



# Alrendo TS Bravo L

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Diagnostics &  
Reflash Guide

## **Driver**

*The driver for the CAN Reader must be installed before the PC will recognize the device*

*Driver Installation – Page 3*

*NOTE: IF YOU HAVE ALREADY INSTALLED THE SOFTWARE FOR THE PREVIOUS TS BRAVO MODEL YOU CAN SKIP THIS STEP*

## **Visual C ++**

*Some PCs will already have this installed so if you already have this software, skip this step.*

*Installation – Page 7*

*Connecting the CAN Reader – Page 9*

## **Intelligent Battery Management & Reflash**

*If an Alrendo Technician instructs you to send a data log, please install this software and follow the instructions to record a data log.*

*Installation – Page 11*

*Starting the Software – Page 12*

*Reflash– Page 13*



Volume

ZCANPRO

ZLG\_CAN\_Driver

32bit

64bit

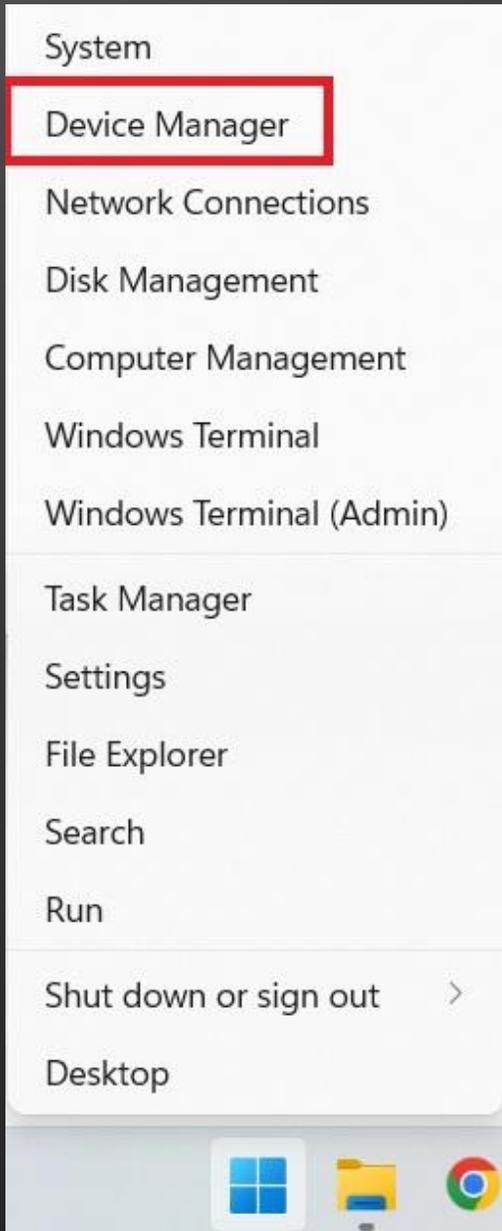
64位系统x64

## Driver - Installation

With this guide, you should have received a ZIP file with the name " Alrendo Diagnostics Software". First, unzip the file then you will find there are four subfolders.

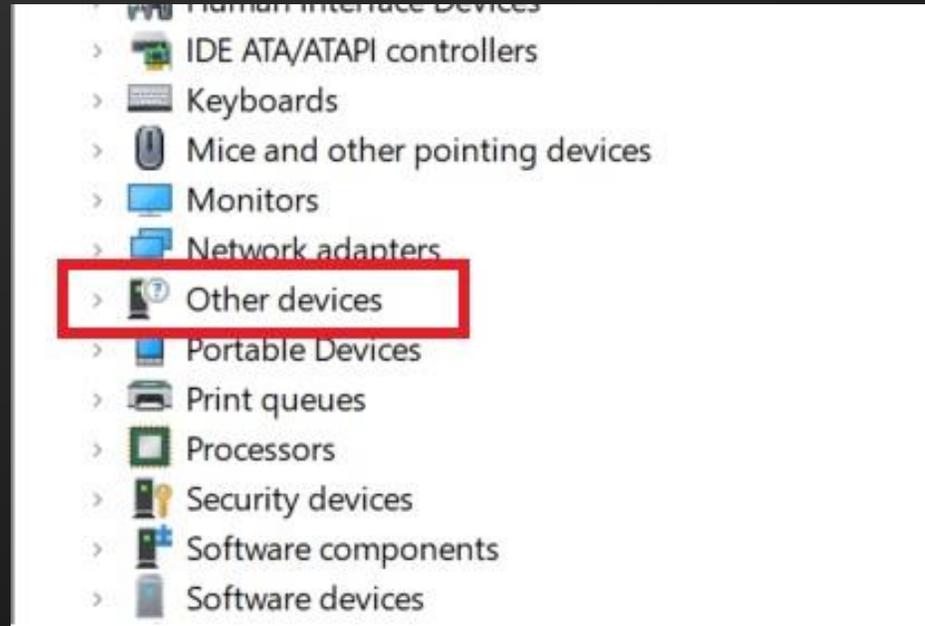
1. Open the "ZLG\_CAN\_Driver" folder
2. Make note of the file location as it will be required later.





## Driver - Installation

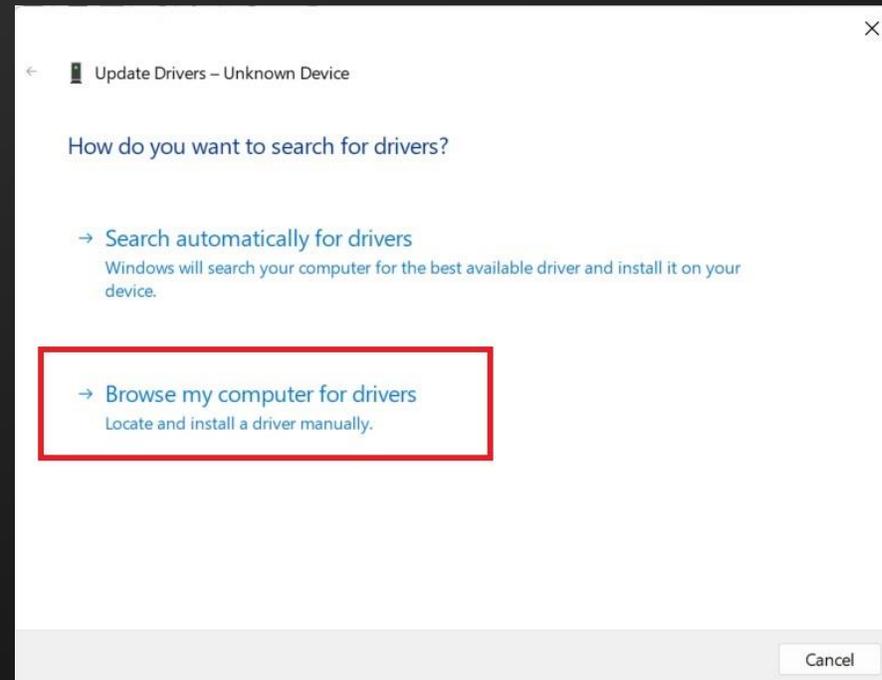
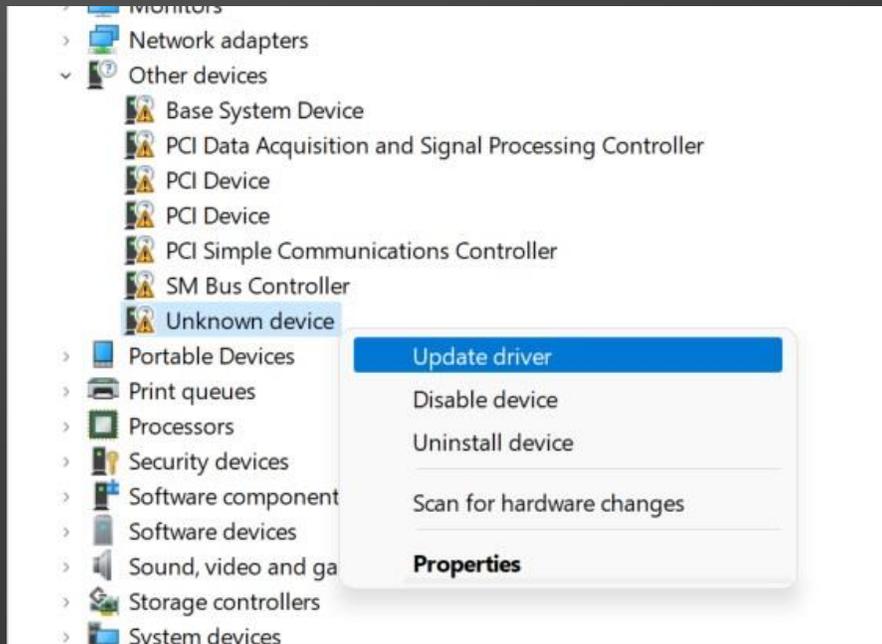
3. Right click on the Windows icon and select "Device Manager"
4. Select the "Other devices" drop down menu



# Driver - Installation

5. Right click on the "Unknown device" and select "Update driver"

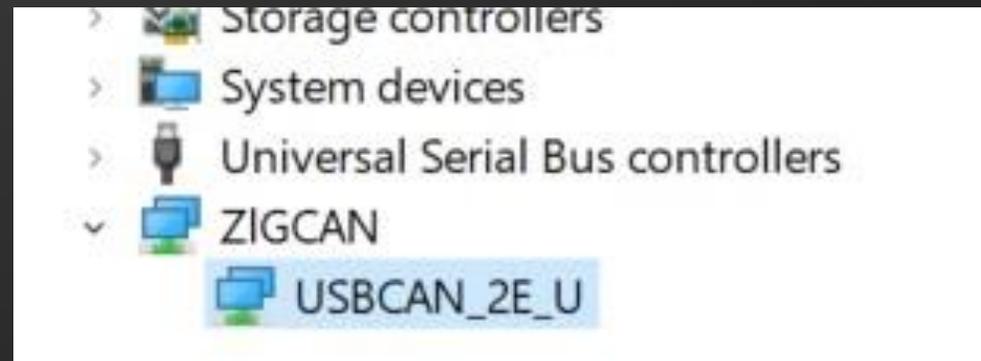
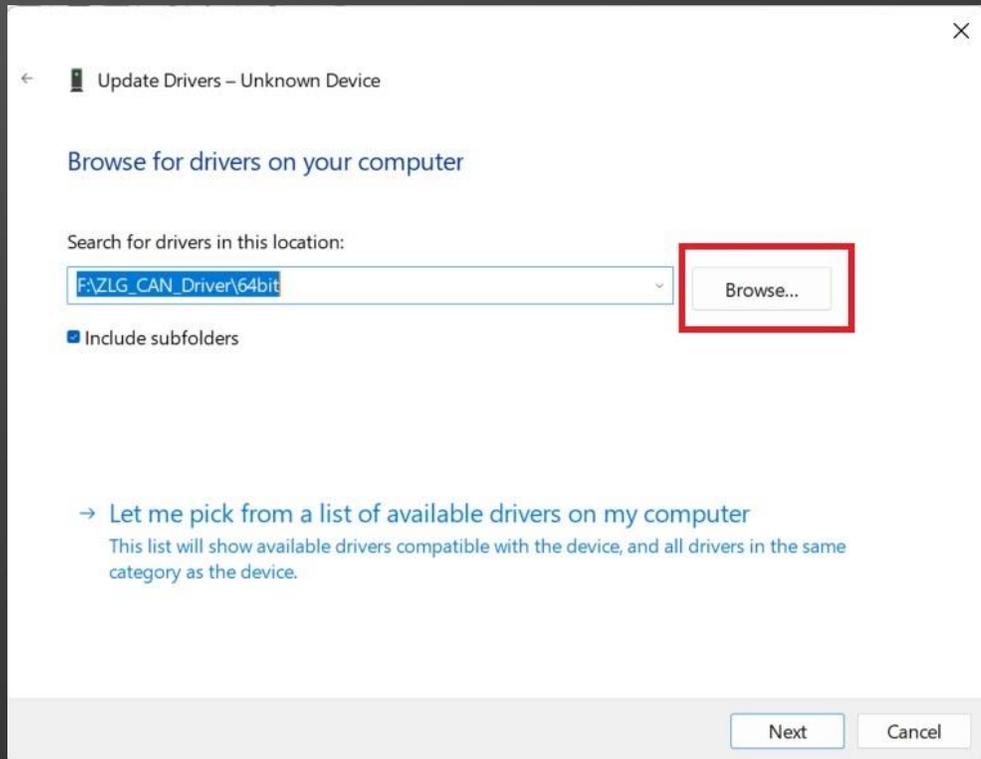
6. When the installation window pops up, select "Browse my computer for drivers"



## Driver - Installation

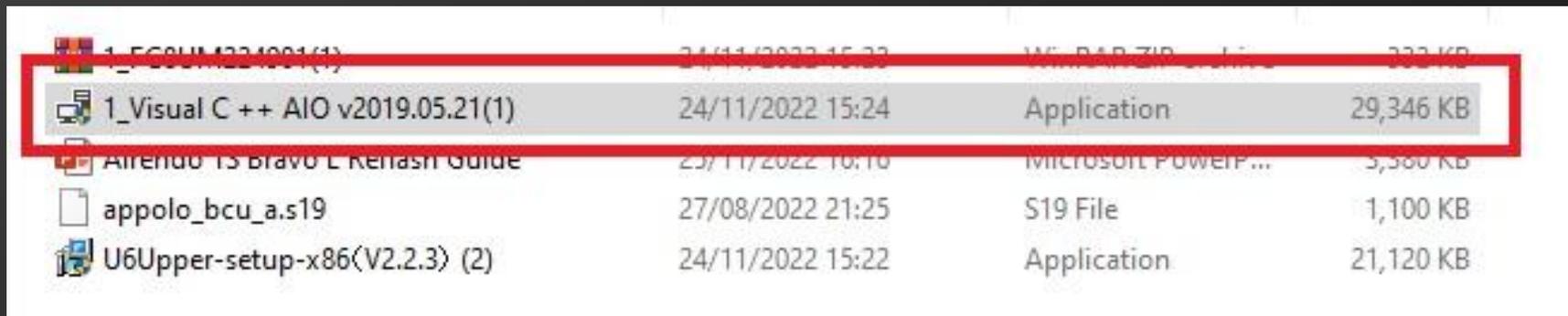
7. Browse for the "ZLG\_CAN\_Driver" folder and select the "32bit" or "64bit" folder depending on your operating system. Select "Next" and finish the installation.

8. If the installation was successful, you will see the USBCAN\_2E\_U hardware is now recognized.



# Visual C ++ - Installation

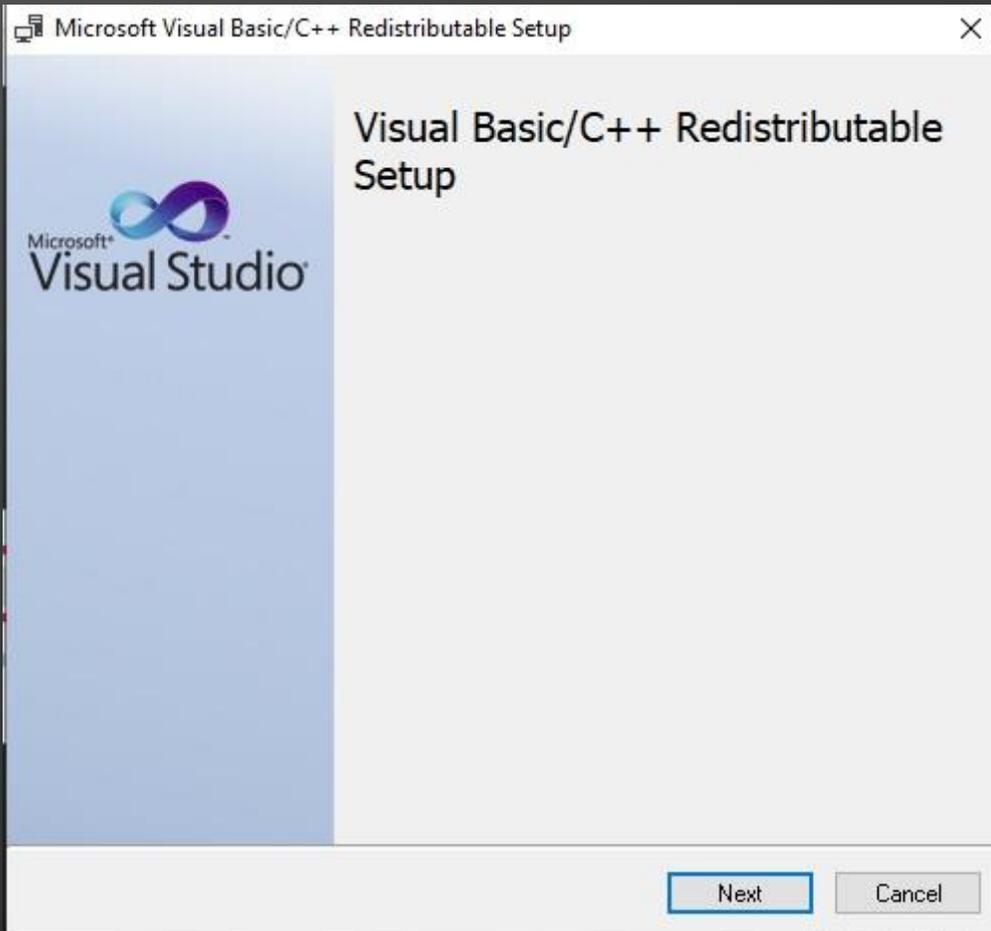
1. Open the Visual C ++ exe file



File Name	Date Modified	File Type	Size
1_FC8UM1221001(1)	24/11/2022 15:23	WinRAR ZIP	333 KB
1_Visual C ++ AIO v2019.05.21(1)	24/11/2022 15:24	Application	29,346 KB
Airrendo TS Bravo L Refresh Guide	23/11/2022 10:10	MICROSOFT POWERP...	5,580 KB
appolo_bcu_a.s19	27/08/2022 21:25	S19 File	1,100 KB
U6Upper-setup-x86(V2.2.3) (2)	24/11/2022 15:22	Application	21,120 KB



# Visual C ++ - Installation



1. Start the installation
2. Allow the program to extract and install the files

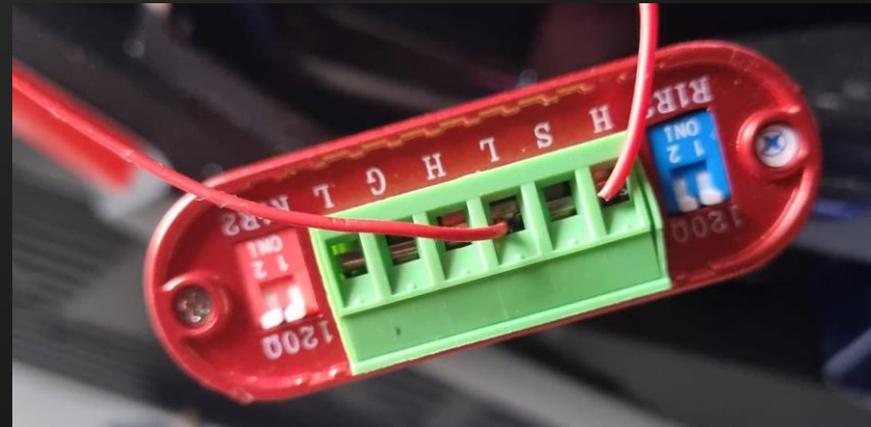
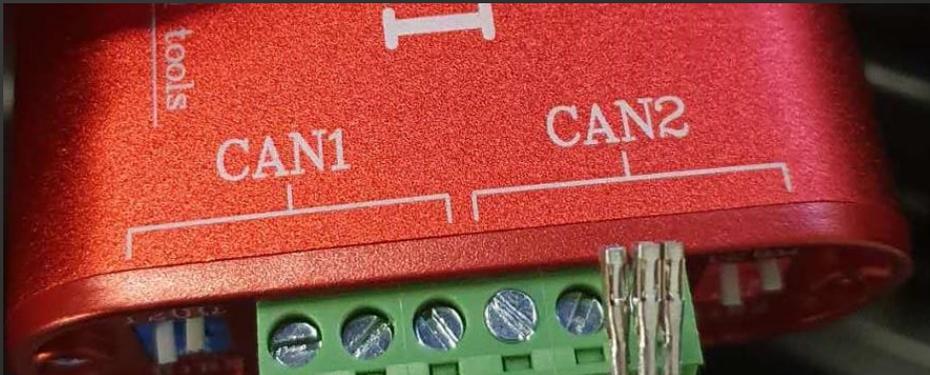
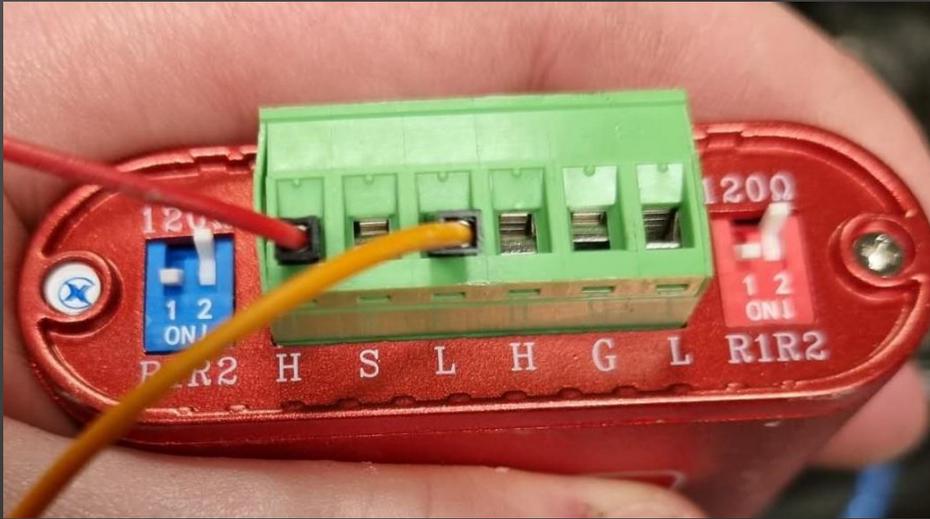
*NOTE: If you already have Visual C ++ installed then a warning pop up box will appear. If this happens, you can skip to the next step.*

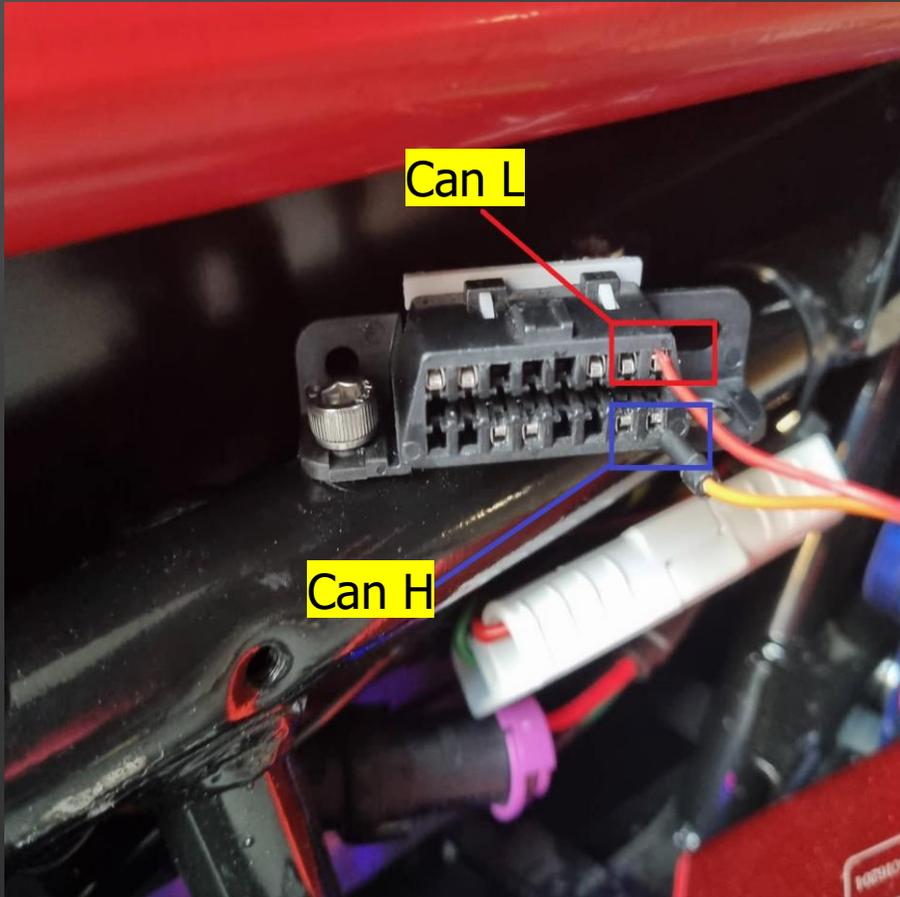


## Connecting the CAN Reader

The software is now installed and we can start the connection to the CAN reader.

1. Connect one wire to the "H" and another wire to the "L" on the "CAN 1" side of the reader.
2. Ensure the white switches on the blue and red sections have both the white switches in the up position, as see below.





## Connecting the CAN Reader

1. Connect the wires as shown in the picture to the OBD port.
2. Connect the USB to the PC.

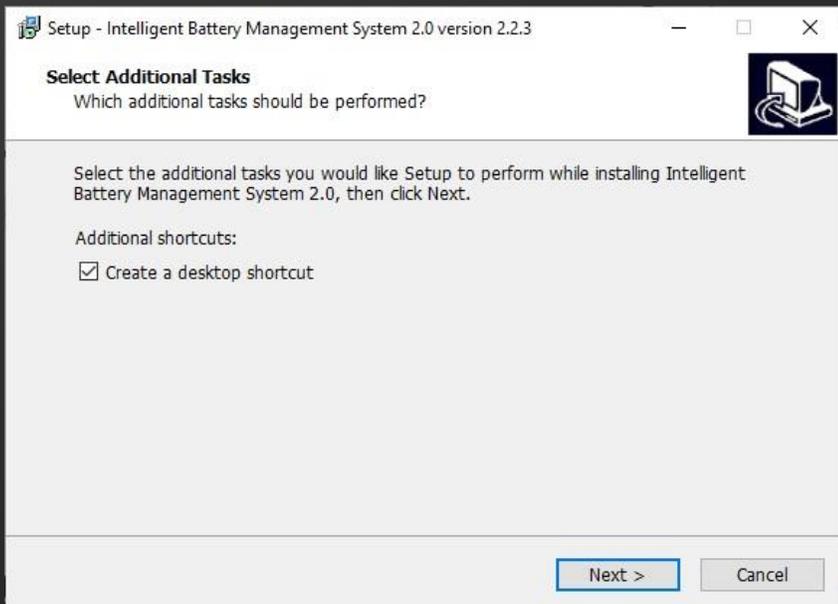
*NOTE: If you have trouble getting the CAN reader to connect when starting the software, try swapping the wires going into the OBD port.*



# Intelligent Battery Management & Reflash – Installation

1. Open the U6Upper Setup exe file
2. Install the Intelligent Battery Management software

File Name	Date Modified	Type	Size
1_FC8UM224901(1)	24/11/2022 15:23	WinRAR ZIP archive	332 KB
1_Visual C ++ AIO v2019.05.21(1)	24/11/2022 15:24	Application	29,346 KB
Alrendo TS Bravo L Reflash Guide	28/11/2022 12:42	Microsoft PowerP...	3,707 KB
apollo_bcu_a.s19	27/08/2022 21:25	S19 File	1,100 KB
U6Upper-setup-x86(V2.2.3) (2)	24/11/2022 15:22	Application	21,120 KB





## Intelligent Battery Management & Reflash - Starting the Software

The software is now installed and we can start the connection to the CAN reader.

1. Make sure the Can reader is connected and the motorcycle is turned on.
2. Open the Intelligent Battery Management software.
3. You may need to change the language to English.
4. Change the device type to `usbcan_2e_u`.
5. Ensure the settings are the same as pictured.
6. Select "Submit".

A screenshot of the Intelligent Battery Management System settings interface. The interface is white with various input fields and buttons. The settings are as follows: "Choose config" is set to "default"; "language" is set to "EN"; "Port" is set to "6000"; "canserver" is a toggle switch that is turned on; "Channel" is set to "0"; "Device index" is set to "0"; "Save to" is set to "dataSave01"; and "Device type" is set to "usbcan\_2e\_u", which is highlighted with a red rectangular box. At the bottom right, there are two buttons: "Cancel" and "Submit".

# Intelligent Battery Management & Reflash - Reflash

*The software should now be populated with the BMS information. If the screen looks like the picture below and displays "NA" then there is an issue with the CAN reader connection.*

Intelligent Battery Management System

System overview | Real time info. | Parameter Calibration | Force control | Firmware upgrading | History data

Pack voltage	Pack current	Charger connection	NA	Charger state	NA
NA	NA	Charging voltage	NA	Charging current	NA
		Charging elapsed	NA	Remaining	NA

SOC	SOH	Insulation+ res.	NA	Insulation- res.	NA
NA	NA	Avg. volt.	NA	Avg. temp.	NA
		Online cell count	NA	Online temp. count	NA

**System config**

Batt. type	NA	Rated capacity	NA	Rated current	NA	Rated total voltage	NA
Rated DC-chg current	NA	Rated AC-chg current	NA	Cells in series	NA	Cells in parallel	NA
Temp. probe count	NA	Initial SOC	NA	Initial SOH	NA		

**Peak data**

Max cell volt.	NA	Cell #	NA	Min cell volt.	NA	Cell #	NA
Max cell temp.	NA	Temp. probe #	NA	Min cell temp.	NA	Temp. probe #	NA
Cell volt. delta	NA	Temp. delta	NA				

**DTU**

Running state	NA	Power Supply Volt	NA	IMEI	NA	CCID	NA
Carrier name	NA	GSM network	NA	GPRS network	NA	LAC	NA
Sent packet count	NA	signal strength	NA	error rate	NA	CI	NA

**Real time overview**

UTC+08:00 ▾ Calibration

NA

Up time NA

Running mode

Wake-up signal

SOC NA

Pack voltage NA

Pack current NA

Max cell volt. NA

Min cell volt. NA

Max cell temp. NA

Min cell temp. NA

Total Chg NA

Total Dchg NA

**Real time alarm info.**

Alarm	Alarm info.

Alarm count:0



## Intelligent Battery Management & Reflash - Reflash

1. Select the "Firmware upgrading" tab.
2. Select "Local".
3. Open the file "appolo\_bcu\_a.s19"
4. Start the flash.
5. The motorcycle screen will turn off which the reflash is being carried out.

