

SST-DN4-USB Installation Instructions

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This document applies to the SST-DN4-USB Installation Instructions.

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SST-DN4-USB Installation Instructions

Topic overview

Card aliases are used by an application to access Molex DeviceNet scanner modules.

Each DeviceNet channel that exists in a system must be assigned a unique card name. For instance, if a PC system contains a DeviceNet PCI card, and a SST-DN4-USB exists on the network, a unique card name or alias must be assigned to each. Card names will already be assigned to each of the local cards, but a card alias must be specified for each Remote DeviceNet Scanner. An application can then address a particular DeviceNet module in the system via the card name.

About this Technical Note

This note explains how to:

• Configure the SST-DN4-USB card name

This Technical Note assumes that:

- You're familiar with SST DeviceNet interface cards and software
- You're familiar with Windows operating systems

Hardware used

Interface card	SST-DB4-USB
Physical I/O	N/A

Software used

Operating system	Windows 7
Any other software required (network configuration software)	SST DeviceNet Installation v3.9.0.0 or higher

Recommended reading

- SST Remote DeviceNet Diagnostic User Guide (717-0034)
- SST-DN4-USB Hardware Reference Guide (715-0105)



Procedure

1. Installing the software and Driver

The DeviceNet software should be installed prior to connecting the DeviceNet USB Interface to your host computer, as the device driver is required when the DeviceNet USB Interface is attached.

Insert the DeviceNet Products CD shipped with the DeviceNet USB Interface and follow the on-screen instructions.

Note: The DeviceNet Installation must be version 3.9.0.0 or higher.

2. Installing the DeviceNet USB Interface

- Take the DeviceNet USB Interface out of its shipping container and anti-static bag, being careful not to touch any of the connectors or pins.
- Connect the High-Speed USB 2.0 cable to the USB Type B receptacle on the unit.
- Connect the other end of the USB cable to a High-Speed USB 2.0 Type A port on the host computer. (Full-Speed USB 1.1 is also supported, but with reduced features.)
- Connect the DeviceNet USB Interface to the DeviceNet or CAN network



Note

It is highly recommended to operate the DeviceNet USB Interface in High-Speed USB 2.0 mode. Operating in Full-Speed USB 1.1 will result in the following restrictions:

- A maximum of 48 bytes of input data and 48 bytes of output data per I/O connection
- A maximum of 40 bytes of explicit message service data
- Data latencies and/or inability to keep up with network traffic

It is therefore advisable to only attempt to operate in Full-Speed USB 1.1 mode when communicating with a small network that is functioning at lower baud rates.

3. Adding SST-DN4-USB Card Aliases

Card aliases are used by an application to access Molex DeviceNet scanner modules.

Each DeviceNet channel that exists in a system must be assigned a unique card name.

- Start the **DeviceNet Remote Diagnostic** application.
- Select the **Config** Tab



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	Network Card Device I/0 1 I/0 2 Send Explicit Config
	Ethernet Adapter Description
	Intel(R) 82579LM Gigabit Network Connection
	Ethernet Adapter MAC Address D0:67:E5:39:D8:B4
	Search Search All FTH Adapters Search USB Adapter
	Found Remote Scanners Add To Config
	USB Serial N Remote Scanne Local Adapter M In Config
	Current Configuration New Edit Remove From Config
	Current Configuration New Edit Remove From Config Card Alias USB Serial N Remote Scanne Local Adapter
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- Click on the **Search USB Adapter** button to locate all relevant USB scanners. It will discover up to the maximum of 5 connected SST-DN4-USB interfaces
- In the Found Remote Scanner list, select the desired USB scanner and click Add to Config



DeviceNet Remote Diagnostic	
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	Network Card Device I/0.1 I/0.2 Send Explicit Config
	Ethernet Adapter Description
	Intel(R) 82579LM Gigabit Network Connection
	Ethernet Adapter MAC Address D0:67:E5:39:D8:B4
	Search All ETH Adapters Search USB Adapter
	Found Remote Scanners Add To Config
	USB Serial Number Remote Scanne Local Adapter M In Config
	B98BE03A012C N/A N/A yes
	< •
	Current Configuration New Edit Remove From Config
	Card Alias USB Serial Number Remote Scanne Local Adapte
	DN4-USB-0001 B98BE03A012C N/A N/A
	< •
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Note

For maximum performance, only a single SST-DN4-USB device should be used at one time. Communicating with multiple devices simultaneously, while supported, will typically result in lower performance, and in some cases could potentially result in one or more devices being unable to keep up with the data on busy networks.

Dynamic attaching and removal of SST-DN4-USB devices is not supported, and therefore all devices must be connected to or removed from the host prior to running applications that communicate with any of the devices.



4. Editing USB DeviceNet Scanner Card Aliases

To change the USB DeviceNet Scanner Card Alias associated with a USB scanner, select the USB scanner in the **Current Configuration** list and click the **Edit** button. The Add USB Remote Scanner Serial dialog is displayed.

Add USB Remote Scanner Serial	X
USB Remote Scanner Serial B9 8B E0 3A 01 2C Card Alias DN4-USB-0001	OK Cancel

In the Card Alias field, enter the desired card name, for example "USB_Scanner".

Click **OK** to save your changes. The Card Alias entry will be updated in the **Current Configuration** list.



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	Network Card Device I/0 1 I/0 2 Send Explicit Config
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	Found Promote Config
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	Current Configuration New Edit Remove From Config
	Card Alias USB Serial Number Remote Scanne Local Adapter
	USB_Scanner B98BE03A012C N/A N/A
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Now, the SST-DN4-USB is installed in your system and ready to be used.



Technical support

Technical support is available during regular business hours by telephone, fax or email from <u>www.Molex.com</u>. Documentation and software updates are also available on the Web site.

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