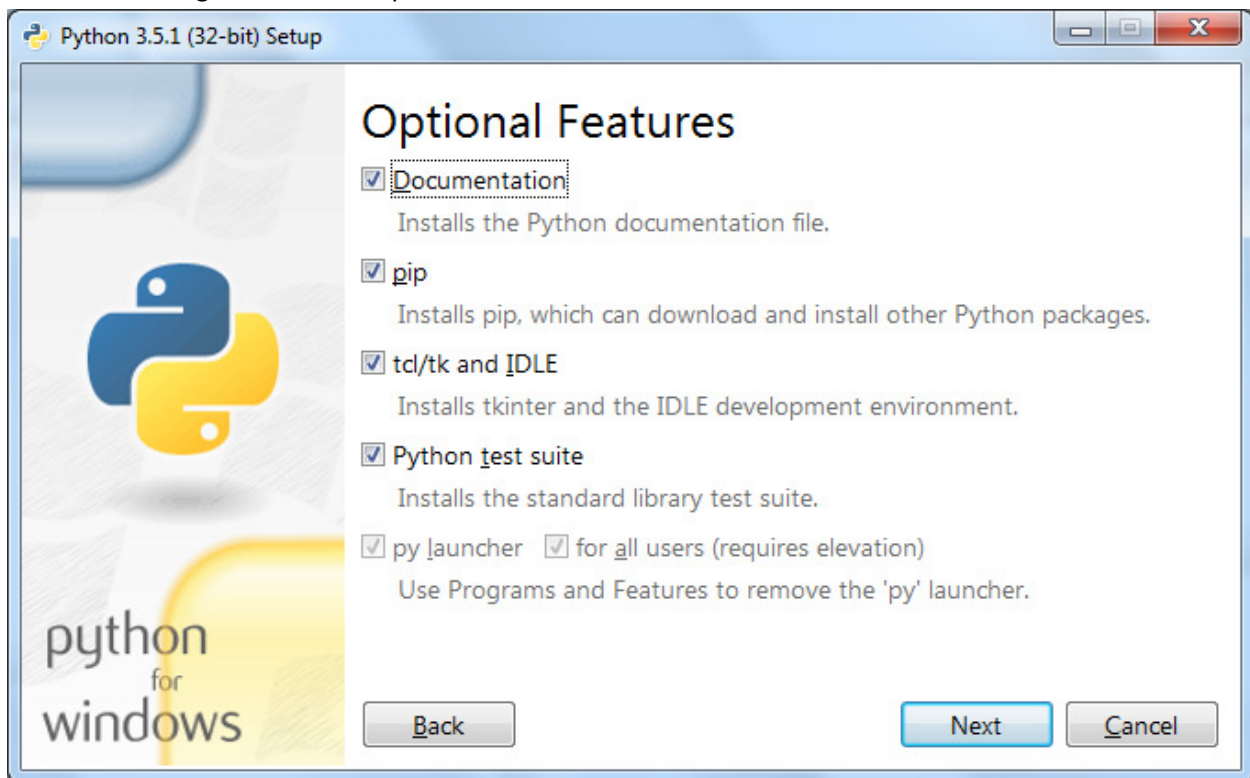


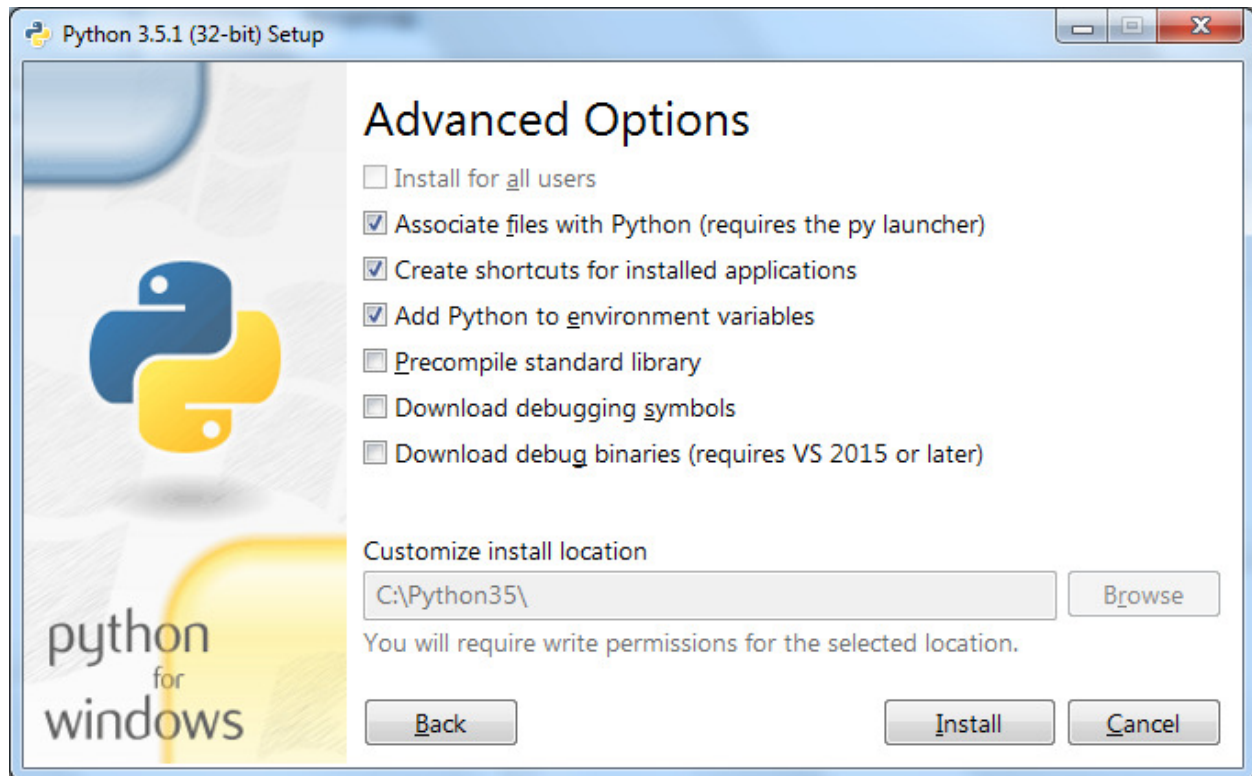
How to Set Up CAN Invader and UD100 Bluetooth Adapter for use with Python Scripting.

L.Bellanca: March 4, 2016: V1

Step 1: Download all the required sw to your PC. This includes:

- Download Python35 in file “python-3.5.1.exe” msi files do not exists for 3.5 branch. Note needs to be 32 bit version – 64 bit python does not work with PyBluez!!!
- Install to C:\Python35 directory – not the default location so you need to modify this during install.
- Make sure to select option to select the following as shown below and “Add Python to environment variables” during the install setup.



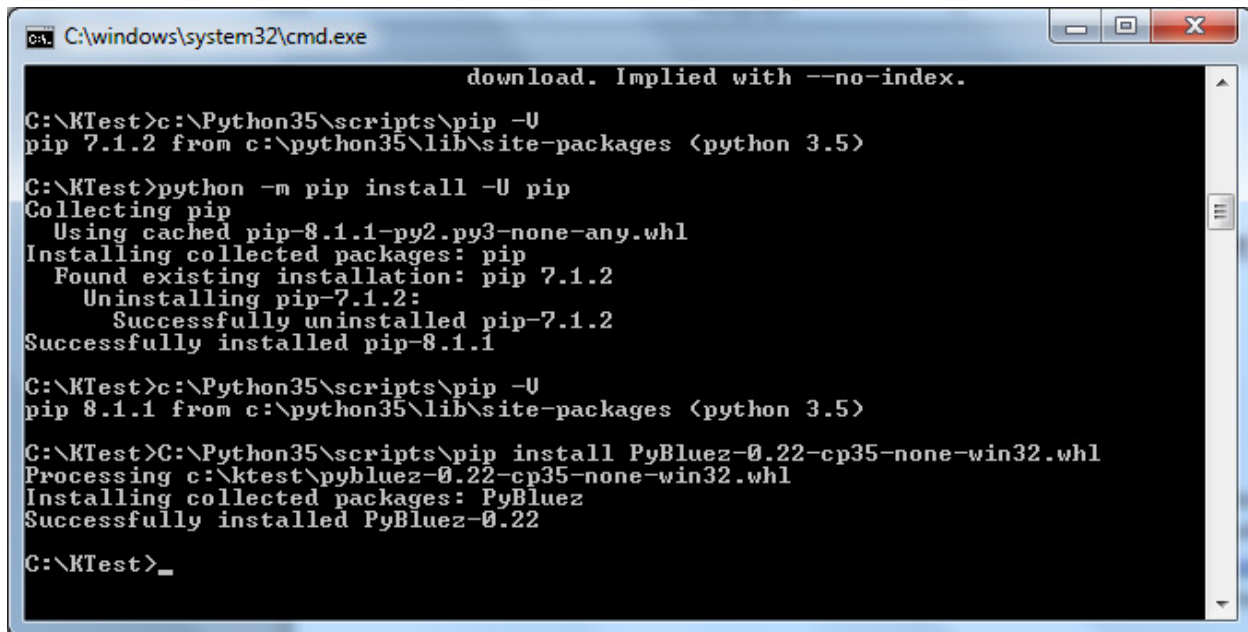


-Then you need to download the correct PyBluez installer for 3.5 : "PyBluez-0.22-cp35-none-win32.whl"

-You may need to upgrade pip first : `python -m pip install -U pip`

-CD to directory where you downloaded the Pybluez whl file.

-To install, enter a command shell and type: `"C:\Python35\scripts\pip install PyBluez-0.22-cp35-none-win32.whl"`

A screenshot of a Windows command prompt window titled "C:\windows\system32\cmd.exe". The window has a black background with white text. The text shows the following commands and their outputs:

```
download. Implied with --no-index.

C:\KTest>c:\Python35\scripts\pip -U
pip 7.1.2 from c:\python35\lib\site-packages (python 3.5)

C:\KTest>python -m pip install -U pip
Collecting pip
  Using cached pip-8.1.1-py2.py3-none-any.whl
Installing collected packages: pip
  Found existing installation: pip 7.1.2
  Uninstalling pip-7.1.2:
    Successfully uninstalled pip-7.1.2
Successfully installed pip-8.1.1

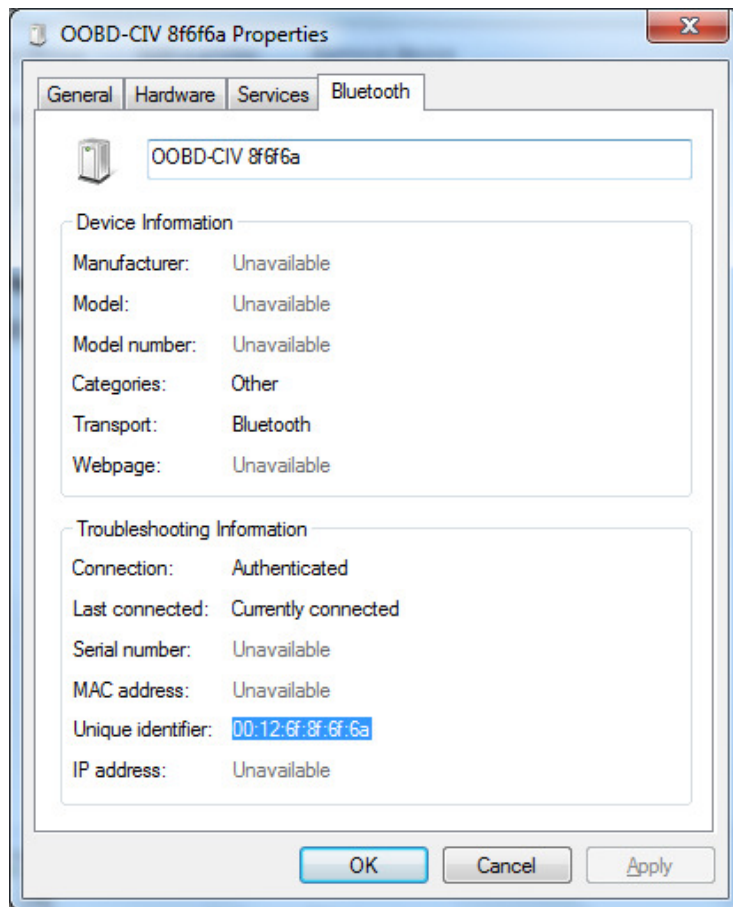
C:\KTest>c:\Python35\scripts\pip -U
pip 8.1.1 from c:\python35\lib\site-packages (python 3.5)

C:\KTest>c:\Python35\scripts\pip install PyBluez-0.22-cp35-none-win32.whl
Processing c:\ktest\pybluez-0.22-cp35-none-win32.whl
Installing collected packages: PyBluez
Successfully installed PyBluez-0.22

C:\KTest>_
```

Step 2 – Make Connections and configure files

- Connect the UD100 to your PC USB port and observe a solid blue light. Ensure device installs without any errors as it should work with WIN7 with no other installs or downloads needed.
- Connect the CAN Invader to a powered diagnostic J1962 connector (aka vehicle or test bench)- observe the solid green light and a blinking blue light on unit.
- Refresh your PC Bluetooth device list and look for a device called "OBD – CIV – xxxx" and right click for properties.
- You need to pair to the device with the PC first for the program to work. Enter the PIN code "1234" - note 1234 worked for me but 0000 did not.
- Note that you may need to remove/delete device for list if you had it previously paired but then allowed another PC to pair with it. So try deleting it if you are having trouble paring the device and you have used the device before.
- Open the file "oobd_control.ini" and edit the MAC address in the file to match what shows on your PC BT device properties for the unique identifier field:
- To set the default config file that is loaded on program launch, edit the file "ConfigFile.py" and ONLY change the index number where indicated.



Step3 – Configuration and run program.

-Set the initial configuration file that is loaded when program runs by modifying the ConfigFile.py file in a text editor. Refer to file for instructions as this may change slightly in various releases:

```
# Created simple file to commonize source for the .ini file that is loaded across multiple modules
# Also defines the global variables passed between modules.
# This name below is the list of the available config files
# User can change the one that load on program intial run by setting the index value below in the CHANGE HERE section

# Change to a list structure to allow changes from gui interface
config_list = ["oobd_control_C346.ini"] # index = 0
config_list.append("oobd_control_S550.ini") # index = 1 # use ABS for VIN
config_list.append("oobd_control_B299.ini") # index = 2 # use apim for VIN this worked in B299N cluster works too.
config_list.append("oobd_control_CD390.ini") # index = 3
config_list.append("oobd_control_CD391.ini") # index = 4
config_list.append("oobd_control_CD520.ini") # index = 5 # use IPC for VIN on CS20N or BCM OK
config_list.append("oobd_control_CD539.ini") # index = 6
config_list.append("oobd_control_V408.ini") # index = 7
config_list.append("test.ini") # index = 8 - DO NOT USE TEST ONLY

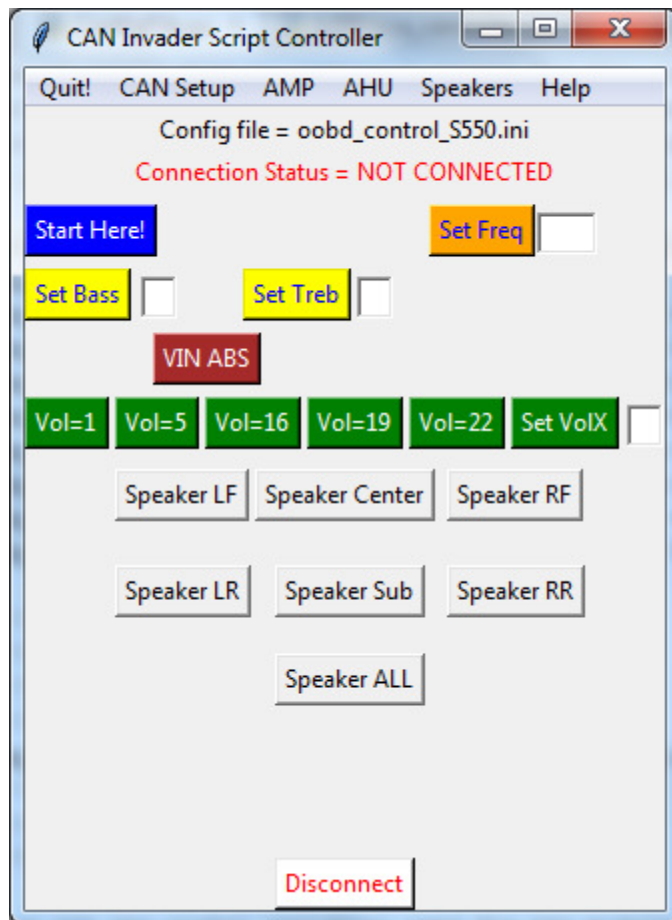
# !!!!!!!CHANGE HERE ONLY BELOW!!!!!!
# !!!!!!!CHANGE HERE ONLY BELOW!!!!!!
# !!!!!!!CHANGE HERE ONLY BELOW!!!!!!
# !!!!!!!CHANGE the number only from 0 to 7 !!!!!!!
config_file = config_list[1] # use index above in place of the number [x]
# !!!!!!!CHANGE HERE ONLY ABOVE!!!!!!
# !!!!!!!CHANGE HERE ONLY ABOVE!!!!!!
# !!!!!!!CHANGE HERE ONLY ABOVE!!!!!!

# Below are the global variables used for the modules in the project DO NOT CHANGE
global User_AHU_Selection
User_AHU_Selection = ""
User_Speaker_Selection = ""
User_AMP_Selection = False # True or False
global CFI
CFI = config_file
```

-Verify the information in the xxxxx.ini file you selected. Refer to the example.ini file for information if you need to modify anything.

-To launch program you double click on the file bg.py

-For beginner user, you can press the “Start Here” button to connect and configure the CAN interface with 1 button press.



-For the advanced engineering mode, press “shift e” (capital E) to show the engineering interface.

-You should then be able to verify the TP messages are being sent and other commands as requested.

SYNC GEN1.1.vs3 - Vehicle Spy

File Setup Spy Networks Measurement Embedded Tools Scripting and Automation Run Tools Help

Online... Platform: SYNC Rotary Desktop 1 Data

Network Databases Messages

Filter Add

Filter

Line	Time	Tx	Er	Description	ArbId/Header	Len	DataBytes
1				MS CAN \$727	727	8	02 80 00 00 00 00 00 00
2	9.999832 s			MS CAN \$727	727	8	02 80 00 00 00 00 00 00
3	9.999835 s			MS CAN \$727	727	8	02 80 00 00 00 00 00 00
4	9.999834 s			MS CAN \$727	727	8	02 80 00 00 00 00 00 00
5	9.999834 s			MS CAN \$727	727	8	02 80 00 00 00 00 00 00
6	9.999833 s			MS CAN \$727	727	8	02 80 00 00 00 00 00 00
7	9.999833 s			MS CAN \$727	727	8	02 80 00 00 00 00 00 00

Columns (default) Setup ... Review Buffer...

No Bus Errors