Smart Driver™

Digital Smart Driver™ AC Power Supply

Digital Smart Driver™ power supplies are specifically engineered

to illuminate LightTape®.

Whether it is one piece or ten, it is possible to do it all with one Smart Driver™. There are a variety of models to choose from offering a variety of useful features. A Light Tape® representative will advise which model to use based on the total illuminated area, zones, and location.

FEATURES

- Quiet
- · Stylish compact design
- · Rated Input Voltage 110 / 220 VAC
- · Protection Class 1
- IP Degree 2x
- · Worldwide voltage capacity
- · Blink and Dimmer Switch
- Visual LED system status indicator
- Lightweight
- · Short circuit and overload protection
- · Convection Air Cooled
- CE, UL, CSA and AS/NZS compliant
- 0-10 dimming
- DMX 512 compatible



AC POWER SUPPLY RANGES AND OUTPUT

| Model | Light Ta | Input | | Output | |
|----------------------|-----------------------------|-----------------------------------|---------|--------|-----------------|
| | Imperial | Metric | Amps | Watts | Max. Current, A |
| SD-8000 | 4000 - 8000 in ² | 25,806 - 51,612 cm ² | 3.50 | 420 | 3.8 |
| DSD 200 0-10 DIMMING | 1-200 in ² | 6.5 - 1,290 cm ² | 0.5 max | 12 | 0.022 |
| DSD 4000 DMX | 200-4000 in ² | 1,290 - 25,806 cm ² | 1.7 | 204 | 2 |
| DSD 2000 DMX | 1000-2000 in ² | 6,451 - 12,903 cm ² | 2.8 max | 68 | 0.91 |
| DSD 1000 DMX | 400-1000 in ² | 2,580 cm2 - 6,451 cm ² | 0.9 | 97 | 0.32 |
| DSD 200 DMX | 1-200 in ² | 6.5 - 1,290 cm ² | 0.5 max | 12 | 0.022 |
| DSD 2000 | 1000-2000 in ² | 6,451 - 12,903 cm ² | 2.8 max | 68 | 0.91 |
| DSD 1000 | 400-1000 in ² | 2,580 cm2 - 6,451 cm ² | 0.9 | 97 | 0.32 |
| DSD 400 | 200-400 in ² | 1,290 - 2,580 cm ² | 0.7 max | 17 | 0.11 |
| DSD 200 | 1-200 in ² | 6.5 - 1,290 cm ² | 0.5 max | 12 | 0.022 |



AC Power Supply Specifications



FEATURES

- DMX MODE 512 Supplies are fully DMX controllable, allowing for integration into complicated stage and light shows.
- 2. BLINK MODE Allows for on/off pulse control with fine tuning knob.
- 3. BRIGHTNESS CONTROL luminosity adjustment to approriately match installation environment.
- O-10 DIMMING Optional function to remotely control Light Tape® brightness using standard O-10v dimmers. Compatable with Lutron Dimmers.

| Model | DMX | Blink Mode | Brightness control | 0-10 Dimming |
|----------------------|-----|------------|--------------------|--------------|
| SD-8000 | | Χ | X | |
| DSD 200 0-10 DIMMING | | | X | Χ |
| DSD 4000 DMX | Χ | Χ | X | X |
| DSD 2000 DMX | Х | | | X |
| DSD 1000 DMX | Х | | | Χ |
| DSD 200 DMX | Х | | | X |
| DSD 2000 | | | X | |
| DSD 1000 | | | X | Χ |
| DSD 400 | | | X | |
| DSD 200 | | | Χ | |

AC POWER SUPPLY DIMENSIONS

| Model | Length | | Width | | Height | | Weight | |
|----------------------|----------|--------|----------|---------|----------|--------|----------|---------|
| | Imperial | Metric | Imperial | Metric | Imperial | Metric | Imperial | Metric |
| SD-8000 | 9.875 in | 250 mm | 4.75 in | 120 mm | 2.25 in | 57 mm | 4.15 lb | 2.2kg |
| DSD 200 0-10 DIMMING | 6 in | 155 mm | 2.625 in | 67.5 mm | 1.5 in | 40 mm | 0.8 lb | 363 g |
| DSD 4000 DMX | 8.75 in | 220 mm | 7.25 in | 185 mm | 2.75 in | 70 mm | 4.85 lb | 2.22 kg |
| DSD 1000 DMX | 7.75 in | 195 mm | 3.375 in | 85 mm | 2 in | 50 mm | 3.9 lb | 1.77 kg |
| DSD 2000 DMX | 8.375 in | 225 mm | 3.375 in | 85 mm | 2 in | 50 mm | 4.3 lb | 1.95 kg |
| DSD 200 DMX | 6 in | 155 mm | 2.625 in | 67.5 mm | 1.5 in | 40 mm | 0.85 lb | 386 g |
| DSD 2000 | 8.375 in | 225 mm | 3.375 in | 85 mm | 2 in | 50 mm | 3.65 lb | 1.66 kg |
| DSD 1000 | 7.75 in | 195 mm | 3.375 in | 85 mm | 2 in | 50 mm | 2.7 lb | 1.22 kg |
| DSD 400 | 6.625 in | 165 mm | 2.625 in | 67.5 mm | 1.5 in | 40 mm | 1.05 lb | 476 g |
| DSD 200 | 4.438 in | 113 mm | 2.75 in | 70 mm | 1.625 in | 41 mm | 0.7 lb | 318 a |



Smart Driver™ Safety & Handling

It is important that you operate Light Tape® and Smart Driver™ Power Supplies within their parameters. Changes to parameters that result in over-current will damage the Light Tape® lamp and power supplies.

Safety:

- Always consult local electrical codes for wiring regulations and installation requirements.
- Before use, ensure Smart Driver is adjusted to the correct input voltage (120/240 VAC) if the unit is equipped with a voltage selector switch.
- · Always disconnect power before servicing.
- Do not operate Smart Driver[™] outdoors unless in a suitably rated enclosure. Ensure installation in a dry environment.
- Always treat Smart Driver[™] with care and respect as one would with any device where electrical current is present.

Handling:

- Turn off power to the Smart Driver™ using the power switch located on the input side of the unit. Allow five (5) minutes for capacitors to drain to the 120/240 VAC branch circuit grounding system before disconnecting supply to the unit.
- When cleaning Smart Driver[™], do not use water or chemical cleaners.
- Smart Drivers[™] should be mounted vertically using mounting holes to allow for natural convection air flow and maximum cooling. If applicable mount units with cooling fans facing upwards.
- Always store electronics in dust free environments to ensure proper performance.

General Installation Guidelines:

- Follow all installation guidelines from Electro-LuminX.
 Please visit our website www.lighttape.com for additional information.
- Please read all instructions prior to installation. Contact your regions tech support with any questions.
- When unpacking, please review all contents on the packing list and immediately notify us of any missing or damaged items.
- Do not mount Smart Driver™ directly to resonant surfaces such as metal, as this may produce amplified harmonics.
- Ensure to protect Smart Driver against severe shock or vibration with the use of vibration dampers where required.
- Light Tape® is non-polar, each hemisphere requires its own lead from the power supply.

- The Smart Driver™ to be selected based on total load.
 One Smart Driver™ can light multiple Light Tape® pieces, connected in Parallel. We do not recommend connecting Light Tape® Lamps in series or daisy chain. Do not under load or over load the Smart Driver™ as exessive current may damage electrical connections, lamps and power supply.
- Do not power up the Smart Driver™ without having the correct load applied.
- The external dimmer switch on Smart Driver[™] controls the output voltage and frequency.
- Ensure the brightness is set to the lowest position prior to powering up lamp/s.
- Use a voltage meter to determine volts / hertz from Smart Driver™ once Light Tape® has been connected.
- Set Smart Driver™ dimmer switch as per factory recommended settings:

Low: 200 volts

Medium: 250 volts* (Recommended set point)

High: 300 volts.

(For permanent, backlighting installations, the Smart Driver $^{\text{TM}}$ output should not exceed 270V AC output. This will help maximise the lifetime of the lamp.)

- We DO NOT recommend exceeding 300 volts. Contact us if the Smart Driver™ is operating outside of range.
- Smart Driver[™] power supplies are equipped with overload and short circuit protection. If trip occurs during operation, please inspect Light Tape[®] for damage, and operating voltage is within correct range.
- Red LED indicates the following :
 - a. Short Circuit Protection: Check wiring if light is on.
 - b. Overload Protection: Verify that lamp area is acceptable, or for possible damage to lamp.
- To reset Smart Driver[™], switch off the main power toggle switch and wait 15 seconds, until LED indicator light subsides. Adjust the dimmer switch to a lower brightness setting prior to switching Smart Driver[™] back on.
- When O-10 Dimming, it is recommended that the input power be controlled with an external relay so that the Smart Driver™ can be switched off when not in use.



DC Power Supplies



FEATURES

- Mountable/portable
- Compact in size
- Temperature Range: -22°F to 185°F (-30°C to 85°C)
- Accepts variety of input voltages
- High Efficiency
- Reverse Polarity protection
- No load protection

- Short circuiting protection
- Self compensating
- Quiet
- Small form factor
- CE compliant
- 6V, 12V, 24V inputs available

DC POWER SUPPLY RANGES AND OUTPUT

| Model | Light T | Input | | | Output | |
|--------------|-----------------------------|-------------------------------------|--------|------|--------|--------------|
| | Imperial | Metric | V | Amps | Watts | Max. Current |
| BUS-DSD-4000 | 200-4000 in ² | 1,290.32 - 25,806.4 cm² | 24v DC | 4.5 | 108 | |
| DC 2000 | 1200 - 2000 in ² | 7,741.92 - 12,903.2 cm ² | 12v DC | 6 | 72 | 8752 mA |
| DC 1500 | 800 - 1200 in ² | 5,161.28 - 7,741.92 cm ² | 12v DC | 3.6 | 45 | 6564 mA |
| DC 750 | 500 - 800 in ² | 3,225.8 - 5,161.28 cm² | 12v DC | 2.5 | 30 | 3282 mA |
| DC 500 | 300 - 500 in ² | 1,935.48 - 3,225.8 cm² | 12v DC | 1.5 | 18 | 2188 mA |
| DC 300 | 150 - 300 in² | 967.74 - 1,935.48 cm² | 12v DC | 0.9 | 10.8 | 1312 mA |
| DC 150 | 75 - 150 in² | 483.87 - 967.74 cm² | 12v DC | 0.5 | 6 | 656 mA |
| DC 100 | 50 - 100 in² | 322.58 - 645.16 cm ² | 12v DC | 0.4 | 5 | 438 mA |
| DC 50 | 25 - 50 in² | 161.29 - 322.58 cm² | 12v DC | 0.16 | 2 | 219 mA |
| DC 20 | 10 - 25 in² | 64.52 - 161.29 cm² | 12v DC | 0.08 | 1 | 88 mA |
| DC 9V | <30 in² | <193.55 cm² | 9v DC | 0.2 | 2 | mA 144 |

DC POWER SUPPLY DIMENSIONS

| Model | Length | | Width | | Height | | Weight | |
|--------------|----------|--------|----------|---------|----------|--------|----------|---------|
| | Imperial | Metric | Imperial | Metric | Imperial | Metric | Imperial | Metric |
| BUS-DSD-4000 | 8.75 in | 222 mm | 6.25 in | 158 mm | 3 in | 76 mm | 4.15 lb | 1.88 kg |
| DC 2000 | 6.5 in | 165 mm | 4.25 in | 108 mm | 2 in | 50 mm | 2.65 lb | 1.2 kg |
| DC 1500 | 6 in | 152 mm | 3.875 in | 98.4 mm | 1.5 in | 38 mm | 1.85 lb | 839 g |
| DC 750 | 4 in | 102mm | 3.875 in | 98.4 mm | 1.5 in | 38 mm | 0.95 lb | 431 g |
| DC 500 | 4 in | 102mm | 3.125 in | 80 mm | 1.5 in | 38 mm | 0.7 lb | 318 g |
| DC 300 | 4 in | 102mm | 2.125 in | 54 mm | 1.5 in | 38 mm | 0.9 lb | 408 g |
| DC 150 | 4 in | 102mm | 2 in | 50 mm | 1.5 in | 38 mm | 0.6 lb | 272 g |
| DC 100 | 3 in | 76 mm | 2 in | 50 mm | 1.5 in | 38 mm | 0.45 lb | 204 g |
| DC 50 | 3 in | 76 mm | 1.6 in | 40 mm | 1 in | 25 mm | 0.2 lb | 90.7 g |
| DC 20 | 1.75 in | 44 mm | 1 in | 25 mm | 0.8 in | 20 mm | 0.1 lb | 45.4 g |
| DC 9V | 2.3 in | 58 mm | 2.3 in | 58 mm | 1 in | 25 mm | 0.15 lb | 68 g |



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