# Serial Address Dump Tutorial

This program allows you to save all register configurations from an Alicat device to a single file. You can use it to record current settings before performing a major change or to compare current values to the initial values an instrument had when it was shipped from our factory.

## Step 1: Download the Serial Address Dump

It is located on our website under the "Resource Center" → "Software & Drivers" section. Once on that page, scroll down to navigate to this section:



Click on the "Serial Address Dump App" link to download it to your computer.

## Step 2: Extract the program from the compressed folder

Since it downloads as a .zip file, extract the compressed folder with the program to a location of your choice by right-clicking on the file and selecting "Extract All":
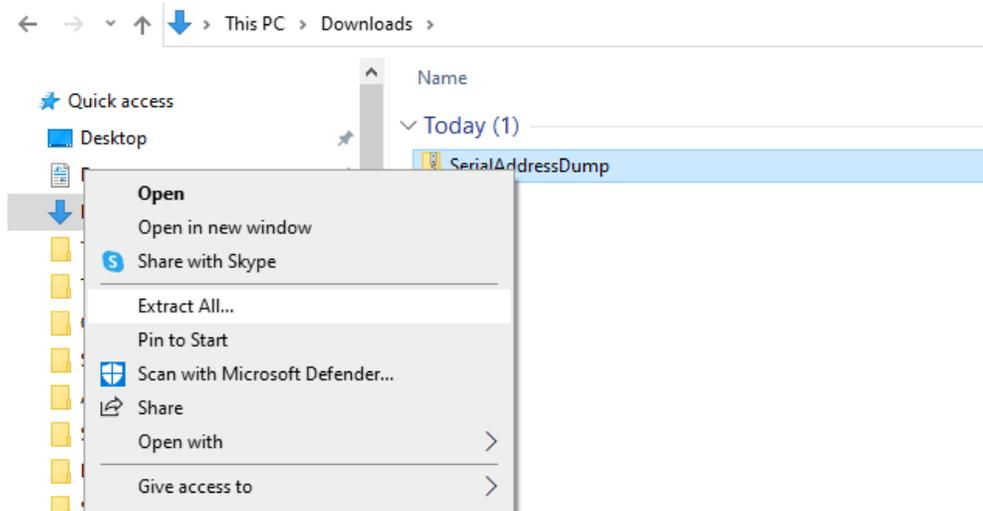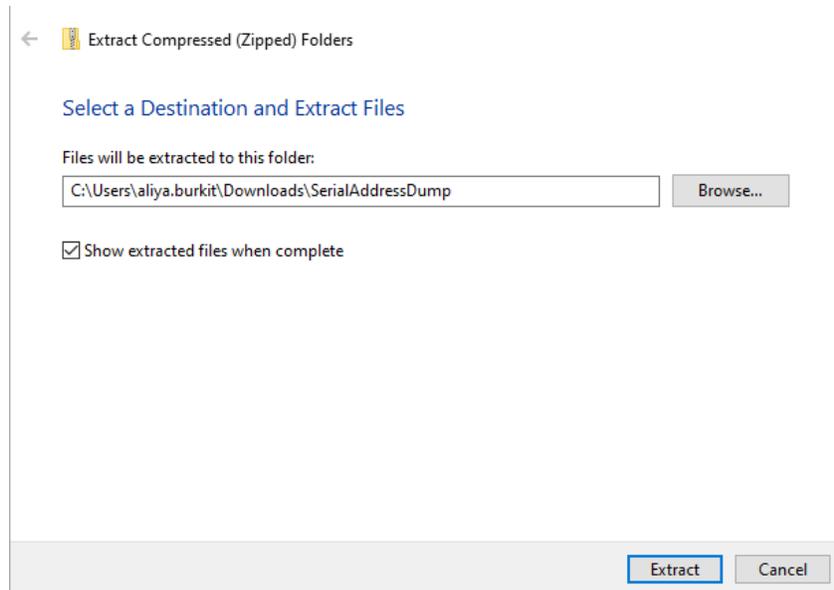
It will now be a regular folder in the location that you chose:



*Note: a common mistake is trying to run the serial address dump program from the .zip folder, which gives an error and prevents the address dump file from being saved.*

Now you can run the app from that folder by double-clicking on it:
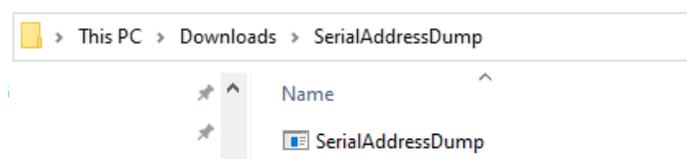


## Step 3: Establish connection with the Alicat

Once the app is open, it will look like this:

1) The first thing the program needs is the **COM Port** number:
- If you know the COM Port to which the Alicat is connected to, go ahead and enter it as a number.
- If you don't know the COM Port to which the Alicat is connected to, a quick way to find it out is to utilize the "Device Manager" on your computer:
  - Search for "device manager" in the search bar of your PC:
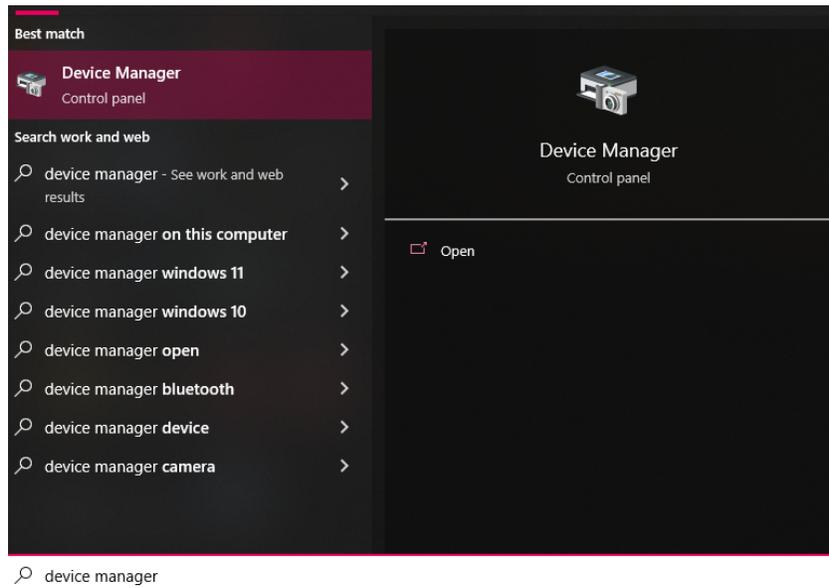


  - Depending on your computer settings, it might give you a warning that you are not logged in as an administrator. You can ignore this warning and click OK:
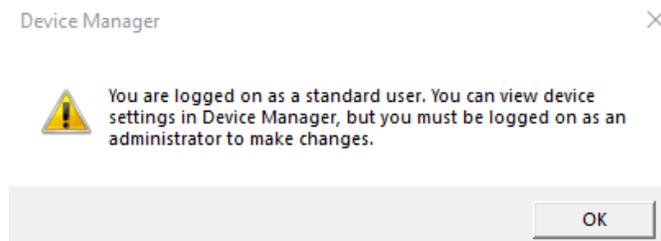
○ Now it will open a new window which looks like this:
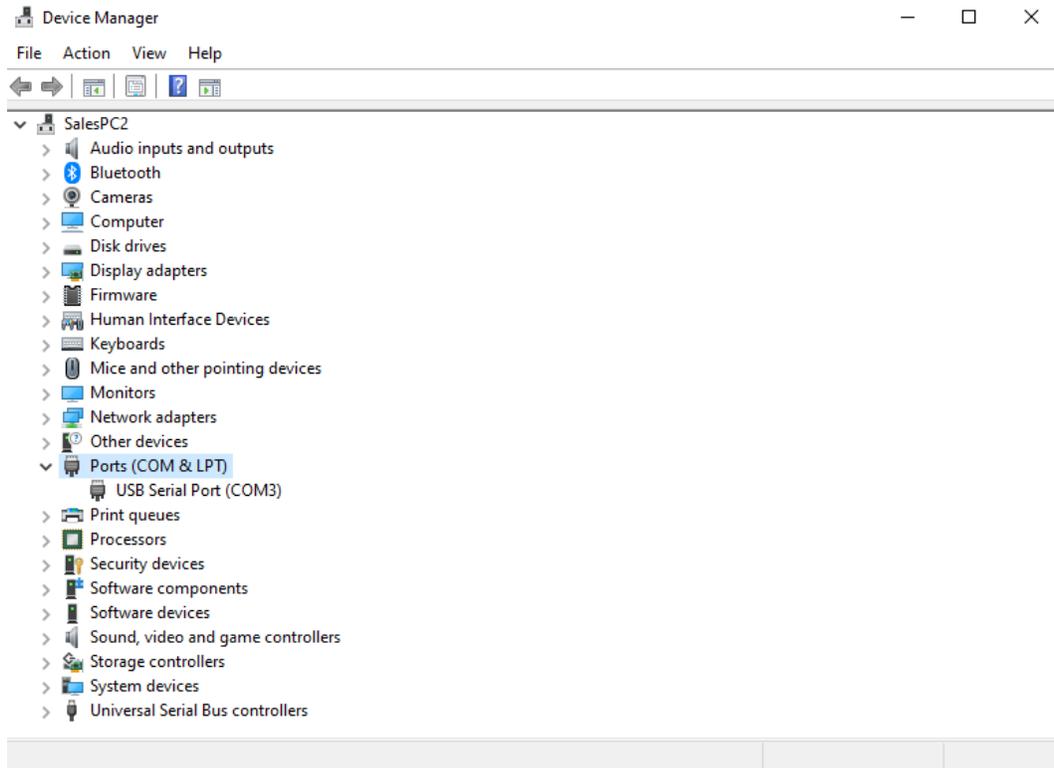


○ When you unplug and then plug the Alicat back in to your computer via the USB cable, you will notice a USB Serial Port (COM[number]) appear and disappear under **Ports** (COM&LPT). On my computer, this was COM3 (COM Port 3), as you can see above. On your computer it might be a different COM port number. Go ahead and enter that number in the program window:



2) After the COM Port, the program will ask for a **Baud Rate**. By default, Alicat devices are set to "19200":

```
****************************************************************
* Serial Address Dump                                         *
* Copyright Alicat Scientific, Inc. - 2015 - All rights reserved *
* This application will dump all the address values of the device *
* into a text file.                                           *
****************************************************************

COM Port:3

Baud:19200

Identifier:
```

If you suspect that the baud rate on your device might have been changed, you can check the current baud rate by using the display on your device. This can be done by clicking **MENU →** **SETUP → RS-232 Serial**, which lists all serial communication settings of the device. You will see a Baud Rate displayed there, and this is the number you need to enter in the program:
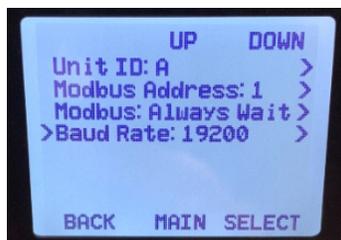


**Note:** *the directions on how to get to the serial settings on the Alicat device can differ depending on your firmware version. Please let us know if you need assistance on finding this menu.*

3) Lastly, the program needs an **Identifier**, which you can think of as a "name" or a "Unit ID" of the device in a serial communication setting. By default, Alicats are set to identifier "A" (or Unit ID: A), however, it might differ in some cases. You can see the device identifier (or Unit ID) on the same page on the Alicat display where you saw the baud rate:
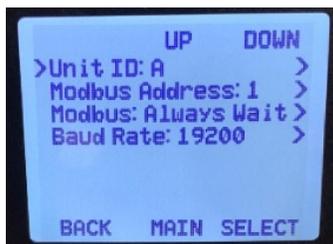


After you enter the COM Port, the Baud rate and the Identifier, the program starts running by reading all the register values on the device and saving them to a .txt file in the same location where you saved the program:

```
****************************************************************
* Serial Address Dump                                         *
* Copyright Alicat Scientific, Inc. - 2015 - All rights reserved  *
* This application will dump all the address values of the device *
* into a text file.                                           *
****************************************************************

COM Port:3

Baud:19200

Identifier:A
COM3 is open.
>
> A    009 = 34753
> A    010 = 22002
> A    011 = 38226
> A    012 = 0
> A    013 = 28158
> A    014 = 1
> A    015 = 1
> A    016 = 199
> A    017 = 16640
> A    018 = 33792
> A    019 = 32878
> A    020 = 9242
> A    021 = 100
> A    022 = 5000
> A    023 = 10
> A    024 = 0
```

You should see a "Done" message at the end if the program ran correctly:

```
> A    175 = 10
> A    176 = 0
> A    177 = 2
> A    178 = 99999
> A    179 = 10
> A    180 = 0
> A    181 = 2
> A    182 = 99999
> A    183 = 79999
> A    184 = 99999
> A    185 = 0
> A    186 = 0
> A    187 = 0
> A    188 = 0
> A    189 = 99999
> A    190 = 0
> A    191 = 0
> A    192 = 0
> A    193 = 0
> A    194 = 0
> A    195 = 32768
> A    196 = 0
> A    197 = 0
> A    198 = 32768
> A    199 = 160
> A    200 = 0
Done

Press enter to close.
```

Now you can navigate back to the folder where you saved the program initially and see a .txt file with the address dump, which should look like this:

| Name | Type |
| --- | --- |
| SerialAddressDump | Application |
| SN_319609_RegLog_07-27-2023_13-13-22 | Text Document |

**This is the file you will need to email back to Alicat so that we can assist you with any questions about the device.**

*Note:* *another common issue that prevents the Serial Address Dump program from running is if there is another application(-s) open on your computer that uses serial communication. Please make sure that no other serial communication software is running on your computer at the same time as the address dump. Otherwise you will get an error message that looks like below:*

```
************************************************************
* Serial Address Dump                                     *
* Copyright Alicat Scientific, Inc. - 2015 - All rights reserved *
* This application will dump all the address values of the device *
* into a text file.                                        *
************************************************************

COM Port:3

Baud:19200

Identifier:A
Error occurred: System.UnauthorizedAccessException: Access to the port 'COM3' is denied.
   at System.IO.Ports.InternalResources.WinIOError(Int32 errorCode, String str)
   at System.IO.Ports.SerialStream..ctor(String portName, Int32 baudRate, Parity parity, Int32 dataBits, StopBits stopBi
ts, Int32 readTimeout, Int32 writeTimeout, Handshake handshake, Boolean dtrEnable, Boolean rtsEnable, Boolean discardNul
l, Byte parityReplace)
   at System.IO.Ports.SerialPort.Open()
   at Program.Main(String[] args)
Press enter to close.
```