



## USER INFORMATION – MODEL 1675-24-48-4

Connection and operation of the Model 1675-24-48-4 is almost entirely self-explanatory from the top cover markings on each unit. The additional information below may be helpful in avoiding installation errors or performance problems when using this dc-dc converter.

### Mechanical Installation

The four slotted mounting holes on the converter's base flange were designed for use with #10 hardware. The mounting hole pattern is 5.5" x 7.2" on center.

Although this power converter is very efficient (88% typical), some power is lost to heat. The aluminum chassis of the converter is also its integral heatsink, and it is important to allow air to flow unrestricted around the converter if it is to be used at or near full rated power for extended periods of time.

### Electrical Connections

The input/output terminal block is designed for use with #8 hardware. The input and output terminals are clearly marked beside the terminal block, and deliberate caution should be exercised to avoid wiring and polarity errors. Both the input and the output of the converter are dc-isolated from the chassis and from each other. Therefore, the input and output may each be connected as either a positive or negative voltage, independent of the other.

**Warning:** This converter is not internally fused. Externally fuse the input line at 30 amperes. Good installation practice for equipment powered by dc battery systems dictates that input fuses or circuit breakers should be located at the battery end of the cables feeding the converter. For this reason, no input protection devices are incorporated into the Model 1675-24-48-4 to protect against fault conditions at the input to the converter. Instead, a 30-A fuse or circuit breaker should be installed near the battery in series with the positive (+) input line when this source is negative-grounded or not grounded (floating), or in series with the negative (-) input line when the battery source is positive-grounded.

It is suggested that #10 AWG cables be used to connect the converter to its 24-volt battery source and that #16 AWG cables be used to connect to its 48-volt load. The length of the connection cables should be kept to a minimum. If the length of the cables is to exceed 10 feet, lower gauge (i.e. larger) cables should be considered.

### Operation and Maintenance

This converter should never be operated from a source voltage greater than 30 Vdc as this may stress or damage internal circuitry.

The maximum rated output current for this converter is 4.0 amperes continuous at 25°C ambient temperature. At higher ambient temperatures (up to 70°C maximum), a duty-cycle limitation or output-current derating may apply. For further information, see Bulletin No. 0071A.

Other than preventing dust and debris from accumulating on external surfaces of the converter and occasionally checking the integrity of the electrical connections, no periodic maintenance should be required.

SEE REVERSE FOR ADDITIONAL INFORMATION

## REPAIR AND RETURN INFORMATION

It is recommended that a damaged or malfunctioning unit be returned to Wilmore for repair. Multiple-component cascade failures in power conversion circuitry can greatly complicate trouble-shooting procedures, and factory technicians familiar with the circuitry can locate the problem quickly, explore adjacent circuitry for stressed or damaged components, and subject the converter to a thorough retest.

Wilmore maintains a **Return Material Authorization** system in order to efficiently track your inbound shipment and expedite its repair and return to you. Before shipping material to Wilmore for repair, please call (919) 732-9351 or email [info@wilmoreelectronics.com](mailto:info@wilmoreelectronics.com) and request an **RMA Number** for your shipment. If possible, please provide the complete model number of the equipment, its serial number, and a brief description of the problem. Place this **RMA Number** on the outside of the package and ship prepaid to:

WILMORE ELECTRONICS CO., INC.  
607 U.S. 70A East  
P.O. Box 1329  
Hillsborough, NC 27278

### LIMITED WARRANTY

Wilmore Electronics Company, Inc. warrants this product to be free from defects in material and workmanship for one (1) year after delivery to the original purchaser. During this period, a defective product for which an authorization to return the product has been given, shall be returned to Wilmore freight prepaid. The products will be repaired, replaced, or credit allowed only if the defect, after examination by Wilmore, is determined to be a defect in material or workmanship. If this returned product is determined by Wilmore to have suffered from user misuse or abuse or to have been opened or modified without written instructions from Wilmore, or if the date of receipt of a request for return authorization exceeds the 1-year warranty period, the warranty is null and void. In such cases, Wilmore will determine the cost of repair, quote this price to the purchaser, and continue as advised by the purchaser.

The sole obligation of Wilmore and the purchaser's exclusive remedy under this or any other warranty, expressed or implied, is the repair or replacement of a defective product as provided above, or the issuance of credit in an amount not to exceed the contract price for the product deemed to be defective. Wilmore makes no warranty of merchantability or fitness for a particular use. Wilmore shall not be responsible for incidental or consequential damage, whether or not foreseeable, caused by defects in this product. There are no other warranties which shall extend the description above.