

ELECTRONIC TRANSFORMERS – FREQUENTLY ASKED QUESTIONS
--

1. Please describe the features of your transformers.

FEATURE	ELECTRONIC EN-R Series	ELECTRONIC SST Series	ELECTRONIC EN-R2 Series
Input Voltage	120V	120V	120V
Output Voltage	12V	12V	12V
Wattage Available	Models up to 150W	60W, 150W	Models up to 300W
Dimmer Type	Electronic Low Voltage	Electronic Low Voltage	Electronic Low Voltage
Reset Circuit Breakers	No	No	No
Secondary Protection	Auto-reset	Auto-reset	Auto-reset
Thermal Protection	Yes	Yes	Yes
UL Class II Listed	No	No	Yes
Cycle	50-60Hz	50-60Hz	50-60Hz

2. What is the warranty of the transformers?

Our transformer warranty is 2 years.

3. Are WAC transformers U.L. listed?

Yes. There are two types of U.L. listings, component listed and standard listed. Components are identified by the backwards “UR” symbol. This means the transformer is part of a factory-installed fixture or to be used as a replacement. Remote transformers require the “UL” listing and are supplied in an approved enclosure.

4. What is a Class II transformer?

A Class II transformer is limited to not more than 60 watts. It is a low energy device and is considered “inherently limited and intrinsically safe” an integral fuse isolates primary and secondary circuits. Secondary wiring from a Class II transformer does not require conduit and clamp wiring techniques in accordance with Section 3 of the NEC. The HR-88 button lights and miniature recessed cabinet lights require this transformer.

5. 150 watts is not a lot of capacity, what if I need more?

Just use multiple transformers; there is not much cost differential between using multiple small wattage units and one larger unit. Multiple transformers can be wired to the same switch and will operate together (see diagram at the end of the section).

6. How long is the cord and plug that comes with the EN-1260-P-AR plug-in transformer? Can it be detached?

6 feet. Yes the cord can be detached to so the wire can negotiate smaller openings. The transformer has a built in on/off rocker switch.

7. Please provide specifications for the electronic transformers.

MODEL	INPUT VOLTS	MAX LOAD	MIN LOAD	INPUT CURRENT	OUTPUT VOLTAGE	CASE TEMP	AMBIENT TEMP
EN-1260-RB-AR EN-1260-R-AR	120V	60W	20W	0.5A	11.6V	90°C 194°F OR	-20°C TO +50°C OR -4°F TO 122°F
EN-1275-RB-AR EN-1275-R-AR	120V	75W	20W	0.6A	11.6V	90°C 194°F OR	-20°C TO +50°C OR -4°F TO 122°F
EN-1260-RB2 EN-1260-R2	120V	60W	20W	0.5A	11.6V	90°C 194°F OR	-20°C TO +50°C OR -4°F TO 122°F
EN-12100-RB-AR EN-12100-R-AR	120V	100W	60W	0.8A	11.6V	90°C 194°F OR	-20°C TO +50°C OR -4°F TO 122°F
EN-12150-RB-AR EN-12150-R-AR	120V	150W	60W	1.3A	11.6V	90°C 194°F OR	-20°C TO +50°C OR -4°F TO 122°F
EN-24150-RB-AR EN-24150-R-AR	120V	150W	60W	1.3A	23.6V	90°C 194°F OR	-20°C TO +50°C OR -4°F TO 122°F
EN-B12PY-AR	120V	250W	100W	2.A	11.5V	90°C 194°F OR	-20°C TO +50°C OR -4°F TO 122°F
EN-B24PZ-AR	120V	300W	100W	2.5A	23.6V	90°C 194°F OR	-20°C TO +50°C OR -4°F TO 122°F
EN-1260-P-AR	120V	60W	20W	0.5A	11.6V	75°C 167°F OR	-20°C TO +50°C OR -4°F TO 122°F
SST-60E	120V	60W	20W	0.5A	11.6V	90°C 194°F OR	-20°C TO +50°C OR -4°F TO 122°F
SST-150E	120V	150W	60W	1.25A	12V	90°C 194°F OR	-20°C TO +50°C OR -4°F TO 122°F

8. The chart above refers to minimum load. What does that mean?

The electronic transformers require a minimum load to operate. You need to stay within the specified minimum and maximum range for the transformer to operate properly.

9. How do I check the output voltage of your electronic transformers?

As our transformers operate at high frequency, the voltage cannot be read with most meters. A true RMS meter with 20KHZ capability is needed.

10. What percentage load can the transformers take?

You may load the transformer to its maximum capacity. For example, the EN-1260-RB-AR unit is rated for 60W you may utilize it to its maximum capacity of 60W. The same applies to all the other units.

11. In the model numbers of your EN series transformers, what does the “AR” signify?

The “AR” means auto reset. There are three main features:

- a. Short Circuit Protection: In the event of an electrical short, the transformer will stop functioning. After the shorted condition is removed and power is re-applied, the transformer will continue normal operation with no adverse effect to its life span.
- b. Thermal Overload Protection: The transformer will cease functioning in the event of a circuit overload condition. It will re-set once the condition is corrected.
- c. Soft start: Turning on a light switch applies a sudden surge of voltage to bulbs and transformers, shortening the life of both. The “soft start” feature applies the voltage gradually. You’ll notice a brief delay on a cold start and virtually no delay on a warm start.

12. I am concerned with a voltage drop in my application. Do you have any guidelines on the subject?

To minimize a voltage drop and lessened light output, the transformer should be located as close to the fixture as possible. A drop of 5% or less is generally acceptable. The chart below is a guideline to keep the drop below 5%.

MAXIMUM LENGTH / VOLTAGE DROP GUIDELINE					
WIRE SIZE	LOAD				
	35 W	50 W	60 W	100 W	150 W
18 GAUGE	8 FT	8 FT	6 FT	NA	NA
16 GAUGE	12 FT	12 FT	10 FT	NA	NA
14 GAUGE	21 FT	19 FT	17 FT	15	14
12 GAUGE	28 FT	25 FT	22 FT	20	18

13. Why do my fixtures flicker?

Check the distance of the last fixture from the transformer. Refer to the chart above for guidelines. The further the distance between the fixture and the transformer, the greater the voltage drop. This is one potential cause. Another possibility is that you are using a transformer that is too large and not meeting the minimum load requirement. Finally a loose connection may also cause flickering.

14. Why does a transformer/dimmer hum?

All dimmers create noise from the lamp, transformer or the dimmer itself. A loud buzz is a signal that the dimmer and transformer are not compatible. A mild low volume hum is normal. Whether the noise is objectionable depends on what you are dimming, how quiet the room is, how much sound the furniture and surfaces absorb, and how sensitive the customer is.

15. In a low voltage situation (12V) like a motor home or a boat, would I require a transformer for my fixtures?

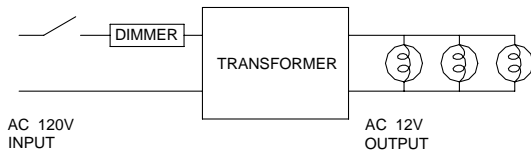
Most RV's and boats operate under 12V. Transformers are not necessary.

16. What does a multi terminal block (MTB-01) do?

It simplifies the wiring of multiple low voltage fixtures to a transformer. Instead of having a blob of wires to a wire-nut, it can be made much neater and allows better connections with an MTB-01. The MTB-01 can accommodate up to 6 fixtures only. The output (12V) wires connect to the input terminal of the MTB-01, marked "A". Meanwhile, the wires from the 6 fixtures connect to the 6 output terminals of the MTB-01, marked "B" through "G". Refer to installation instructions for wiring details.

17. Transformer Wiring Diagram

Single Transformer



Multiple Transformers

