

# 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](http://www.acipower.com)

# ACB-12-1471

## PRODUCT DATA SHEET

04/08/04

## CCFL INVERTER

(For Multiple Tube Applications)

The ACB-12-1471 is designed to power 6 CCFL's to a nominal power level of 36 watts from an input voltage of +12V.

The ACB-12-1471 features analog dimming control via a dc control level of 0V(off) to +5V(on) @ pin 7 of CON1. A dc reference voltage(+5V) is available @ pin 6 of CON1 for external use.

Enable control (0V=off, +5V=on) is accomplished @ pin 5 of CON1.

All outputs are open and short circuit protected.

### Specifications:

$V_{in} = +12V \pm 10\%$

CCFL strike voltage = 2000Vrms @  $V_{in}=12V$

CCFL tube current = 8.0mA/tube @ 100% intensity/ $V_{in}=12V$

Recommended CCFL sustaining voltage = 600Vrms - 850Vrms

Nominal tube current frequency = 41kHz  $\pm 10\%$

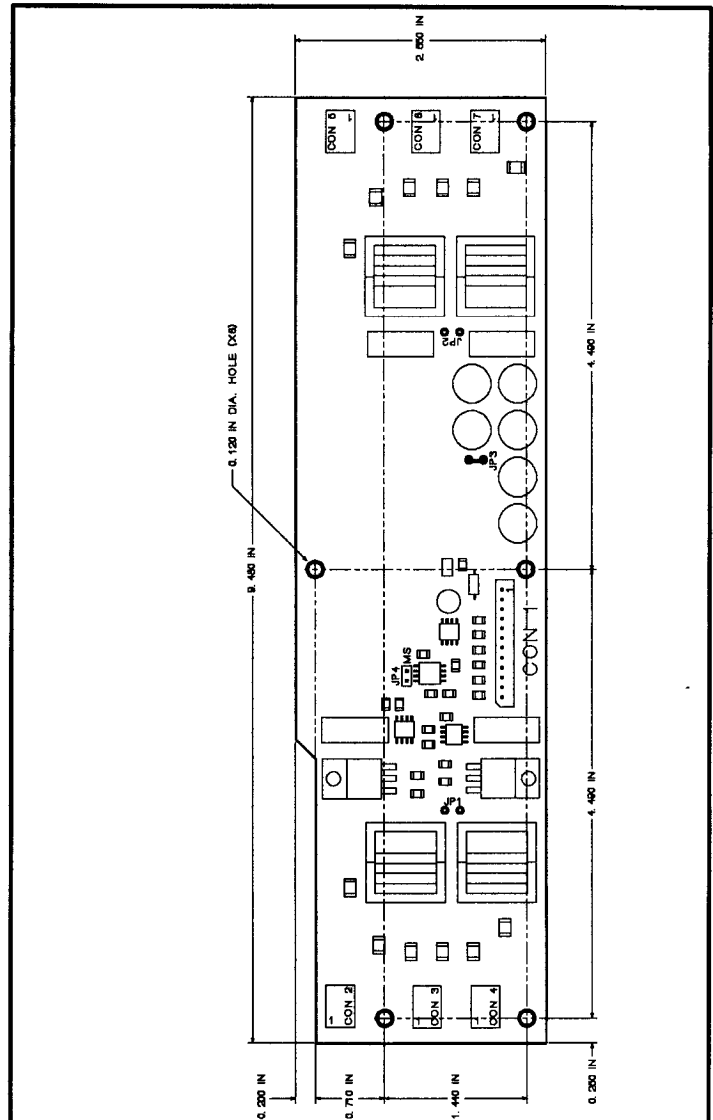
Nominal pwm frequency(free-run) = 98Hz  $\pm 3\%$

Pwm duty cycle range = 0 to 100%

Maximum reference voltage current draw(CON1, pin 6) = 10mA

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.

Average electrical efficiency > 90%



PROFILE < 0.575 IN

INPUT CONNECTOR  
CON1  
MOLEX 22-03-5125

OUTPUT CONNECTOR(S)  
CON2-CON7  
JST SM02B-BHSS-1

PIN #	FUNCTION	PIN #	FUNCTION
1,2	+VIN	1	CCFL HOT
3,4	GND(POWER)	2	CCFL COLD
5	ENABLE		
6	+5V OUT		
7	VCNTL		
8	GND(SIGNAL)		
9	(OPTIONAL)		
10	GND(SIGNAL)		
11	TBD		
12	GND(SIGNAL)		