- For details on using your new OWL Intuition-lc system, please now download the Electricity Monitoring User Manual document by clicking on Support & Manuals on the web dashboard (lower right).
- Please ensure you retain this document for future reference.

INFORMATION & TROUBLE SHOOTING TIPS

- Unless the Transmitter is in Check Mode, the red LED does not flash, in order to prolong battery life.
- Check that the blue LED on the Network OWL flashes at least every 12 seconds if the monitored electricity supply consumption is varying, or every 60 seconds when at a steady state.
- If the blue LED does not flash then the Transmitter signal is not being received or the Transmitter Pairing has been lost. Undo the Transmitter's Sensor and move them so they are near to the Network OWL to confirm radio range is not an issue.
- For wireless range testing you can make the Transmitter send its signal every 2 seconds (for 30 seconds) by pressing the "Check" button in the battery compartment for 10 seconds. The red LED will flash with each transmission, the Network OWL blue LED will flash to confirm the signal has been received.

SAFETY INFORMATION

To ensure that you use your product safely and correctly please read the warnings & safety precautions below before installing your OWL Intuition Transmitter & Sensor.

- This product uses a Type C current Sensor. Do not apply around or remove from hazardous LIVE conductors.
- When fitting the Sensor if in any doubt always contact a qualified electrician.
- Do not immerse the unit in water or other liquids. If you spill liquid over it, dry it immediately with a soft cloth.
- Do not use or store the product in conditions that could adversely affect the product such as rain, snow, desert and magnetic fields.
- Do not subject the product to excessive force, shock, dust, temperature or humidity.
- Keep the product away from heat sources - radiators, stoves, heaters etc.
- Do not use the product in or near water or in high moisture areas such as bathrooms.
- Do not tamper with the product's internal components. This invalidates the warranty.
- Do not attempt to repair the product yourself.
- Contact the retailer or Customer Services if your product requires servicing.
- If the equipment is used in a manner not specified in this manual, the protection provided by the equipment may be impaired.
- Take care when handling all battery types. Batteries can cause injuries, burns or damage to property if they come into contact with conducting materials, heat, corrosive

materials or explosives.

- Remove the batteries before storing the product for extended periods.
- Only use fresh batteries. Do not mix new and old batteries.
- Do not dispose of old batteries as unsorted municipal waste, only do so in accordance with your local waste disposal regulations.
- When disposing of this product do so in accordance with your local waste disposal regulations.

CARING FOR YOUR PRODUCT

- Before cleaning, disconnect the Sensor and remove the batteries from the Transmitter.
- Use a lightly dampened cloth. Do not use liquid or aerosol cleaning agents, benzene, thinners, abrasive or corrosive materials.
- Do not scratch hard objects against the product.
- Do not leave discharged batteries in the product.

SPECIFICATIONS

Transmitter dimensions	64mm x 95mm x 40mm
Sensor dimensions (max when closed)	50mm x 50mm x 30mm
Radio frequency band	433MHz unlicenced ISM band
Operating range	Up to 30m (in free space)
Power source	3 x 1.5V Alkaline AA batteries
Operating temperature range	0°C to +40°C
Storage temperature range	-25°C to +65°C
Relative humidity	25% to 95% non-condensing

COMPLIANCE

The CE marking certifies that this product meets the main requirements of the European Parliament and Council Directive 1999/5/EC. A copy of the signed and dated Declaration of Conformity is available on request. OWL Intuition products are manufactured to ISO-9001 Quality Assurance Standards.

WARRANTY INFORMATION

2 Save Energy Limited guarantees that OWL Intuition products will work for a minimum period of 24 months from date of purchase and that it will be free from defects in materials, workmanship or design. If during this limited 2 year period of guarantee, from date of purchase, you find that the equipment is not working properly, you may return it to us and we will replace, or, (at our discretion) repair it, free of charge.

2 Save Energy Limited will not accept any liability for defects arising from fair wear and tear, accidental or wilful damage, misuse or failure to follow product or safety instructions If you return any equipment as faulty, 2 Save Energy Limited reserves the right to test the equipment and if found to be in perfect working order, to return it to you. In this event, 2 Save Energy Limited reserves the right to charge for any testing or postage costs incurred. This does not affect your legal rights relating to equipment, which is faulty. Warranty conditions only apply where Proof of Purchase is provided.

To return OWL Intuition product contact customer.services@theowl.com to report the issue and reason for returning your product. 2 Save Energy Limited will issue you a form and reference number. Once we have received the completed form and proof of purchase we will commence the returns process.

For details on using your new OWL Intuition-lc system, please download the Electricity Monitoring User Manual document by clicking on Support & Manuals on the web dashboard (lower right).

Customer Support
If you have any further questions please check our frequently asked questions at:
http://www.theowl.com/faqs.html
You can also email us at: **customer.services@theowl.com**
(please ensure you state your Network OWL MAC ID)

2 Save Energy Limited operate a policy of continuous development and improvement, therefore the content of this document is subject to change without notice.