

USB N-BUTTON

Push Notification Quick Start Guide



SERIAL PORT TOOL

Introduction

Real-Time Status & Control

USB Push Notification Board that allows you to connect a contact closure to the board and send an email or text message when the circuit is closed. The board will communicate the contact closure information to your computer through a USB connection. N-Button Software will then send a text or email from the computer to your selected recipients.

All the Features You Need...

- Send SMS or Email Message
- Compatible with ANY Contact Closure Sensor
- Onboard USB Interface Module
 - Plugs Directly into USB Port
- N-Button Software
 - Point & Click Interface
 - Use to Configure Messages

Step-By-Step Instructions

This Manual will give you step-by-step instructions for connecting your USB Push Notification Board and setting up N-Button Software to send text and/or emails.

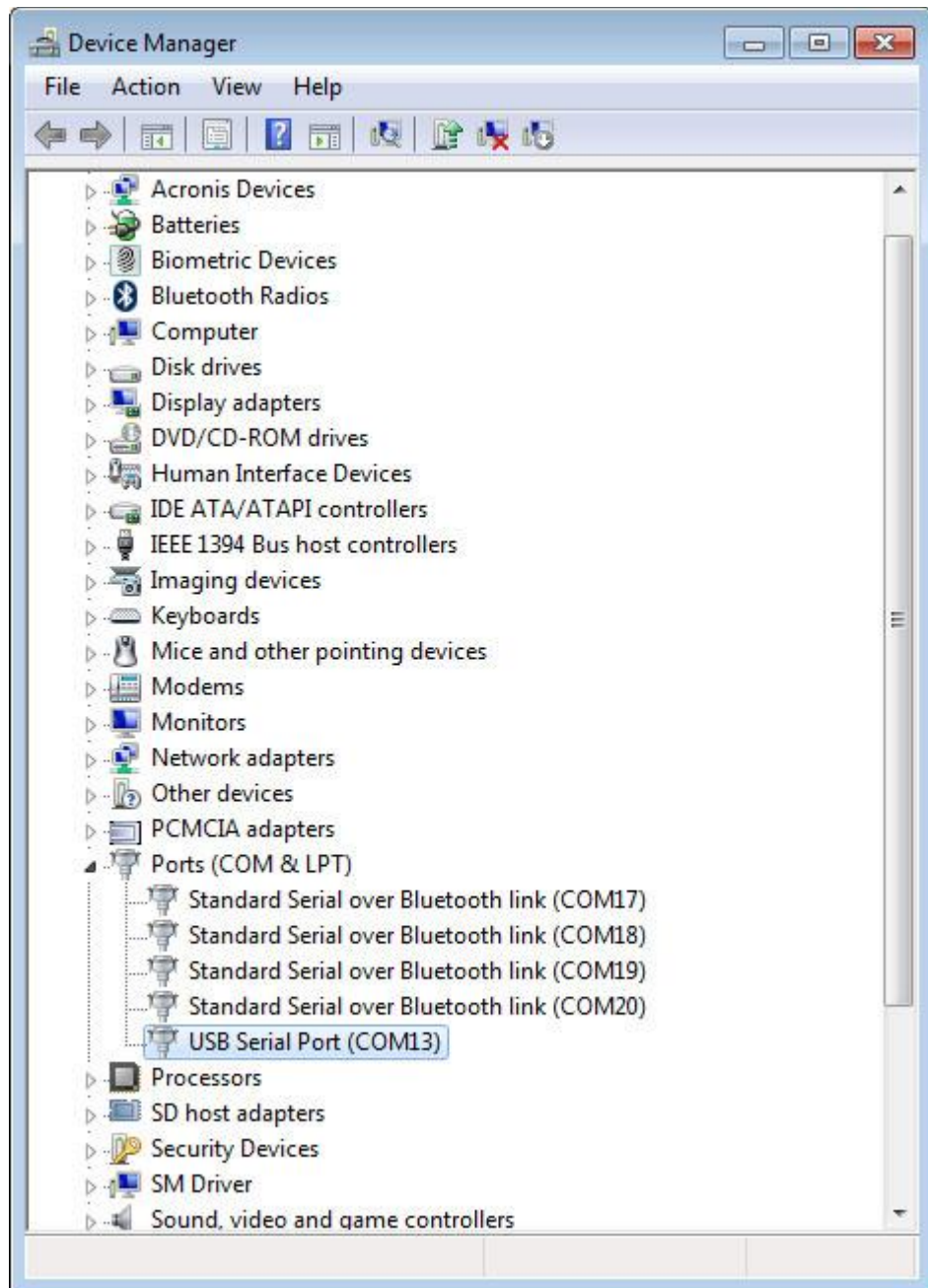
Connect Board to Computer

USB Setup

USB Communications

1. Connect USB cable between your ZUSB Communication Interface and your computer. The ZUSB communication module contains the USB port on the Push Notification board. The board should be powered for initial testing.
2. Virtual COM port drivers are required before the ZUSB communications module can be used.
 - Windows 10, 8 and 7 typically recognizes this device without drivers, however, the latest drivers may be downloaded and installed from the following location for all operating systems:
<http://www.ftdichip.com/Drivers/VCP.htm>. This link also contains installation instructions appropriate to your operating system.
3. After the driver is installed, open your “Device Manager” to determine the COM port your computer assigned to the ZUSB module.
4. You should see “USB Serial Port” located under “Ports (COM & LPT)”
5. Take note of the COM port assigned to the ZUSB communications module. This COM port will be used to access the device in N-Button. In the screen shot shown, COM13 was assigned. When running N-Button in this example, COM13 will be used to access this device. The COM Port on your computer will most likely be different. It is possible to have multiple devices installed on one computer, each device will have its own COM port number assigned to it.

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Note: The USB Light will on the ZUSB communications module will only illuminate if the virtual COM port driver is properly installed.

If the device remains undetected, try disconnecting and reconnecting the power and USB cables.

N-Button Communication and Scan Channel Setup

N-Button

Communicating to the Board

1. Download and install the version of N-Button Pro or N-Button Lite that you purchased with the board.

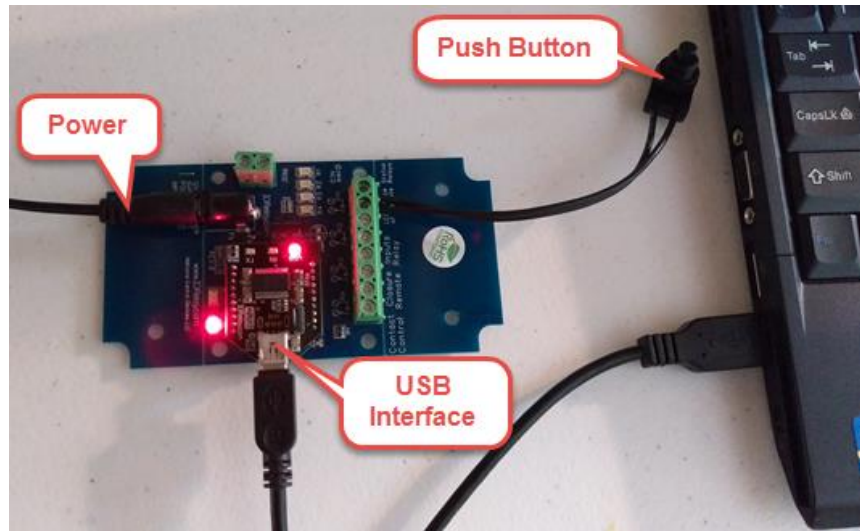
N-Button Lite:

<http://serialporttool.com/download/NButton/NButtonLite.zip>

N-Button Pro:

<http://serialporttool.com/download/NButton/NButtonPro.zip>

2. Plug in power and connect USB push notification board to your computer.



3. Run N-Button Pro/Lite software. Click Device Manager -> New to add USB push notification board

Manufacturer -> National Control Devices

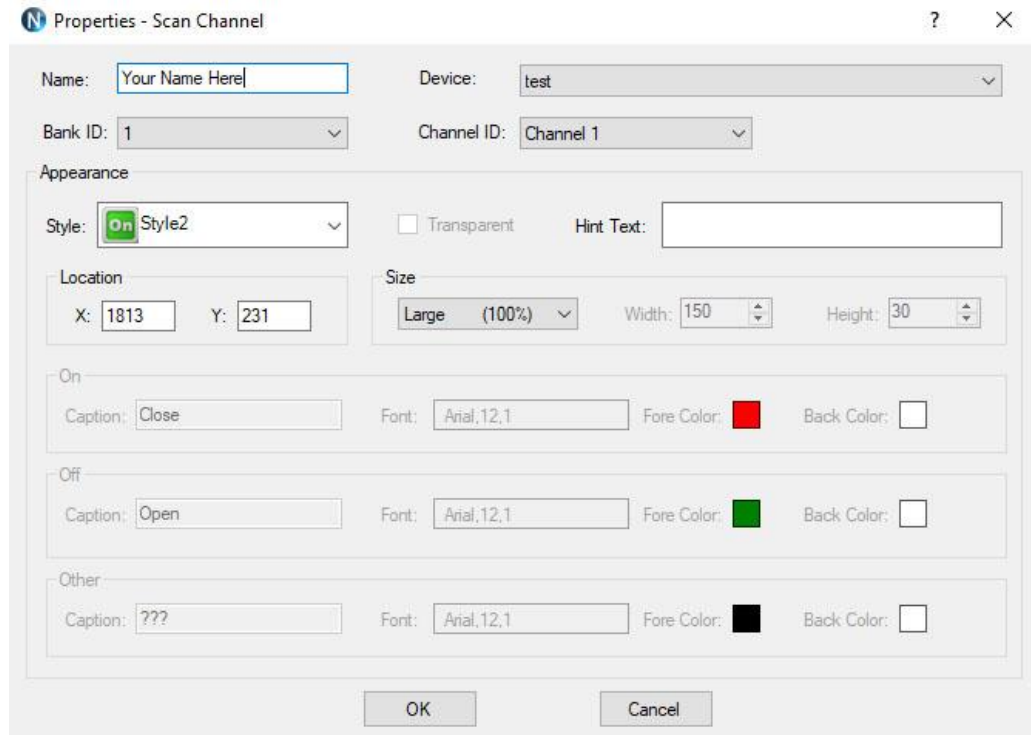
Board Type -> Push Notification

Com Port -> Port Name (Your USB COM Port #) and Baud Rate 115200
Keep default value for other options

Scan Channel Setup

Scan Channel is what will read the input of the board and determine if the dry contact circuit is open or closed. You will create a scan channel widget

for each input on the board.



1. Click the Scan Channel Button to open Properties.
Name -> Create a name
Device -> The one you created
Bank ID, -> It will be 1
Channel ID -> The input you are reading with this widget
Style -> Select a style from the drop-down menu
Size -> Select a size for your desktop widget
Click OK -> To save the Scan Channel

You will now see the Scan Channel widget you created out on your desktop in **Red**. Look on your desktop, usually on the upper left-hand corner for the new widget!

Scan Channel is Gray

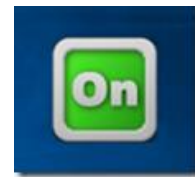
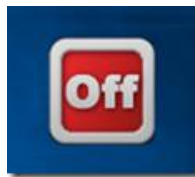
If the Scan Channel is not red there is a setup issue, most likely with the module setup. If the Scan Channel is gray, it's not communicating with the board, and you will need to check your settings in the Module Setup at the beginning of this manual. Check the COM port that you are connecting to.

Scan Channel Is Green

The scan channel that displays in the N-Button Manager is always green. Look for the widget you just created out on your desktop, usually on the upper left-hand corner for the new widget!

Scan Channel Is Red

If the Scan Channel is red it is communicating to the board, and you can test the inputs. The inputs will make the widget change from red to green when the dry contact circuit is closed.



Using a dry contact (no voltage) input close the contacts of the input you have set, you will see the Scan Channel widget on your desktop turn to Green. Release the closure, the widget turns to red again.

The Ethernet push notification board is now working with N-Button software. The widget you created is now showing the status of the input. You can setup as many scan channels as you have inputs on the board you purchased. Each one will have its own notification.

Text/Email Setup

N-Button Manager

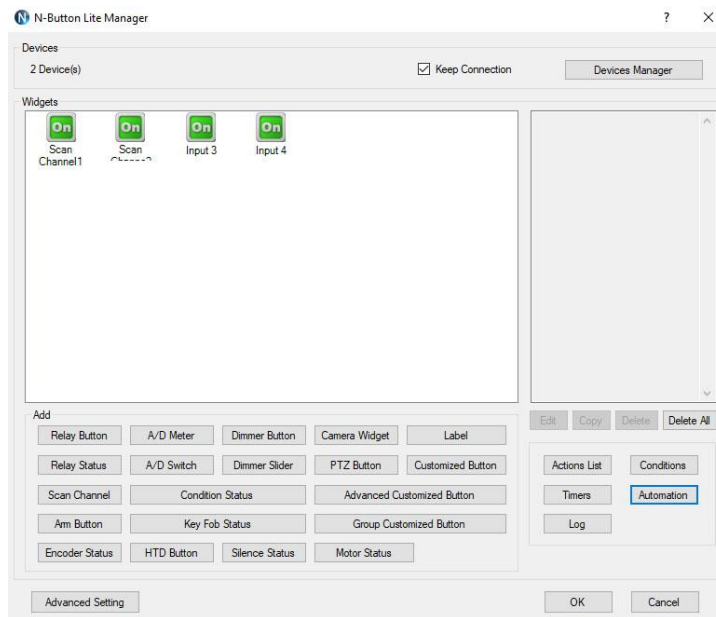
Setting up Your First Text/Email

Right click on the widget you just created and select N-Button Manager to open N-Button Manager.

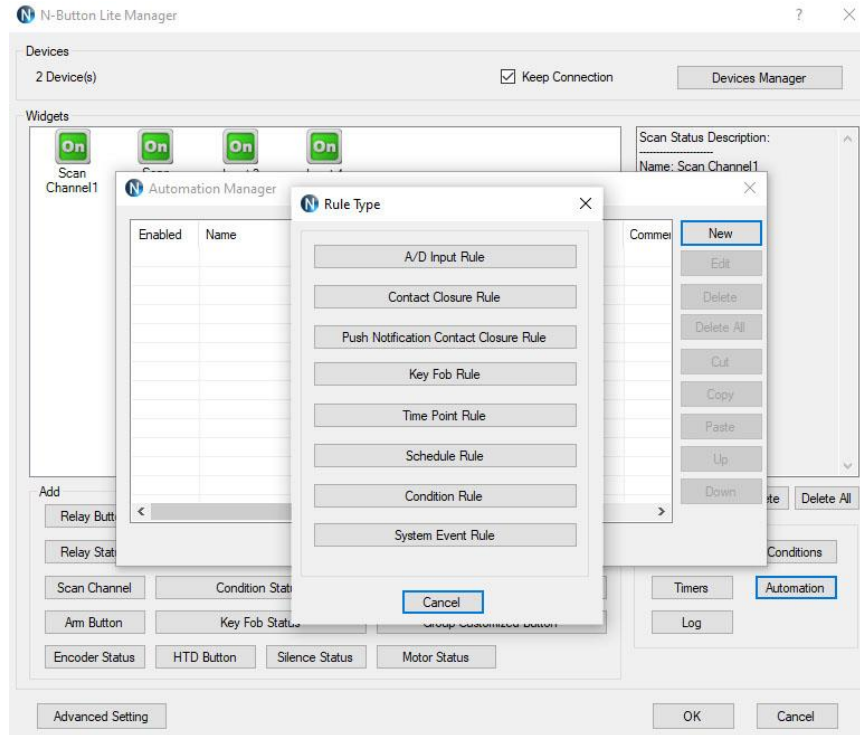
-> Click Automation in the lower right-hand corner of the window to open the Automation Manager Window.

-> Click New in the Automation Manager Window to open the Rule Type Window.

-> Click Push Notification Contact Closure Rule



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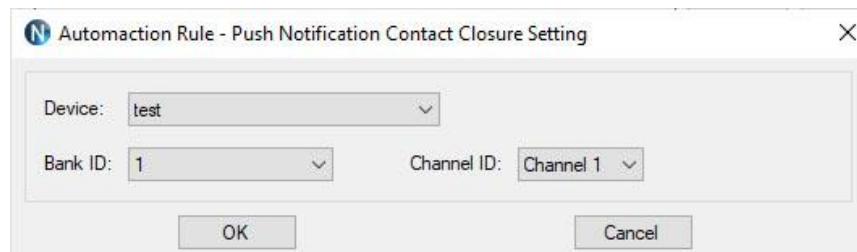


1. Select Your Device

Select Settings under Push Notification Contact Closure to select the device you created and the channel you want to use.

Bank ID -> It will be 1

Channel ID -> The input you are reading with this widget. If you have more than one scan channel you will setup each one separately so they each have their own message.



Push Notification Contact Closure Rule

Name: You Create Name

Push Notification Contact Closure

test, Bank :1 Channel :1

Setting

Action when Status Changes from Open to Close

Email Action

Setting Clear

Action when Status Changes from Close to Open

Email Action

Setting Clear

Action when Status is Close

None

Setting Clear

Interval: 5 second(s)

Action when Status is Open

None

Setting Clear

Interval: 5 second(s)

Comment

OK Cancel

2. Determine When the Message is Sent

Action When Status Changes from Open to Close. Under Action Type select Send Email.

You can also set a message for other actions such as when the contact closure opens to send a message when the circuit opens. This will notify you when the closure has opened

You can set the interval of messages under Action When Status is Closed or When Status is Open. If the message is being sent more than once this is where you look to change that setting.

3. Setup Your Email

-> SMTP Server: Enter the SMTP account information you will be using to send the email. *Due to Google security upgrades Gmail cannot be used. Hotmail or any SMTP mail can be used.*

-> Enter the address where you want the email sent, for more than one recipient separate the addresses with a comma.

-> Add your Subject and message.

-> Click OK in all open windows and return to the desktop.

After finishing all previous page settings, all recipients will receive an email once the contact closure input on the board changes state. To test, close the contact input on the push notification board and check your email and/or text for your message.

The computer must remain powered up and connected to the network to read the input on the board. To send the message the computer will always need access to the internet.

Direct Query Command Set

If writing your own program, the only command required for this board is to query the status of the inputs. This may also need to be done after a server reboot to get the current status of inputs on the controller. This will be done via a TCP socket connection to the controller's IP address on the port number. While these are technically A/D inputs we are simply using them as contact closure inputs. All inputs are pulled low on the controller so if the input is not tripped its value will be 0. When the input is tripped it will be pulled high and its status will be 255. It is recommended that you assume any input above 200 is tripped with a contact.

Reads the 8-Bit Analog Input of Channels

Send Bytes:	Byte 1:	Byte 2:
Function:	Command	Parameter (Channel 1-8)
Decimal Values:	254	150-157
Hex Values:	0xFE	0x96 - 0x9D
Receive Byte:	Decimal:	0-255
	Hex:	0x00-0xFF

Multi-Channel 8-Bit

Send Bytes:	Byte 1:	Byte 2:
Function:	Command	Returns AD1 - AD8
Decimal Values:	254	166
Hex Values:	0xFE	0xA6
Receive Byte:	Decimal:	0-255 (AD1-AD8)
	Hex:	0x00-0xFF

Technical Support

NCD Community

National Control Devices has a forum where you can search and post questions on the operation of the boards. The NCD Community is where you will get the fastest support for all NCD products right from the developers! Discussions are welcome on applications, and you are encouraged to share your experiences with other users. Visit the community here: community.ncd.io/

Serial Port Tool

Questions for configuring N-Button Software can be made online at: support@serialporttool.com

Relay Pros Support

Contact Relay Pros at support@relaypros.com

Contact Relay Pros support@relaypros.com www.relaypros.com	Contact Serial Port Tool suport@serialporttool.com www.serialporttool.com
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