



NetSure™ Control Unit (NCU) Controller 2nd Ethernet Port Add-On Kit

Installation Manual

Kit Specification Number: 559252

For Use in Spec. No. 582127000 and 581127000 Power Systems

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Technical Support Site

If you encounter any installation or operational issues with your product, check the pertinent section of this manual to see if the issue can be resolved by following outlined procedures.

Visit <https://www.vertiv.com/en-us/support/> for additional assistance.

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Admonishments Used in this Document



DANGER! Warns of a hazard the reader *will* be exposed to that will *likely* result in death or serious injury if not avoided. (ANSI, OSHA)



WARNING! Warns of a potential hazard the reader *may* be exposed to that *could* result in death or serious injury if not avoided. This admonition is not used for situations that pose a risk only to equipment, software, data, or service. (ANSI)



CAUTION! Warns of a potential hazard the reader *may* be exposed to that *could* result in minor or moderate injury if not avoided. (ANSI, OSHA) This admonition is not used for situations that pose a risk only to equipment, data, or service, even if such use appears to be permitted in some of the applicable standards. (OSHA)



ALERT! Alerts the reader to an action that *must be avoided* in order to protect equipment, software, data, or service. (ISO)



ALERT! Alerts the reader to an action that *must be performed* in order to prevent equipment damage, software corruption, data loss, or service interruption. (ISO)



FIRE SAFETY! Informs the reader of fire safety information, reminders, precautions, or policies, or of the locations of fire-fighting and fire-safety equipment. (ISO)



SAFETY! Informs the reader of general safety information, reminders, precautions, or policies not related to a particular source of hazard or to fire safety. (ISO, ANSI, OSHA)

Important Safety Instructions

Safety Admonishments Definitions

Definitions of the safety admonishments used in this document are listed under “Admonishments Used in this Document” on page iv.

Safety and Regulatory Statements

Refer to Section 4154 (provided with your customer documentation) for Safety and Regulatory Statements.

Déclarations de Sécurité et de Réglementation

Reportez-vous à la Section 4154 (fourni avec les documents de votre client) pour les déclarations de sécurité et de réglementation.

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1 Vertiv™ NetSure™ Control Unit (NCU) Controller 2nd Ethernet Port Retrofit Kit

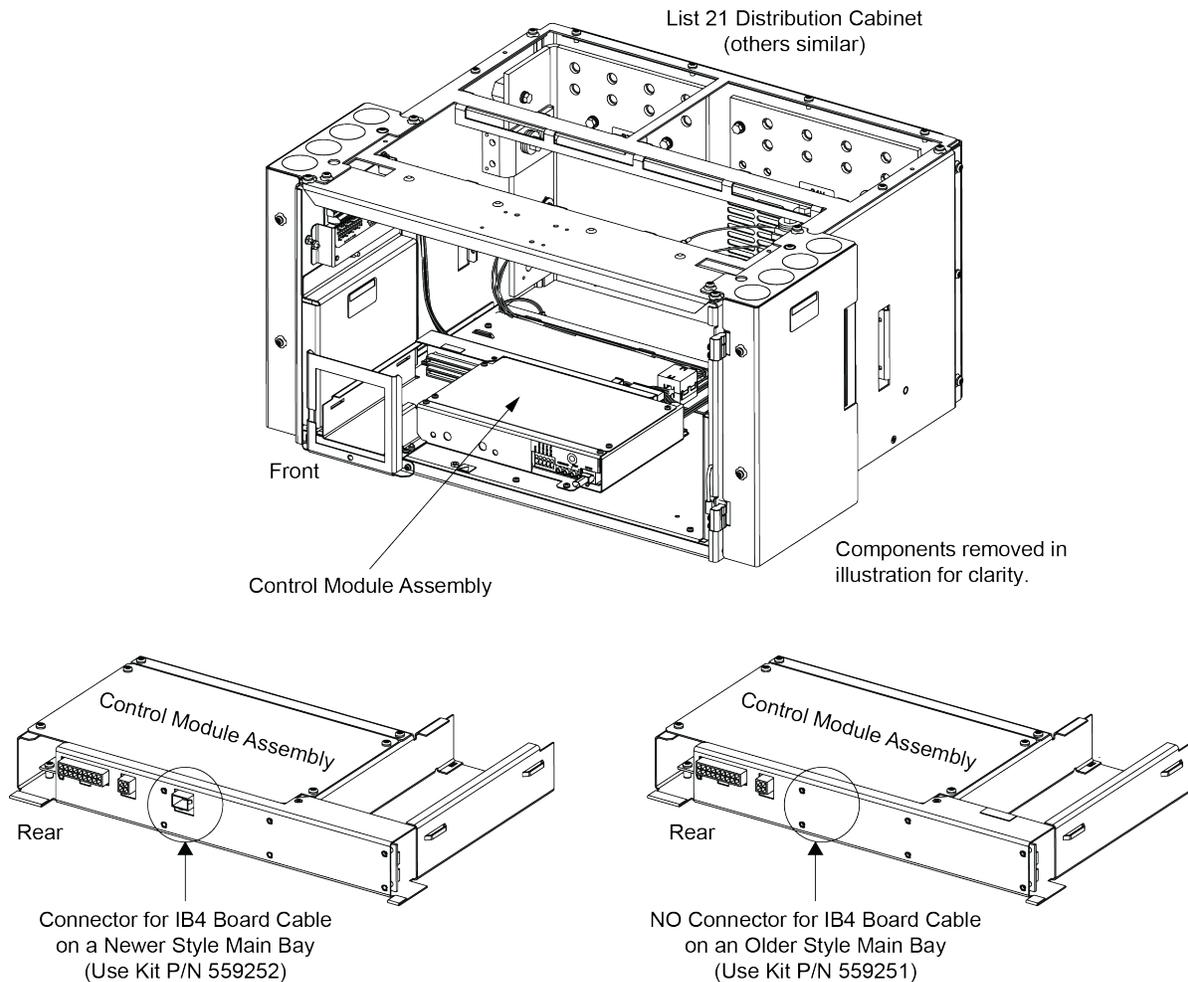
1.1 Kit Description

These instructions provide a step-by-step procedure to field install this kit into Power System Spec. No. 582127000 and 581127000. Installation of this kit in other equipment should not be attempted.

This kit provides the IB4 board with a second Ethernet port. The Ethernet port located on the NCU Controller's front panel can be used to connect a computer directly to the NCU. The Ethernet port located on the IB4 board can be used to connect the NCU Controller to your Local Area Network (LAN).

There are two kits available. One to add the IB4 board to a newer style main bay that provides an NCU Controller motherboard connector for an IB4 board cable and the other for an older style main bay that does not have this NCU Controller motherboard connector. THIS KIT IS FOR A MAIN BAY THAT HAS AN IB4 BOARD CONNECTOR LOCATED ON THE NCU MOTHERBOARD. See Figure 1.1 for identification.

Figure 1.1 Identifying Control Module Assembly IB4 Board Connector



1.2 Kit Contents

Table 1.1 lists the items furnished with this kit. Before starting the procedure, check the items furnished against those listed to ensure that there are no shortages.

Table 1.1 Kit Contents

Qty.	Description	P/N
1	IB4 Board Assembly	558076
1	IB4 Board Cover	559238
1	IB4 Board USB Cable	559324
7	6-32 x 1/4" Screws	233394000



NOTE! The system must be equipped with the NCU controller (model 1M830DNA) for the second Ethernet port to operate. If the system is equipped with the ACU+ controller (model 1M820DNA) it must be replaced by the NCU controller, which is not provided with this kit and must be ordered separately.

1.3 Tools and Material Required

Table 1.2 lists the items required to install this kit.

Table 1.2 Tools and Material Required

Description
Cross-Blade Screwdriver

1.4 Installation Procedure

THESE INSTRUCTIONS SHOULD BE READ THROUGH COMPLETELY BEFORE INSTALLING THE KIT.

The following is a step-by-step procedure to install the kit. The procedure has been written for ease of use and to minimize the possibility of contact with potentially hazardous energy. This procedure should be performed in the sequence given, and each step should be completely read and fully understood before performing that step. Observe all "Important Safety Instructions" presented at the beginning of this document as this procedure is being performed. As each step of the procedure is completed, the box adjacent to the respective step should be checked. This will minimize the possibility of inadvertently skipping any steps. If the step is not required to be performed for your site, also check the box to indicate that it was read.



NOTE! When performing any step in this procedure which requires removal of existing hardware, retain all hardware for use in subsequent steps, unless otherwise stated.

1.4.1 Procedure



DANGER! Observe the Important Safety Instructions located at the beginning of this document.

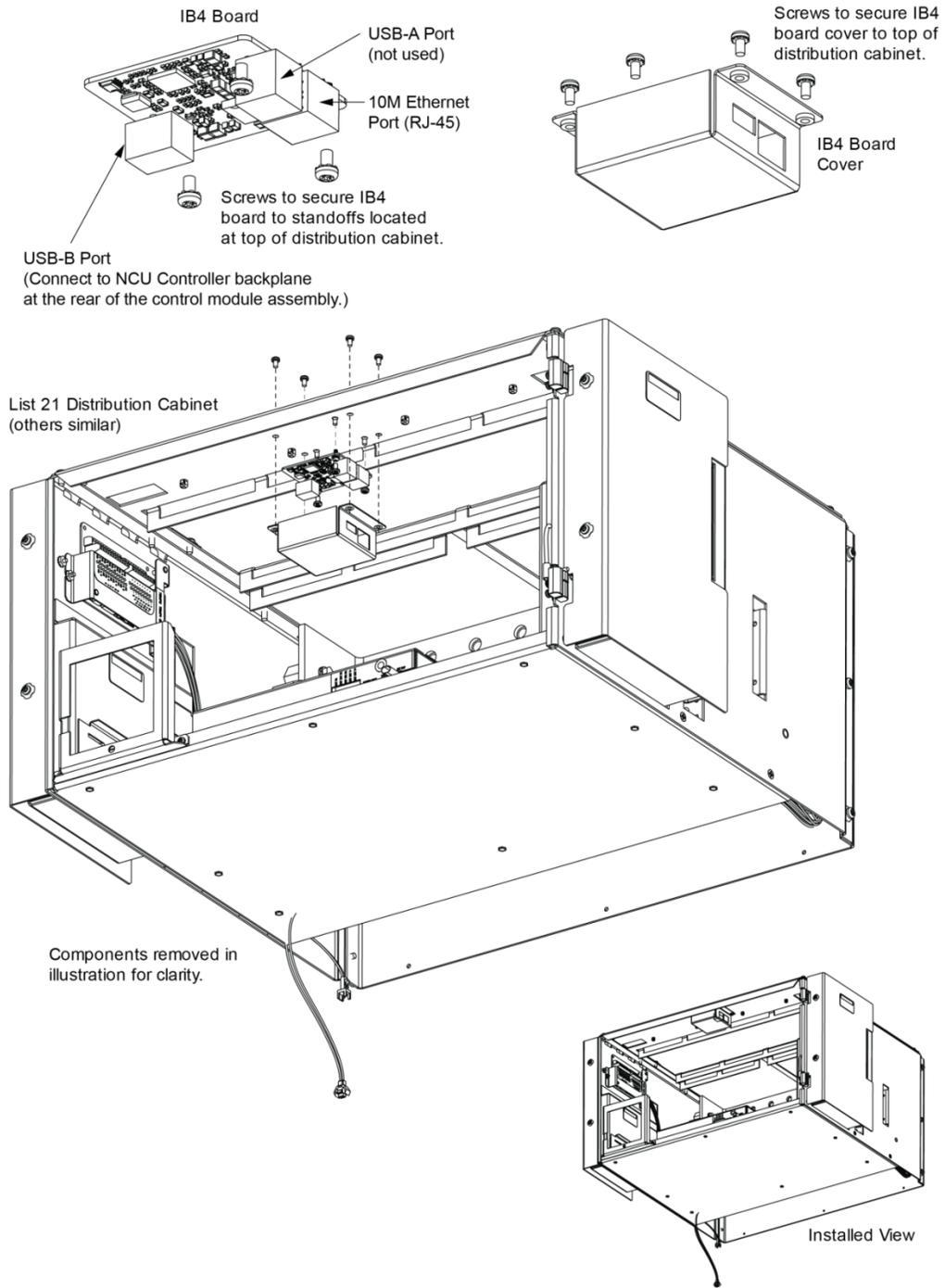


NOTE! Refer to Figure 1.1 and Figure 1.2 as this procedure is performed.

- [] 1. Locate the standoffs at the top inside of the distribution cabinet used to mount the IB4 board. See Figure 1.2.

- [] 2. Orient the IB4 board over the mounting standoffs, as shown in Figure 1.2. Secure the IB4 board to the standoffs with the kit provided screws.
- [] 3. Orient the IB4 board cover over the IB4 board, as shown in Figure 1.2. Secure the IB4 board cover to the distribution cabinet with the kit provided screws. The screws are installed from the top of the cabinet and secured to the captive fastener located on the IB4 board cover.
- [] 4. Attach the provided IB4 board cable to the IB4 board. Route the cable along existing cables to the back of the control module assembly. Plug the cable into the appropriate connector located on the back of the control module assembly. See Figure 1.1 and Figure 1.2.
- [] 5. Re-boot the NCU controller by pressing ENT and ESC at the same time from the front panel. Do this with the Main Screen being displayed.

Figure 1.2 Installing the Kit



2 Vertiv™ NetSure™ Control Unit (NCU) Controller Second Ethernet Port Connection

You just installed the IB4 board and connected it to the NCU Controller backplane via the kit furnished cable. The IB4 board provides a second Ethernet port. The Ethernet port located on the NCU Controller's front panel can ONLY be used to connect a computer directly to the NCU. The Ethernet port located on the IB4 board can be used to connect the NCU Controller to your Local Area Network (LAN).



NOTE! If your system has an IB4 board, DO NOT connect your Local Area Network (LAN) to the NCU front Ethernet port.



NOTE! Refer to the NCU Controller User Manual (UM1M830BNA) for instructions on using the controller's Ethernet connections.

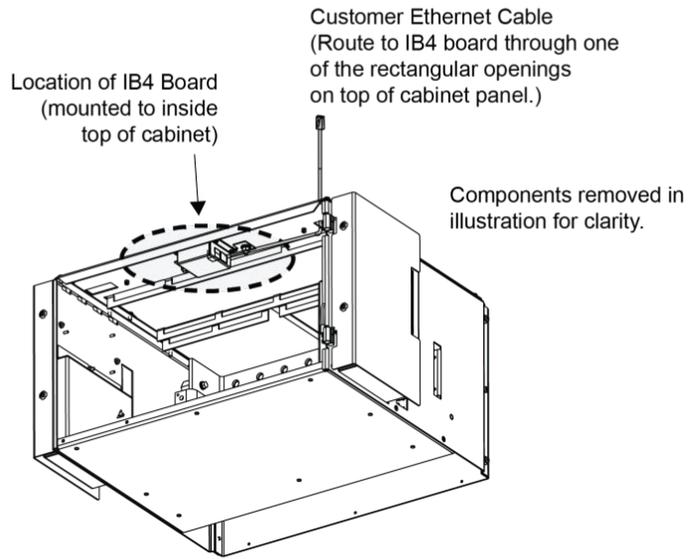
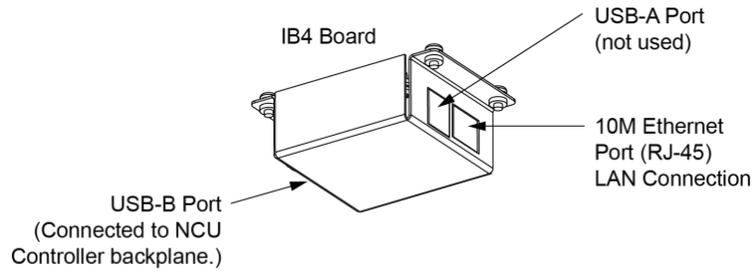
An RJ-45 10BaseT jack is provided on the IB4 board for connection into a customer's network. This jack has a standard Ethernet pin configuration scheme, twisted pair. Refer to Figure 2.1 for location. Use shielded Ethernet cable (grounded at both ends). Note that the IB4 board's RJ-45 jack is connected to chassis ground. Refer to the NCU Controller Instructions (UM1M830BNA) for operational details.



WARNING! The intra-building port(s) of the equipment or subassembly is suitable for connection to intra-building or unexposed wiring or cabling only. The intra-building port(s) of the equipment or subassembly MUST NOT be metalically connected to the interfaces that connect to the OSP or its wiring. These interfaces are designed for use as intra-building interfaces only (Type 2 or Type 4 ports as described in GR-1089-CORE, Issue 4) and require isolation from the exposed OSP cabling. The addition of Primary Protectors is not sufficient protection in order to connect these interfaces metalically to OSP wiring.

The intra-building port (RJ-45) of the equipment or subassembly must use shielded intra-building cabling/wiring that is grounded at both ends.

Figure 2.1 IB4 Board NCU Controller Second Ethernet Port Connection



List 21 Distribution Cabinet
(others similar)

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