



Nextek Power Systems Emergency Ballast for Low Voltage Lighting Systems Installation Procedure





TABLE OF CONTENTS

ABOUT NEXTEK POWER SYSTEMS.....pg 3

WARRANTY SUMMARYpg 4

1.0 FEATURESpg 5

2.0 APPLICATIONpg 5

3.0 OPERATION.....pg 5

4.0 MAINTENANCE.....pg 5

5.0 TECHNICAL SPECIFICATIONS.....pg 6

6.0 INSTALLATION PROCEDUREpg 7

7.0 PRODUCT WARRANTY.....pg 8

8.0 NOTESpg 9



ABOUT NEXTEK POWER SYSTEMS

Nextek Power Systems AC/DC integration technology represents a breakthrough in on-site electrical management, combining the availability of AC power with the quality and efficiency of a DC supply.

NEXTEK BENEFITS

- Easy conversion of AC lighting fixtures to DC-powered units
- Easy conversion of AC grid power into DC power for commercial building applications
- Highly efficient management of peak loads
- Future-proof lighting and other systems to be developed
- Nextek Power Systems Direct Coupling® Technology, directly connects clean power generated at a building to its electronic loads inside cutting down on over-all power consumption, boosts electricity generated and stored on-site, and delivers a robust renewable energy ready network.

DISCLAIMER

Nextek Power Systems has made every reasonable effort to ensure the accuracy of the information in this catalog. Nextek Power Systems does not guarantee that the information is error free, nor do we make any other representation, warranty or guarantee that the information is accurate, correct, reliable or current. Nextek Power Systems, Inc. reserves the right to make any adjustments to the information contained herein at any time without notice. The specifications in this catalog are for reference purposes only and are subject to change without notice. Consult Nextek Power Systems for the latest design specifications. All trademarks are either the exclusive property of Nextek Power Systems, Inc. or other companies. Copyright 2010 by Nextek Power Systems, Inc. in the United States and other countries throughout the world.



WARRANTY SUMMARY

Dear Nextek Power Systems Customer,

Thank you for your purchase of a Nextek Power Systems Products. We make every effort to assure our products will give you long and reliable service.

As with any manufactured device, repairs might be needed due to damage, inappropriate use, or unintentional defect. Please note the following guidelines regarding warranty service of our products.

- Any and all warranty repairs must conform to the terms of the warranty.
- All equipment must be installed according to their accompanying instructions and manuals with specified over-current protection in order to maintain their warranties.
- The customer must return the component(s) to Nextek Power Systems securely packaged, properly addressed, shipping paid and RMA clearly labeled on both the inside and outside of the box. We recommend insuring your package when shipping. Packages that are not securely packaged can sustain additional damage not covered by the warranty or can void warranty repairs.
- There is no allowance or reimbursement for an installer's or user's labor or travel time required to disconnect, service, or reinstall the damaged component(s).
- Nextek Power Systems will ship the repaired or replacement component(s) prepaid to addresses in the continental United States, where applicable. Shipments outside of the United States will be sent freight collect.
- In the event of a product malfunction, Nextek Power Systems cannot bear any responsibility for consequential losses, expenses, or damage to other components.
- Please read the full warranty at the end of this manual for more information.

CONTACT INFORMATION

Nextek Power Systems
461 Burroughs Street
Detroit, MI 48202
Phone: +1 (313) 887-1321
Fax: +1 (313) 887-9433
www.nextekpower.com
info@nextekpower.com



1.0 FEATURES

- Low-voltage, 2 wire 24VDC
- Very High charge Efficiency with Auto-Polarity correction
- Sound rated A
- Will operate any T8, T5 or BIAX style lamp

2.0 APPLICATION

The NB24-T5T8-01E fluorescent emergency ballast works in conjunction with a DC ballast to convert new or existing fluorescent fixtures into emergency lighting. The NB24-T5T8-01E emergency ballast consists of a high-temperature nickel-cadmium battery, charger and circuitry in one compact black case.

The NB24-T5T8-01E can be used with one 17W - 54W (2' - 4') T5, T8 or BIAX fluorescent lamp. The NB24-T5T8-01E is suitable for indoor locations. It is not suitable for air handling heated air outlets or wet or hazardous locations. Please call for specific information about lamp and ballast compatibility.

3.0 OPERATION

When the main power fails, the NB24-T5T8-01E immediately switches to emergency mode, operating one lamp illuminated at a reduced lumen output for a minimum of 90 minutes. When the main power is restored, the NB24-T5T8-01E automatically returns to charging mode.

4.0 MAINTENANCE

Every 30 days the NB24-T5T8-01E charging indicator should be inspected for illumination and the emergency ballast operation should be confirmed by pressing the test switch. A long term 90 minute discharge should be performed once a year by operating lamps for not less than 90 minutes.



- Nextek Power Systems - Emergency Ballast for Low Voltage Lighting Systems, Installation Procedure

5.0 TECHNICAL SPECIFICATIONS

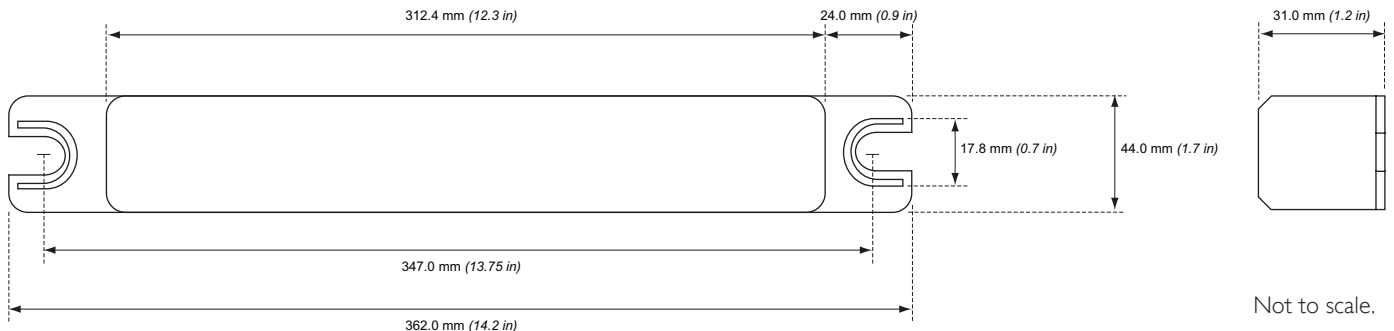
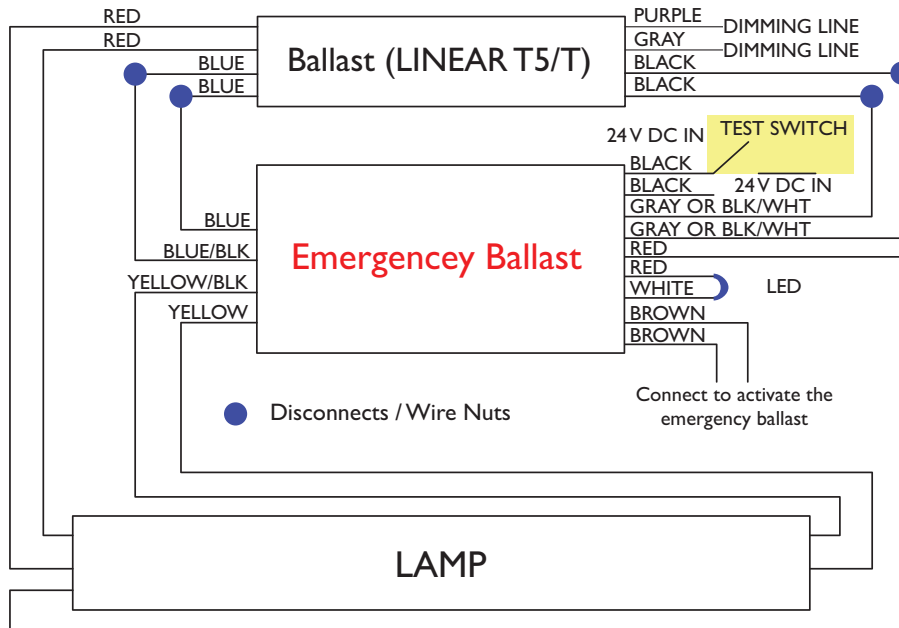
U.S. Patent Pending

- Operating Voltage: 24v DC (nominal)
- Operating Current: 140 mA.
- Rated Inrush Current: 250mA for 1 sec
- Illumination time: 90 min.
- Initial Light Output: Up to 650 Lumens
- Test switch: Single Pole
- Charge indicator light: LED
- Charge Current: 200 - 250mA
- Recharge time: 24 hours
- Battery: High Temperature Maintenance-Free Nickel-Cadmium. 7 - 10 year life expectancy
- Dimensions: 1.7 in W x 1.2 in H x 14.2 in L (44 mm W x 31 mm H x 362 mm L)
- Weight: 1.6 lbs (700 g.)

Single Lamp Operation	
Lamp Type	Lumens*
F25T8	625
F32T8	650
FT40BX	625
F24T5HO	425
F54T5HO	800
F28T5	775
F21T5	475

* In "emergency" lighting mode

All specifications are subject to change without notice



Not to scale.

For more information:

Nextek Power Systems
461 Burroughs Street
Detroit, Michigan 48202

Tel: 313-887-1321
Toll free: 1 (877) 24-VOLTS
Fax: 313-887-9433

www.nextekpower.com
info@nextekpower.com



6.0 INSTALLATION PROCEDURE

The NB24-T5T8-01E does not affect normal fixture operation. It may be used with either a switched or unswitched fixture. If a switched fixture is used, an unswitched hot lead must be connected to the emergency ballast. The emergency ballast must be fed from the same DC branch circuit as the standard ballast. The NB24-T5T8-01E may be installed on top of or remote from the fixture. The NB24-T5T8-01E may be remotely installed up to 50 feet from the lamp. Installation is not recommended with fixtures where the ambient temperature may fall below 0°C.

1. This product is for use with a Fluorescent emergency lighting load not to exceed 54W at a maximum rated current of 280mA for a minimum of 90 minutes in emergency run time.
2. Make sure all connections are in accordance with the National Electrical Code and any local regulations.
3. To reduce the risk of electric shock, disconnect both normal and emergency power supplies and converter connector of the emergency ballast before servicing.
4. This product is suitable for dry locations. This product is not suitable for heated air outlets, wet or hazardous locations and is not suitable for sealed and gasketed fixtures.
5. The power source is 24Vdc.
6. Do not install near gas or electric heaters.
7. Do not attempt to service the battery. A sealed, no-maintenance battery is used and not field replaceable.
Contact the manufacturer for information on service.
8. The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.
9. Do not use this product for other than intended use.
10. Servicing should be performed by qualified service personnel.



7.0 PRODUCT WARRANTY

The NB24-T5T8-01E is warranted for (5) years from date of purchase. This warranty covers only properly installed Nextek emergency ballasts used under normal conditions. For the warranty Nextek will, at its option, repair or replace defective emergency ballast without charge, provided it is returned to the factory transportation prepaid and our inspection determines it to be defective under terms of the warranty. Repair or replacement, as stated above, shall constitute the purchaser's exclusive warranty, which does not extend to transportation, installation, labor, or any other charges, nor does it apply to any equipment of another manufacturer used in conjunction with the emergency ballast.

CONTACT INFORMATION

Nextek Power Systems
461 Burroughs Street
Detroit, MI 48202
Phone: +1 (313) 887-1321
Fax: +1 (313) 887-9433
www.nextekpower.com
info@nextekpower.com

Nextek Power Systems Emergency Ballast for Low Voltage Lighting Systems Installation Procedure

REVISION HISTORY		DATE
A	First Draft	February 27, 2011
B	Second Draft	June 07, 2011

CONTACT INFORMATION

Nextek Power Systems
461 Burroughs Street
Detroit, MI 48202
Phone: +1 (313) 887-1321
Fax: +1 (313) 887-9433
www.nextekpower.com
info@nextekpower.com



NEXTEK Power Systems

