



# Wattvision Setup

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See online instructions and videos at  
<http://www.wattvision.com/setup>

*Dear Wattvisionary,*

*Thank you for choosing Wattvision. We hope you'll find these setup instructions easy to understand, and that your energy use data will be up and running on [wattvision.com](http://wattvision.com) shortly, enabling you to start saving energy.*

*Please contact us if you have any issues or questions setting up your system. We strive for great reviews and happy customers.*

*You can reach us at [info@wattvision.com](mailto:info@wattvision.com) or 888.565.8425.*

# What's in the box?

## Power Supply and Gateway

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One of these sensors:

**Analog**



**Digital Front**



**Digital Top**



1. Wall power supply.
2. Wattvision Gateway.
3. Wattvision Sensor appropriate for your meter type. Not appropriate for your meter? Contact us at 888.565.8425 or [info@wattvision.com](mailto:info@wattvision.com).

# Up and running in just 4 steps

- 1) **Pair** your Gateway to your Wattvision.com Account
- 2) **Enter** your Wireless Network Settings in the Gateway, so it can connect to your Network
- 3) **Verify** that the Gateway can join your Wireless Network
- 4) **Install** Sensor on Meter

Then, you can view and compare your energy use live, on the web and your mobile device, at wattvision.com.



## Step 1: Pair your Gateway with your Wattvision account.

1. Visit <http://www.wattvision.com>
2. Click “My House,” log in, create your account, and add your house.
3. Follow prompts to select your meter type.
4. On the **Settings** Page, click “Pair Sensor with this House.” And enter your Gateway ID, printed on the back of your Gateway.

### Sensor Status

No sensor detected. [Order a sensor now](#) or [Pair your sensor with this house.](#)

5. Once paired, move on to the next step!

## Step 2: Configure Gateway so it can connect to your Network.



Enter your network details through “Wattvision Setup” Network

**Overview:** The Gateway needs to know your wireless network details so it can connect to the Wattvision Servers. You can enter this information through the Gateway’s “Setup Mode” which creates an ad-hoc network called “Wattvision Setup” between the gateway and your computer.

Fill in your info for this step (see the troubleshooting section for more info on how to find these out):

Your Wireless Network Name (capitalization matters)	
Your Wireless Network Password	
Your Wireless Network Security Type (choose one)	Open, WEP, WPA, or WPA2
Your Router IP Address	

- 1) **Start Gateway Setup Mode:** Connect Power to the Gateway without the sensor connected. (If the sensor was already connected, you'll have to remove it and reconnect power to the Gateway).

- a) The **SENSOR** and **LINK** lights will **FLASH RAPIDLY**. This means you're in **Setup Mode**.
  - b) After 20 seconds, the **WIFI Light turns ON**. The ad-hoc network is now available.
- 2) From any computer, connect to the "Wattvision Setup" network. This will require you to disconnect from your wireless network and join the "Wattvision Setup" Network. *The connection may take up to 60 seconds depending on your computer.*
- 3) Once connected, point your browser to the Gateway at **<http://169.254.4.4/>**
- 4) Change settings on the Gateway at this page.
- a) You'll need to enter **Your Wireless Network Name, Your Security Type, Your Password, and Your Router's IP**. See the **troubleshooting section for more details on how to find these values**.
  - b) When finished, plug in the sensor and reconnect power to the Gateway.

### Step 3: Verify connection to your network.



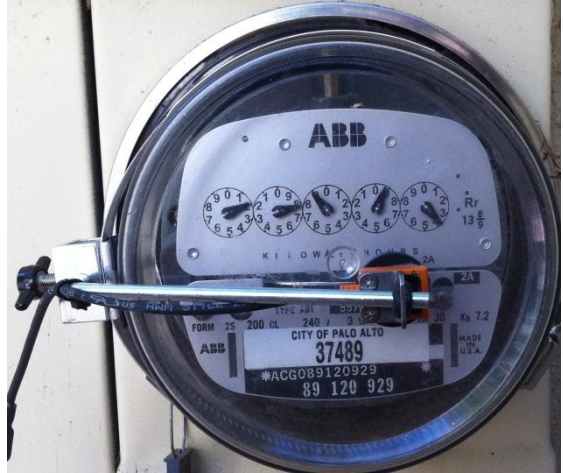
*Overview: It's working when the **WIFI** (connected to network) light and **LINK** (connected to wattvision servers) lights are on.*

- 1) Make sure you are within range of your wireless router.
- 2) **Start Normal Mode:** Connect the Sensor to the Gateway, and then connect the power supply to the Gateway.
  - a) Remember to power up the Gateway after you connect the sensor. Otherwise, the Gateway will default to "setup/configuration mode" (step 2).
  - b) Since you have not connected your sensor to your meter yet, the **SENSOR** light will stay off or on – that's fine.
  - c) The Gateway will now try to connect to your wireless network with the details entered in step 2.
- 3) You should see the **WIFI** light turn on within 60 seconds, and then you should see the **LINK** light turn on shortly after that. Congrats! Your Gateway is connecting to the Wattvision Servers through your network.

Choose the correct “Step 4” based on your sensor type.

## Step 4: Mount Sensor on your Meter. For Analog Sensors:

*Overview: The sensor detects the black spot on the edge of the rotating disk inside your meter. Mount the sensor so that the red light is shining directly on the edge of the disk, offset to one side (pictured at right). The yellow light on the sensor is OFF when it*



*sees the edge of the disk, and ON when it sees the black spot on the edge of the disk. See videos of proper positioning at <http://www.wattvision.com/setup>*

### 1) Start Normal

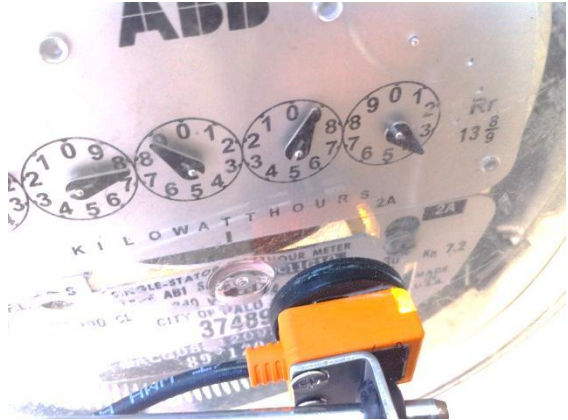
**Mode:** Connect the sensor to the Gateway. Then, connect the power supply to the Gateway.

### 2) Take the sensor out to your electricity meter, running the cord through a purpose-drilled hole.

(Some users have



run their wire under the garage door, through a window, doorway, or other means.)



### **For Front Analog Sensor:**

- 1) Slide the clamp on the meter, as shown about  $\frac{1}{2}$  to 1 inch back from the front face of the meter
- 2) Tighten the clamp hand tight.
- 3) Slide the fixture on the clamp till the L bracket is in line with the disk in the meter.
- 4) The rubber plate should be tight and flush on the face of the meter.
- 5) The sensor will emit a red light, point the light onto the edge of the rotating disk.
- 6) The beam of light should hit just to the right of the center-point of the disk ( $\frac{1}{2}$ " inch or less from the center).
- 7) Hand-tighten the knob on the sliding fixture.
- 8) As the black spot on the disk goes under the red light, the orange light on the sensor should turn on and off.

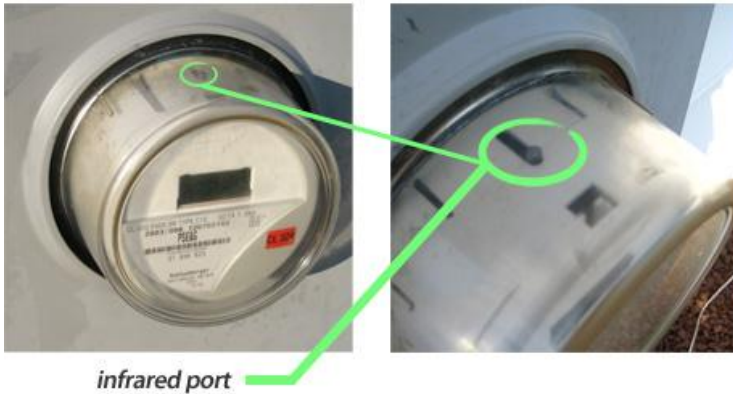
### **Adjustments / Tweaks:**

- 1) For setup to go faster, you may want to temporarily turn something on, so the black spot passes the sensor more frequently, allowing you to calibrate better.
- 2) If the yellow light on the sensor is on, it means that it is not detecting the rotating disk.
- 3) If the light is off, it means that it is detecting the silvered edge of the disk.
- 4) If the sensor does not respond (the orange light is always off or always on when the black mark passed under the light) then you need to adjust the position of the sensor.

- 5) If the orange light is always on, move the sensor laterally along the edge of the disk. Notice that the ideal position is not tangent to the disk, but along the curve.
- 6) If step 5 does no work, you will have to reduce the light being sensed by the sensor to get the correct range. Do this by partially (say  $\frac{1}{2}$ ) covering the detecting lens (not the red emitter bulb) with black tape.
- 7) When the correct range and pointing is achieved, the orange light on the sensor will come on only when the black mark on the rotating meter disk goes past the red light.
- 8) If the sensor is now working, tighten all screw on the clamp and then hand-tighten the knob on the sliding fixture.

Choose the correct “Step 4” based on your sensor type.

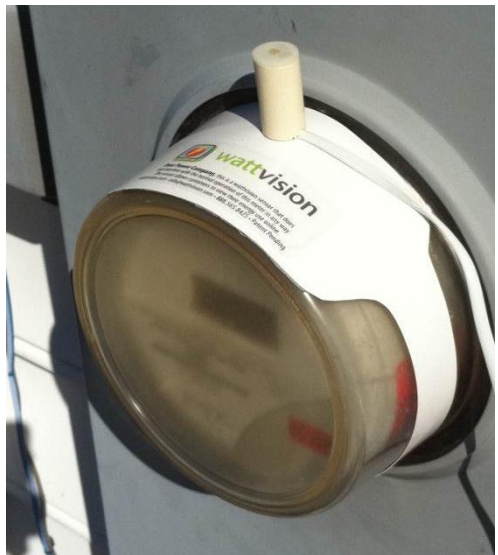
## Step 4: Mount Sensor on your Meter. For Top Digital Sensors.



*Overview: The sensor reads an Infrared pulse emitted from the top of your meter. The LED on the sensor turns on and off when a pulse is detected. For a video of it in action please visit*

***<http://www.wattvision.com/setup>***

- 1) **Start Normal Mode:**  
Connect the sensor to the Gateway. Then, connect the power supply to the Gateway.
- 2) Take the sensor out to your electricity meter, running the cord through a purpose-drilled hole. (Some users have run their wire under the garage door, through a window, doorway, or



other means.)

### **For Top Digital Sensor:**

- 1) Find the Infrared emitter port, under the glass of the meter. It looks like a clear pencil eraser, on top of your meter.
- 2) Position the Sensor so the hole in the sensor probe is directly over the infrared emitter.
- 3) You should see the green LED on the sensor start to turn on and off. You may need to wait a minute per toggle, depending on the energy consumption of your house.
- 4) Make sure the sensor is strapped on as tight as possible.

### **Adjustments / Tweaks:**

- 1) For setup to go faster you may want to temporarily turn something on, so the Infrared LED on the meter pulses more frequently, which will make the sensor LED toggle on and off more frequently. This will make it easier to setup.
- 2) If you observe the face of your meter, you will notice some black boxes appearing and disappearing. When these boxes change, the green LED on the sensor should turn on or off.  
You can Test the Sensor Probe by waving the hole in it above the LED marked "Sensor" on the Gateway. A hidden Infrared emitter is located here. If you can get the Sensor LED to turn on and off as you wave the Sensor Probe over the LED marked "Sensor" on the gateway, you have successfully tested the Sensor Probe.

Choose the correct “Step 4” based on your sensor type.

## Step 4: Mount Sensor on your Meter. For Front Digital Sensors.

*Overview: The sensor reads an Infrared pulse emitted from an infrared port on the face of your meter. The Green LED on the sensor turns on and off when a pulse is detected. The port may be marked “Test Pulse” or “Test LED”. For a video of it in action please visit <http://www.wattvision.com/setup>*

- 1) **Start Normal Mode:** Connect the sensor to the Gateway. Then, connect the power supply to the Gateway.
- 2) Take the sensor out to your electricity meter, running the cord through a purpose-drilled hole. (Some users have run their wire under the garage door, through a window, doorway, or other means.)

### For the Front Digital Sensor:

- 1) Find the Infrared emitter port, on the face of your meter. (See photos for examples).
- 2) Position the Sensor so the hole in the sensor probe is directly over the infrared emitter.



- 3) You should see the green LED on the sensor start to turn on and off. You may need to wait up to 3-5 minutes, depending on the energy consumption of your house. Make sure the sensor is strapped on as tight as possible.



### **Adjustments / Tweaks:**

- 1) For a faster setup, you may want to temporarily turn something on, so the Infrared LED on the meter pulses more frequently, which will make the sensor LED toggle on and off more frequently. This will make it easier to setup.
- 2) If you observe the face of your meter, you will notice some black boxes appearing and disappearing. These boxes change in step with the infrared pulses that the wattvision sensor detects. When these boxes change, the green LED on the sensor should turn on or off.
- 3) You can Test the Sensor Probe by waving the hole in it above the LED marked "Sensor" on the Wattvision Gateway. A hidden Infrared emitter is located here. If you can get the Sensor LED to turn on and off as you wave the Sensor Probe over the LED marked "Sensor" on the gateway, you have successfully tested the Sensor Probe.

## FAQ and Troubleshooting

### Gateway: What are the modes?

- **Setup Mode**
  - POWER UP Gateway WITHOUT Sensor connected. Creates ad-hoc network called "Wattvision Setup." SENSOR and LINK lights flash rapidly.
- **Normal Mode**
  - POWER UP Gateway WITH Sensor connected. Attempts to connect to your network with the settings you provided in setup mode.

### Gateway: What do the lights mean?

- **POWER** - gateway has power.
- **WIFI** - gateway connected to your network OR setup network ready
- **LINK AND SENSOR are FLASHING** – Gateway is in Setup Mode
- **LINK** – When solid, gateway connected to wattvision servers.
- **SENSOR** - Toggles on and off slowly / when meter data received: Sensor is working.

### Troubleshooting

- **How do I find my network name, security type, password, and router IP?**
  - **On a Mac:**
    - We can't help with your password. But for your network name, security type, and router IP, connect to your wireless network with your Mac, and then run the "Determine My Wifi Settings" app, available for download at <http://www.wattvision.com/setup>
  - **On a PC:**

- *To find your security type:* Double-click Wireless Network icon > Properties > Wireless Networks > Properties > Authentication Type
  - *To find your Router IP:* Start > Run... > Type "cmd" and hit enter > in the prompt type "ipconfig" > Under "Wireless Network Connection" it's "Default Gateway"
- **Setup Mode** – I cannot connect to the Gateway in Setup Mode
  - In Setup Mode, it takes about 60 seconds for some computers to connect to the Wattvision Gateway. You can confirm connection by checking your computer's local IP Address – it should now be 169.254.xxx.yyy. You can do this on Windows from the command line, type ipconfig, or on Mac open "Network Utility" and select AirPort.
  - Make sure you open a new browser window or restart your browser – sometimes the settings to connect to your network are cached and you cannot load the page hosted by the sensor at <http://169.254.4.4>
  - You may also try a different browser than the one you normally use.
- **WIFI Light Not Turning on in Normal Mode**
  - You are out of range of your wireless router. Move closer to it.
  - Your Router doesn't support Wireless B – change your router's settings.
  - In rare cases, you may have some setting on your router that prevents the wattvision gateway from connecting. The wattvision device works at 1-2MBps, so if your router isn't set to connect to low-bandwidth devices, you may be excluded. Contact us if you think this is the case.
- **WIFI Light is On, LINK light is not turning on**

- Usually you haven't entered the correct value for your Router IP in Setup Mode
- (Unlikely) There is an IP Address Conflict on your network (The Gateway has a Static IP – "IP Address" in "Step 1: Configuration Mode")
- (Unlikely) The sensor is incompatible with your Router
- Still experiencing problems? Call us! You can reach the wattvision team at 888.565.8425 or at [info@wattvision.com](mailto:info@wattvision.com)

## WARRANTY

If you have any problems or issues, do not hesitate to contact us. If you are not satisfied with our product, please return it within 30 days for a full refund.

If your system stops working within one year of purchase under normal operating conditions, you may send in your system for repairs at no cost. Please contact us at [info@wattvision.com](mailto:info@wattvision.com) or 888.565.8425.