



KILL A WATT EZ

USER MANUAL

For more information visit our website @ www.secpa.com



Equipment Rental Agreement

AGREEMENT made between SECPA (Owner) and _____ (Member/Renter)

Owner hereby provides to Renter the equipment described below:

- 1) Member shall use the equipment for **FREE**.
- 2) The Member agrees to return the equipment within 14 days, or a fee of \$25.00 will be applied to the Member's next monthly bill.
- 3) The Member assumes all risks of loss or damage to the equipment from any cause, and agrees to return it to the Company in the condition received from the Company, with the exception of normal wear and tear. The equipment shall remain, at all times, the property of SECPA unless a sales agreement is negotiated for purchase of the equipment separate from this agreement.

Equipment Description: Kill a Watt EZ Electricity Monitor

Serial # _____

Date checked out: _____ Due Date: _____ Date checked in: _____

Owner: Southeast Colorado Power Association

Member' signature: _____

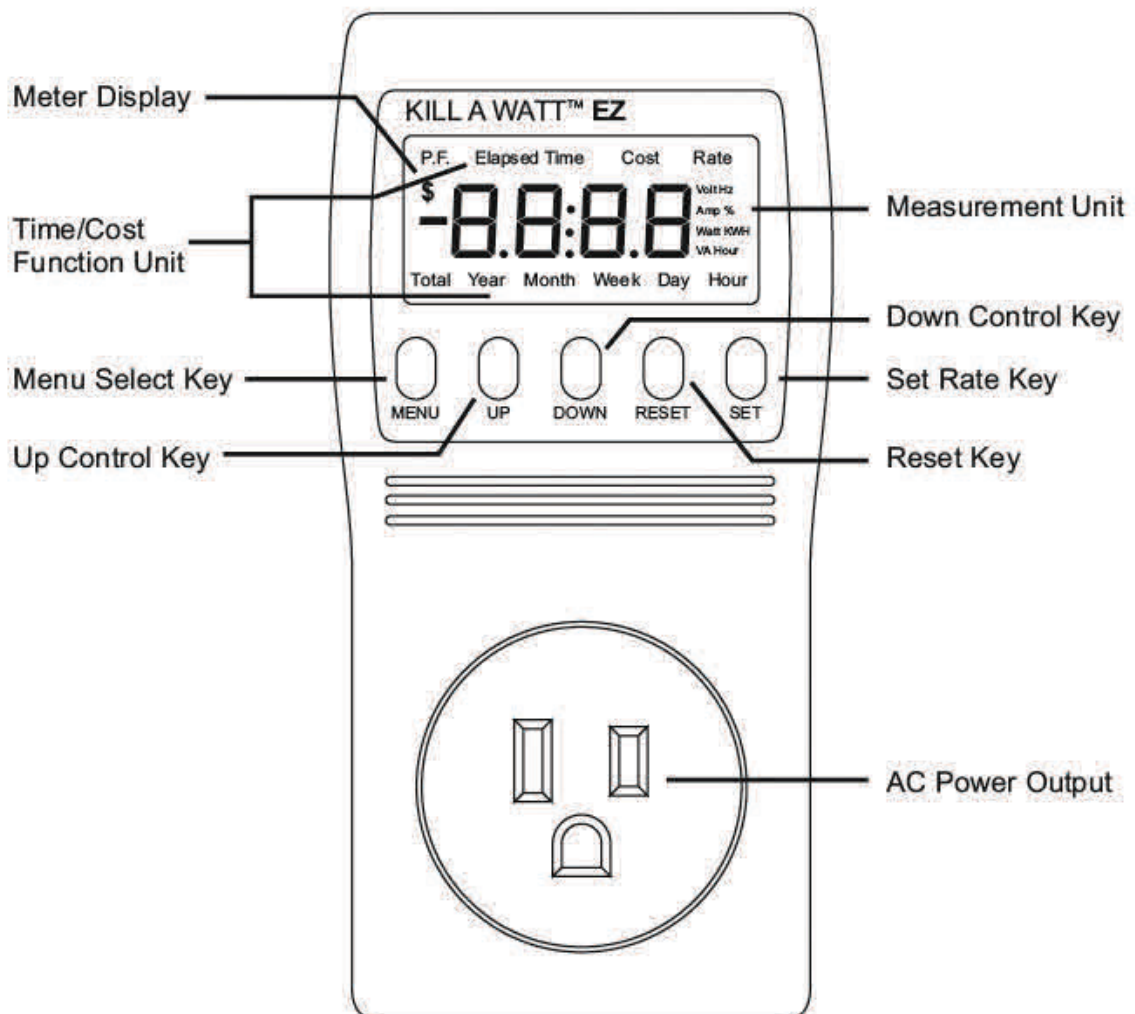
Date _____

Account # _____

Southeast Colorado Power Association likes having well informed Members, so we have created this easy-to-use manual to help you better understand energy consumption in your household. You will learn how to identify appliances that are "Power Hogs" and what might be a "Vampire", slowly using energy when not in use. We hope this will help you decide what appliances need to be replaced and what might need to be unplugged as it sits idle. This in turn, should cut down on your power bill.

KILL A WATT EZ

This diagram shows the basic functions of your meter



QUICK START GUIDE

1. Connect the Kill A Watt EZ to a 120V outlet and the appliance to the meter. Suggestion: When monitoring a refrigerator or freezer, use an extension cord to position the "Kill A Watt EZ" in a location convenient for reading.
2. The monitor has been pre-programmed with SECPA's rate of \$0.123. To display the actual cost of power consumed, press the MENU key until "Cost" is displayed.
3. Don't be surprised if the total cost displayed is \$0.00 initially. It will take some time to accumulate cost.
4. Pressing the UP and DOWN key will cycle through the projection periods (day, week, month and year). For some appliances the reading may vary depending on what the appliance is doing. For example, a printer will use more power when printing than when idle. Many appliances continue to use power even when turned "off" this is referred to as a power hog, vampire or phantom, and it can add up over time since the power is being used 24/7. Appliances that use power when turned off can be unplugged or plugged into a power strip and the user can turn the power strip to "off".
5. Press RESET till "rEST" appears. You will do this every time you want to read new information. In any mode, you can hold the RESET to clear previous appliances, times, rates, etc.
6. If you press the MENU button, the other information options will show themselves—RATE, KW, ELAPSED TIME, VOLT, COST. When the VOLT shows on the display, you can push UP or DOWN to see volts (true RMS), current in AMPS (true RMS), watts in active power watts, VA in apparent power ($VA = V_{rms} * A_{rms}$), Frequency in Hz, and P.F. power factor ($PF = \text{Watts} / V_{rms} * A_{rms}$)
7. The longer the appliance remains attached to the unit, the more accurate the projection will be. This is especially true for appliances that are not running constantly. For example, if a television is used for 4 hours a day, it's important to measure the 20 hours a day that the appliance is not in use in order to get a true projection of cost.

The more items you test, the more you will see where you can save on your electric bill.

It's been wasting your money
for years. That's pretty cold.



Okay now the fun begins...

How can you use this information to reduce your energy consumption? For every appliance/equipment you have, there are five possible courses of action. Make a choice on each appliance/equipment as to what you'll do:

1. **"POWER STRIP IT"** - Plug the appliance or equipment into a power strip. This is particularly useful where you have several electronic devices that work together. Typical examples are your computer and its peripherals, and your entertainment center. If certain devices are used all the time but others only occasionally, consider having two power strips (for example, one for your computer and monitor and the second for your printer(s), external drives, etc.). Then get in the habit switching off the power strip when you shut down the system. (A special note about Satellite TV Receivers, Digital Cable Boxes, and DVR's—These loveable devices that are so popular with TV viewers can be real "energy hogs", because in most cases they are on all the time; even when you switch them off with your remote. Consider actions that will reduce your usage without ruining your plans to record your favorite shows.
2. **"UNPLUG IT"** - A stand alone device that pulls energy unnecessarily even when it's turned off can simply be unplugged until you need to use it. This can be anything from an extra TV or stereo that you only watch occasionally, chargers for various devices, just about anything that is only used occasionally.
3. **"LOSE IT"** - If you have an appliance or piece of equipment that your are simply not using (example: the extra refrigerator that is 20+ years old and contains a 30 day supply of pop) get rid of or donate it.
4. **"WISH LIST IT"** - If you've got older appliances, they may be energy hogs. The Kill A Watt will help you figure out which ones are using the most energy, and then you can make a wish list of Energy Star appliances to replace them as your budget allows. The new ones are MUCH MORE efficient than your old ones and will save you money!
5. **"LIVE WITH IT"** - There are certain things that use energy all the time that you'll want to keep right on using. Just to name a few candidates around the typical house: (1) rechargeable tooth brush, (2) clock radio, (3) appliances with built-in clocks that are necessary for proper operation, (4) devices whose cords and plugs are inaccessible, (5) cordless phones, (6) answering machines.



WORKSHEET

[illegible]



WORKSHEET

[illegible]

Appliance Operating Cost Estimator

		SECPA Cost per KWH		0.1232
Appliance	Est. Wattage	Est. Hours/month	Est. KWH	Est. Monthly Cost
Aquarium (Small)	150	730	110	\$13.49
Audio Entertainment System	250	60	15	\$1.85
Blender	385	2	1	\$0.09
Clock	3	730	2	\$0.27
Clothes Dryer	6,000	17	102	\$12.57
Coffee Maker	1,200	30	36	\$4.44
Compactor	400	10	4	\$0.49
Computer, monitor, printer	365	75	27	\$3.37
Convection Oven	1,500	8	12	\$1.48
Curling Iron	1,500	5	8	\$0.92
Dehumidifier (20 Pints, Summer)	450	360	162	\$19.96
Dishwasher - Drying	1,200	25	30	\$3.70
Dishwasher - Washing	250	35	9	\$1.08
Garbage Disposal	420	60	25	\$3.10
Electric Blanket	175	180	32	\$3.88
Electric Pet Fence	15	730	11	\$1.35
Fan - Attic Ventilation	400	71	28	\$3.50
Fan - Paddle	80	150	12	\$1.48
Fan - Window	125	100	13	\$1.54
Freezer - Frost Free	440	334	147	\$18.11
Fry Pan	1,200	10	12	\$1.48
Garage Door Opener	350	3	1	\$0.13
Hair Dryer - Portable	1,000	10	10	\$1.23
Heat Lamp	250	5	1	\$0.15
Heat Tape (30ft., Winter)	180	720	130	\$15.97
Heater (Auto Engine, Winter)	1,000	180	180	\$22.18
Heater (Portable)	1,500	40	60	\$7.39
Heating System (Warm Air Fan)	312	288	90	\$11.07
Humidifier (Winter)	177	230	41	\$5.02
Clothes Iron	1,000	5	5	\$0.62
Ice Maker	200	333	67	\$8.21
Jacuzzi - 2 Person	1,500	93	140	\$17.19
Lighting (Compact Fluorescent)	18	100	2	\$0.22
Lighting (Fluorescent)	40	100	4	\$0.49
Lighting (Incandescent)	75	100	8	\$0.92
Lighting (Outdoor Floor)	120	90	11	\$1.33
Microwave Oven	1,500	11	17	\$2.03
Mixer, Hand	100	10	1	\$0.12
Pool Pump (1.5 HP)	2,000	250	500	\$61.60
Power Tools (Circular Saw)	1,800	1	2	\$0.22
Radio	71	101	7	\$0.88
Range (Oven)	2,660	20	53	\$6.55
Range (Self Cleaning Cycle)	2,500	3	8	\$0.92
Refrigerator/Freezer	250	333	83	\$10.26
Satellite Dish and Receiver	360	183	66	\$8.12
Sump Pump (1/2 HP)	500	20	10	\$1.23
Television (Color, Solid State)	200	183	37	\$4.51
Toaster	1,400	3	4	\$0.52
Vacuum Cleaner	1,500	6	9	\$1.11
Waffle Iron	1,200	4	5	\$0.59
Washer	512	17	9	\$1.07
Waterbed Heater	375	256	96	\$11.83
Water Heater	4,500	91	410	\$50.45
Window Air Conditioner - 12,000 BTU	1,500	200	300	\$36.96
Window Air Conditioner - 6,000 BTU	825	200	165	\$20.33