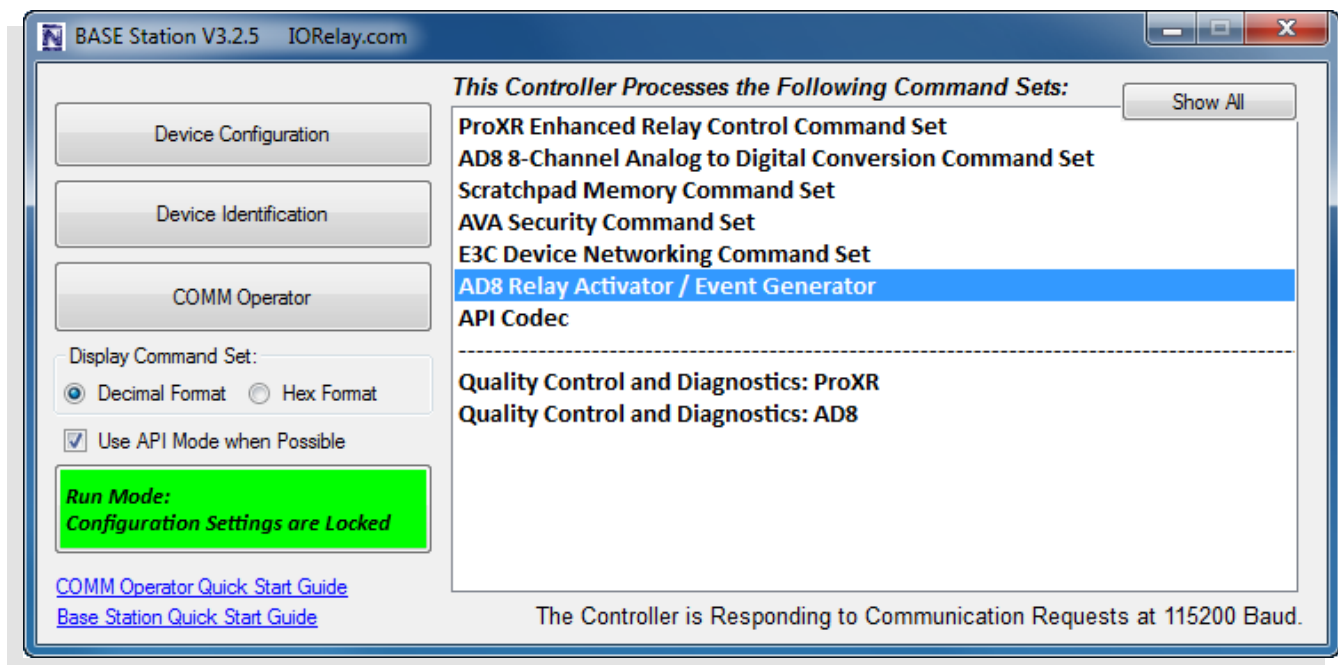


Quick Start Guide

AD8 Relay Activator

NCD Base Station Event Generator



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NOTICE: Portions of this Manual REQUIRE Internet Access

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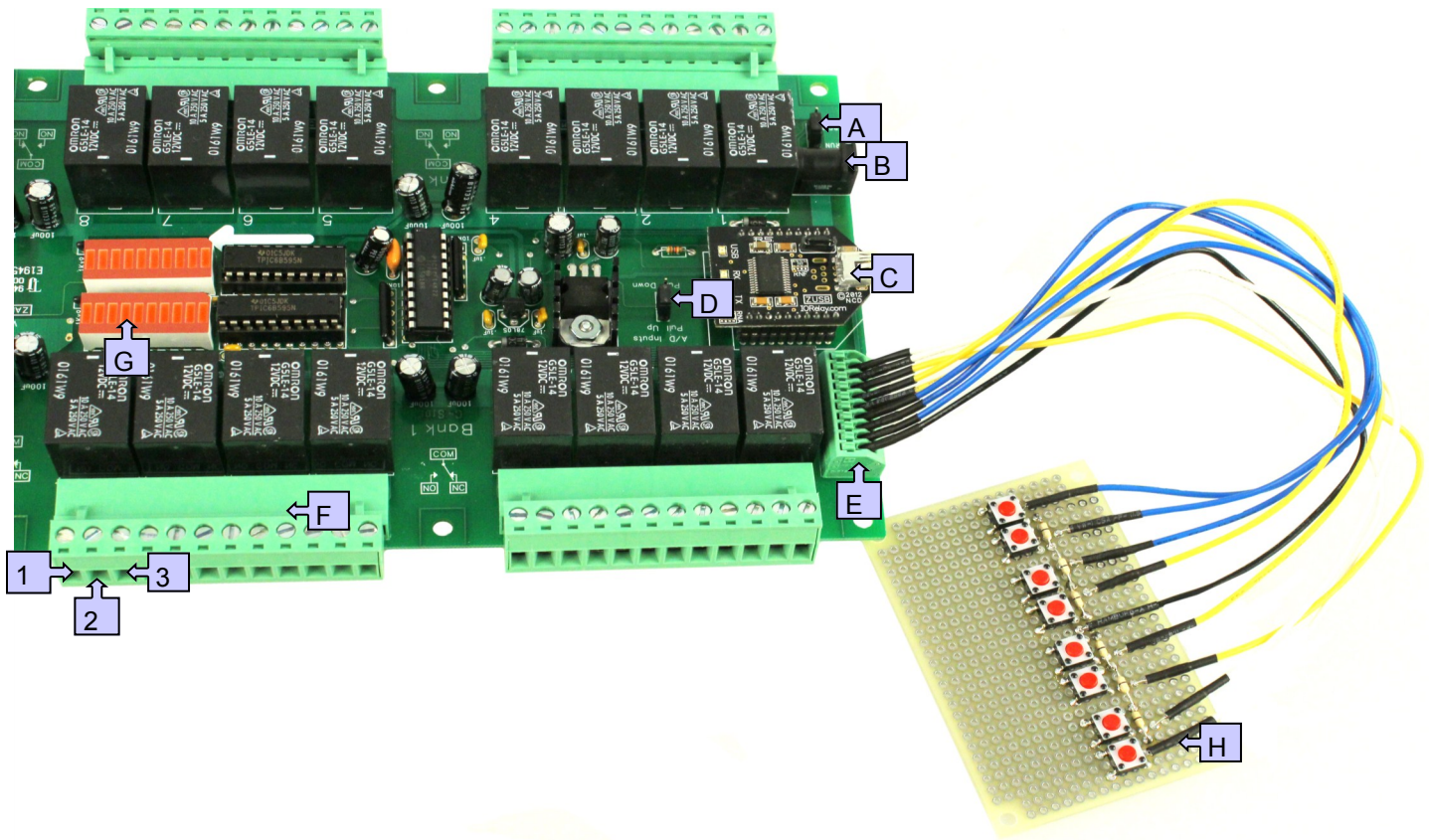
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AD8 Hardware

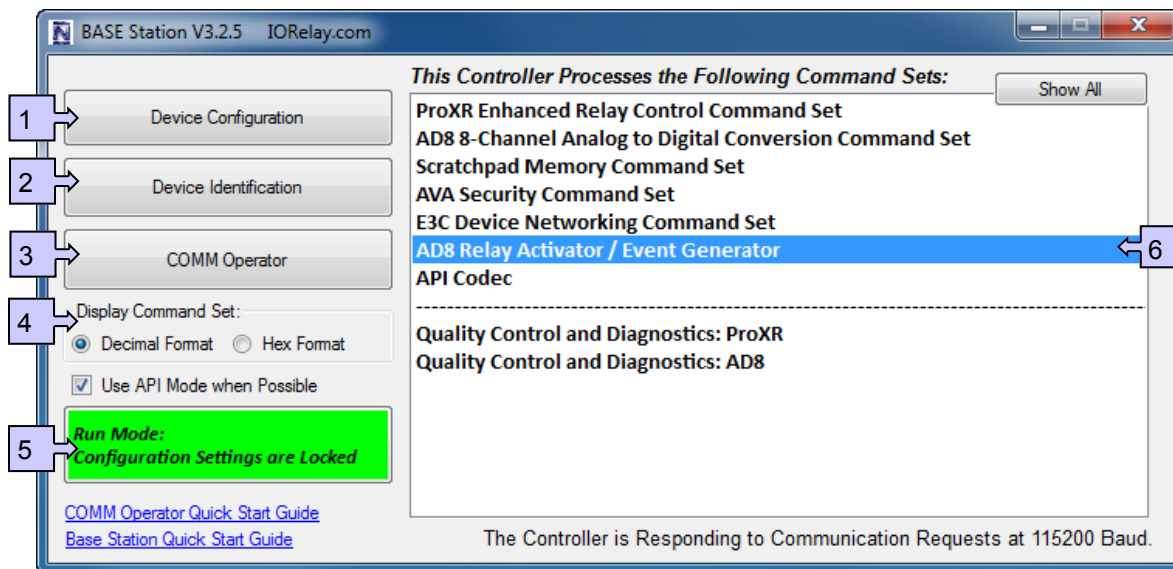


- A. **Program/Run Jumper:** Used to change operating modes. For daily use always set to *RUN* position.
- B. **Power Connector:** +12V DC center position 2.1 mm.
- C. **Communication Module:** Modular Interface Support allows you to use about any kind of standard computer interface available. Diagrams depicts a USB Communications module.
- D. **Pull Up/Down Jumper:**
 - ▶ *Up* Position pulls inputs high to plus 5 VDC. (used for contact closures or variable resistance signals)
 - ▶ *Down* position pulls inputs low to ground (used for reading external 0-5 VDC signals.)
- E. **10 Pin-8 Channel AD Connector:** Extreme right and left connections are GROUND. Connection 2-9 (left to right) correspond to Analog Inputs 1-8 Respectively.
- F. **Relay Connectors:** 3 Per Relay; Normally Open, Common and Normally Closed. Relay Connectors shown are Single Pull Double Throw (SPDT).
 - ▶ 1(NO): This terminal has no connection when the relay is off. The terminal is connected to COM when the relay is on.
 - ▶ 2(COM): This terminal is connected to NC when the relay is off. The terminal swings over to NO when the relay is on.
 - ▶ 3(NC): This terminal is connected to COM when the relay is off. This terminal has no connection when the relay is on.
- G. **Status LEDs:** Displays status of individual relays and the ready/busy status of the controller. The Ready LED engages when power is supplied to the controller. The Busy LED, or Data Receive LED, flashes when valid data is received. R1-R8 LEDs indicate the IO status of individual relays.
- H. **Input Control Switch:** Each button controls a relay according to the settings applied in the Base Station Application.

Base Station

Base Station Software

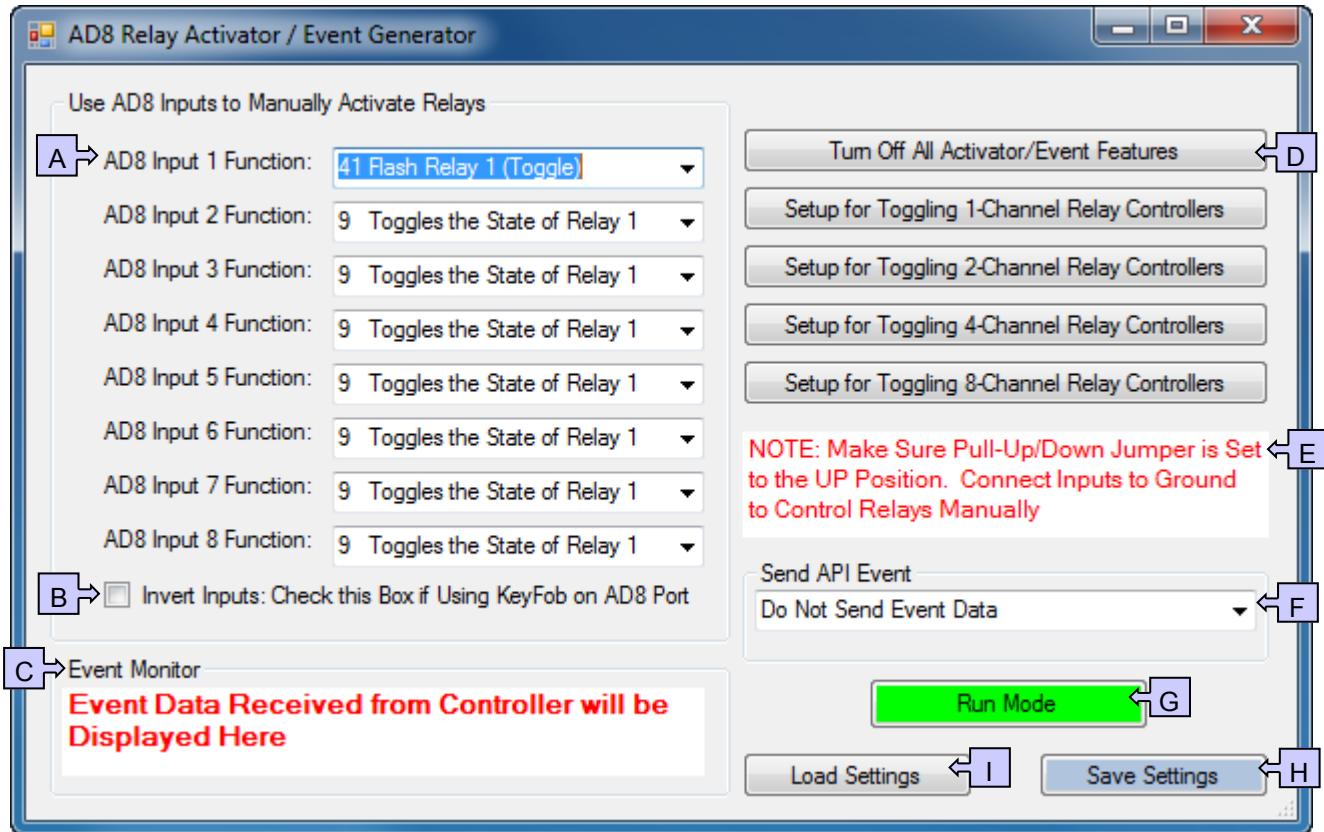
Download and install [NCD Base Station](#) Software to communicate with your controller. After connecting the controller to your computer, open and run Base Station software and select the correct port or IP Address for your controller. You will see the dialog box shown in the screen shot below. Select 'AD8 Relay Activator / Event Generator' as selected below.



When Base Station Software runs on your Windows computer, the software will identify the type of controller and will build a list of command sets that are compatible with your controller. There are 6 basic parts to the main Base software application:

1. **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
2. **Device 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.
3. **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.
4. **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.
5. **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.
6. **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.

AD8 Relay Activator



- A. Select control relays with AD8 Inputs by selecting various function combinations. **Note: Be aware of the function combinations you are applying. While conflicting command logic will not damage your controller, logic conflicts will result in unpredictable functionality.**
- B. Check this box if using a Key Fob on an AD8 Port.
- C. Displays API data received from controller, if Section F of diagram is set to send API Data.
- D. Each of these five buttons is a quick setting for the AD8 Input functions. Selecting any of these buttons will change the settings in Section A of diagram.
- E. Important information regarding device displayed here.
- F. Select setting. If set to send API Data, the event monitor (Section C of diagram) will record data received.
- G. Displays the device operation mode. Should read "Run Mode" for normal operation. Will read "Configuration Mode" while storing settings .
- H. Select this option to apply changes to settings. This will cause your device to go into configuration mode momentarily.
- I. This option allows you to reset all values to the last saved setting.

Technical Support

Technical support is available through our website, controlanything.com.

AccessNCD is the way we connect NCD engineers to our customers.

Click on the **AccessNCD** button located on the top right of the header of each page of our website.



For technical support and application information, contact Travis Elliott, our technical engineer. If you feel that you have discovered a bug in the firmware of our controllers, contact Ryan Sheldon, our hardware developer. If you have programming-related questions or have discovered a bug in our software, please contact Shirui Xu, our software engineer.

Click the '*Tech Support Staff*' tab and click on the appropriate engineer link for assistance. Click on our '*Forum*' tab if you would like to post publicly or review problems that other customers have had and 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 **AccessNCD** first. However, for persistent problems, NCD technical support engineers will schedule a phone consultation.

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