

NBB Series

Managed Power Controllers

Quick Start Guide With Rack Mounting Instructions





Warnings and Cautions: Installation Instructions



Secure Racking

If Secure Racked units are installed in a closed or multi-unit rack assembly, they may require further evaluation by Certification Agencies. The following items must be considered.

1. The ambient within the rack may be greater than room ambient. Installation should be such that the amount of air flow required for safe operation is not compromised. The maximum temperature for the equipment in this environment is 55°C. Consideration should be given to the maximum rated ambient.
2. Installation should be such that a hazardous stability condition is not achieved due to uneven loading.

Input Supply

Check nameplate ratings to assure there is no overloading of supply circuits that could have an effect on overcurrent protection and supply wiring.

Grounding

Reliable earthing of this equipment must be maintained. Particular attention should be given to supply connections when connecting to power strips, rather than direct connections to the branch circuit.

No Serviceable Parts Inside; Authorized Service Personnel Only

Do not attempt to repair or service this device yourself. Internal components must be serviced by authorized personnel only.

- **Shock Hazard - Do Not Enter**

Disconnect Power

If any of the following events are noted, immediately disconnect the unit from the outlet and contact qualified service personnel:

1. If the power cord becomes frayed or damaged.
2. If liquid has been spilled into the device or if the device has been exposed to rain or water.

Two Power Supply Cables



Note that some NBB series units feature two separate power circuits, and a separate power supply cable for each power circuit. If your NBB unit includes two power supply cables, make certain to disconnect both power supply cables from their power source before attempting to service or remove the unit.

Detached 15-Amp "Starter" Cable(s)

If the NBB unit includes a detached, 125 VAC, 15 Amp "Starter" Cable(s), this allows you to connect the NBB to power for bench testing and initial start up is adequate for applications that only require 15 Amps. For 20-Amp power switching applications, please refer to the WTI Power Cable guide supplied with the unit, or use appropriate 20-Amp cables.

Units with Attached Power Supply Cable(s)

For units with fixed Power Cords the socket-outlet shall be installed near the equipment and shall be easily accessible.

Restricted Access Location

Equipment is intended for installation in Restricted Access Location.

Les matériels sont destinés à être installés dans des EMPLACEMENTS À ACCÈS RESTREINT.

1. Introduction

This Quick Start Guide describes a simplified installation procedure for the NBB series hardware, which will allow you to communicate with the unit in order to demonstrate basic features and check for proper operation. This Quick Start Guide does not provide a detailed description of unit configuration, or discuss advanced operating features. For more information, please refer to the Firmware Guide and Hardware Guide, which can be found on our web site at the address below, or by scanning the QR Code to the right.



www.wti.com/uguides

2. Installing the NBB Hardware

Apply Power to the NBB

Refer to the warnings and cautions at the beginning of this guide and the power rating nameplate on the NBB, and then connect the unit to an appropriate power source. Connect the power cable(s) to the power inlet(s), install the optional cable keeper(s) (if present,) then connect the cables to an appropriate power supply.

Notes:

- If you need to determine the exact model number for your NBB unit, either refer to the nameplate on the back of the unit, or access command mode as described in Section 3 and then type `/J *` and press **[Enter]**.
- For mounting instructions, please refer to Section 4 in this Quick Start Guide.

Connect your PC to the NBB

The NBB can either be controlled by a local PC, that communicates with the unit via serial port, controlled via external modem, or controlled via TCP/IP network. In order to switch plugs or select parameters, commands are issued to the NBB via either the Network Port or SetUp Port. Note that it is not necessary to connect to both the Network and SetUp Ports, and that the SetUp Port can be connected to either a local PC or External Modem.

- **Network Port:** Connect your 10Base-T or 100Base-T network interface to the NBB Network port.
- **SetUp Port:** Use the DX9F-DTE-RJ Adapter supplied with the unit to connect your PC COM port to the NBB SetUp (RS232) Port.
- **External Modem:** Use the optional DX9M-RJ-KIT (not included) to connect your external modem to the NBB's SetUp (RS232) Port.

3. Communicating with the NBB

In order to ensure security, both Telnet and Web Browser Access are disabled when the NBB is shipped from the factory. To enable Telnet and/or Web Browser access, please refer to the NBB User's Guide. When properly installed and configured, the NBB will allow command mode access via Telnet, Web Browser, SSH client, modem, or local PC.

Notes:

- Default NBB serial port parameters are set as follows: 9600 bps, RTS/CTS Handshaking, 8 Data Bits, One Stop Bit, No Parity. Although these parameters can be easily redefined, for this Quick Start procedure, it is recommended to configure your communications program to accept the default parameters.
- The NBB features a default IP Address (192.168.168.168) and a default Subnet Mask (255.255.255.0). This allows network access to command mode, providing that you are contacting the NBB from a node on the same subnet. When attempting to access the NBB from a node that is *not* on the same subnet, please refer to the User's Guide for further configuration instructions.

1. **Access Command Mode:** The NBB includes two separate user interfaces; the Text Interface and the Web Browser Interface. The Text Interface is available via Local PC, SSH Client, Telnet, or Modem. The Web Browser interface is only available via TCP/IP network.
 - a) **Via Local PC:** Start your communications program and press **[Enter]**.
 - b) **Via SSH Client:** Start your SSH client, enter the default IP address (192.168.168.168) for the NBB and invoke the connect command.
 - c) **Via Web Browser:** Make certain that Web Browser access is enabled as described in the NBB User's Guide. Start your JavaScript enabled Web Browser, enter the default NBB IP address (192.168.168.168) in the Web Browser address bar, and then press **[Enter]**.
 - d) **Via Telnet:** Make certain that Telnet access is enabled as described in the NBB User's Guide. Start your Telnet client, and enter the NBB's default IP address (192.168.168.168).
 - e) **Via Modem:** Make certain that the NBB Control Port has been configured for Modem Mode as described in the NBB User's Guide, then use your communications program to dial the number for the external Modem connected to the Control Port.
2. **Username / Password Prompt:** A message will be displayed, which prompts you to enter your username (Login) and password.. The default username is "**super**" (all lower case, no quotes), and the default password is also "**super**". If a valid username and password are entered, the NBB will display either the Plug Control Menu (Web Browser Interface) or the Plug Status Screen (SSH, Telnet, or Modem.)

3. **Test Switching Functions:** You may wish to perform the following tests in order to make certain that the NBB is responding to commands. When switching and reboot commands are executed, the Status LED(s) will also turn On or Off to indicate the current status of the outlet(s).
 - a) **Reboot Outlet:**
 - i. **Web Browser Interface:** Click on the "Plug Control" link on the left hand side of the screen to display the Plug Control Menu. From the Plug Control Menu, click the down arrow in the row for Plug A1 to display the dropdown menu, then select "Reboot" from the drop down menu and click on the "Execute Plug Actions" button.
 - ii. **Text Interface:** Type `/BOOT A1` and press **[Enter]**.
 - b) **Switch Outlet Off:**
 - i. **Web Browser Interface:** From the Plug Control Menu, click the down arrow in the "Action" column for Plug A1 to display the drop down menu, then select "Off" from the drop down menu and click on the "Execute Plug Actions" button.
 - ii. **Text Interface:** Type `/OFF A1` and press **[Enter]**.
 - c) **Switch Outlet On:**
 - i. **Web Browser Interface:** From the Plug Control Menu, click the down arrow in the "Action" column for Plug A1 to display the drop down menu, then select "On" from the drop down menu and click on the "Execute Plug Actions" button.
 - ii. **Text Interface:** Type `/ON A1` and press **[Enter]**.
4. **Logging Out:** When you log off using the proper NBB command, this ensures that the unit has completely exited from command mode, and is not waiting for the inactivity timeout to elapse before allowing additional connections.
 - a) **Web Browser Interface:** Click on the "LOGOUT" link on the left hand side of the screen.
 - b) **Text Interface:** Type `/X` and press **[Enter]**.

4. Mounting Options

The NBB offers a variety of different mounting options that allow the unit to be easily mounted in most common equipment racks. In addition to the mounting buttons and flat mounting plates included with the NBB unit, optional mounting brackets are also available as described in Section 4.3.

4.1. Mounting Buttons

The Mounting Buttons enable NBB units to be mounted in any equipment rack that includes mounting button holes. Depending on the location of the mounting button holes in your equipment rack, this can allow the NBB to be mounted on the posts at the rear of the equipment rack, or in some cases, mounted on the outside of the rack corner posts.

1. **Determine the Appropriate Mounting Button Locations:** Refer to Figure 1 and the table below to determine the appropriate button locations for your individual equipment rack:

Rack Type	Distance Between Buttons (Center)	Button Holes Used
APC, SMC, Wright Line	49"	A1 and A1 (or) A2 and A2
Standard Mounting Locations	36.75"	STD-1 and STD-1 (or) STD-2 and STD-2

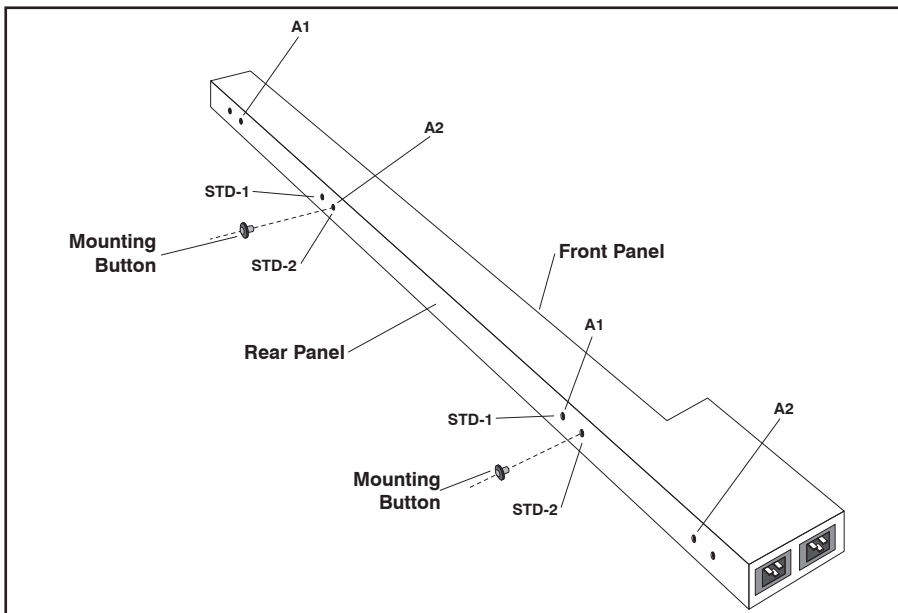


Figure 1: Installing Mounting Buttons

2. Install two Mounting Buttons in the holes selected in Step 1 above. Refer to Figure 2 below for further details regarding assembling the Mounting Buttons and attaching them to the NBB unit.
3. Refer to Figure 3 below to make certain that the equipment rack includes appropriate mounting button holes and then attach the NBB unit to the rack by inserting the Mounting Buttons into the Mounting Button holes. When the NBB is in place, slide the unit downward to securely seat each Mounting Button in its corresponding hole.

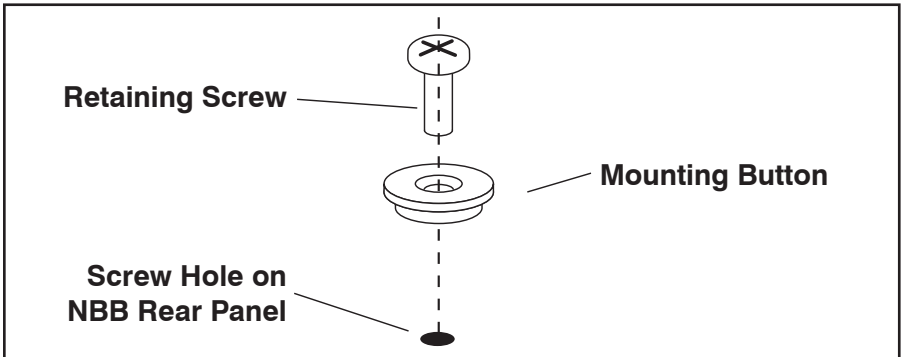


Figure 2: Attaching Mounting Buttons to the NBB Unit

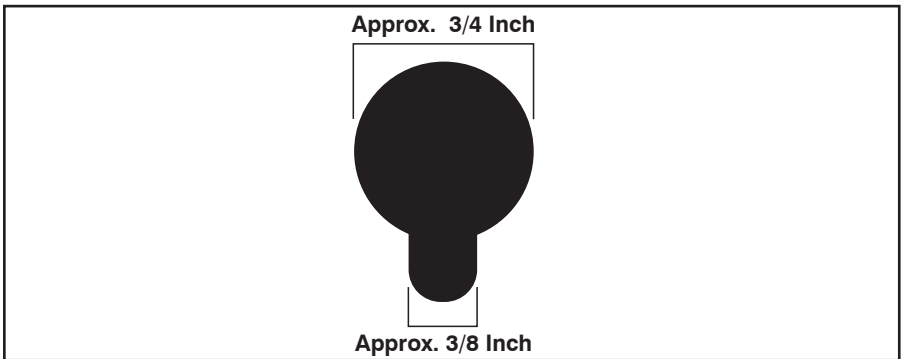


Figure 3: Mounting Button Hole Specs

4.2. Mounting Plate

The flat Mounting Plates included with the unit, can be used to mount NBB units in most standard equipment racks. When the Mounting Plates are used, NBB units can be mounted facing either side of the rack.

1. **Attaching the Brackets to the NBB:** Determine which direction the NBB will face after mounting, and then secure the Mounting plates to the NBB as shown in Figure 4, using the screws provided with the mounting brackets.

The Mounting Plates can either be attached to the back or side of the unit, and the unit can also be installed to face the front, rear, or either side of the equipment rack.

2. **Attaching the Mounting Plates to the Equipment Rack:** Determine which direction the NBB unit will face in the rack, then line the screw holes in the Mounting Plates up with two holes in the equipment rack mounting strip. Make certain that the unit is level, and then use two screws to secure each Mounting Plate to the rack as shown in Figure 4.

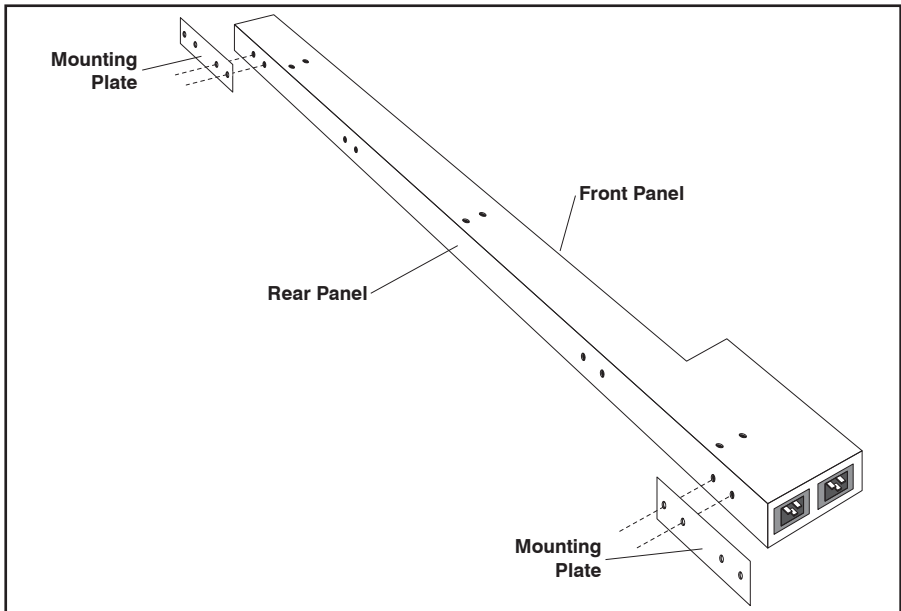


Figure 4: Installing Mounting Plates

4.3. Mounting Brackets (Optional)

In addition to the Mounting Buttons and Mounting Plates that are included with the NBB unit, optional mounting brackets are also available. The Mounting Brackets allow the NBB to be installed on the mounting rails found in most standard equipment racks.

1. **Attaching the Mounting Brackets to the NBB:** The Mounting Brackets can be attached to the NBB unit using the three pairs of screw holes on either side of the NBB unit. Use screws supplied with the Mounting Bracket kit to secure three Mounting Brackets on one side of the NBB unit as shown in Figure 5 below.
2. **Attaching the Mounting Brackets to the Equipment Rack:** Align the Mounting Brackets with the screw holes in the equipment rack's mounting rail and then use a retaining screw to secure each Mounting Bracket to the equipment rail.

This completes the Quick Start Guide for the NBB. Prior to placing the unit into operation, it is recommended to refer to the NBB User's Guide for important information regarding advanced configuration capabilities and more detailed operation instructions. If you have further questions regarding the NBB unit, please contact WTI Customer Support as described in the User's Guide.

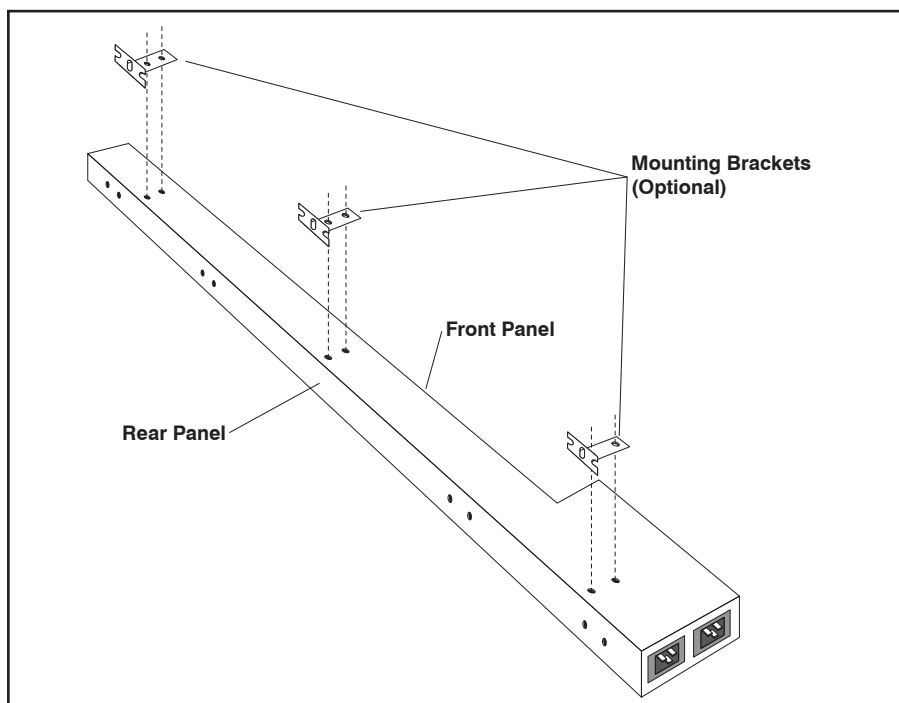


Figure 5: Installing Optional Mounting Brackets

Notes:

FCC Part 15 Regulation

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy, and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Plug the equipment into an outlet on a circuit that is different from the one used by the receiver.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with Part 15 of the FCC rules. Operation of this device is subject to the following conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference that may cause undesired operation.

WARNING: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment

EMC and Safety Directive Compliance

The CE mark is affixed to this product to confirm compliance with the following European Community Directives:

- Council Directive 2014/30/EU of 26 February 2014 on the approximation of the laws of Member States relating to electromagnetic compatibility;
- and
- Council Directive 2014/35/EC of 26 February 2014 on the harmonization of the laws of Member States relating to electrical equipment designed for use within certain voltage limits;

Industry Canada - EMI Information

This Class A digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.



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