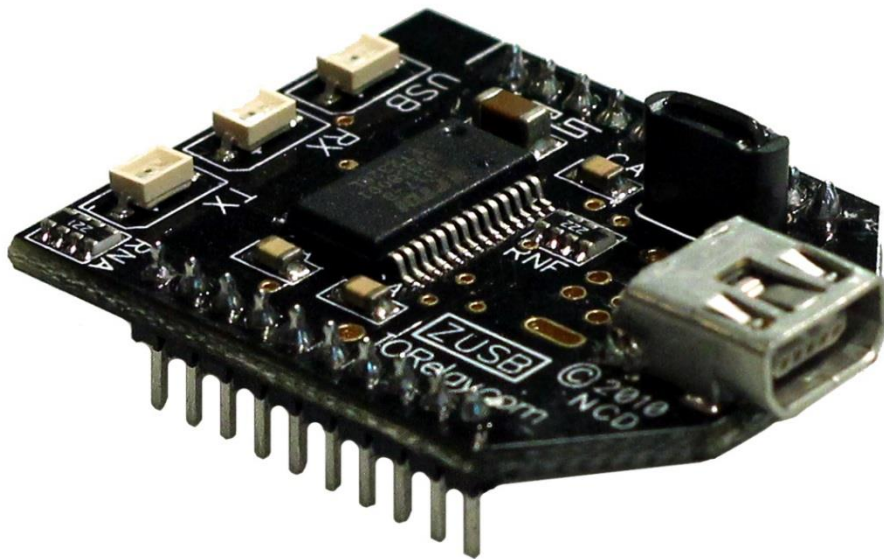


# NATIONAL CONTROL DEVICES

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## ZUSB Quick Start Guide



**Universal Serial Bus Communications Module**

NATIONAL CONTROL DEVICES

**ZUSB**

# **Universal Serial Bus Communications Module**

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Notice: Portions of this manual require internet access.

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### ***Technical Support Limitations:***

National Control Devices is unable to provide complete technical support for this device. This device incorporates substantial technology and firmware manufactured by a 3rd party company, and has been tested for compatibility with the NCD product line. NCD Technical Support will share any knowledge we have obtained with regard to the integration of this 3rd party technology into our product line in an effort to assist customers whenever possible. However, advanced communication problems may require customers to directly contact the technical support department of the 3rd party company. NCD Technical Support will not contact the 3rd party company on behalf of our customers unless NCD Technical Support is able to recreate the problem experienced by our customers.

National Control Devices has integrated the following 3rd party technologies into our product line:

WiFi Communications	Roving Networks	<a href="http://www.rovingnetworks.com/">http://www.rovingnetworks.com/</a>
Bluetooth Communications	SENA	<a href="http://www.sena.com/">http://www.sena.com/</a>
802.15.4 Wireless Communications	DIGI	<a href="http://www.digi.com/">http://www.digi.com/</a>
ZigBee Wireless Communications	DIGI	<a href="http://www.digi.com/">http://www.digi.com/</a>
XSC Wireless Communications	DIGI	<a href="http://www.digi.com/">http://www.digi.com/</a>
Ethernet Connect ME	DIGI	<a href="http://www.digi.com/">http://www.digi.com/</a>
USB Virtual COM Port	FTDI	<a href="http://www.ftdichip.com/">http://www.ftdichip.com/</a>

All other communication technologies are manufactured by National Control Devices and are fully supported by NCD Technical Support staff. Please contact NCD Technical Support Staff and review our forum posts at NCD Support (<http://forum.controlanything.com>).

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## ZUSB Setup

### Getting Started

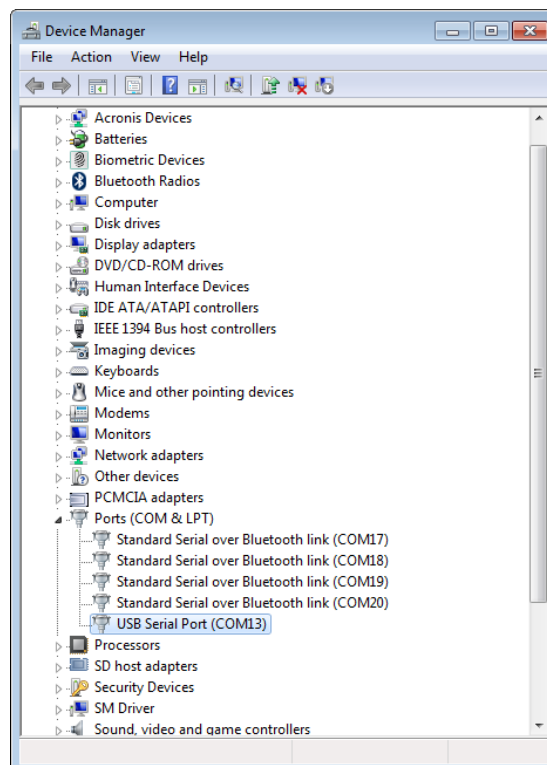
#### Things you will need:

- A Computer running Windows XP, Windows Vista, Windows 7 or any version of Linux.  
Note: We develop the software for Windows operating systems, so we advise having a Windows PC available for initial testing.
- ZUSB Communication Interface
- Power Supply (Computer Grade 12V DC Regulated Power Supply suggested)
- USB Cable

- 1) Connect USB cable between your ZUSB Communication Interface and your computer. The ZUSB communication module should be installed into a compatible controller that supports the ZUSB communications module. The device should be powered for initial testing.
- 2) Virtual COM port drivers are required before the ZUSB communication module can be used.
  - Windows 1 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>
- 3) After the driver is installed, open your “Device Manager” to determine the COM port your computer assigned to the ZUSB module. Windows 7 users may Click the Start > Control Panel > Device Manager.
- 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 using our software. In the screen shot shown, COM13 was assigned. When running our software, COM13 will be used to access this device. It is possible to have multiple devices installed on one computer; each device will have its own COM port number assigned to it.

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

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



*In the Screen shot shown here, COM13 was assigned to the ZUSB communications module. Take note of the COM port number that was assigned to the ZUSB before running any of our software utilities.*

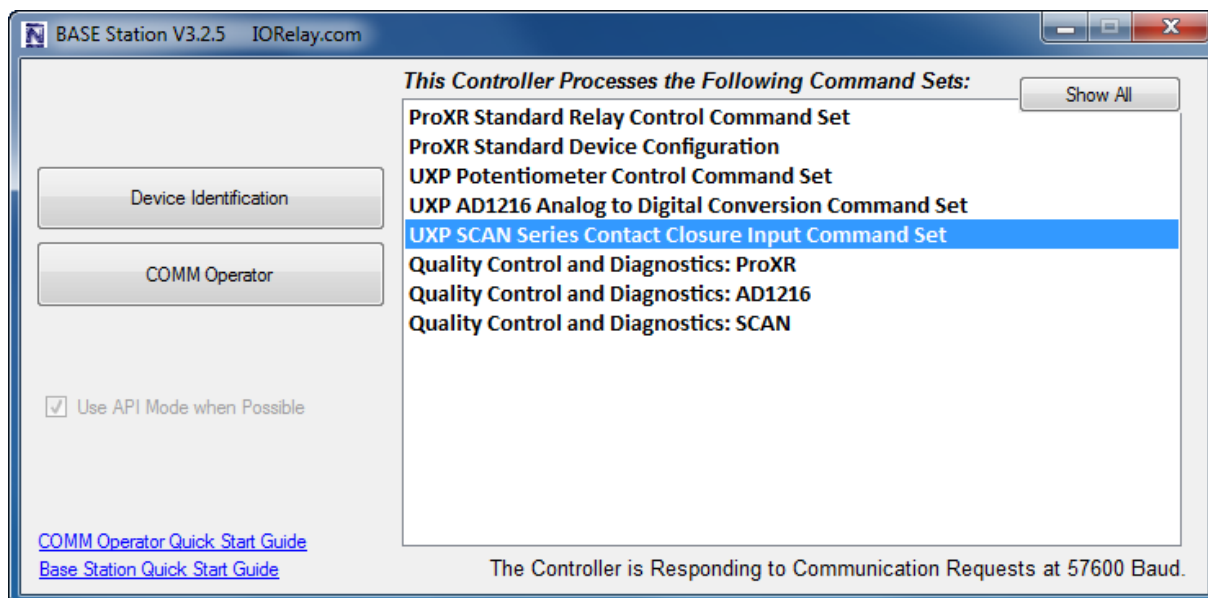
You will now need to download and install [NCD Base Station Software](#). Base Station Software allows you to communicate with and test your device. When Base Station Software runs on your Windows computer, the software will identify the type of controller and will build a list command sets that are compatible with your controller. Below are the basic parts to the main Base software application:

1. **Identification and Documentation:** This button displays Read-Only information stored in the controller. It can help you identify the type of device that is connected and what its capabilities are. This portion of the software also builds a library of documents that will be helpful in using the controller it has identified. This library of documents will change depending on the type of device which has been identified.
2. **COMM Operator:** COMM Operator is a tool for testing and learning how to communicate with all Network and COM based devices. This manual may include command codes you can send to the device using COMM Operator. COMM Operator should be thought of as a terminal to send and receive bytes of data. COMM Operator was used extensively in the development of this device and should be referenced throughout the learning process. COMM Operator is a commercial product and is NOT Free. The 30-Day Evaluation version is provided and users may purchase a license for this software if they would like to continue use beyond 30 days.

3. **Device Command Sets:** Each Device contains a set of commands that are identified by the Base Station software. Choose the command set you would like to explore in this box. Click one time on the command set you would like to explore.

*Note: There may be more basic features depending on your device. Other features you may notice:*

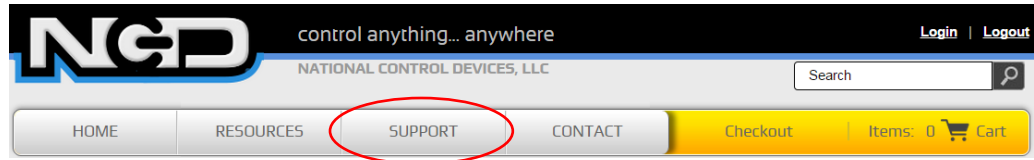
- **Device Configuration:** This button allows you to modify important device settings to help improve communication speed, functionality, and timing parameters of the device. Device Configuration is rarely used by the user.
- **Display Command Set:** When working with Base software, many windows will display the actual command codes used to trigger a particular function. This option allows you to choose Decimal and Hex formats. This manual is shown in both Hex and Decimal format. Decimal is typically used in COMM Operator and is our preferred format, but Hex works great too.
- **Run Mode:** Run mode is used for daily operations and is the default mode of operation. To prevent accidental writes to non-volatile memory, the device must be placed in Configuration Mode to change EEPROM memory. Click this button anytime you need to change modes. Note that a jumper on the controller will force this device into Configuration mode. If a device is powered up in Configuration Mode and you are using a Web-I interface, the Web-I will boot in DHCP mode as a safeguard in case the device becomes inaccessible with a static IP address.





## Technical Support

Technical support is available through our website, [controlanything.com](http://controlanything.com). **Support** is the way we connect NCD engineers to our customers.



*Click on the **Support** tab at the top of any page on our website to be taken to the **Forum** page. Here you can publicly post or review problems that customers have had, and learn about our recommended solutions.*

Our engineers monitor questions and respond continually throughout the day. Before requesting telephone technical support, we ask that customers please try to resolve their problems through **Support** first. However, for persistent problems, NCD technical support engineers will schedule a phone consultation.

## Contact Information

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Open 9 a.m. - 4 p.m. CST

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All orders *must* be placed online at our website, [www.controlanything.com](http://www.controlanything.com)

### Notice:

The only authorized resellers of NCD products are

- [www.controlanything.com](http://www.controlanything.com)
- [www.relaycontrollers.com](http://www.relaycontrollers.com)
- [www.relaypros.com](http://www.relaypros.com)

All other websites are not authorized dealers; we have noticed some retailers offering our products fraudulently.