



A Con Edison program in partnership with ThinkEco

# modlet<sup>®</sup> smartAC

## User Guide

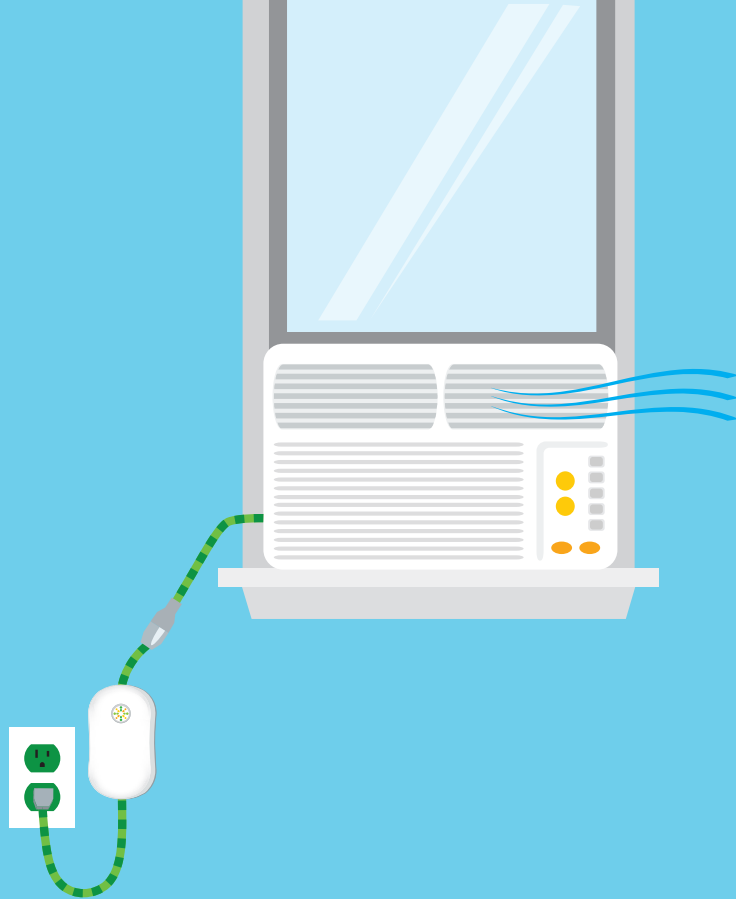


# What is the coolNYC™ program?

The coolNYC program is designed to let Con Edison customers who own window A/C units better manage their power use while saving energy this summer.

Did you know that the power consumed by window A/C units represents a large portion of residential energy usage during the summer months, placing a large burden on the Con Edison distribution system?

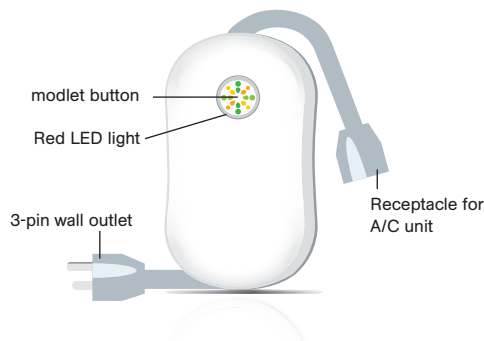
By participating in this program, you will gain the ability to see how much energy your window A/C units are using, as well as gain remote control of your window A/C units from a website or smartphone. We hope you'll be able to lower your energy consumption on window A/C units, while allowing us to better manage our distribution systems overall.



For more information on how the modlet saves you energy, visit our website: [www.themodlet.com](http://www.themodlet.com)

# Hardware

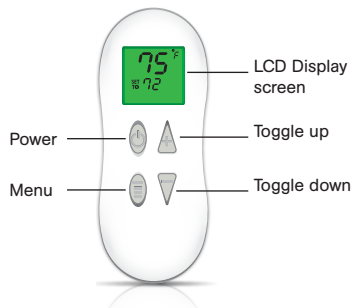
## modlet



## USB gateway







## smartAC thermostat



# Features

## modlet

LED light status			
 Light not on	 Solid red	 Spinning clockwise	 Slowly fills up
normal operation mode	circuit overloaded; unplug one or more devices	modlet is joining the network; occurs when you first set it up	Each segment will fill up one at a time until the light is solid red, then each segment will turn off; occurs when modlet is trying to pair with the thermostat

## smartAC thermostat

Use the wireless thermostat to set a target temperature for your room and monitor the current room temperature. Please note, after a few minutes of inactivity the remote enters a sleep mode and the screen goes blank. To wake up the remote, press any button once. Press the menu button once and then use the +/- buttons to switch between Fahrenheit and Celsius.

### Normal Operation Mode

Current room temperature is displayed on top and the programmed (SET TO) temperature is displayed on the bottom. To change the target temperature, press the (+) or (-) button on the remote to raise or lower the temperature.



### Demand Response Mode

Your window A/C is receiving a signal to turn off or use a higher SET TO temperature. To exit demand response mode just press the toggle up (+) or down (-) button to change the SET TO temperature.



### Low Battery

You need to change the batteries in your remote with 2 new AAA batteries.



### No wireless signal

Your thermostat is not connected to your modlet. Move the remote closer to your modlet and the SET TO temperature should reappear.



# Quick setup

Follow these simple instructions to get on your way to savings!

**NOTE: DO NOT PLUG IN THE USB RECEIVER OR MODLET BEFORE COMPLETING THE SOFTWARE WIZARD. The wizard will prompt you when to plug them in.**

## 1. Software

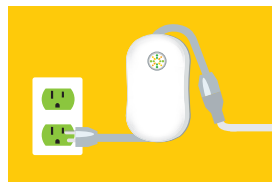


Go to **www.mymodlet.com** to create an account and begin the installation. Enter the registration key found on the inside cover of the modlet box. Create a user profile and then download and save the installer to your desktop. Double click on the installer icon to begin the wizard and follow the onscreen instructions. If required to reboot during the process, click back on the ThinkEco Installer to continue the installation.

## 2. Hardware



Plug your USB receiver into your computer when prompted by the Installer. Depending on your computer, you may see some 'found new hardware' or 'install new hardware' prompts. If so, be sure to accept all of them. If the USB receiver is not found on your first try, reinsert into the USB slot and push it in all the way



Turn off and unplug the window A/C closest to your computer that you want to monitor. Click **Search** on the Installer first, then plug the modlet into the outlet. The spinning LED light will stop when your modlet joins the network. Plug your A/C back into the modlet and complete the set up on the Installer.



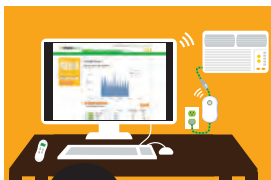
Next, set up the smartAC thermostat. First, click the **Add thermostat** on the install wizard and the select the modlet you wish to pair with the thermostat. If you have exited the wizard, it can be opened through the ThinkEco **Modlet Manager** (for PC's this is located in your computer tray

and for Mac's this is located under Applications). Then follow all on screen instructions.



If you have more than one window A/C unit and modlet, set up each additional modlet one at a time as you move away from your computer, so that the last modlet plugged in is the one farthest from your computer. To set up additional modlets, click the Add Modlets button on the installer and install each modlet using the same procedure as the first modlet.

### 3. Monitor & Control

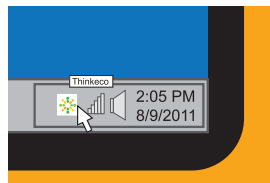


Finish setting up your account and then start viewing your energy consumption through the **Energy Usage tab**. Keep in mind that it may take a few minutes after setting up your modlet to begin seeing data. To set a schedule, visit the **Savings Plan tab** to control when your devices are on

and off. Please note, during the initial baseline period scheduling is not available. Track your savings with the Summary tab and see updates from the coolNYC team on the Con Edison page. To view your account from any computer simply visit **www.mymodlet.com** or download the ThinkEco App for Android or iPhone.

For more information go to: [www.coolNYCprogram.com/howto](http://www.coolNYCprogram.com/howto) or call our support team 1.800.682.0152

### 4. Optional – Add More Modlets



More modlets can be added at any time. For **Windows**, right click on the ThinkEco Icon in your computer tray and select **Open Modlet Manager**. For **Mac**, go to Applications, ThinkEco and then **Modlet Manager**.

For both systems, next click the **Add Another Modlet** button, and then plug in your next modlet. Then set up your thermostat by clicking the **Add Thermostat** and selecting the modlet you wish to pair with the thermostat. To build robust wireless networks, it's best to work your way outward from your computer.

Please note that a smartAC thermostat is needed for each modlet and can only control the modlet that it was initially paired with.

## How it works

The modlet smartAC kit converts any window air-conditioner into an Internet-enabled device with smart thermostat control and scheduling capabilities.

### ThinkEco Web App

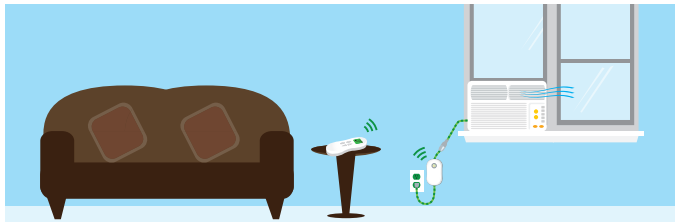
- Displays real-time and historical energy consumption data.
- Allows you to schedule your window A/C on or off or change the SET TO temperature from a computer or mobile device. (This is equivalent to programming a household thermostat to turn off and on at certain times of the day.)

### modlet

- Controls the flow of electricity to your window A/C unit.
- Monitors real-time energy consumption of your window A/C unit and communicates this data to your computer via the USB receiver.

### smartAC thermostat

- Measures the current temperature inside the room and communicates the temperature to the modlet.
- Allows you to program a SET TO temperature that you would like the window A/C unit to maintain. (When the temperature in the room is greater (warmer) than the SET TO temperature and your A/C is scheduled on, the modlet turns your window A/C on. If the temperature is less (colder) than the SET TO temperature, the modlet turns your window A/C off.)



## Tips

To maximize the performance of your modlet A/C system, use the following tips.

### 1. Set your window A/C unit to high and cold.

When you first set up your modlet, use the controls on your A/C unit to set it to a cold temperature and high fan speed. This will help your room cool down and reach your target temperature faster.

### 2. Use the wireless remote instead of your A/C controls.

After the modlet is set up, use the wireless thermostat to change the SET TO temperature. The thermostat communicates both the current and SET TO temperature directly to the modlet so it can control your window A/C unit.

### 3. Turn on your computer and plug in your USB at least once a week.

Energy consumption and temperature data is only transmitted from the modlet to your computer when your computer is on and the USB receiver is plugged in. The modlet can store this data for up to 10 days, but your computer must be on to monitor or control your A/C from a smart phone or computer outside your home or to participate in the demand response events.

### 4. Keep your thermostat in the same room as your A/C.

Each thermostat is programmed to work with one modlet and window A/C. If you have multiple A/Cs and modlets in your apartment, make sure that you leave the thermostat in the same room as the A/C that it controls to ensure accurate temperature readings.

### 5. Keep the thermostat near the center of the room.

Since the thermostat has an internal thermometer to measure the room temperature, keep the thermostat toward the middle of the room for an accurate reading (i.e. – not right next to the window A/C or in a hot sunny window).

# Software tips

## 1. Energy Usage

Displays total power consumption for all A/Cs as well as individual A/C units.

Customize the time period displayed on the graph.

View up to 5 individual power traces as separate lines or the total power consumption for more than 5 A/Cs.

Export current data displayed to a file for more analysis.



Click and drag your mouse across a section of the graph to zoom in.

Click on the names of one or more A/Cs to display their consumption on the graph.

## 2. Savings Plans

Allows you to set schedules for when your window A/C is on or off. When you schedule your window A/C to be “on,” the thermostat is activated and works with the modlet to maintain the target temperature in the room. Please note, this feature is only available after the initial baseline period.\*

You can create more than one plan – such as one for week-days and one for weekends.

View an overview of the schedules planned for today.



Create a plan for as little as one day or for many years.

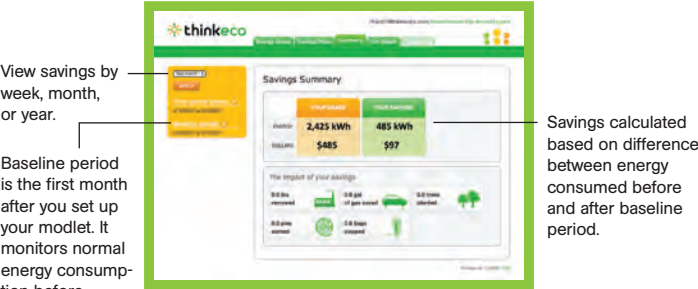
Select days and times for your A/C to turn on.

Select which A/Cs the plan applies to. You can create a separate plan for each outlet.

\*The baseline period refers to the first few weeks after you set up your Modlet Network. The baseline period monitors the typical energy consumption of your A/Cs. This information helps you create plans and calculate savings.

### 3. Summary

View total energy consumed and saved for all the A/Cs in your Modlet Network.



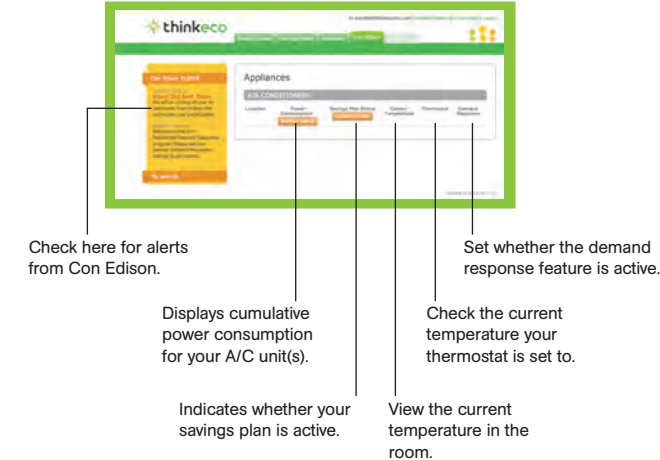
### 4. Modlet Network

Check the status of your Modlet Network (modlets, USB receiver and devices) and add new devices to your network.



### 5. Con Edison

Centralized control of all of your modlets and window air conditioners.





# Mobile apps

## iPhone App



Download the iPhone app from the App Store by searching for ThinkEco.

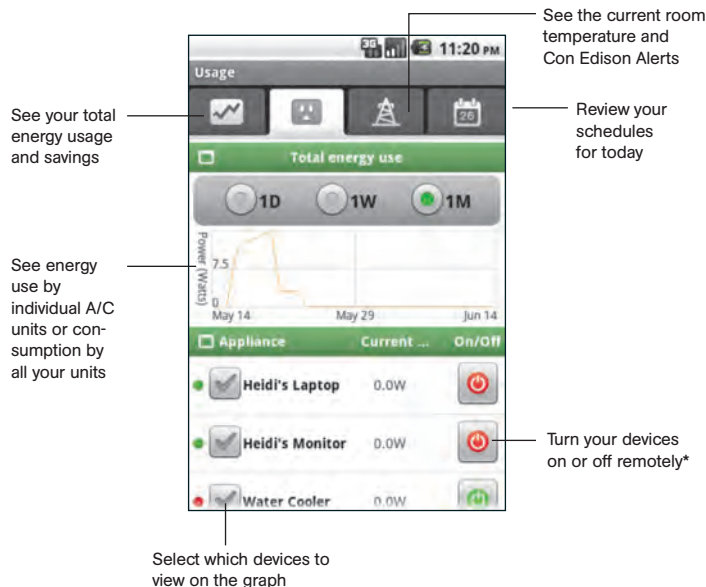


\*Note: to use these functions remotely, your computer must be on and the USB receiver must be plugged in.

## Android App



Download the Android app from the Android Market by searching for ThinkEco.



\*Note: to use these functions remotely, your computer must be on and the USB receiver must be plugged in.

# Troubleshooting

If you are connected to the internet and logged into your account, but you're not seeing the latest data, try these tips.



## 1. Check USB

- Make sure your USB receiver is plugged in all the way.
- Next unplug it and then plug it back into your computer.
- Check the status of your USB by clicking on the **Modlet Network** link in the top right of your screen and then clicking on **USB Receiver**.



## 2. Be patient

- When you first set up your network, or if your computer has been off for a while, the data may take a few minutes to load onto the interface. Check back in 15 minutes.



## 3. Refresh

- Try hitting the refresh button on the Energy Usage tab or your browser.



## 4. Verify parameters

- Check the variables you selected for the graph: does the start and end date match when you plugged in your modlet?
- Do you have at least one device selected? Click on the devices you want to graph or select all to see total end

ThinkEco will add a French version of this statement to the manual prior to marketing.



## 5. Check devices

- Check the status of your devices on the energy usage tab. A green light next to your device means it has reported data to your computer in the last 24 hours.
- If the light is red, first unplug and re-plug in your USB receiver. Next, verify your devices are labeled correctly and assigned to the correct outlet by clicking **Modlet Network** and then **Modlets**.

For more troubleshooting information, call the modlet tech support center at 1-800-682-0152 or email: support@thinkecoinc.com. You can also visit [www.coolnycprogram.com](http://www.coolnycprogram.com) for more information about the program.

## ThinkEco modlet®

Thank you for purchasing your new modlet®! For more information and to learn about your modlet® please visit [www.themodlet.com](http://www.themodlet.com). Please read all user guides/manuals provided to you (in both paper and electronic form) including in the software downloaded in connection with the usage of this device and all operating and safety instructions. If you fail to do so this product may not function properly and may lead to damage to the product and to other danger.

## Specifications

The kit you purchased may include one or more of the following products:

- modletBN:
- TE4010: Electrical rating: 120V/15A/60Hz/1875W
  - TE4011: Electrical rating 120V/20A/60Hz/2500W
  - TE4013: Electrical rating 240V/20A/60Hz/5000W
  - All versions: 13 inch cord either end (26 in total)
  - All versions: ZigBee (IEEE 802.15.4) wireless communication

- USB Gateway:
- ZigBee (IEEE 802.15.4) wireless communication
  - Plugs into standard PC/Mac USB port

- smartAC thermostat:
- ZigBee (IEEE 802.15.4) wireless communication
  - Power source: 2 AAA Batteries

## Important Safety Information:

Use indoors in a dry location. Do not use this product in connection with critical care equipment (i.e. life-support systems). Contains non-user serviceable parts; do not open. This is a live AC outlet, even when the modlet is in an "off scheduled mode". This product is not a toy. Do not allow children to operate it. The modlet TE4010 is not intended for use with loads rated above 15 Amps. The modlet TE4011 and modlet TE4013 are not intended for use with loads rated above 20 Amps. Do not "daisy-chain" the modlet. Only plug the modlet into a duplex outlet or a grounded extension cord with the same rating as your modlet. In an over current condition or if the modlet is plugged into an old and/or damaged socket the modlet and socket temperature may increase substantially. Unplug the modlet and appliances immediately and discontinue use. You should contact a qualified electrician to inspect and/or replace the outlet. Connecting a modlet to an improperly grounded outlet will void all warranties. UL 916/4989/94 listed

## Regulatory Information:

Installation and use of this device must be in strict accordance with the instructions included in the user documentation provided with the product or at [www.thinkeco.com](http://www.thinkeco.com). Any changes or modifications made to this device that are not expressly approved by the manufacturer may void the user's authority to operate the equipment. ThinkEco will assume no liability for any damage or violation of government regulations arising from failing to comply with these guidelines.

## Note: USA-FCC (Federal Communications Commission) statement

This device complies with Part 15 of FCC Rules.

Operation is subject to the following two conditions:

1. This device may not cause interference, and
2. This device must accept any interference, including interference that may cause undesired operation of this device.

## Note: FCC Interference 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. If not installed and used in accordance with the instructions, it 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 and correct the interference by one or more of the following measures:

1. Reorient or relocate the receiving antenna.
2. Increase the distance between the equipment and the receiver.
3. Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
4. Consult the dealer or an experienced radio/TV technician for help.

## LIMITED ONE (1) YEAR WARRANTY

**Warranty:** ThinkEco warrants that the modlet, USB gateway, gateway, smartAC thermostat (collectively "TE Products") will be free from defects in material and workmanship and perform to ThinkEco's applicable published specifications for a period of one (1) year from date of delivery to you. The liability of ThinkEco hereunder shall be limited to replacing or repairing, at its option, any defective TE Products which are returned F.O.B. ThinkEco's corporate address (or, at ThinkEco's option, refunding the purchase price of such TE Products). In no case are TE Products to be returned without first obtaining permission and a return order number from ThinkEco. You are responsible for the cost of shipment of the defective TE Products to ThinkEco, and ThinkEco is responsible for the cost of shipment of a replacement TE Products to you. In the event you send TE Products back to ThinkEco, and the TE Product is not defective, ThinkEco reserves the right to charge you a fee associated with postage and handling of such TE Product.

**Replacement Modlets:** Replacement TE Products are warranted by ThinkEco pursuant to the warranty set forth above for the longer of (i) thirty (30) days; or (ii) the remaining warranty period for the original Modlet. The replacement TE Product may be refurbished and/or contain refurbished parts.

The following are not covered by this warranty: (i) TE Products which have been subject to abuse, misuse, accident, alteration, neglect, unauthorized repair, inspection or installation, Acts of God, power surge, wear and tear, mishandling, misapplication, or other causes unrelated to defective materials or workmanship; and (ii) any damages and/or viruses caused by use of a third party device in conjunction with the TE Products. You are responsible for determining if a third party device used in conjunction with any TE Product is suitable for such use and ThinkEco is not liable, and this warranty does not cover, any damages caused by, or to, any third party device. ThinkEco will make the final determination as to the existence and cause of any alleged defect. No warranty is made with respect to any custom equipment or goods produced to your specifications except as specifically stated in writing by ThinkEco in the contract for such custom goods.

**Disclaimer & Limitation of Liability:** **EXCEPT AS EXPRESSLY PROVIDED ABOVE, THINKECO MAKES NO, AND HEREBY DISCLAIMS ALL OTHER, WAR-RANTIES, EXPRESS, STATUTORY, OR IMPLIED, INCLUDING ANY WARRANTY OF NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. THINKECO MAKES NO REPRESENTATION, WARRANTY**

**OR GUARANTY AS TO THE RELIABILITY, TIMELINESS, QUALITY, SUITABILITY, TRUTH, AVAILABILITY, ACCURACY OR COMPLETENESS OF THE TE PRODUCTS AND DOES NOT REPRESENT OR WARRANT THAT (A) THE USE OF THE TE PRODUCTS WILL BE SECURE, TIMELY, UNINTERRUPTED OR ERROR-FREE OR OPERATE IN COMBINATION WITH ANY OTHER HARDWARE, SOFTWARE, SYSTEM OR DATA, (B) THE TE PRODUCTS WILL MEET CUSTOMER'S REQUIREMENTS OR EXPECTATIONS, (C) ANY STORED DATA WILL BE ACCURATE OR RELIABLE, (D), THE TE PRODUCTS ARE FREE OF VIRUSES OR OTHER HARMFUL COMPONENTS. IN NO EVENT WILL THINKECO BE LIABLE TO YOU OR ANY THIRD PARTY FOR ANY LOST PROFITS, USE OF USER INFORMATION, LOSS OF DATA, BUSINESS INTERRUPTION, OR OTHER INDIRECT, CONSEQUENTIAL, SPECIAL, OR INCIDENTAL DAMAGES OF ANY NATURE ARISING FROM OR RELATING TO YOUR USE OF THE TE PRODUCTS, EVEN IF THINKECO HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. IN NO EVENT WILL THINKECO'S TOTAL CUMULATIVE LIABILITY TO YOU, FOR ANY AND ALL CLAIMS UNDER ANY THEORY OF LAW, EXCEED THE ORIGINAL PURCHASE PRICE OF THE TE PRODUCTS IN QUESTION.**

To contact ThinkEco regarding this Limited Warranty, please call ThinkEco at 1-800-682-0152. For additional information please visit [www.thinkeco.com/warranty](http://www.thinkeco.com/warranty)

## RETURN POLICY

If you purchased your Modlet from a third-party retail store, you must return the Modlet to that same retailer and comply with such retailer's return policy. Please contact the store for additional details on completing your return. All refunds will be net of any rebate and/or discount that you received in connection with any promotion.

The failure to abide by this policy will result in substantial delays to any refund request.

Please contact ThinkEco at 1-800-682-0152 <tel:1-800-682-0152> with any questions regarding this policy.



148 Madison Avenue, 8th Floor, New York, NY 10016  
[www.thinkecoinc.com](http://www.thinkecoinc.com)



Assembled in the USA

