Unique Micro Design

... Engineering IT Solutions

Model 560 Series NBX®/UPS Shutdown Interface User Manual

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Revision History

Date	Issue	Comments
18/09/2002	1	Issue 1
10/10/2003	2	Connector Assignment changed
		PCB Rev. 2 (3-2057-002-3)

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1. Introduction

1.1 Scope

This manual provides information for the Unique Micro Design Model 560 NBX®/UPS Shutdown Interface.

1.2 Overview

The Unique Micro Design Model 560 NBX®/UPS Shutdown Interface provides an orderly shutdown of NBX®100/25 and SuperStack® 3, when an input from a UPS indicates low battery. The orderly shutdown of the NBX®, prevents database corruption.

The M560 holds the NBX® in a "ReBoot" state until the UPS indicates power has returned to normal.

Important Note

The NBX® telephone system is very sensitive to electrical noise on its inputs. **Unique Micro Design** recommend surge protectors on all interfaces and proper grounding of the system enclosure.

It is also recommended that regular backup procedures are implemented.

2. Models

2.1 Desktop Model 560A



The M560A is designed for desktop mounting, enclosed in a grey ABS plastic housing.

2.2 19 inch Rack Mounting Model 561A



The M561A is a standard 1RU 19 inch rack mounting, designed to work into your data and phone racking systems, the control board is fully enclosed to protect the electronics.

2.3 Internal NBX® Mounting

Model 562A



The M562A is designed to intergrate directly into the NBX® chassis, fitting into an empty slot.

3. Connectivity

The Model 560 series has three I/O ports. The UPS port connects to the interface port on the UPS. The NBX® port connects to the NBX port COM1 and the PC port connects to a serial port on a computer (when used with the NBX®).



The M560 is designed to "wedge" between a PC and the NBX® serial port COM1 (when a computer is used), the shutdown data is sent directly to the NBX® port. The UPS port connects to the interface port on the UPS, this series model is designed for the APC brand, but there are many factory options available (contact our Technical Department: "techsupport@umd.com.au" for further information).



Connecting the M560 series NBX®/UPS Shutdown Interface

The Model 560 series uses a test button in parallel with the UPS input for battery low, to simulate the battery condition. This will cause the NBX® to shut down, and should be used with caution.



When the Model 560 holds the NBX® in a reset state, the indicator flashes.

4. Interfaces

4.1 PC Serial port DB9 female (socket), J4

Pin	I/O	Description
1	-	internally connected to NBX port
2	o/p	internally connected to NBX port
3	i/p	internally connected to NBX port wedged
4	-	internally connected to NBX port
5	-	Ground
6	-	internally connected to NBX port
7	-	internally connected to NBX port
8	-	internally connected to NBX port
9	-	internally connected to NBX port



Front view of DB9 Socket

4.2 NBX® Serial port DB9 male (plug), J3

Pin	I/O	Description
1	-	internally connected to PC port
2	i/p	internally connected to PC port
3	o/p	internally connected to PC port and wedged
4	-	internally connected to PC port
5	-	Ground
6	-	internally connected to PC port
7	-	internally connected to PC port
8	-	internally connected to PC port
9	-	internally connected to PC port



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4.3 UPS Interface port DB9 male (plug), J2

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Pin	I/O	Description
3	i/p	Low Battery contact
4		Ground

5. Operation

The Unique Micro Design Model 560 NBX®/UPS Shutdown Interface provides an orderly shutdown of NBX®100/25 and SuperStack® 3, when an input from a UPS indicates low battery. The orderly shutdown of the NBX®, prevents database corruption.

When the input from the UPS indicates the battery is low, the M560 sends the NBX® a "ReBoot" command. The LED indicator flashes each half second to indicate this process, the M560 then holds the NBX® from restarting until the UPS input has changed state (ie UPS is back to normal operation).

The M560 will then send the restart command to the NBX®.

6. Specifications

Physical Desktop Model	Dimensions Enclosure	140 x 110 x 35 mm Moulded ABS plastic
	Colour	grey
Power	Source	via parasitic from handshake lines on NBX ® and PC
	Voltage	5 Volts
	Input Current	1.2 mA (nominal)
I/O Ports	UPS	DB9 plug
	NBX	DB9 plug
	PC	DB9 socket

7. Ordering Information & Accessories

Part Number	Model No.	Description
M560A00 M561A00	560A 561A	NBX®/UPS Interface - Desk Top NBX®/UPS Interface - Rack Mount
M562A00	562A	NBX®/UPS Interface - Internal
		Documentation
9-0560-993-3	DOC-M560-UM	User Manual (this document)
		Cables
2-5109-020-4	CA109-2	D9P to D9S 2m

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