



Quick Start Guide &  
Instruction Manual

PRODUCT INFORMATION

**TS1810** | 7-Outlet AV Advanced PowerStrip+ Multi-Sensor

Patents Pending & Patents  
9,665,073 B2  
7,193,335 B2

188LV-US-7XXXA-MA4BM

REV 12/10 Dec 2020

 For technical support  
go to [www.tricklestar.com](http://www.tricklestar.com)  
or call 1-888-700-1098

[www.tricklestar.com](http://www.tricklestar.com)



## 1 IR & Motion Multi-Sensor

The multi-sensor connects to the powerstrip via the RJ11 port marked "sensor."

## 2 Power Connection

The Advanced PowerStrip+ (APS+) must be plugged into a grounded outlet to be properly surge protected. Use of an extension cord, adaptor or other powerstrip in conjunction with the APS+ will void all warranties.

## 3 Sensor/RJ11 Port

Plug the multi-sensor into this port. There will be a soft, audible "click" when the connector is inserted correctly.

## 4 Surge LED

When illuminated, it indicates that the surge protection is functioning normally. If this LED does not illuminate, it indicates that the surge protection function has been damaged while protecting your devices, and the product must be replaced.

## 5 Ground LED

When illuminated, it indicates that the APS+ is correctly grounded. If not illuminated, there is a grounding problem and you must contact an electrician to properly ground the socket. Surge protection will not work with an improperly-grounded outlet.

## 6 Switched LED

When illuminated, it indicates that the switched outlets have power and devices plugged into them can be used.

## 7 Resettable Circuit Breaker

If the surge, ground, and switched LEDs are not illuminated and/or electronics plugged into the APS+ won't turn on, press the circuit breaker to manually activate power.

## 8 Always-on Outlets

Electronics that require continuous power should be plugged into the always-on outlets.

## 9 < tv > Outlet

The outlet marked < tv > is the control outlet.

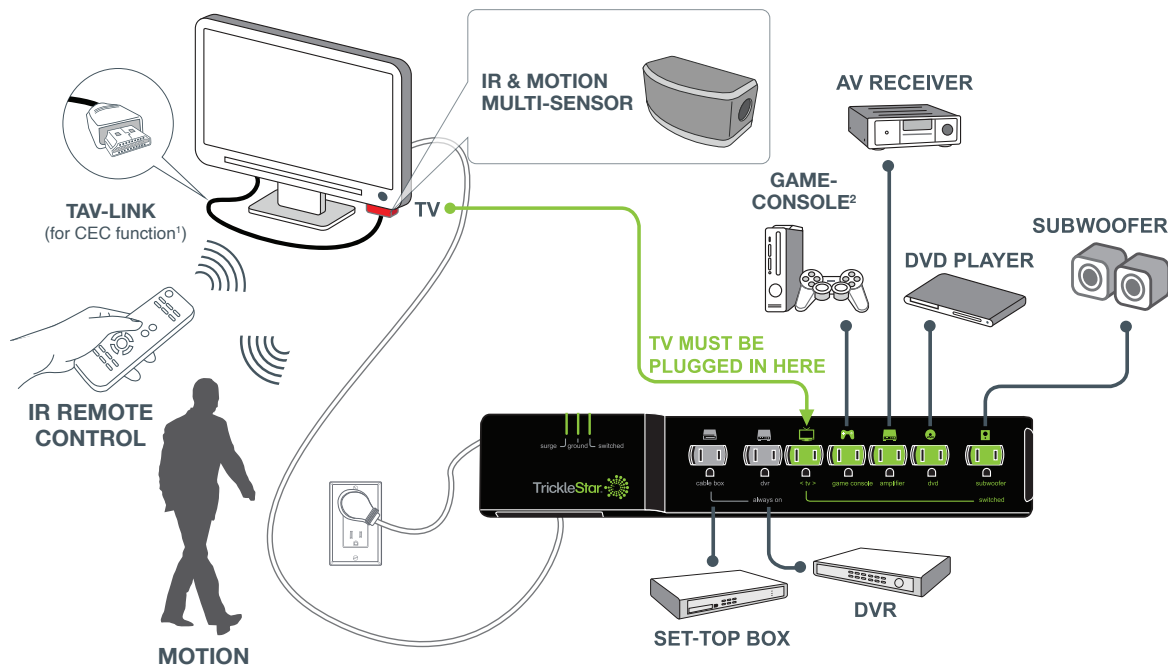
**IMPORTANT: THE TV MUST BE PLUGGED INTO THIS OUTLET**

## 10 Switched Outlets

If the TV is turned off or there is no IR remote activity or motion detected, the devices plugged into these outlets will automatically turn off.

## 11 TAV-Link Cable (sold separately)

TAV-Link sends high-level CEC commands to certain HDMI connected devices, allowing them to safely store their data and settings prior to powering down.

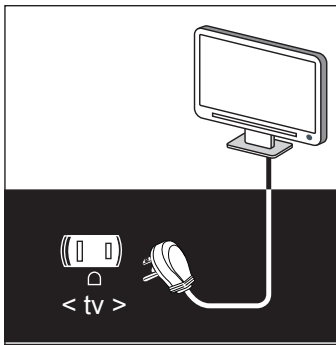


<sup>1</sup> TAV-Link functionality will softly switch off (place into an energy-saving mode) HDMI-connected peripherals capable of receiving Consumer Electronic Control (CEC) commands if no IR remote control activity or motion is detected.

<sup>2</sup> Game consoles without hard disk drives (HDDs) should be plugged into a switched outlet. Game consoles with hard disk drives should be plugged into an always-on outlet.

# Setup Instructions

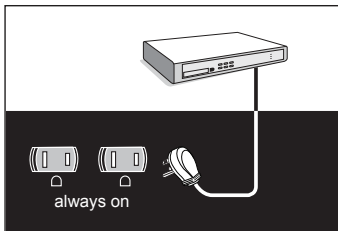
## Step 1



Plug the TV into the control outlet marked <tv>.

Note: The TV must be plugged into this outlet.

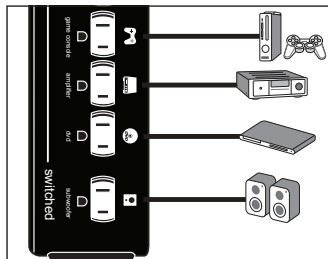
## Step 2



Plug devices that require continuous power and devices with hard disk drives into the always-on outlets (e.g., DVR and set-top box).

TAV-Link (optional): Peripheral electronics that are capable of receiving CEC commands should be plugged into the always-on outlets (see step 5).

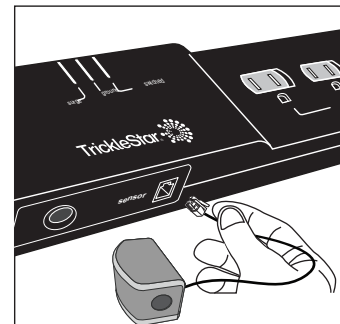
## Step 3



Plug TV peripherals, such as a DVD player, speakers and or receiver into the outlets labeled "switched." into the switched outlets.

Note: All four switched outlets operate the same way. The icons are just examples of AV equipment that can be plugged into these outlets.

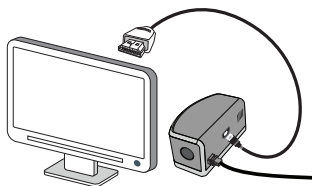
## Step 4



Plug the multi-sensor into the port on the side of the power strip that looks like a phone jack and marked "sensor."

## Step 5 TAV-LINK CAPABILITY —OPTIONAL—

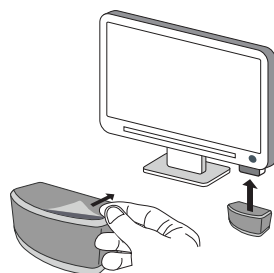
TAV-LINK CABLE SOLD SEPARATELY



Plug the TAV-Link cable (sold separately) into an open HDMI port on your TV.

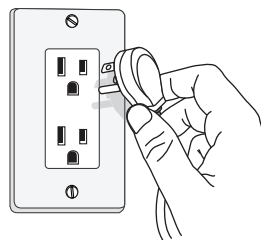
TAV-Link will softly switch off (or place into an energy saving mode) HDMI-connected peripherals capable of receiving CEC commands.

## Step 6



Remove the backing from the double-sided tape on the top of the multi-sensor. Affix the multi-sensor to the TV, near the TV's remote sensor, facing the TV-watching area.

## Step 7

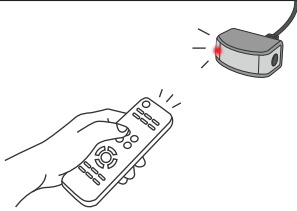


Plug the power strip into a grounded outlet. The ground and surge lights on the power strip will illuminate, indicating that the power strip is properly grounded and surge protection is active.

## Before First Use

This APS+ features auto-threshold sensing technology. This learns the normal power draw of your TV, known as a power profile. After setup, you need to teach the APS+ the power profile of your TV.

### Step 1

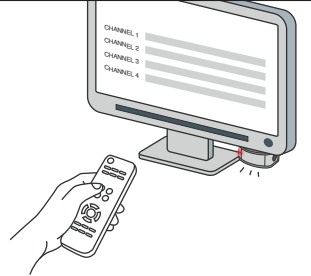


Press any button but the power button on your Infrared (IR) remote. The multi-sensor should blink red once and then the switched outlets should have power.

You'll know the switched outlets have power when the green switched LED at the top of the power strip is lit.

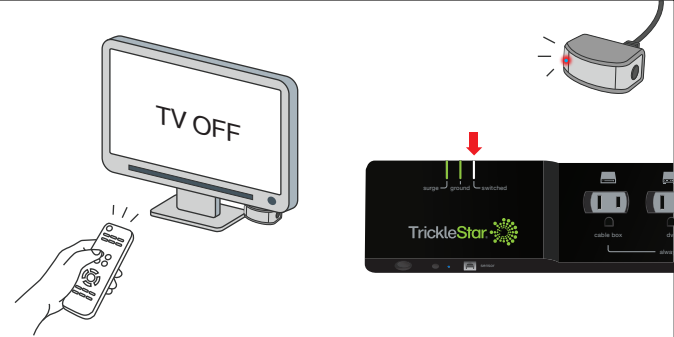
Note: Not all remotes are IR. Please make sure you're using an IR remote in this step.

### Step 2



Turn on your TV. Let it come to full brightness. Use the IR remote to change channels. The sensor should blink red each time you press your IR remote.

### Step 3



Turn the TV off. Wait for the switched outlets to turn off, which should take about a minute.

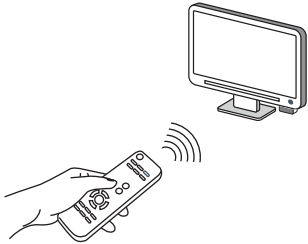
You'll know they are off when the green "switched" LED indicator at the top of the strip is no longer lit. While the TV is turning off, the sensor should blink red and blue.

Now the APS+ has learned the power profile of your TV and you can use it.

# Operation Modes

## TV Mode

### Step 1



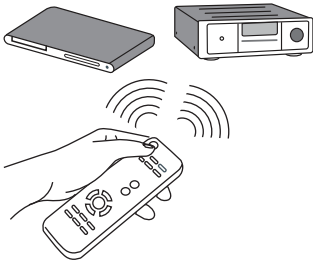
Press any button but the power button on any Infrared (IR) remote control to turn on the switched outlets. You may hear a click as power is supplied to the switched outlets. The green "switched" LED on the top of the power strip will illuminate.

### Step 2



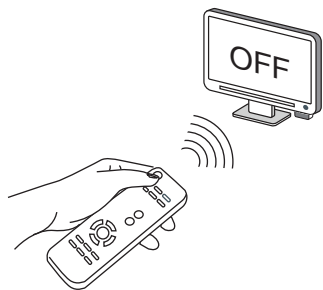
Press power on the TV remote control to turn on the TV.

### Step 3



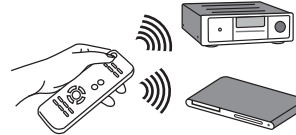
Use peripheral remote controls to turn on electronics as needed.

### Step 4



When finished watching TV, press the power button on the remote control to switch off the TV. All of the switched outlets will automatically turn off within 1 minute.

## Music Mode



Press any button except the power button on an Infrared (IR) remote for any of the electronics plugged into the power strip to turn on the switched outlets.

Press power on all music related devices to turn them on.

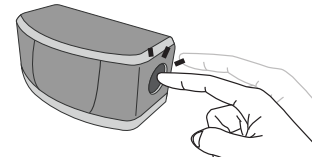
#### Note:

- If the TV is not turned on while in music mode, all switched outlets will turn off after eight hours.
- If the TV is turned on during music mode, the APS+ will switch to TV mode.

## Changing the Countdown Timer

To adjust the countdown timer, press and hold the button for 10 seconds until the red LED illuminates. Then press:

- Once for 30 minutes (IR + motion sensing)
- Twice for 60 minutes (IR + motion sensing)
- Three times for 120 minutes (IR + motion sensing, default setting)
- Four times for 60 minutes (IR-sensing only)
- Five times for 120 minutes (IR-sensing only)



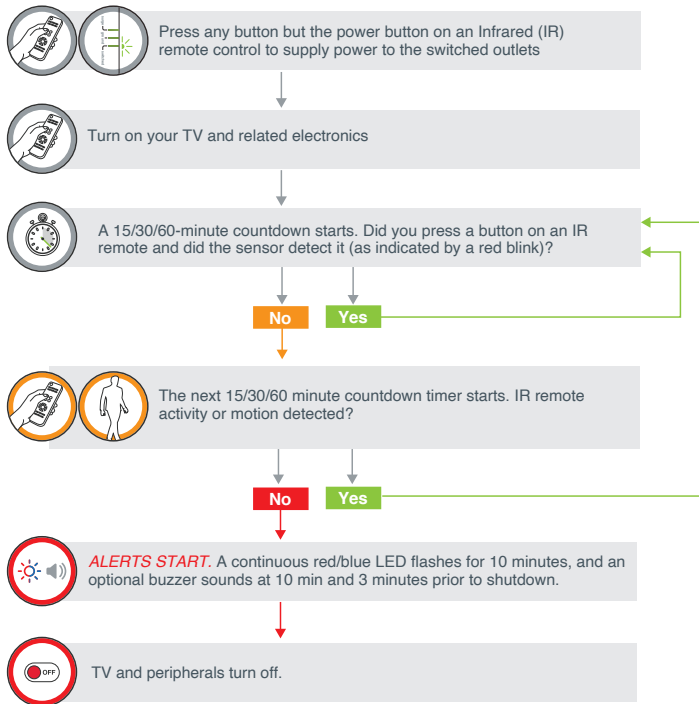
After countdown timer is set, the LED will flash the number of times the button was pressed to indicate the setting.

## Disabling the Buzzer

The sensor has a default buzzer that will sound 10 minutes and 3 minutes prior to shutdown. To disable the buzzer, press and hold the button for 10 seconds until the red LED illuminates, then press the button six times. The red LED will flash six times to confirm that the buzzer has been disabled.

## Sensing Modes

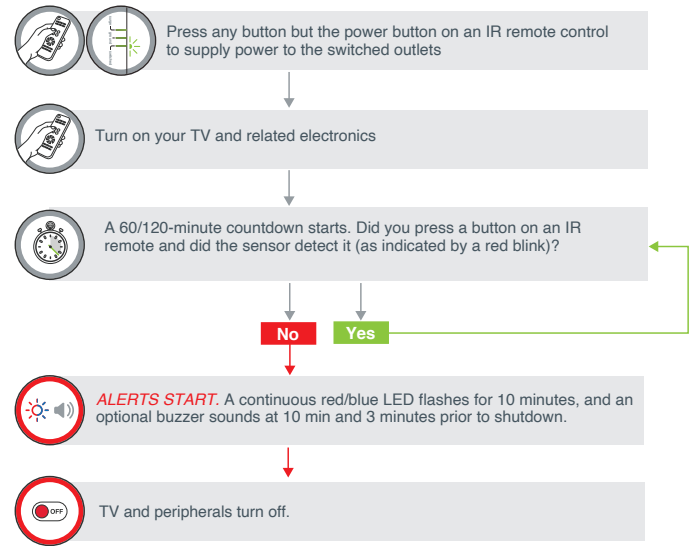
### IR + Motion Sensing



### Countdown Timer Operation for Multi-Sensing

- For the first 15/30/60 minutes - the multi-sensor looks for IR remote activity only.
- For the next 15/30/60 minutes - the multi-sensor looks for IR remote activity and motion.
- If no IR remote activity or motion has been detected during the 30/60/120 minute countdown period, the switched outlets and the items plugged into them turn off, including the TV.

### IR-Only Sensing



### Countdown Timer Operation for IR-only Sensing

- For 60/120 minutes - the multi-sensor looks for IR remote activity.
- If no IR remote activity is detected during the 60/120 minute countdown period, the switched outlets and the items plugged into them turn off, including the TV.

# FAQ

## What can I plug into the APS+?

The APS+ is intended to be used with a television and related electronics.

- Never insert any object other than a plug into the APS+ outlets.
- The APS+ is designed for indoor use only. Do not use it outside.
- Never use the APS+ with appliances, such as refrigerators, electric kettles, oven, microwaves, etc.
- Never use the APS+ with power tools such as power drills, bench saws or similar.

## What TV-related electronics should I plug into the grey always-on outlets?

Plug in Audio Visual (AV) electronics that need constant power for recording features, timers and program guides, such as:

- Digital Video Recorders (DVRs)
- Digital receivers
- Set-top boxes
- Game consoles with HDDs

## What TV-related electronics should I plug into the switched outlets?

The TV must be plugged into the green outlet labeled < tv >. Plug in devices such as the following in to the remaining switched outlets:

- Blu-ray player
- Amplifier
- Game consoles without HDDs
- Home theater speakers
- DVD Player
- CD Player
- Soundbar

## How does the APS+ save energy?

The APS+ saves energy two ways:

- 1) Eliminates standby power
  - After the TV is turned off, the switched outlets turn off within one minute and no longer draw any power.
- 2) Monitors activity and powers down unused electronics
  - In TV Mode, all switched outlets turn off if there is no IR remote activity or motion detected during the countdown period.
  - In Music Mode, all switched outlets turn off after eight hours.
  - By using the optional TAV-Link cable, HDMI-connected peripherals capable of receiving CEC commands will automatically soft-switch off or enter a power saving mode if there is no IR remote activity or motion detected during the countdown period.

# Troubleshooting

Problem	Solution
None of the outlets have power	Press the circuit breaker button on the side of the APS+ to activate power.
The switched outlets don't have power.	The multi-sensor must be connected to the APS+ , the TV must be plugged into the outlet labeled < tv > and IR signal from any remote must be received to supply power to the switched outlets.  Alternatively, press the button on the multi-sensor to manually supply power to the switched outlets.
The TV peripherals do not switch off when the TV is off	Make sure that the TV is plugged into the outlet labeled < tv >.  Make sure that the TV peripherals are plugged in to the green switched outlets (except for the one labeled < tv >).  The switched outlets will turn off within one minute of the TV turning off.
The multi-sensor is blinking on and off every 5 seconds	This is a notification that your TV and peripheral electronics plugged into the switched outlets will shut off in 10 minutes.
The TV keeps turning off after 30/60/120 minutes	The countdown timer shuts off the TV and peripherals after 30/60/120 minutes if no Infrared (IR) remote signal or motion is detected by the sensor. To reset the timer for another 30/60/120 minutes, press any button on an IR remote control or move in front of the multi-sensor.
The TV is shutting down within a couple of minutes of being turned on or going right into Music Mode.	The APS+ didn't properly learn the power profile of your TV. Turn everything off. Unplug the APS+ from the wall outlet. Unplug the sensor and all devices from the APS+. Let sit for a few minutes. Plug the devices and sensor back in to the APS+. Plug the APS+ back into a wall outlet. Follow the "Before First Use" instructions. This will reset the power profile.



# Product Warranty

The Product Warranty is 10 years (hereafter referred to as Product Warranty).

TrickleStar warrants to the original purchaser that for the Product Warranty, it shall be free of defects in design, assembly, material, or workmanship, and will repair or replace, at its option, any defective product free of charge.

## CONNECTED DEVICE WARRANTY

TrickleStar will repair or replace, at its option, any devices which are damaged by a transient voltage surge/spike or lightning strike, (an "Occurrence"), while properly connected through the Product to a properly wired AC power line with protective grounding.

If applicable; the telephone line, and/or network line must be properly connected and installed, and the antenna cable line must also be properly connected and installed, as determined by TrickleStar at its sole discretion.

This Connected Device Warranty is a Limited Warranty, subject to the limitations and exclusions set forth herein. TrickleStar will repair or replace the damaged connected devices, at TrickleStar's option, an amount equal to the fair market value of the damaged devices or the original purchase price of the devices, whichever is less, up to the maximum of: \$100,000

The fair market value of the devices shall be the current value of the devices specified in the most recent edition of the Orion Blue Book online on Usedprice.com.

TrickleStar reserves the right to review the damaged Product, the damaged devices, and the site where the damage occurred. All costs of shipping the Product and the damaged devices to TrickleStar for inspection shall be borne solely by the purchaser. TrickleStar reserves the right to negotiate the cost of repairs. If TrickleStar determines, in its sole discretion, that it is impractical to ship the damaged devices to TrickleStar, TrickleStar may designate, in its sole discretion, a repair facility to inspect and estimate the cost to repair such devices. The cost, if any, of shipping the devices to and from such repair facility and of such estimate shall be borne solely by the purchaser.

Damaged devices must remain available for inspection until the claim is finalized. Whenever claims are settled, TrickleStar reserves the right to be subrogated under any existing insurance policies the claimant may have. All above warranties are null and void if:

- The Product in use during the occurrence is not provided to TrickleStar for inspection upon TrickleStar's request at the sole expense of the purchaser
- TrickleStar determines that the Product has not been installed in accordance with the Installation Requirements, altered in any way or tampered with
- TrickleStar determines that the damage did not result from the occurrence or that no occurrence in fact took place, the repair or replacement of the damaged devices is covered under a manufacturer's warranty
- TrickleStar determines that the connected devices were not used under normal operating conditions or in accordance with any labels or instructions
- The Product is not plugged directly into a receptacle
- The Product is "daisy-chained" together in serial fashion with other power boards, UPS', other surge protectors or extension cords
- A three-to two-prong adapter is used
- The Product is not used indoors

This Product is not for use with aquariums and all other water-related products. Use only indoors and in dry locations. The Connected Device Warranty only protects against damage to properly connected devices where TrickleStar has determined, in its sole discretion, that the damage resulted from an occurrence, and does not protect against acts of God (other than lightning) such as flood, earthquake, war, vandalism, theft, normal-use wear and tear, erosion, depletion, obsolescence, abuse, damage due to low voltage disturbances (i.e. brownouts or sags), non-authorized program, or system devices modification or alteration. This warranty contains the sole warranty of TrickleStar, there are no other warranties, expressed or, except as required by law, implied, including the implied warranty or condition of quality, merchantability or fitness for a particular purpose, and such implied warranties, if any, are limited in duration to the term of this warranty. Some states do not allow limitations on how long an implied warranty lasts, so the above limitations may not apply to you.

In no event shall TrickleStar be liable for incidental, special, direct, indirect, consequential or multiple damages such as, but not limited to, lost business or profits arising out of the sale or use of any Product, even if advised of the possibility of such damages. This warranty gives you specific legal rights, and you may also have other rights, which may vary from state to state. Some states do not allow the exclusion or limitation of incidental or consequential damage, so the above limitations may not apply to you.

This warranty is valid only for the original purchaser of the product. All damage claims against the product must be made within 30 days from the date of the occurrence and must be accompanied by a receipt for the damaged devices or the warranty is void.

Warranty is valid in the United States and Canada.

## MAKING A WARRANTY CLAIM

Go to: [www.tricklestar.com](http://www.tricklestar.com) and print our claim form and email it to [warranty@tricklestar.com](mailto:warranty@tricklestar.com)

Provide the following information:

- Product part number
- A list of the devices that were connected to the Product at the time of the occurrence
- A list of the devices that were damaged during the occurrence and the extent of the damage
- The date of the occurrence
- Where you purchased the Product
- When you purchased the Product
- A copy of original receipt

A customer service representative will then instruct you on how to forward your devices, receipt and Product in use during the "occurrence" and how to proceed with your claim.

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## Need Help?

## About TrickleStar

7 AV Advanced  
Outlet PowerStrip+



Click or give us a call.



[www.tricklestar.com/gethelp.html](http://www.tricklestar.com/gethelp.html)



1-888-700-1098

TrickleStar was founded in 2007 with the belief that collectively, small actions by a large number of people can result in significant energy savings.

Based on this belief, we create products that reduce energy consumption in homes and businesses.

Today, we are the preferred choice of electric utilities, energy efficiency programs, implementation contractors and energy auditors.