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# Virtual Keypad (GUI) Software & Board Firmware

Posted by mathewss - 2009/03/28 01:56

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Sec. 1) Virtual Keypad (GUI) Software for Windows, Linux, OSX

Keypad View:

[http://www.nutech.com/images/stories/ademco/ad2usbgui\\_keypad.png](http://www.nutech.com/images/stories/ademco/ad2usbgui_keypad.png)

Alarm Sensors and Zones View:

[http://www.nutech.com/images/stories/ademco/ad2usbgui\\_items.png](http://www.nutech.com/images/stories/ademco/ad2usbgui_items.png)

Floorplan alert view:

[http://www.nutech.com/images/stories/ademco/ad2usbgui\\_layout.png](http://www.nutech.com/images/stories/ademco/ad2usbgui_layout.png)

Requirements

Windows

Gtk# for .Net<http://download.xamarin.com/GTKforWindows/Windows/gtk-sharp-2.12.22.msi>Microsoft .NET 4.0 (may already be installed on your system)<http://www.microsoft.com/en-us/download/details.aspx?id=17718> or

<http://www.nutech.com/images/fbfiles/files/dotnetfx40.exe>

Linux, FreeBSD, Solaris, Mac OSX[www.go-mono.com/mono-downloads/download.html](http://www.go-mono.com/mono-downloads/download.html)

The ad2usbgui package

Places the contents of this zip someplace convenient. You can run program by double clicking on the application ad2usbgui.exe

When you run the program for the first time you will need to set the configuration to communicate with your AD2\* device. You can do that from within the program in the "System Menu" or by directly editing the text config files mysettings.conf or ad2usbgui.exe.config . The application must be restarted in order for config file changes to take effect.

v2.0.7 Windows, Linux, Other .Net 4.0

<http://www.nutech.com/ccount/click.php?id=26>

v2.0.6 Mac OSX Bundle

<http://www.nutech.com/ccount/click.php?id=7>

Sec. 2) AD2USBGUI revision history

1.0 First version just simple interface no keypad just display of text

1.1 Added LCD Display

1.0 First version just simple interface no keypad just display of text

1.1 Added LCD Display

1.2 Added Keypad

1.2a Some tweeking on keypad and interface

1.2b Upload firmware function Small GUI changes.

1.2c Small bug fixes button 1 was disconnected? um how did that happen?

1.3a Lots of changes a few are as follows New RF sensor tab New Floorplan alert window Bux fixes including parsing of commas in text buffer bug Socket client and server ( no ssl yet sorry ) Reset the device button Diagnostics settings button

1.3b Refactor socket code and serial code to allow for byte by byte reading. Now we can upload firmware over ethernet Exposed button and LED images in resource folder so user can customize them New features in config file Window size LCD display colors Window size Log font size Disable for com port Some GUI changes LCD looks cleaner centered with background color missing now fixed Fixed some race conditions in socket and serial code that was causing crashes Other small stuff was a busy weekend so I dont recall it all

1.3c Working on F1-F4 keys needs more testing but I think it is all working now 1.3d Now shows name of rf device if it defined in the config and not the serial number Fixed another race condition Added address mask filter to only see messages for keypad addresses you choose Added a global exception handler

2.0 Renamed RF Tab to "Items" Added custom icons to the Items tab Added custom command to Log tab Configure Ad2USB firmware (requires firmware V2\_1f\_09 or later) Added example module code for custom modules Added zonetracker module for purchase that tracks zones open/close in items tab Created unlocker module for purchase that will help discover installer codes Config setting to ignore unknown RF devices Signon messages for connecting sockets Sorting on ID and Type in Items tab Configuratoin Dialog About Box myresources folder for custom

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imagesImproved exception management continue running after exception dialogmysettings.conf for private settings  
2.0.4Fixed a bug with jpegs on windowsAdded support for config of relay modulesSome minor performance improvementsmissing client certificate fixed  
2.0.4033Added full build version data to program window title. This is the number of days since 1/1/2000Added more exception handling around loading of key filesFixed a bug in the Diagnostic Mode entry. Added function F4 to mark the log to help me decode output from the panel better.  
2.0.5Fixed some exceptionsAdded log file supportAdded mystuff.csChanged examples licensing to MITAdded webkit.cs  
2.0.6 20120526UI Changes pretty stuffSplit out the keypad as a module with source codeadded new Layout display plugins "binary" and "outline".  
2.0.7 20130709Fixed bugsImproved mystuff with new config screen and load module by defaultadded config plugin support to integrate plugins config screens into main UIStop scroll of log widow is scrolled up to look at historyAdded timestamp to log screen with config option to turn it off  
2.0.8 SOON(ish)Add SSL Supportbeta new module downloader.dll that downloads the programming for 15/20p panels

### Sec. 3) Firmware for the ad2usb boards

\* Unless you have a very old AD2USB you likely do not need to update ever.

You need firmware V2.1f.09 or later to make the most of this version. The latest firmware can be downloaded further down in this post. Once you have downloaded the firmware file, place it on your system someplace and use the MonoGUI or the Console Upload Utility to upload to your firmware. If the ad2usb board does not respond after uploading wait a minute and then reset the board using the new "Reset" button on the logs tab.

After completing a firmware update you MUST reset your configuration on the device by entering ! in a terminal connected to the AD2USB com port

Make sure you select the firmware version that is correct for your ad2usb board. The following two sections will help you determine which board you have and provide links for the appropriate software.

#### Sec. 3.1) Firmware for V2.0 ad2usb boards

[http://www.nutech.com/images/fbfiles/images/ad2usb\\_V2a.jpg](http://www.nutech.com/images/fbfiles/images/ad2usb_V2a.jpg)

You can identify the V2.0 boards by squarish USB-B connector.

This firmware version V2.1f\_10 fixes a problem in V2.1f.0e where the board could potentially jump into SERIAL mode and drop communications to the USB port. If you are using V2.1f.0e you need to update to version V2.1f\_10 .

NOTE: Version V2.1f\_10 requires that a JUMPER be placed on the J3 connector on the board. You must connect pins C3-C4 for USB or C4-C5 for SERIAL output. If you need to run firmware V2.1f.0e you can jumper C3 to GND to resolve the mode change problem.

<http://www.nutech.com/ccount/click.php?id=15>

Older firmware versions are also available:

<http://www.nutech.com/ccount/click.php?id=9>

<http://www.nutech.com/ccount/click.php?id=5>

<http://www.nutech.com/ccount/click.php?id=10>

#### Sec. 3.2) Firmware for V2.2 - V2.3a ad2usb boards

[http://www.nutech.com/images/fbfiles/images/ademco2usb\\_combined\\_layout\\_top.png](http://www.nutech.com/images/fbfiles/images/ademco2usb_combined_layout_top.png)  
[http://www.nutech.com/images/fbfiles/images/ad2usb\\_2.png](http://www.nutech.com/images/fbfiles/images/ad2usb_2.png)

You can identify the V2.2 - V2.3a boards by the Mini-USB Connector.

Firmware version 2\_2a\_4 contains three new features not available in previous releases, and not available on the v2.0

boards.

Keypad Address Mask: This feature allows you to select specific keypad addresses to listen to. The keypad address mask is the same masking that the AD2USB GUI uses under "Configuraiton->General->Keypad Address Mask. This is then converted into a 32bit hex number ie ffffff

From the MSB(left) to the LSB(right) of this 32 bit word the address of each device is as follows

7,6,5,4,3,2,1,0,15,14,13,12,11,10,9,8,23,22,21,20,19,18,17,16,31,30,29,28,27,26,25,24

Long Range Radio (LRR) Emulation: The availability of a LRR device in the alarm system causes the panel to send messages containing the user code used to arm/disarm the panel. If a real LRR is not present, this feature allows the ad2usb to become a virtual LRR.

Deduplication: The availability to remove repetitive messages. This in conjunction with the Address Mask will remove duplicate alarm messages the panel produces. You can get a fresh message by sending a blank link or any data to the AD2USB

Current production firmware

<http://www.nutech.com/ccount/click.php?id=24>

Current BETA firmware

<http://www.nutech.com/ccount/click.php?id=27>

Older firmware versions are also available:

<http://www.nutech.com/ccount/click.php?id=17>

<http://www.nutech.com/ccount/click.php?id=16>

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## Re:Virtual Keypad (GUI) Software & Board Firmware

Posted by hamw - 2012/02/19 21:05

I have the V2.0 board with the square connector. Could you post a pic showing the jumper in the proper position for USB? Also, if the jumper is placed there, is the board still able to operate via USB with either serial addressing or telnet as well? I'm currently still using the Indigo Serial Bridge script i posted about here a while back but am considering Berkinet's telnet plugin. I'm a little confused about what is lost when committing the board to "serial" or "USB" based on the jumper location.

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## Re:Virtual Keypad (GUI) Software & Board Firmware

Posted by berkinet - 2012/02/19 21:53

I will let Sean post the jumper picture, if he has one. However, I can answer the other question. The jumper sets the ad2usb board to user either USB or RS-232 serial communications. It does not affect how your application software communicates with the ad2usb. If you already have your ad2usb board connected to your computer with a USB cable, then you want to jumper the board for USB. Most users will want to set their jumper for USB.

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## Re:Virtual Keypad (GUI) Software & Board Firmware

Posted by mathewss - 2012/02/19 22:51

This was buried deep. This link describes the jumper setting that is needed on that board.

Hay Hamw

On that board it was one or the other serial or usb. The 2.2 version of the board the serial adapter was on all the time but caution should be used to only talk to USB or Serial not both allowing attaching the AD2USB directly to a micro controller or max232 chip. I also have RS232 version with no USB chip that can connect directly to a DB9 connector.

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Hope this helps.

Re  
Sean M

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## Re:Virtual Keypad (GUI) Software & Board Firmware

Posted by hamw - 2012/02/20 03:29

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Does that mean that as long as I don't hook it up to a serial device I am OK and don't need to put on the jumper? Would make life easier if it is just the SW update.

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## Re:Virtual Keypad (GUI) Software & Board Firmware

Posted by berkinet - 2012/02/20 09:08

hamw wrote:

Does that mean that as long as I don't hook it up to a serial device I am OK and don't need to put on the jumper? Would make life easier if it is just the SW update. Unfortunately, no. To assure that the connection does not accidentally shift between serial and USB you need the jumper. The ad2usb might work without the jumper, but, it might also just change settings at some random time.

The jumper is very easy to add. While the pictures show an empty circuit board, in actuality, there are small pins on the board where you can insert a short piece of wire. It is not difficult and does not require any soldering.

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## Re:Virtual Keypad (GUI) Software & Board Firmware

Posted by hamw - 2012/02/20 19:15

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So I jumpered C3 and C4 as indicated. I am able to connect to the AD2USB via terminal and via Serial Bridge, no problem. However I can't get MonoGui to connect. I attach a pic showing the telnet connection is OK on Keypad 04 with no board expanders emulated. On the same pic is the reading from the MonoGui log and the comm settings I set for it. I did quit the telnet session in Terminal prior to trying to connect. Note that every time I open MonoGui it forgets which keypad number the NuTech is assigned to; always reads "0". I can't reset the log either.

Trying a different tack, I booted up VMWare fusion and downloaded the console firmware update app and the firmware. I enabled the USB port on VMWare and executed the firmware app and the firmware multiple times. It seems to run very quickly and then quit?

How do I tell which firmware version I'm currently running?

[http://www.nutech.com/images/fbfiles/images/AD2USB\\_MonoGui.png](http://www.nutech.com/images/fbfiles/images/AD2USB_MonoGui.png)

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## Re:Virtual Keypad (GUI) Software & Board Firmware

Posted by berkinet - 2012/02/20 19:21

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It looks like you have multiple things trying to connect to the ad2usb using USB at once. If ser2sock is connected, then the MonoGUI cannot connect directly to the ad2usb via USB, you must configure it to use the IP port you specified in the ser2sock command line. If you are following the ser2sock instructions in the Indigo ad2usb plugin, then you would set the MonoGUI (and any other software) to use port 1503 on IP Address 127.0.0.1.

So, try killing everything. Then restart ser2sock, and try a telnet connection. If that works, just leave it open, and try the MonoGUI. Just configure everything for the IP interface to ser2sock.

The V command (Capital V) will display your firmware version.

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## Re:Virtual Keypad (GUI) Software & Board Firmware

Posted by berkinet - 2012/02/20 19:29

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Ok. Now I can see the picture you posted. Try using 127.0.0.1 in the MonoGUI instead of WilliamsEC

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## Re:Virtual Keypad (GUI) Software & Board Firmware

Posted by hamw - 2012/02/20 20:14

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I entered 127.0.0.1 as per the ser2sock instructions - lots of places to look! and the MonoGui came online. I uploaded the firmware and the process seemed to stall. Waited 5 min or so, checked the log which at the end said "Boot....." which I interpreted to mean the upload was complete and the MonoGui needed to be reset. I closed and reopened MonoGui and now it won't reconnect, nor will Terminal or Serial Bridge. I unplugged the USB and de-powered the unit to no avail. This is what it reads:

```
Last login: Mon Feb 20 23:01:59 on ttys000
Mac-mini:~ WilliamsEC$ telnet 127.0.0.1 15005
Trying 127.0.0.1...
Connected to localhost.
Escape character is '^]'.
!SER2SOCK Connected
!SER2SOCK SERIAL_CONNECTED
```

There is no usual alarm text following.

The log from MonoGui says basically the same thing. Is it possible the unit is now bricked, or is this just some kind of hang?

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## Re:Virtual Keypad (GUI) Software & Board Firmware

Posted by berkinet - 2012/02/20 20:26

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Make sure you completely disconnected the ad2usb from the panel and the USB port. Then plug it in again, start ser2sock and connect with telnet.

Then, enter a =. (equal sign) that should cause the ad2usb to reboot. If it is still non-responsive Sean will probably be able to help you recover.

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## Re:Virtual Keypad (GUI) Software & Board Firmware

Posted by hamw - 2012/02/21 17:57

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Did that and rebooted computer with AD2USB unplugged, then reattached everything. Opened terminal session, entered = and got this again:

```
Last login: Tue Feb 21 20:50:19 on console
Mac-mini:~ WilliamsEC$ telnet 127.0.0.1 15005
Trying 127.0.0.1...
Connected to localhost.
Escape character is '^]'.
!SER2SOCK Connected
!SER2SOCK SERIAL_CONNECTED
```

=

=

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MonoGui shows this, and won't allow re-upload of the firmware:  
Starting ad2usbgui build #2.0.3841.17210  
Trying to connect to: 127.0.0.1:15005  
!SER2SOCK Connected  
!SER2SOCK SERIAL\_CONNECTED

Sean, Berkinet, any ideas?

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## Re:Virtual Keypad (GUI) Software & Board Firmware

Posted by mathewss - 2012/02/21 19:42

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I am at the office 503 443 2000 x 14 give me a ring.

Re  
Sean M

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## Re:Virtual Keypad (GUI) Software & Board Firmware

Posted by hamw - 2012/02/21 20:50

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Thank you, Sean, for pointing out that the correct jumpers for USB are C4 and C5. Appreciate your helping me through this!

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## Re:Virtual Keypad (GUI) Software & Board Firmware

Posted by mathewss - 2012/02/21 20:58

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hamw wrote:

Thank you, Sean, for pointing out that the correct jumpers for USB are C4 and C5. Appreciate your helping me through this!

No problem sorry for the confusion. I updated the document to explain that C3-C4 = Serial Adapter and C4-C5 = USB mode.

Re  
Sean M

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## Re:Virtual Keypad (GUI) Software & Board Firmware

Posted by cpeltier - 2012/08/28 08:30

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I bought a second ad2usb in August of last year because the first one would not stay connected to the USB bus for any period of time. The first one never rebooted after the recommended firmware upload. The second one had been better but was still having the problem just not as frequent. After a year of operation it has disconnected at least three times with the dmesg notice "ftdi\_sio ttyUSB1: FTDI USB Serial Device converter now disconnected from ttyUSB1"(Debian). I am using this to control an alarm panel 400 miles away and this is very annoying! The second ad2usb ran firmware V2.2a.3 which I noticed was shipped with a beta version according to the notes in this forum. I upgraded this one to V2.2a.4 production firmware hoping hoping for a better result. I loaded the hex file through the GUI

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and after loading it never came back to life after the reboot. I followed the instructions carefully and the file loaded without issues until the reboot.

The last log entries are:

```
!wait
Sending :1051B0001F6729F301A5990960A3978B5DC8AB2DE3
Sending :1051C0002A133D313AFDE93F82C4EE148E43CE8C62
!load
Sending :0200000400F00A
Sending :02000000FF00FF
!ae
Sending :00000001FF
!00FF:0000
!ok
Uploading done resetting the AD2USB
!sn:000005d4
!boot.....
```

What can be done?

Chris Peltier  
CTO NetCarrier Inc

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## Re:Virtual Keypad (GUI) Software & Board Firmware

Posted by mathewss - 2012/08/28 10:02

cpeltier wrote:

I bought a second ad2usb in August of last year because the first one would not stay connected to the USB bus for any period of time. The first one never rebooted after the recommended firmware upload. The second one had been better but was still having the problem just not as frequent. After a year of operation it has disconnected at least three times with the dmesg notice "ftdi\_sio ttyUSB1: FTDI USB Serial Device converter now disconnected from ttyUSB1"(Debian). I am using this to control an alarm panel 400 miles away and this is very annoying! The second ad2usb ran firmware V2.2a.3 which I noticed was shipped with a beta version according to the notes in this forum.

I upgraded this one to V2.2a.4 production firmware hoping hoping for a better result. I loaded the hex file through the GUI and after loading it never came back to life after the reboot. I followed the instructions carefully and the file loaded without issues until the reboot.

The last log entries are:

```
!wait
Sending :1051B0001F6729F301A5990960A3978B5DC8AB2DE3
Sending :1051C0002A133D313AFDE93F82C4EE148E43CE8C62
!load
Sending :0200000400F00A
Sending :02000000FF00FF
!ae
Sending :00000001FF
!00FF:0000
!ok
Uploading done resetting the AD2USB
!sn:000005d4
!boot.....
```

What can be done?

Chris Peltier  
CTO NetCarrier Inc

Sorry for your pain Chris. It looks like the firmware upload did not go well from the log it looks very unhappy.

Hard to say why or what but I will do everything I can to get you fixed up.

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Does anyone at that location have the ability to power cycle the alarm? At this point that is the only way to get the AD2USB back into boot loader mode.

Also the issue you reported looks like usb noise power issue. If you have noisy power it can be a real problem usb. Does that computer have an RS232 Port? If it does I will send you a serial version out today to install the next time you are at the location or maybe you can get someone to do it remotely.

Re  
Sean M

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## Re:Virtual Keypad (GUI) Software & Board Firmware

Posted by cpeltier - 2012/08/29 10:31

I don't have anybody that I can easily send to that facility with the technical experience to perform that function. I do have a visit planned in late September where that could happen but I prefer not to wait that long. What do you suggest? Power cycling it and forcing a new image into after it reboots?

The Ad2usb is attached to USB1 on a Technologic TS-7800 embedded ARM SBC. USB0 has a iButtonLink, LINKUSB one-wire USB interface.

The LINKUSB has dozens of temperature sensors on it and it has never had a problem like the ad2usb device. The TS-7800 also runs a environmental management system with lots of external opto-isolated discrete I/O.

The alarm system and TS-7800 SBC are protected by a rack mounted APC UPS system. The facility has never lost power as it is also backed up by a standby generator. There are numerous inverters in the facility which are notorious for AC noise. There are 32 Enphase solar inverters and a 3 phase inverter powering a variable speed well pump.

AC noise has not been a problem with any other device. The LINKUSB has far more wire connected to it then the alarm system and has not ever glitched in its 3 years of operation. Maybe their circuitry is better at rejecting noise?

The TS-7800 does have a spare 10 pin header sporting an RS-232 interface...

Chris

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## Re:Virtual Keypad (GUI) Software & Board Firmware

Posted by kyleob - 2012/09/13 07:07

Hi guys, I am new to this board. I am trying to run this virtual keypad on a Raspberry PI which uses an ARM processor. Is it possible to compile this code for this type of processor? Has anybody attempted this and had luck? Thanks for any input.

-Kyle

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## Re:Virtual Keypad (GUI) Software & Board Firmware

Posted by cpeltier - 2012/09/19 09:47

I am going on site Friday to deal with the dead AD2USB. What exactly am I supposed to do? I have called several times and posted but there has been no response.

Need a fix fast! -Chris

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## Re:Virtual Keypad (GUI) Software & Board Firmware



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Posted by mathewss - 2012/09/19 10:17

Hay Chris.

I am at the office today give me a ring and fill me in on the issue.

Re  
Sean M

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## Re:Virtual Keypad (GUI) Software & Board Firmware

Posted by strandedata - 2013/01/15 15:03

Hello everyone.

I just installed my ad2usb on a Vista 10SE and though I can see the messages on the log, the virtual keyboard just says "Waiting first message", without actually showing the messages on the display.

It would be possible to do some programming through the logs, but it would be a lot more painful.

It's a similar problem to what was related here.

I've already changed the channel to 31 and the commands do work. Any ideas?

Thanks!

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## Re:Virtual Keypad (GUI) Software & Board Firmware

Posted by mathewss - 2013/01/15 15:12

Probably a bug in the latest beta GUI. Have you tried the older version of the GUI?

Re  
Sean M

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## Re:Virtual Keypad (GUI) Software & Board Firmware

Posted by strandedata - 2013/01/15 16:56

Have you tried the older version of the GUI?

I did, but the display remained blank. :dry:

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## Re:Virtual Keypad (GUI) Software & Board Firmware

Posted by DavidNPro - 2013/01/24 04:48

I was wondering if you have the source code for your actual GUI itself available for download anywhere? I was trying to do some customization to the UI, but have been unable to find the source code anywhere make the tweaks and recompile the ad2usb.exe.

Thanks

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## Re:Virtual Keypad (GUI) Software & Board Firmware

Posted by shep29 - 2013/02/24 02:51

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I have a Vista 20P, a Micasaverde Vera 1 z-wave controller and the Ad2usb (mini USB version) wired to my alarm system. I'm able to control my alarm panel via the Micasaverde Dashboard and the Ad2usb via Terminal on my Intel-based MAC BOOK PRO running the latest version of Mountain Lion 10.8.2. I'm UNABLE to control the Ad2usb or my panel via the ad2usbgui software however. I've tried everything in the forums including upgrading the USB FTDI firmware library via Terminal, installing MonoGUI (64-bit version as my MAC's processor is Core Duo 2) to installing and reinstalling the Ad2usbgui software. I've also watched the videos related to controlling Ad2usb via MAC's in the forums. No dice.

The logs in the Ad2usbgui emulator show a bunch of crazy charcters after this first line: "Starting ad2usbgui build #2.0.3848.21886

```
`àlß` b#É ÂtF üýž ]p hÈœ¼ RÓ â âBF(üüB Èœßœ b`ÈXí`G.üü càlß`R âX 4F üüBhÈlP r câX 4F üüB Èœ¼
RR ÈX `F/üý hÈÿP R #ÈX` `F/üü bèÿpã€ÒhÈ8 tF üpBHÈœ¼è `ÈX `G,yüB Èœ¼ÈR càXìCF(üü...."
```

In Preferences, I'm able to set the correct port name for my USB but I can't set the correct Ad2usb keypad address of my panel, which I enabled in the panel as address 17. Also can't upload new Ad2usb firmware via Ad2usbgui, which was my ultimate goal.

Ideas?

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## Re:Virtual Keypad (GUI) Software & Board Firmware

Posted by mathewss - 2013/02/24 11:55

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Thats new. so to be sure the gui is the only program talking to the ad2usb device only one com port per program at a time.

I would say its a baud rate issue. Double check the config files and see if its set to 119200 maybe its a bug in the mac bundle that the baud is set to some incorrect baud rate for the newer usb mini versions.

as for firmware if you can get terminal going on your mac and talk to it correctly then the CLI version of the firwmware upload should work.

Re  
Sean M

shep29 wrote:

I have a Vista 20P, a Micasaverde Vera 1 z-wave controller and the Ad2usb (mini USB version) wired to my alarm system. I'm able to control my alarm panel via the Micasaverde Dashboard and the Ad2usb via Terminal on my Intel-based MAC BOOK PRO running the latest version of Mountain Lion 10.8.2. I'm UNABLE to control the Ad2usb or my panel via the ad2usbgui software however. I've tried everything in the forums including upgrading the USB FTDI firmware library via Terminal, installing MonoGUI (64-bit version as my MAC's processor is Core Duo 2) to installing and reinstalling the Ad2usbgui software. I've also watched the videos related to controlling Ad2usb via MAC's in the forums. No dice.

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RR ÈX `F/üý hÈÿP R #ÈX` `F/üü bèÿpã€ÒhÈ8 tF üpBHÈœ¼è `ÈX `G,yüB Èœ¼ÈR càXìCF(üü...."
```

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Ideas?

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## Re:Virtual Keypad (GUI) Software & Board Firmware

Posted by shep29 - 2013/02/25 10:17

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I left you a voicemail to discuss this. Also tried calling the support line several times today but no one is answering.

I tried accessing one program at a time but still didn't work. How do I access the config files to check the baud rate? The baud rate I use when accessing via Terminal is 115200 as per the documentation and videos.

Don't know how to upload firmware via Terminal.

mathewss wrote:

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Sean M

shep29 wrote:

I have a Vista 20P, a Micasaverde Vera 1 z-wave controller and the Ad2usb (mini USB version) wired to my alarm system. I'm able to control my alarm panel via the Micasaverde Dashboard and the Ad2usb via Terminal on my Intel-based MAC BOOK PRO running the latest version of Mountain Lion 10.8.2. I'm UNABLE to control the Ad2usb or my panel via the ad2usbgui software however. I've tried everything in the forums including upgrading the USB FTDI firmware library via Terminal, installing MonoGUI (64-bit version as my MAC's processor is Core Duo 2) to installing and reinstalling the Ad2usbgui software. I've also watched the videos related to controlling Ad2usb via MAC's in the forums. No dice.

The logs in the Ad2usbgui emulator show a bunch of crazy charcters after this first line: "Starting ad2usbgui build #2.0.3848.21886

```
`àìß` b#É ÂtF üýž ]p hÈœ¼ RÓ â âBF(üùB Èœßœ b`ÈXÍ`G.üù càìß`R âX 4F üùBhÈÌP r câX 4F üùB Èœ¼  
RR ÈX `F/üý hÈÿP R #ÈX` `F/üù bèÿpã€ÒhÈ8 tF üpBHÈœ¼è `ÈX `G,yùB Èœ¼ÈR càXìCF(üù...."
```

In Preferences, I'm able to set the correct port name for my USB but I can't set the correct Ad2usb keypad address of my panel, which I enabled in the panel as address 17. Also can't upload new Ad2usb firmware via Ad2usbgui, which was my ultimate goal.

Ideas?

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## Re:Virtual Keypad (GUI) Software & Board Firmware

Posted by mathewss - 2013/02/25 10:29

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Ya I see the problem.

The config file built into the MAC bundle is wrong it has the wrong baud rate.

I dont have any tools to update this file but I think you can open the file on your mac and update it manually. look for ad2usbgui.exe.config and the above text change the baud rate to 115200 and see if you can save it.

---

I need to find someone to "re" bundle the newer GUI program into a new package that version is very old.

Re  
Sean M

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## Re:Virtual Keypad (GUI) Software & Board Firmware

Posted by shep29 - 2013/02/25 11:02

The search comes up empty for the filename ad2usbgui.exe.config. Would it be under a different name? I see lots of config files in the MonoGui folders here: /Library/Frameworks/Mono.framework/...

mathewss wrote:  
Ya I see the problem.

The config file built into the MAC bundle is wrong it has the wrong baud rate.

I dont have any tools to update this file but I think you can open the file on your mac and update it it manually. look for ad2usbgui.exe.config and the above text change the baud rate to 115200 and see if you can save it.

I need to find someone to "re" bundle the newer GUI program into a new package that version is very old.

Re  
Sean M

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## Re:Virtual Keypad (GUI) Software & Board Firmware

Posted by mathewss - 2013/02/25 19:48

Ok thanks to Mr. Perlman we have a new version packaged and ready to test. Please download from the same MAC bundle link and give it a try. It does have a bug in the config settings screen that after closing crashes but restarting seems to have kept the settings. I will investigate and fix when I get some time currently something I have very little of.

Feedback would be good so please post as soon as you can what your results are.

Re  
Sean M

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## Re:Virtual Keypad (GUI) Software & Board Firmware

Posted by shep29 - 2013/02/26 02:56

Success! I'm able to control my panel now via the Virtual Keypad and I uploaded the latest Beta firmware. After making changes in Preferences, the settings in the "Serial & Socket" and "General Settings" screens save but the settings in the "Setup AD2USB" screen do NOT, which has the keypad address setting unfortunately. After I clicked OK it crashed. Upon restart everything worked after I changed the keypad address setting to what it should be.

Are the Layout and Items tabs supposed to update based on all the zones and devices programmed on my panel?

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## Re:Virtual Keypad (GUI) Software & Board Firmware

Posted by mathewss - 2013/02/26 06:38

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shep29 wrote:

Success! I'm able to control my panel now via the Virtual Keypad and I uploaded the latest Beta firmware. After making changes in Preferences, the settings in the "Serial & Socket" and "General Settings" screens save but the settings in the "Setup AD2USB" screen do NOT, which has the keypad address setting unfortunately. After I clicked OK it crashed. Upon restart everything worked after I changed the keypad address setting to what it should be.

Are the Layout and Items tabs supposed to update based on all the zones and devices programmed on my panel?

Excellent. The layout and items are examples and can be modified but it will require some courage reading XML. the config file

I mentioned has all of these settings as well as lots of comments explaining. I suggest keep backups of the config as you make changes just in case a mistake is made you can revert back.

All the graphics including the layout floorplan can be changed just replace the graphic files in the package with your own.

Re  
Sean M

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## Re:Virtual Keypad (GUI) Software & Board Firmware

Posted by berkinet - 2013/02/26 07:04

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mathewss wrote:...All the graphics including the layout floorplan can be changed just replace the graphic files in the package with your own...BTW, you do not actually replace the graphics files, which are in the resources folder. Place your image files in the myresources folder. Just make sure you use the same name as the file you wish to "replace."

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## Re:Virtual Keypad (GUI) Software & Board Firmware

Posted by shep29 - 2013/02/27 05:46

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Where are these files located?

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## Re:Virtual Keypad (GUI) Software & Board Firmware

Posted by berkinet - 2013/02/27 06:08

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The files are located inside the app bundle. right(control)-click on the app and select Show Package Contents.

Note that in MacOS applications are actually just folders but the Finder does some magic to make them look like apps. If you use the terminal you can see the structure quite clearly.

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## Re:Virtual Keypad (GUI) Software & Board Firmware

Posted by mathewss - 2013/07/09 10:01

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I published AD2USBGUI v2.0.7 last night and I am running this on my frontdoor touchscreen keypad. So far its looking good.

Re  
Sean M

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## Re:Virtual Keypad (GUI) Software & Board Firmware

Posted by DeltaNu1142 - 2013/10/26 04:58

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Just yesterday I connected my AD2USB to my Vista 15P alarm panel. I'm seeing all messages via PuTTY (arming/disarming from physical keypads, motion sensors), and verified current firmware version V2.2a.6. I installed Gtk#. I downloaded AD2USBGUI and modified the config file for COM5, but each time I start the EXE, I get the Windows dialog box below.

What am I missing? My eventual goal is to connect AD2USB to Vera.  
<https://www.nutech.com/images/fbfiles/images/Error.png>

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## Re:Virtual Keypad (GUI) Software & Board Firmware

Posted by mathewss - 2013/10/26 09:50

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If you ultimate goal is the Vera then the GUI is not important and doing both is not really an option.

Still the error should be looked at for your ability to program and have a keypad if you want / need one.

The bottom of that dialog shows a "detail" does this show any more useful info?

9 times out of 10 this is a problem C# or gtk# on the system.

Re  
Sean M

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## Re:Virtual Keypad (GUI) Software & Board Firmware

Posted by DeltaNu1142 - 2013/10/26 11:07

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mathewss wrote:

If you ultimate goal is the Vera then the GUI is not important and doing both is not really an option.

Agreed, but:

mathewss wrote:

Still the error should be looked at for your ability to program and have a keypad if you want / need one.

The bottom of that dialog shows a "detail" does this show any more useful info?

9 times out of 10 this is a problem C# or gtk# on the system.

See below...

I verified .NET version is v4. I uninstalled GTK#, rebooted, reinstalled, and rebooted. I'm getting the same error...

[https://www.nutech.com/images/fbfiles/images/Error\\_1.png](https://www.nutech.com/images/fbfiles/images/Error_1.png)

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## Re:Virtual Keypad (GUI) Software & Board Firmware

Posted by DeltaNu1142 - 2013/10/26 11:14

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Error dialog, scrolled down: [https://www.nutech.com/images/fbfiles/images/Error\\_2.png](https://www.nutech.com/images/fbfiles/images/Error_2.png)

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## Re:Virtual Keypad (GUI) Software & Board Firmware

Posted by mathewss - 2013/10/26 11:49

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Possible the Microsoft .Net 4.0 Redistributable needs to be installed. ( on the GUI download page )

Did you already do that?

An exception file should be in the folder with the EXE called exception\_error\_log.txt if this does not exist then I think its likely C# is not working on your system at all. If it does exist could you please email it to general@support.nutech.com so I can read it over.

I am at my desk for most of the day 503 443 2000 x14

Give me a ring and we will just go over everything and see what is going on would be more efficient that posting back and forth :)

Re  
Sean M

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## Re:Virtual Keypad (GUI) Software & Board Firmware

Posted by DeltaNu1142 - 2013/10/26 11:53

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Thanks--I'll reinstall .NET & then give you call.

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## Re:Virtual Keypad (GUI) Software & Board Firmware

Posted by mathewss - 2013/10/26 12:29

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So it looks like the Gtk# download instructions need to change. Mono download site changed a little and the latest version of Mono is a full mono install not just Gtk#. They still have "Previous Stable Version: 2.10.x" if this is selected then one can download JUST the Gtk# part.

Not sure why the Full Mono install does not work it just never has but now that they dont offer the Gtk# by itself for version 3.2.3 I will have to update our install docs on the forums.

Re  
Sean M

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## Re:Virtual Keypad (GUI) Software & Board Firmware

Posted by mathewss - 2013/10/26 15:40

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Ok after opening a bug report with the mono Gtk# people I in regard to the missing link I have updated the install docs at the top of this thread.

I now have included a hard coded link to Gtk# for windows. Just download and install this and make sure you have .Net 4 installed.

Re  
Sean M

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## Re:Virtual Keypad (GUI) Software & Board Firmware

Posted by mathewss - 2013/10/26 20:37

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DeltaNu1142 wrote:

Thanks--I'll reinstall .NET & then give you call.

Please take a look at the top message in this thread again and let me know if that seems clear and if you can give it a shot and report back any concerns or problems.

Re

Sean M

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## Re:Virtual Keypad (GUI) Software & Board Firmware

Posted by JustPlainNuts - 2013/11/17 15:28

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Hello All. I am new to this forum. I have been reading a lot and a have question. Can the Virtual Keypad send signals via email? For example, can it send an email if the alarm is set off. If not, how can this be done? I have a Vista 20P and I am looking at this as a possible solution for my own E-monitoring.

Thank you!

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## Re:Virtual Keypad (GUI) Software & Board Firmware

Posted by mathewss - 2013/11/17 18:36

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Hay Nuts :)

Yes the free GUI program has a plugin called mystuff. This when configured with your mail provider settings will deliver email notifications of arm/disarm alarms etc. You can even customize it as we provide the source code to the module with instructions on compiling.

Re

Sean M

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## Re:Virtual Keypad (GUI) Software & Board Firmware

Posted by JustPlainNuts - 2013/11/17 19:29

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Outstanding! And thank you for the quick reply. Can it report which zones have been tripped? Can these zones be named?

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## Re:Virtual Keypad (GUI) Software & Board Firmware

Posted by JustPlainNuts - 2013/11/17 19:35

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Sorry for the rapid fire questions but I am very stoked about this app. Are there any Android apps available to control the system from a smart phone?

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## Re:Virtual Keypad (GUI) Software & Board Firmware

Posted by mathewss - 2013/11/17 20:26

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We do have a beta Android app you can ask for by sending a request to try it out at [ad2usb@support.nutech.com](mailto:ad2usb@support.nutech.com)

We are working on an update to the APP to support SSL but I am not sure where we are on that project. I would ask in the email.

The SSL version would only connect to SER2SOCK currently the GUI does not support SSL as a server but its on my list. You can however connect to SER2SOCK from the GUI using SSL now so you can run very secure alarm interface with your GUI and Android app connecting to your alarm.

see <https://github.com/nutechsoftware/ser2sock>

I took a quick peek at the mystuff.cs source code provided with the GUI and it does not look like it send the zone that caused the alarm unless you are running a long range radio or emulating a LRR radio with the AD2\*

It currently sends ARM,DISARM,ALARM+ALARM RESTORE, FIRE+FIRE RESTORE and all LRR messages.

If you are wanting to know what zone caused the alarm it can get tricky but would probably be trivial to implement. One way is to use LRR messages as they send the ZONE along with the alarm signal to your email. Its only zone numbers but would be easy enough to lookup the human readable name from the zone list in the configuration file for the GUI.

We offer engineering time you can purchase to have these types of projects done and can contact us directly for estimates.

I will be publishing a new GUI version soon with the new SSL support.

Re  
Sean M

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