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SECTION H
OUTDOOR TRANSFORMERS

Outdoor Transformers

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OUTDOOR LOW VOLTAGE TRANSFORMERS

Outdoor Low Voltage Transformers for Landscape Lighting Systems

We offer a complete line of outdoor low voltage transformers for use with incandescent and halogen landscape lighting fixtures. These Class 2 isolation transformers offer safety and energy efficiency over line voltage products. Models are available with timer and photocell for added convenience and versatility. Most feature thermal and resetable circuit breakers should the units overheat or overload.

Common features for the whole series:

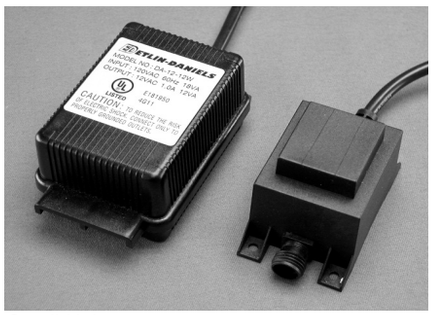
- Reliable quality transformer guaranteed for five years
- Rugged core and coil design for years of trouble free operation that you can count on
- Whisper quiet operation even when dimmed
- Can be fully loaded and dimmed using a low cost incandescent dimmer
- Easy to wire terminal blocks or male tabs
- Compact case sizes to allow more flexibility when installing the transformers
- Can be used indoor or outdoor
- Easy mounting using key hole slots
- $_{c}UL_{us}$ listed

The lower wattage models up to 100VA feature the following:

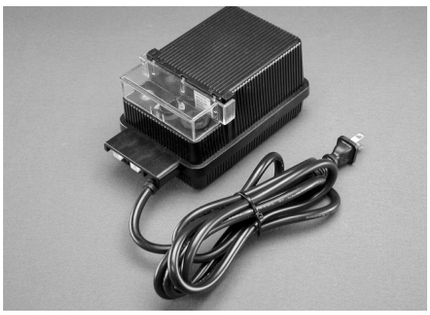
- 120V to 12V for low voltage garden lighting
- High quality electrical steel laminations for increased efficiency and lower operating costs
- High impact plastic cases
- 6'6" SJTW power cord
- Male tabs for easy wiring using crimp terminals
- Compact size which mounts easily
- Some models feature photocell, timer, or manual switch combinations to be as full featured as the system requires

The 200 to 900VA models feature the following:

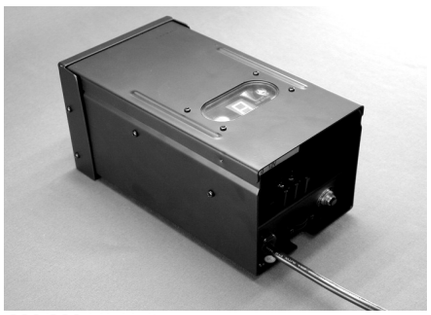
- 120V to 12V for low voltage garden lighting
- Terminal block for easy wiring
- High quality electrical steel laminations for increased efficiency and lower operating costs
- Photocell operation - on at dusk, off at dawn
- High quality powder coated steel enclosure for superior corrosion resistance
- Compact design for increased mounting flexibility
- Easy wall mounting using key hole slots
- Features short circuit and thermal overload protection for fail safe operation
- Dead front output cover with easy access wiring compartment on the base
- Front cover window allows viewing of timer and protection of the photocell
- Electronic timer can be set to remain on for up to 8 hours after coming on at dusk



Small Units



88/100 VA Units



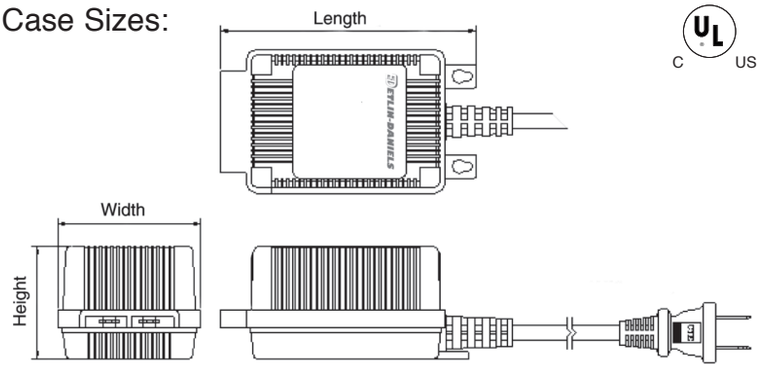
200/300 VA Units

FOR MORE INFORMATION CALL
1-800-661-9610 (Canada) **1-888-762-5384** (USA)

OUTDOOR LOW VOLTAGE TRANSFORMERS

DA-XX-12W Series - 12 to 36VA Small Case Low Voltage Outdoor Transformers

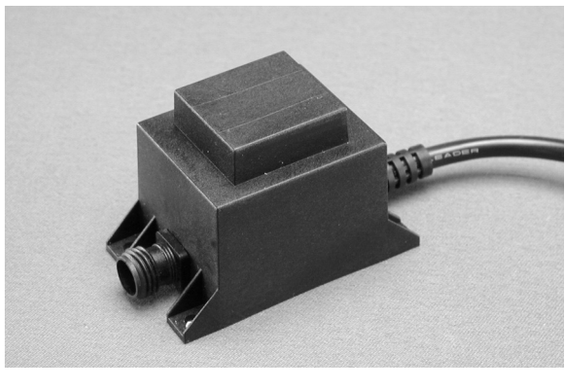
Case Sizes:



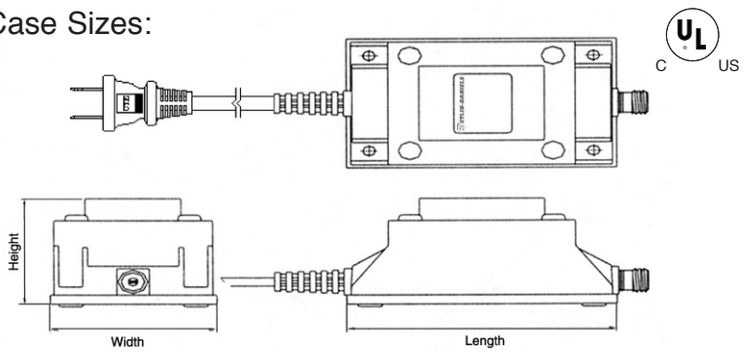
Model Number	Input Voltage and Hertz	Output Voltage	Output Current	Output Watts	Case Size			Weight in Pounds	Output Terminals
					L	W	H		
DA-12-12W	120V @ 60Hz	12VAC	1.00A	12VA	4.05”	2.50”	1.90”	1.18	2- .250” X .032” male tabs
DA-22-12W	120V @ 60Hz	12VAC	1.83A	22VA	4.05”	2.50”	1.90”	1.44	2- .250” X .032” male tabs
DA-30-12W	120V @ 60Hz	12VAC	2.50A	30VA	4.45”	2.87”	2.20”	1.59	2- .250” X .032” male tabs
DA-36-12W	120V @ 60Hz	12VAC	3.00A	36VA	4.45”	2.87”	2.20”	1.87	2- .250” X .032” male tabs

- High impact plastic cases
- Compact size which mounts easily
- 6’6” SJTW 18/2 power cord

DA-XX-12W Series - 60 to 150VA Small Case Low Voltage Outdoor Transformers with replaceable fuse



Case Sizes:



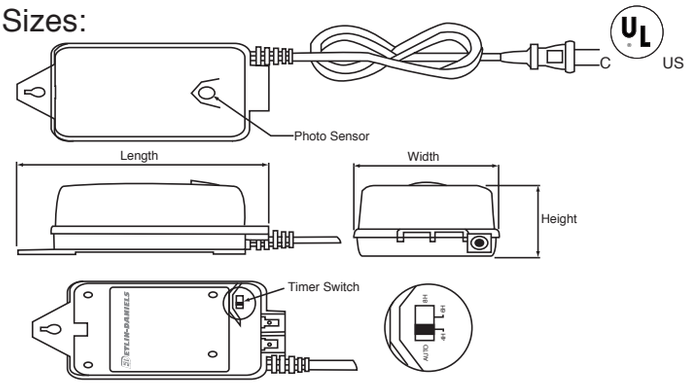
Model Number	Input Voltage and Hertz	Output Voltage	Output Current	Output Watts	Case Size			Weight in Pounds	Output Leads
					L	W	H		
DA-60-12W	120V @ 60Hz	12VAC	5.00A	60VA	5.03”	2.70”	2.99”	2.51	6’6” of SPT 18/2 wire
DA-60-24W	120V @ 60Hz	24VAC	2.50A	60VA	5.03”	2.70”	2.99”	2.51	6’6” of SPT 18/2 wire
DA-100-12W	120V @ 60Hz	12VAC	8.33A	100VA	5.43”	3.62”	2.68”	4.01	6’6” of SPT 18/2 wire
DA-100-24W	120V @ 60Hz	24VAC	4.17A	100VA	5.43”	3.62”	2.68”	4.01	6’6” of SPT 18/2 wire
DA-150-12W	120V @ 60Hz	12VAC	12.5A	150VA	5.79”	3.43”	3.39”	5.13	6’6” of SPT 18/2 wire
DA-150-24W	120V @ 60Hz	24VAC	6.25A	150VA	5.79”	3.43”	3.39”	5.13	6’6” of SPT 18/2 wire

- High impact plastic cases
- Compact size which mounts easily
- 6’6” SJTW 18/2 power cord
- Replaceable fuse

OUTDOOR LOW VOLTAGE TRANSFORMERS

45 to 60VA Small Case Low Voltage Outdoor Transformers

Case Sizes:

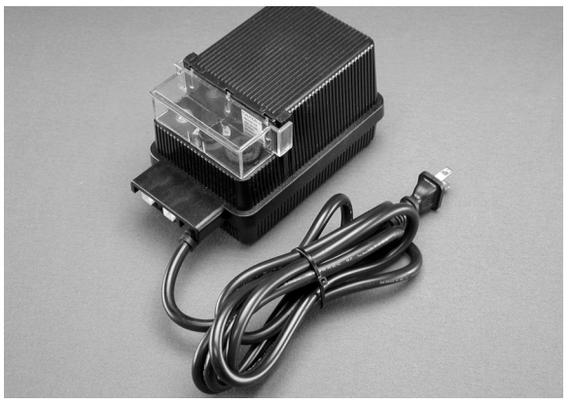


Model Number	Input Voltage and Hertz	Output Voltage	Output Current	Output Watts	Case Size			Weight in Pounds	Output Terminals	Control Devices
					L	W	H			
DA-45-12W-1	120V @ 60Hz	12VAC	3.75A	45VA	6.22”	3.66”	2.87”	2.33	2- .250” X .032” male tabs	Photo / Timer
DA-45-12W-2	120V @ 60Hz	12VAC	3.75A	45VA	6.22”	3.66”	2.87”	2.33	2- .250” X .032” male tabs	Timer only
DA-45-12W-3	120V @ 60Hz	12VAC	3.75A	45VA	6.22”	3.66”	2.87”	2.33	2- .250” X .032” male tabs	Photo Switch
DA-52-12W-1	120V @ 60Hz	12VAC	4.33A	52VA	6.22”	3.66”	2.87”	3.10	2- .250” X .032” male tabs	Photo / Timer
DA-52-12W-2	120V @ 60Hz	12VAC	4.33A	52VA	6.22”	3.66”	2.87”	3.10	2- .250” X .032” male tabs	Timer only
DA-52-12W-3	120V @ 60Hz	12VAC	4.33A	52VA	6.22”	3.66”	2.87”	3.10	2- .250” X .032” male tabs	Photo Switch
DA-60-12W-1	120V @ 60Hz	12VAC	5.00A	60VA	6.22”	3.66”	2.87”	3.85	2- .250” X .032” male tabs	Photo / Timer
DA-60-12W-2	120V @ 60Hz	12VAC	5.00A	60VA	6.22”	3.66”	2.87”	3.85	2- .250” X .032” male tabs	Timer only
DA-60-12W-3	120V @ 60Hz	12VAC	5.00A	60VA	6.22”	3.66”	2.87”	3.85	2- .250” X .032” male tabs	Photo Switch

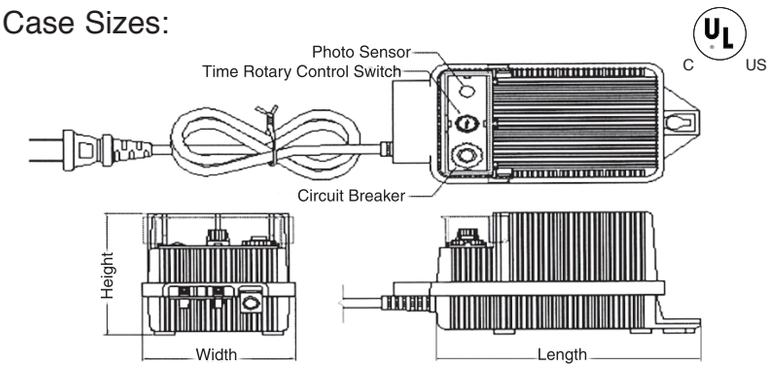
- High impact plastic Cases
- Compact size which mounts easily
- 6’6” SJTW 18/2 power cord
- Photocell switch and timer models - come on at dusk and can be set to stay on for 4/6/8 hours or auto shut off at dawn
- Timer only models - are manually turned on and can be set to stay on 4/6/8 hours and then automatically shut off
- Photocell only models - automatically come on at dusk and turn off at dawn

OUTDOOR LOW VOLTAGE TRANSFORMERS

60 to 100VA Small Case Low Voltage Outdoor Transformers



Case Sizes:

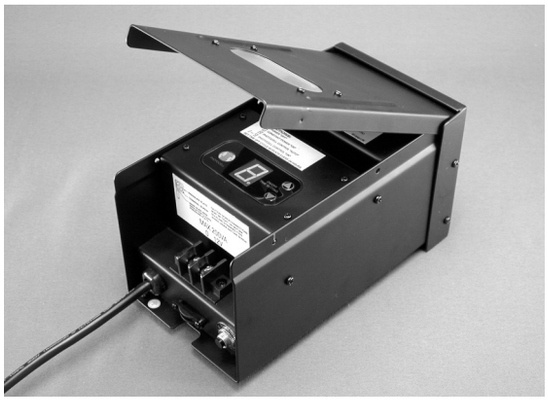


Model Number	Input Voltage and Hertz	Output Voltage	Output Current	Output Watts	Case Size			Weight in Pounds	Output Terminals	Control Devices
					L	W	H			
DA-60-12WH-1	120V @ 60Hz	12VAC	5.00A	60VA	5.90”	3.58”	3.46”	3.14	2 Pole 18-12awg Terminal Block	Photo / Timer
DA-60-12WH-2	120V @ 60Hz	12VAC	5.00A	60VA	5.90”	3.58”	3.46”	3.14	2 Pole 18-12awg Terminal Block	Timer only
DA-60-12WH-3	120V @ 60Hz	12VAC	5.00A	60VA	5.90”	3.58”	3.46”	3.14	2 Pole 18-12awg Terminal Block	Photo Switch
DA-88-12WH-1	120V @ 60Hz	12VAC	7.33A	88VA	5.90”	3.58”	3.46”	3.90	2 Pole 18-12awg Terminal Block	Photo / Timer
DA-88-12WH-2	120V @ 60Hz	12VAC	7.33A	88VA	5.90”	3.58”	3.46”	3.90	2 Pole 18-12awg Terminal Block	Timer only
DA-88-12WH-3	120V @ 60Hz	12VAC	7.33A	88VA	5.90”	3.58”	3.46”	3.90	2 Pole 18-12awg Terminal Block	Photo Switch
DA-100-12WH-1	120V @ 60Hz	12VAC	8.33A	100VA	5.90”	3.58”	3.46”	4.66	2 Pole 18-12awg Terminal Block	Photo / Timer
DA-100-12WH-2	120V @ 60Hz	12VAC	8.33A	100VA	5.90”	3.58”	3.46”	4.66	2 Pole 18-12awg Terminal Block	Timer only
DA-100-12WH-3	120V @ 60Hz	12VAC	8.33A	100VA	5.90”	3.58”	3.46”	4.66	2 Pole 18-12awg Terminal Block	Photo Switch

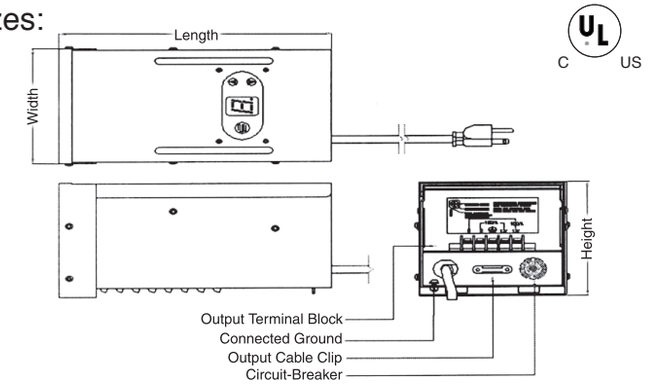
- High impact plastic Cases
- Compact size which mounts easily
- 6’6” SJTW 18/2 power cord
- Resetable circuit breaker on the output side to protect against overload
- Hinged cover to protect controls and give easy access
- Photocell switch and timer models - come on at dusk and can be set to stay on for 4/6/8 hours or auto shut off at dawn
- Timer only models - are manually turned on and can be set to stay on 4/6/8 hours and then automatically shut off
- Photocell only models - automatically come on at dusk and turn off at dawn

OUTDOOR LOW VOLTAGE TRANSFORMERS

200 to 900VA Metal Case Low Voltage Outdoor Transformers



Case Sizes:



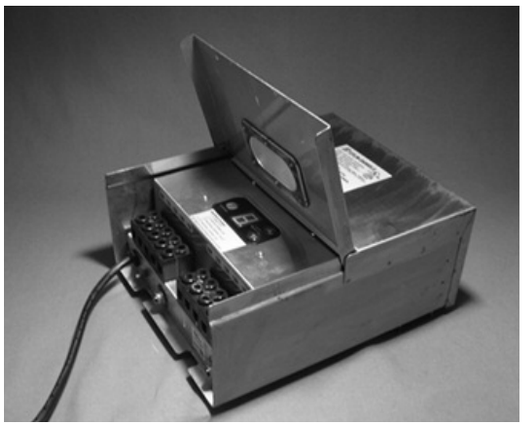
Model Number	Input Voltage and Hertz	Output Voltage	Output Current	Output Watts	Case Size			Weight in Pounds	Output Terminals
					L	W	H		
PTST-20012	120V @ 60Hz	12VAC	16.7A	200VA	8.85”	5.00”	5.00”	11.8	Split load screw terminal block
PTST-30012	120V @ 60Hz	12VAC	25.0A	300VA	8.85”	5.00”	5.00”	14.1	Split load screw terminal block
PTST-60012	120V @ 60Hz	12VAC	50.0A	600VA	14.45”	5.00”	5.00”	23.1	Split load screw terminal block
PTST-90012	120V @ 60Hz	12VAC	75.0A	900VA	12.10”	9.88”	5.43”	36.4	Split load screw terminal block

The 200, 300, 600, and 900 VA models feature the following:

- 120V to 12V for low voltage garden lighting
- Terminal block for easy wiring
- High quality electrical steel laminations for increased efficiency and lower operating costs
- Features short circuit and termal overload protection for fail safe operation
- Photocell switch and timer models - come on at dusk and can be set to stay on 4/6/8 hours or auto shut off at dawn
- High quality power coated steel enclosure for superior corrosion resistance
- Compact design for increased mounting flexibility
- Easy wall mounting using key hole slot
- Dead front cover with easy access wiring compartment on the base
- Front cover window allows viewing of timer and protection of the photocell

OUTDOOR LOW VOLTAGE TRANSFORMERS

300 to 900VA Metal Case Low Voltage Outdoor Transformers



The 300, 600 and 900 VA models feature the following:

- 120V for low voltage garden lighting
- Control can be programmed to stay on 4/6/8 hours and off at dawn.
- High quality electrical steel laminations for increased efficiency and lower operating costs
- Features short circuit and termal overload protection for fail safe operation
- Relocatable photocell that can be mounted in direct ambient light for reliable operation.
- High quality power coated steel enclosure for superior corrosion resistance
- Compact design for increased mounting flexibility
- Easy wall mounting using key hole slots on enclosure.
- Dead front cover with easy access wiring compartment on the base
- Large heavy duty terminal blocks for easy wiring.

Product Number	PST-300-12W4-1S	PST-600-12W4-1S	PST-900-12W4-1S
Power Rating **(W)**	335	670	1005
Input Voltage **(v)**	120	120	120
Frequency **(Hz)**	60	60	60
Output Voltage **(v)**	12.0/12.0/13.0/14.0	11.5/12.0/13.0/13.0	11.5/12.0/13.0/13.0
Output Current **(A)**	26/25.3/24.4/23.5	25.6/25.6/25/24	26/25/25/24
Output Voltage Without Load **(v)**	12/13/14/15	12/13/14/15	12/13/14/15
Operating Temp. **(C)**	100to 40 C/14 to 104 F	100to 40 C/14 to 104 F	100to 40 C/14 to 104 F
Dimensions:			
Length	10.5” / 266.2cm	10.5” / 266.2cm	10.5” / 266.2cm
Width	5.0” / 127cm	8.6” / 220cm	14.5” / 367.5cm
Height	4.9” / 125.0cm	4.9” / 125.0cm	5.3” / 135.0cm
Weight in Pounds	15.3lbs / 6.97 kg	26.8lbs / 12.7 kg	44.2lbs / 20.1 kg
Output Terminals	Com/12/12/14/15	Com/12/12/14/15 300Va Com/12/12/14/15 300Va	Com/12/12/14/15 300Va Com/12/12/14/15 300Va Com/12/12/14/15 300Va
Photocell	Relocatable with SPT-1 18/2 8’ long 2 hole srew mount	Relocatable with SPT-1 18/2 8’ long 2 hole srew mount	Relocatable with SPT-1 18/2 8’ long 2 hole srew mount

Also available in Stainless Steel Enclosure for added corrosion protection - add suffix “-SS”.

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Low Voltage Systems

Sytems require the use of a transformer to reduce standard volt power from your home to 12 volts. Select a transformer that matches as closely as possible the total lamp wattage by adding the wattages of all lamps that are going to be a part of the system. Total lamp load should not be less than 1/3 of the transformer's wattage rating, nor exceed the maximum wattage capacity. If the total wattage is too high, either divide the load between two transformers or use a more powerful transformer.

The closer the lamps are placed to the transformer, the higher their voltage and wattage. When a cable run is too long or there are too many lights being powered by a single transformer, noticable voltage drop may occur resulting in dim lights.

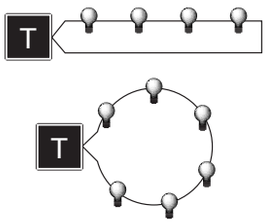
Planning Low Voltage Layouts

These diagrams show some of the most common low voltage cable layouts. Choice of layout can help minimize voltage drop.

Straight Run Installation

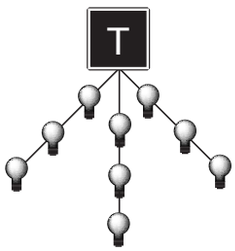
Fixtures run in sequence directly from the transformer in series.

Loop Installation



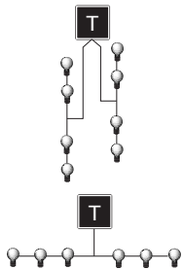
Helps reduce voltage drop and produces a more uniform light output. It is important that you connect the same wire leads to the proper transformer terminals by noting the ridge or marking on one side of the cable.

Split Load Installation



Run up to the recommended maximum cable length in two or more direct lines from the transformer.

"I" Installation



Allows more equal distribution of power to the center of a run, or to run the distance away. Cable running from transformer must be of a heavier gauge such as 10 gauge.