



Digitron Electronics
 4160 Technology Drive, Fremont, CA 94538
 510-979-9971 Fax 510-979-9973
<http://www.digitrondisplays.com>

UAI-1201-01-00

Single Tube
 DC to AC Inverter

Specifications

The UAI-1201-01-00 DC to AC inverter features onboard connectors and can be easily dimmed using an external analog control signal or external PWM generator.

Power by a regulated +12 Volt DC source, the UAI-1201-01-00 is designed to power the Samsung LTN104S2-L01 display backlight.

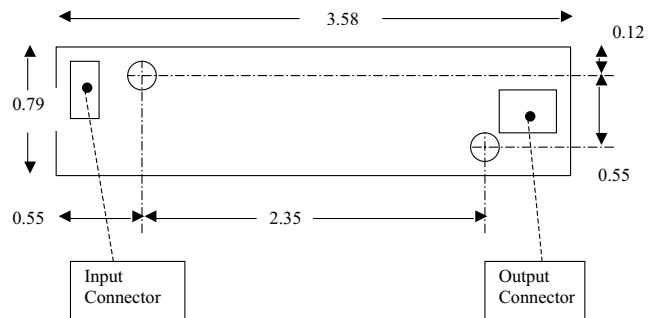
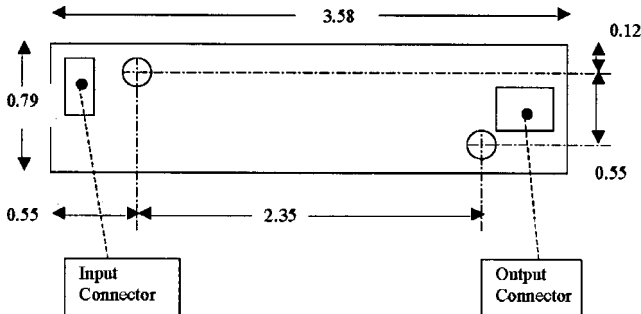
Product Features

Small Package Size, less than 9mm in height.

High Dimming Ratio

High Efficiency

Made in USA



| Connectors | |
|------------------------|---------------------------|
| J1 Molex 53261-0590 | J2 JST SM02B-BHSS-1-TB |

| Pin Descriptions | |
|------------------|------------|
| J1-1 Vin | J2-1 ACout |
| J1-2 GND | J2-2 ACout |
| J1-3 Enable | |
| J1-4 Control | |
| J1-5 N/C | |



Digitron Electronics
 4160 Technology Drive, Fremont, CA 94538
 510-979-9971 Fax 510-979-9973
<http://www.digitrondisplays.com>

UAI-1201-01-00

Single Tube
 DC to AC Inverter

Absolute Maximum Ratings*

| Rating | Symbol | Value | Units |
|-----------------------|--------------|---------------|-------|
| Input Voltage | V_{in} | -0.3 to +13.2 | Vdc |
| Disable | V_{Enable} | -0.3 to +0.3 | Vdc |
| Operating Temperature | T_a | -0 to +85 | °C |
| Storage Temperature | T_s | -40 to +85 | °C |

Recommended Operating Conditions

| Rating | Symbol | Value | Units |
|-------------------------|----------|---------------|-------|
| Input Voltage | V_{in} | -0.3 to +13.2 | Vdc |
| Operating Temperature** | T_a | -0 to +85 | °C |

Electrical Characteristics

| Rating | Symbol | Min | Typ | Max | Units |
|-----------------------|-------------|------|-----|----------|--------------|
| Input Current | I_{in} | - | .32 | .38 | A_{DC} |
| Input Ripple Current | I_{rip} | - | 20 | - | mA_{pk-pk} |
| Output Voltage | V_{start} | 1400 | - | - | V |
| Output Voltage*** | V_{out} | - | 500 | - | V |
| Output Current | I_{out} | - | 6.3 | - | mA_{rms} |
| Enable (pin J1-3)**** | | | | | |
| Turn-off Threshold | V_{thoff} | 0 | - | 1 | V |
| Turn-on Threshold | V_{thon} | 2.5 | - | V_{in} | V |
| | | | | | |
| | | | | | |
| | | | | | |

* Reliable and predictable operation of the device is not guaranteed with applied stresses at or beyond those listed in "Absolute Maximum Ratings". Operation at these limits may reduce device reliability and is therefore not recommended. Please refer to "Recommended Operating Conditions" for reliable operation of the device.

** Reliable operation above 50°C is possible if airflow is provided.

*** When Powering a load simulating the referenced display

**** The inverter is always enabled with an internal pullup resistor tied to the enable pin. A ground on the enable input will turn the inverter off.