

**APPLIED
CONCEPTS INC.**

397 Route 281 - P.O. BOX 453
Tully, New York 13159-0453
Phone: (315) 696-6676 Fax: (315) 696-9923
www.acipower.com

AC2-12-1224

PRODUCT DATA SHEET

CCFL INVERTER

(For Multiple Tube Applications)

02/02/04

The AC2-12-1224 is designed to power 2 or 4 CCFL's to a nominal power level of up to 20 watts.

Intensity control (0-100%) is accomplished by the user providing a variable dc level (Vcntl) at pin 6 of CON1. The dimming polarity of Vcntl is determined by the state of pin 5 of CON1.

If pin 5 of CON1 is HI (+5V), Vcntl response is as follows: 0V=full-off, +4.85V=full-on. Conversely, if pin 5 of CON1 is LO (0V), Vcntl response is as follows: 0v=full-on, 4.85V=full-off.

+5V @ 5mA max is available as a convenience to the user on Pin 8 of CON1

A vertical sync signal is accepted @ pin 7 of CON1 for locking the pwm frequency to the vertical refresh rate.

All outputs are open and short circuit protected

Specifications:

Vin = +12V +/- 10%

CCFL strike voltage = 1700Vrms @ Vin=12V

CCFL tube current = 7.0mA/tube @ 100% intensity/Vin=12V)

Recommended CCFL sustaining voltage = 525Vrms - 725Vrms

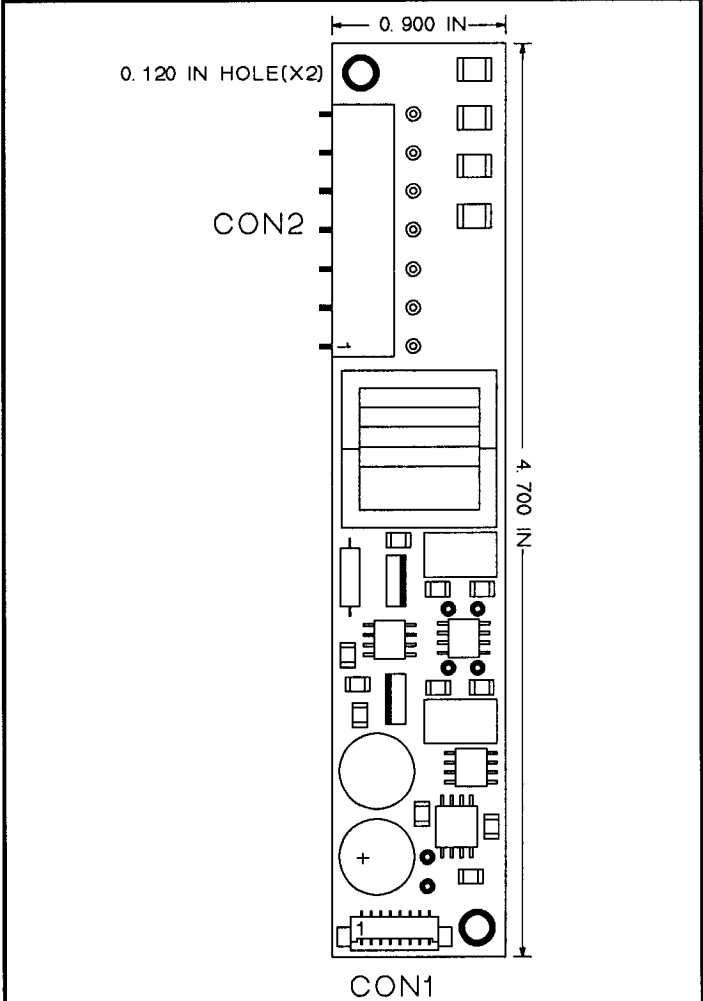
Nominal tube current frequency = 46khz +/- 10%

PWM Frequency = Vsync(60Hz nominal)

VSYNC input requirements = 60Hz nominal, 5V negative going (NOTE: Absence of Vsync will cause the unit to free-run @ 98Hz nominal. Also Vsync input should be tied to ground if not used.)

Pwm duty cycle range = 0 to 100%

Average electrical efficiency >90%



PROFILE < 0.575 IN

INPUT CONNECTOR CON1 MOLEX 53261-0890		OUTPUT CONNECTOR CON2 MOLEX 22-28-1130	
PIN #	FUNCTION	PIN #	FUNCTION
1	+12V(PWR)	1	CCFL COMMON
2	+12V(PWR)	2	NC
3	GND(PWR)	3	NC
4	GND(PWR)	4	NC
5	VCNTL POLARITY	5	NC
6	VCNTL	6	NC
7	VSYNC-IN(60Hz)	7	CCFL4
8	+5V OUT	8	NC
		9	CCFL3
		10	NC
		11	CCFL2
		12	NC
		13	CCFL1