



VersaLux Utility Light Module™

Part# ELPDVLVX1

DATASHEET 3/15/02

Precautions:

- WARNING!** Lights are strong enough to cause damage to the human eye - do not stare into lamps for long periods or from a close exposure (less than 2 feet).
- Caution!** Device is static sensitive and can be destroyed with static electricity - use static handling procedures to ensure proper function, performance and life.
- Caution!** Incorrect connection, or over voltage may cause permanent damage to the device.

Disclaimer:

Technology Associates, Inc. does not guarantee the accuracy or validity of this information. Technology Associates, Inc. is not responsible for the loss of life, property or assets which use of this information and this device may cause.

Overview:

The VersaLux Utility Light Module(tm) is designed to operate from a DC power source within the range of 2.2 to 13.8 volts. The Power Output setting potentiometer (user adjustable) on the module establishes the regulated power to the lamps. This setting can range from 1% to 100% of the unit's total output capacity. This setting stabilizes the light output through its entire operating power range to a maximum variance of no more than +/- 15% through this range, at maximum output. This percentage of variance decreases to nearly 0 as the power output setting reaches 0. 10 white LED's with 20 degree output patterns rated at 6.4CD each provide the actual light. The rated life of the LEDs is up to 100,000 hours. Higher output and operating temperatures will diminish this.

Use and hookup:

Connect the RED lead to the Positive (+) connection of the battery or power supply. Connect the BLACK lead to the Negative (-) connection of the battery or power supply. For proper power protection from failure and fire hazard, a 0.5amp fast-blow fuse should be placed in series with either lead. Or, if operating voltage will be or will fall below 2.5 volts than supply current should be limited to .5 amps. However, because of lower electrical conversion efficiencies at voltages under 4 volts, it is recommended that battery voltages of 4.5 volts or higher be used for optimum efficiency and battery life. Unit may emit an audible tone when operating at voltages below 5 volts, this is normal. If the 1/4" center mounting hole is used, be sure to insulate the board with an insulating washer and to not crush any components located near the hole. Be sure to not allow the top or bottom of the board to make contact with any metal or conductive surface or damage may occur. Using a small screw driver, set the light output setting to the desired level.

Ratings:

Maximum DC supply voltage: 13.8VDC • Maximum DC supply current: .5 amps (@ 2.3 volts)
 Minimum DC supply voltage: 2.2VDC • Minimum DC supply current: 0.7ma (2.2v, lowest output setting)
 Maximum operating temperature: 65 Degrees Celsius

Typical power consumption at Maximum output.		
VDC In	Amps In	%Efficiency
2.2	0.45	68
2.5	0.47	64
3.0	0.41	70
4.0	0.27	80
5.0	0.19	89
6.0	0.15	95
9.0	0.10	94
12.0	0.07	98
13.8	0.06	96

Some typical battery configurations and approximate life expectancy at full output.	
Configuration	Hours
(1) 9V Alkaline	4 +
(3) AA Alkaline series	7+
(4) AA Alkaline series	11+
(4) D Alkaline series	110+
(4) AAA Alkaline series	6+
(4) AA NIMH series	9+
(4) C NIMH series	12+

Attention! Variation in lamp intensity and color is normal and does not indicate failure or defect.

Mechanical Spec, & Drilling guide & Notes:

- Recommend using 13/64" drill for LED holes.
- If using mounting hole, be careful to not crush parts or short traces - use an insulating washer if necessary.
- Depiction to right is not guaranteed accurate.

