



## INSTALLATION AND OPERATION MANUAL



Industrial DC-Battery Power Management System

**This manual serves the following  
ComNet Model Numbers:**

NWKBB200

Thank you for purchasing NetWave® from ComNet. This manual will cover how to install hardware on your enclosure, Configure batteries, cabling and mounting of the enclosure.

The NetWave® NWKBB200 DC-Battery Power Solution provides consistent power for your devices in locations where power is on a timer or they have frequent blackouts or brownouts. The NWKBB200 supports AC input ranging from 110 to 277 VAC, and can also support higher voltages using a Step Down Transformer. The intelligent controller distributes power to the load and batteries when AC power is available and instantly switches over to DC output only when AC power is lost. The kit includes valve-regulated lead-acid batteries, outdoor enclosure, mounting bracket and Smart DCBattery Power Controller. The aluminum outdoor enclosure has two 180° door hinges and a pad lockable latch for security. The enclosure has built in mounting brackets that support pole and wall mounting.

## About This Guide

This guide is intended for different users such as engineers, integrators, developers, IT managers, and technicians.

It assumes that users have some PC competence and are familiar with Microsoft Windows operating systems and web browsers such as Windows Internet Explorer and Mozilla Firefox, as well as have knowledge of the following:

- » Installation of electronic equipment
- » Electrical regulations and guidelines
- » Knowledge of Local Area Network technology

## Related Documentation

The following documentation is also available:

- » NWKBB100 Datasheet

## Website

For information on ComNet's entire product line, please visit the ComNet website at <http://www.comnet.net>

## Support

For any questions or technical assistance, please contact your sales person ([sales@comnet.net](mailto:sales@comnet.net)) or the customer service support center ([techsupport@comnet.net](mailto:techsupport@comnet.net))

## Safety

- » Only ComNet service personnel can service the equipment. Please contact ComNet Technical Support.
- » The equipment should be installed in locations with controlled access, or other means of security, and controlled by persons of authority.

## Contents

|                                     |           |
|-------------------------------------|-----------|
| <b>About This Guide</b>             | <b>2</b>  |
| Related Documentation               | 2         |
| Website                             | 2         |
| Safety                              | 2         |
| <b>Overview</b>                     | <b>5</b>  |
| Legal Information                   | 5         |
| <b>1.0 Introduction</b>             | <b>6</b>  |
| <b>2.0 Installation</b>             | <b>7</b>  |
| Preparing the Enclosure             | 7         |
| Mounting the Enclosure              | 8         |
| Battery Configuration               | 9         |
| <b>3.0 Controller Configuration</b> | <b>10</b> |

## Overview

### Legal Information

No part of this document may be reproduced or transmitted in any form or by any means, electronic and mechanical, for any purpose, without the express written permission of ComNet.

### Copyright

Copyright © 2016 Communication Networks, LLC (dba ComNet). All rights reserved.

### Disclaimer

ComNet reserves the right to make changes in specifications at any time without notice. The information furnished by ComNet in this material is believed to be accurate and reliable. However, ComNet assumes no responsibility for its use.

## 1.0 Introduction

The NetWave® NWKBB200 DC-Battery Power Solution provides consistent power for your devices in locations where power is on a timer or they have frequent blackouts or brownouts.

The NWKBB200 supports AC input ranging from 110 to 277 VAC, and can also support 347 VAC and 480 VAC with an optional Multi Tap Power Transformer.

The intelligent controller distributes power to the load and batteries when AC power is available

## 2.0 Installation

### Preparing the Enclosure

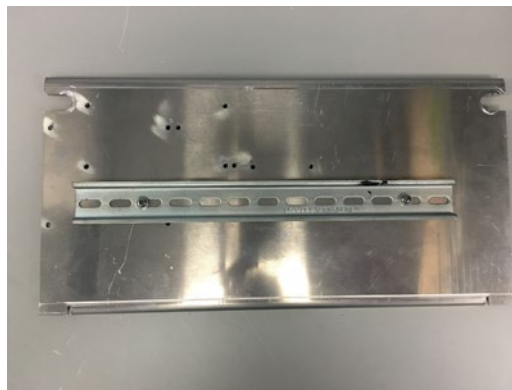
The NWKBB200 enclosure has integrated mounting brackets and a bolt on mounting plate simplifying installation.

Prepare the mounting plate for DIN Rail installation by loosening the screws in the top corners and removing the mounting plate (the appearance of the included mounting plate may vary).



Place the DIN Rail in its desired location. If the pre drilled holes do not align, use a 5/32 drill bit to create a new mounting location.

Secure the DIN Rail to the mounting plate using the provided Screw, Washer and Nut.



Re-attach the mounting plate to the enclosure and tighten bolts.

## Mounting the Enclosure

The NWKBB200 has rackmounts welded onto the enclosure for ease of installation.

The included hose clamps will allow you to mount the enclosure on up to a 3 inch diameter pole or you can wall mount the unit using screws appropriate to your mounting surface.

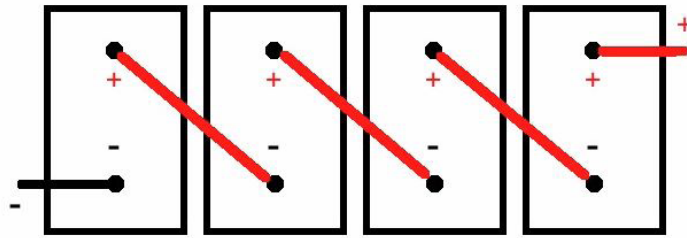


## Battery Configuration

Once the DIN Rail has been installed and the enclosure has been mounted, setup the batteries.

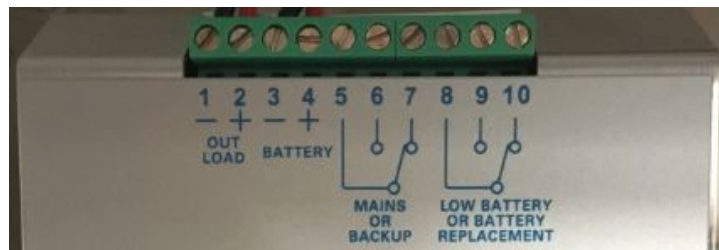
We provide four 12VDC batteries that will need to be configured in series since our controller will output 48VDC.

Batteries in Series:



Connect the unterminated end of the Negative wire to port 3 on the controller

Connect the unterminated end of the Positive wire to port 4 on the controller



Note: The controller will not power on till AC power source is detected.

To start the controller on battery power you will need to connect an RTCONN Cable to a switch to jump start it. Cable is not provided.



# 3.0 Controller Configuration

The Uninterruptible power supply can be used in many different applications.

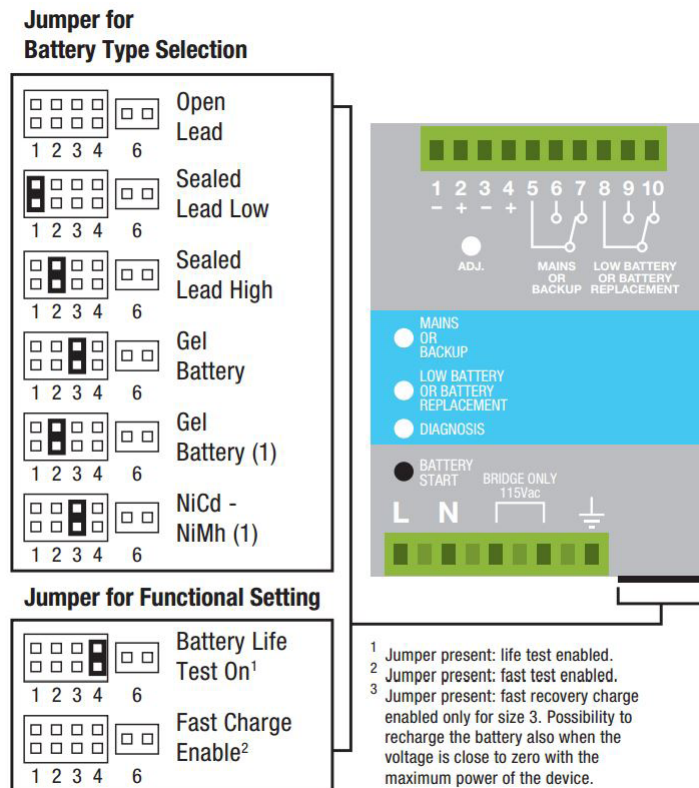
We recommend the following settings for the NWKBB200 Kit.

Set the Charging Current to Max.

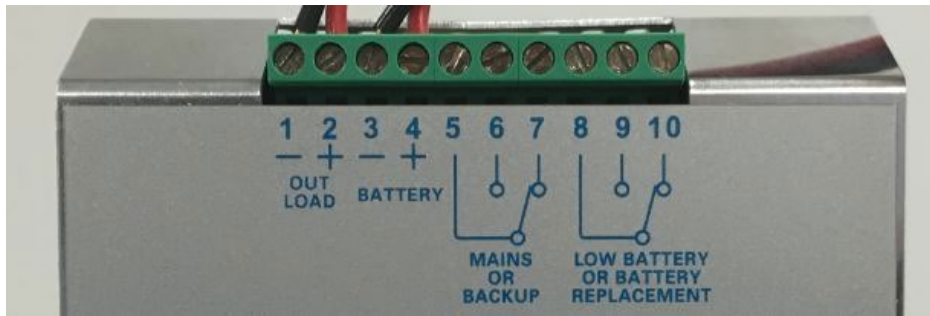


Set Jump settings to Sealed Lead High.

Jumpers are on the bottom right of the controller.



Connect your device to the 48VDC @ 5A power source on Pins 1 and 2.



Connect AC Power Source to the Controller



Once AC power is detected, the LEDs on the front of the controller will light up.



Mains or Backup LED will be off when AC power is available and on when powered by the battery.

Low Battery or Battery Replacement LED indicates that the battery is below 30% capacity or will stay on if a battery fault is detected.

The Diagnosis LED indicates charging mode.

1 Blink/Sec for Trickle Charge

2 Blink/Sec for Boost Charge

5 Blink/Sec for Recovery Charge

More detailed instructions will be provided with the controller for all other applications.



**ComNet Customer Service**

Customer Care is ComNet Technology's global service center, where our professional staff is ready to answer your questions at any time.

Email ComNet Global Service Center: [customercare@comnet.net](mailto:customercare@comnet.net)

**Contact Information****ComNet - [www.comnet.net](http://www.comnet.net)**

|                                |  |   |
|--------------------------------|--|---|
| North America                  | ComNet Corporate Headquarters<br>and Customer Support Center | Tel: +1-203-796-5300  |
|                                |  | Tel: +1-888-6789427   |
|                                |  | Email: <a href="mailto:info@comnet.net">info@comnet.net</a>               |
| EMEA, PACRIM,<br>South America | ComNet Europe Ltd, Leeds                                     | Tel: +44 (0)113 307 6400  |
|                                |  | Tel: +44 (0)113 307 6409  |
|                                |  | Email: <a href="mailto:info-europe@comnet.net">info-europe@comnet.net</a> |



3 CORPORATE DRIVE | DANBURY, CT 06810 | USA  
T: 203.796.5300 | F: 203.796.5303 | TECH SUPPORT: 1.888.678.9427 | [INFO@COMNET.NET](mailto:INFO@COMNET.NET)  
8 TURNBERRY PARK ROAD | GILDERSOME | MORLEY | LEEDS, UK LS27 7LE  
T: +44 (0)113 307 6400 | F: +44 (0)113 253 7462 | [INFO-EUROPE@COMNET.NET](mailto:INFO-EUROPE@COMNET.NET)