

## DID YOU KNOW?



Electricity usage has increased by 60% since 1985 and is expected to grow by an additional 45% by 2030.

The use of electronics within the American home has been growing at an exponential rate and we are constantly demanding more and more of our home's electrical system.

The price per Kilowatt hour has gone from an average of 2 cents to 10 cents over the past 40 years.

Energy and energy pricing are now seen as the most important issues facing the U.S.



Our homes and businesses are filled with electronic devices that generate electronic noise that is harmful to these very same devices.

The noise created by these devices breaks down the switching power supplies, causing premature failure.

This wasteful electronic noise drains more wattage than it uses, adding unnecessarily to your electric bill.



Typical residential and light commercial power sources allow literally hundreds of spikes and surges a day.

These spikes and surges shorten the lifespan of valuable and sensitive electronic equipment.



The technology to counter the harmful and wasteful effects of spikes, surges and noise has been used by industry and utility companies for years, but is only now practical for home use.



On average, there are 20 million lightning strikes in the U.S. each year, with nearly \$1 billion in insured losses.



When properly installed by a professional electrician, your EcoPower4 reimbursement warranty will cover any damaged electronics or appliances, up to \$25,000, in the event a damaging electrical spike or surge should occur.



### Is the EcoPower4 right for your home?

*The EcoPower4 will work in any home and with any single-phase electric application for your home. Also, if you say "yes," to only two or more of the following, then you could be saving a significant amount of money on your electric bill right now!*

*Is your central air conditioner/heat pump unit 3 years or older?*

*Is your forced air furnace 3 years or older?*

*Do you have a pool?*

*Do you have a well?*

*Do you use an air conditioner?*

*Is your refrigerator/freezer not EnergyStar rated?*

*Do you have more than one refrigerator/freezer?*

*Is your washer/dryer not EnergyStar rated?*

*Do you have a hot tub or Jacuzzi?*

*Is your dishwasher not EnergyStar rated?*

*Do you have a number of appliances in your home?*

#### EcoPower4 SPECIFICATIONS

UNIT MODELS	E4-1R240 Nema3 for Outdoor Installation
POWER LINE VOLTAGE (VAC)	120/240
PHASE CONFIGURATION	single
FREQUENCY (Hz)	50-60
POWER DISSIPATION (J) (2ms current wave)	550J
PEAK PULSE CURRENT (A) (8/20 microsecond current wave)	40,000
MAXIMUM CLAMPING (V) (@ 200Am 8/20 microsecond current wave)	340/690
TOTAL CAPACITANCE (uF)	30
OPERATING TEMPERATURE (°C)	-40 to +70
LINE WIRES (AWG)	12
CIRCUIT BREAKER REQUIRED (A)	20
DIMENSIONS (WxHxD)	E4-1R240 - 3i x9i x5i Nema3 for Outdoor Installation - 4.4i x12.5i x5i
WEIGHT (lbs.)	6



Weatherproof  
Enclosure  
Available

# YOUR HOME'S PRESCRIPTION FOR CONSERVING ENERGY, SAVING MONEY, AND PROTECTING APPLIANCES AND ELECTRONICS.

## EcoPower4

POWER CONDITIONING FOR YOUR HOME



Item# US20932  
EPW\_BRO\_20932-0409

CONSERVE ENERGY, SAVE MONEY,  
AND PROTECT YOUR ELECTRONICS  
AND APPLIANCES ...  
EFFORTLESSLY!

INCLUDES  
10 YEAR  
\$25,000  
LIMITED  
WARRANTY



It's time to face the facts. Energy costs are on the rise, and the use of electronics in our homes is growing exponentially. To add insult to injury, every day, the appliances and electronic devices in our homes are under attack from surges, spikes and electrical noise. The time is now for a Whole House Energy Management System.

Say, "Hello!" to the EcoPower4, a clean power system based on the same technology that has been used for years by big industry and utility companies. The EcoPower4 provides your home with:

- power conditioning abilities that translate directly into savings
- an easy installation that creates immediate benefits
- a cost-effective solution that is amazingly maintenance-free
- an environmentally friendly product that helps protect the earth

## WHOLE HOUSE ENERGY MANAGEMENT EXPLAINED

### SAVE MONEY BY ELIMINATING WASTED ELECTRICAL CONSUMPTION

#### THE PROBLEM:

Most motorized home appliances (air conditioning units, refrigerators, freezers, ceiling fans, washers, dryers, dishwashers, pool pumps, vacuum cleaners, furnace blowers, etc.) operate most efficiently when they're operating at full capacity. When they're not working at full capacity they pull more energy than they use, wasting the difference. In fact, the average home in America today operates at a power factor of .77. That means 23% of the electricity being delivered to the home is being wasted by the use of motorized appliances.

#### THE ECOPOWER4 SOLUTION - POWER FACTOR OPTIMIZATION:

The EcoPower4 unit increases that power factor, in most cases, to .97 or .98, therefore increasing the effective use of your electricity and lowering your usage.

*First six months of 2007, we paid a total of \$1,687.52. Then, after [EcoPower4] was installed the same period in 2008, we paid only 1,262.80. A savings of \$424.72 in just six months. We notice that our power is not tripping off as often as it did, and with all lightning in Florida we feel much safer! To us it is a no-brainer to install [EcoPower4].*

*- David & Wanda M., Florida*

### PROTECT APPLIANCES AND ELECTRONICS FROM THE DAMAGE CAUSED BY VOLTAGE SPIKES

#### THE PROBLEM:

Typical residential and light commercial power sources allow literally hundreds of spikes and surges per day to reach valuable electronic equipment in your home. These voltage spikes come from many different sources (motors, power fluctuations, static electricity, lightning, etc.) but can all cause damage to televisions, stereos, computers, DVRs, security systems, etc.

*...a retiree who lives in Okahumpka has been victimized twice by lightning strikes that inflicted an estimated \$10,000 in damage, at least half of it to high-tech devices.*

*- SunSentinel.com*

#### THE ECOPOWER4 SOLUTION - DUAL-MODE SURGE SUPPRESSION:

The EcoPower4 operates in a dual-mode for surge suppression, alternating between two different types of protection. EcoPower4 uses MOVs (Metal Oxide Varistors) to act as a sort of "pressure relief valve," diverting the surge to the neutral/ground lines. Should a massive surge (like a direct lightning strike) attempt to pass through EcoPower4, it switches into fail-safe mode, cutting off the flow of electricity and blocking the surge, keeping damage to a minimum and prolonging the operating life of your appliances and electronic devices.

### PROLONG THE LIFE OF APPLIANCES AND ELECTRONICS BY REDUCING ELECTRICAL "NOISE"

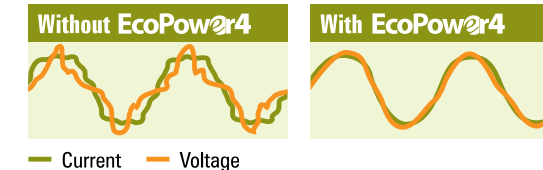
#### THE PROBLEM:

Our homes, businesses and factories are filled with electronic devices that generate "noise." It's this noise that's responsible for that all-too-familiar static you hear on your home radio receiver, the "hum" of a fluorescent lamp, or the "snow" you see when a TV produces a weak signal. And those are just examples of the electric noise we can see and hear. Imagine how much noise is coming from everything else in your home that you can't see or hear. What you also can't see or hear is the damage this noise does to switching power supplies, causing premature failure.

#### THE ECOPOWER4 SOLUTION - HARMONIC FILTRATION:

Designed to filter harmonics and high frequency current (trash) from the electrical environment, harmonic filtration reduces the potential for leakage into the human environment and the creation of additional trash in non-linear loads (televisions, computers, variable frequency drives, energy-efficient lighting, etc.). By reducing the electrical noise and trash current in your home, the EcoPower4 helps protect the switching power supplies, helping prevent premature failure and prolonging the life of your appliances and electronic devices.

#### HARMFUL ELECTRICAL NOISE WITH & WITHOUT EcoPower4



*My June 23 – July 26 Electric Bill just arrived. My KWH usage was 12.3% less for the same number of days, same time frame as last year.*

*My '07 KWH: 1691 '08 KWH: 1483*

*- Bert L.*

#### POWER FACTOR OPTIMIZATION BEFORE & AFTER EcoPower4



Power inflow and power draw are out of phase.  
**LOW POWER FACTOR = HIGH ENERGY WASTE**

Power inflow and power draw are closer in phase.  
**HIGH POWER FACTOR = LOW ENERGY WASTE**



#### Will the EcoPower4 affect any of my appliances and their normal use?

No. If anything, your motors will run about 10% cooler, which is good because heat is the enemy of a motor.

#### How much can I expect to save per month by using the EcoPower4?

Your savings will depend on the factors in your home—the size of your home, the amount of inductive motor load, the amount you are paying per kilowatt-hour for electricity, etc.

#### How long will it take for the EcoPower4 to pay for itself?

This depends on your individual circumstances, number and age of appliances, electrical costs, and usage patterns, but most units are paid for within 2-3 years.

#### Is the EcoPower4 easy to install?

Yes, but the EcoPower4 must be installed by a professional electrician. Installation requires opening the electrical panel, exposing potentially dangerous high voltage wires. The unit comes with complete installation instructions and installs in about 15-30 minutes.

#### How long will the EcoPower4 last?

It has a predicted lifespan of over 20 years and a 10 year limited warranty.

#### Why haven't I heard of these products until now?

That's easy; two words – "cost effectiveness." Up until recently, electric rates throughout America were cheap, costing us 2, 3 or 4 cents per kilowatt-hour (kWh). Now electric rates are anywhere between 8 and 14 cents per kWh. In some places, the rate is over 19 cents per kWh. For example, New York City is 22 cents per kWh and Hawaii is 33.5! At the cheaper rates, the EcoPower4 did not make sense. But at the current rates, it makes all the sense in the world.