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AlarmDecoder Install Guide v2.4

Ademco Vista and DSC Power Series Alarm to Computer interface board

Video Install Tutorials are available on our website at http://www.alarmdecoder.com

Before you start...

Please take a moment and read this manual before you install the AD2* to your alarm panel. Rushing into the install of devices like this can result in damage to the device or accidental activation of your alarm and alerting of your alarm company.

Please use caution when using this device. You should notify your monitoring company you are testing your alarm prior to installing this device or when testing with this device.





DO DI 12V GND MINI USB B

AD2USBtm

* provided case not shown.

DB9 Female



DO DI 12V GND

AD2SERIALtm

* provided locking screws and case not shown

Introduction

Thanks for purchasing the AlarmDecoder interface board. The AD2* device was designed to work with a wide range of Ademco Vista alarm panels as well as the DSC Power Series alarm panels. The AD2* device only consumes ~30mA. You can use this value to calculate the total number of devices your panel will support.

The device presents itself to your computer as a virtual serial port running at 115200,8,N,1#1. Drivers for your operating system are required.

^{#1}The AD2SERIAL Adapter operates at a different baud rate (19200.8.N.1)

Drivers

If you are running windows you can get the Virtual COM port drivers from FTDI http://www.ftdichip.com/Drivers/VCP.htm. In many cases your computer may already have this driver if you have ever used an FTDI based USB2Serial device as many of them are based upon FTDI chips. These drivers are installed for you with our free software keypad installer available on our website.

If you are running Linux you can use the ftdi_sio driver. This should automatically load when you connect the device if you are using a relatively new distribution of Linux. For OSX and many other operating systems the drivers can be found at http://www.ftdichip.com/FTDrivers.htm

Alarm Panel Programming

If you have an older SE based panel then addressing is not used and it is not necessary to change any panel programming for the AD2* to operate.

With all other panels you will need to configure the alarm panel with the address of the AD2* as a new keypad device. For example, the default keypad address for a Vista 15P is 16. The AD2* is factory configured for device address 18 if this is already used on your panel see "Configuration your AlarmDecoder" section on how to change this.

If your alarm panel does not have a spare keypad configured, you will have to configure it for one. In this case, you can 1) call your security monitoring company and ask them to add in a new keypad - (ask them what address they configured it to); or 2) if you know the Installer Code, you can program it in yourself. You should reference the Programming Guide and Installation and Setup Guide for your unit. (I found these at www.aesecurity.com/manuals.html)

Connecting The AlarmDecoder To The Panel and Computer

Connect the 12v,GND,DI(GREEN),DO(YELLOW) on the panel to the 12v,GND,DI,DO on your AD2*. Do not cross the DO/DI lines. The DO on the panel connects to the DO on the AD2*. The device gets power from the alarm to operate. We suggest you perform this connection while the alarm panel is powered down and the battery is disconnected.

When power is connected to the AD2* it should have a steady LED heartbeat indicating the devices is looking for messages from the panel.

Connect the AD2* to a computer. You should see it install some new hardware or give some indication that a new devices was installed in a log file. It will be a COM port. You can see this COM port under your device manager on windows or using the dmesg command under Linux, OSX or other Unix based operating systems.

Try to communicate with the device directly with a serial terminal program. The program I have used for years and trust is Putty. http://www.chiark.greenend.org.uk/~sgtatham/putty/download.html. Under Linux you can use **minicom** using the **-o** option to prevent any modem initialization being done. On OSX you can use the **screen** command.

Pick the COM port that was added, say COM3, using $115200,8,N,1^{a1}$. You should now see see messages. You can press the = character in your terminal program to reset the device and verify you can send data to the AD2* correctly. Depending on your terminal software You may need to press ENTER to instruct the terminal program send it to the AD2*. If your terminal program operates in character mode the enter is not necessary.

Configuring Your AlarmDecoder

You may need to set the devices address on your AD2*. For example the default keypad address for a Vista 15P is 16. As with a normal keypad you have to tell the AD2* what address it is configured for. By default the AD2* device is factory configured for address 18. If you already have a device at 18 you will need to change the AD2* devices address.

To do this just press ! in your terminal program to configure the ADZUSB and set the address. If you have an SE panel you must set this to 31 or you will not see any messages from the panel. Never have two devices share the same address except for the SE panels where addressing is not used. You can press ENTER on any configuration options you a don't want to change and it will keep the current setting.

If you now press \star into your terminal program your panel should respond as if you hit the same key on your alarms keypad. You will see a message from the AD2 such as this "!Sending.done" if you see "!Sending.....done" and it appears to take a long time for the send operation this probably means that the alarm panel is not recognizing the AD2 \star or a device conflict exists. Confirm that the AD2 \star address is configured on the alarm panel. Also make sure no other devices exist at the same address as the AD2 \star .

The AD2* should see all messages from the alarm panel regardless of programming of the panel. If you are not seeing messages after connecting the AD2* to your panel you either have a wiring issue or you have an SE panel and you have not set your AD2* to address 31 before you see messages.

Post installation

Sample code and programs and our free KeyPad software as well as the API documentation and more is available in the forums and Documentation on our site http://www.alarmdecoder.com/

We also now have available to purchase an alarm panel unlocker module for the software keypad. This program when used with this device will determine the master installer code and any other codes on the alarm panel. Other modules are available as well as examlpe code to write your own module.

For questions and support email ad2usb@support.nutech.com. We try to respond to emails in the same day that we get them.

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 $^{^{\}sharp 1}$ The AD2SERIAL Adapter operates at a different baud rate (19200,8,N,1)