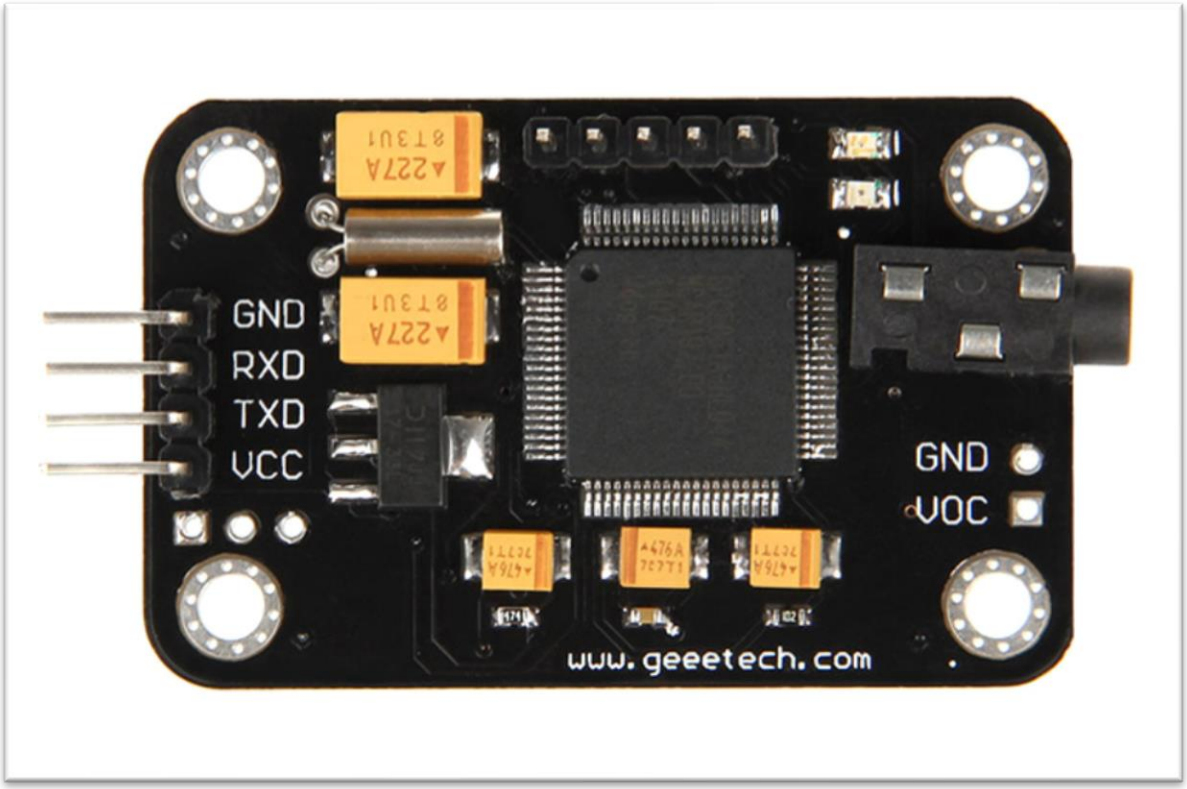
CONFIGURATION MANUAL: GEEETECH VOICE RECOGNITION MODULE



Bastien GABRIELLI

Ingénieur Stagiaire
Électronique/Numérique

bgabrielli@exitia.fr

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I. Presentation

This voice recognition module from GEEETECH configuration commands or answer via Serial communication.

It can store 15 vocal instructions divided in 3 groups, meaning 5 commands per group.

Theoretically, the module is speaker independent, thus if someone other than the person who recorded the commands gives the voice instruction in his place, it is able to recognize the order. Nevertheless, the speaker's independence requires a good microphone.

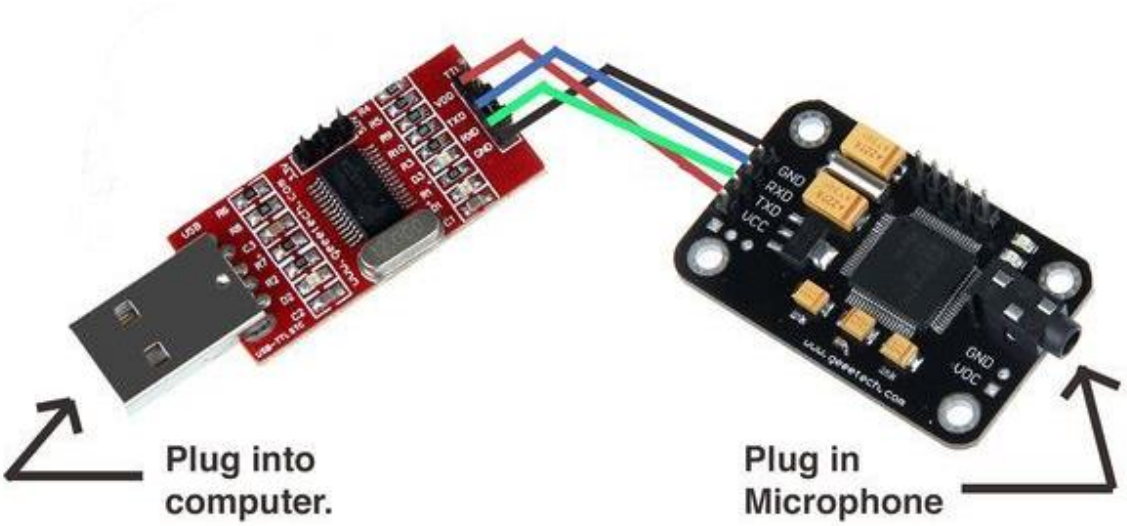
II. Configuration & Use

1. Equipment

In addition to the module and its microphone, since it communicates via the serial port, you must have a USB / TTL converter in order to configure it, as well as a few connection cables.

You must connect the converter to your computer, then connect it to the module via the 4 connection cables as follows :

MODULE	USB/TTL
VCC	VCC
GND	GND
RX	TX
TX	RX

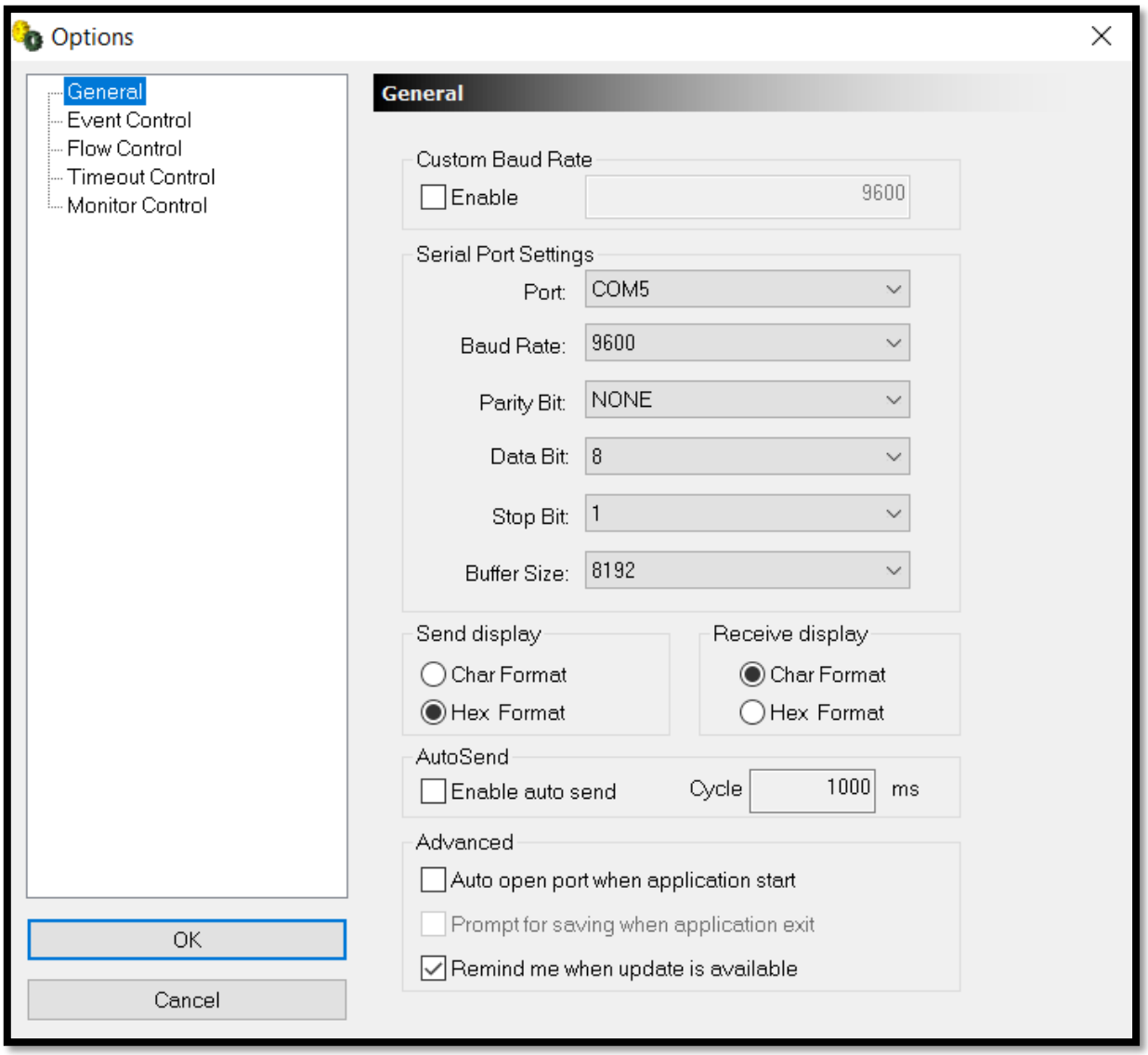


2. Software

To proceed to the configuration of the module, you will logically need a serial communication software, here we will use AccessPort.

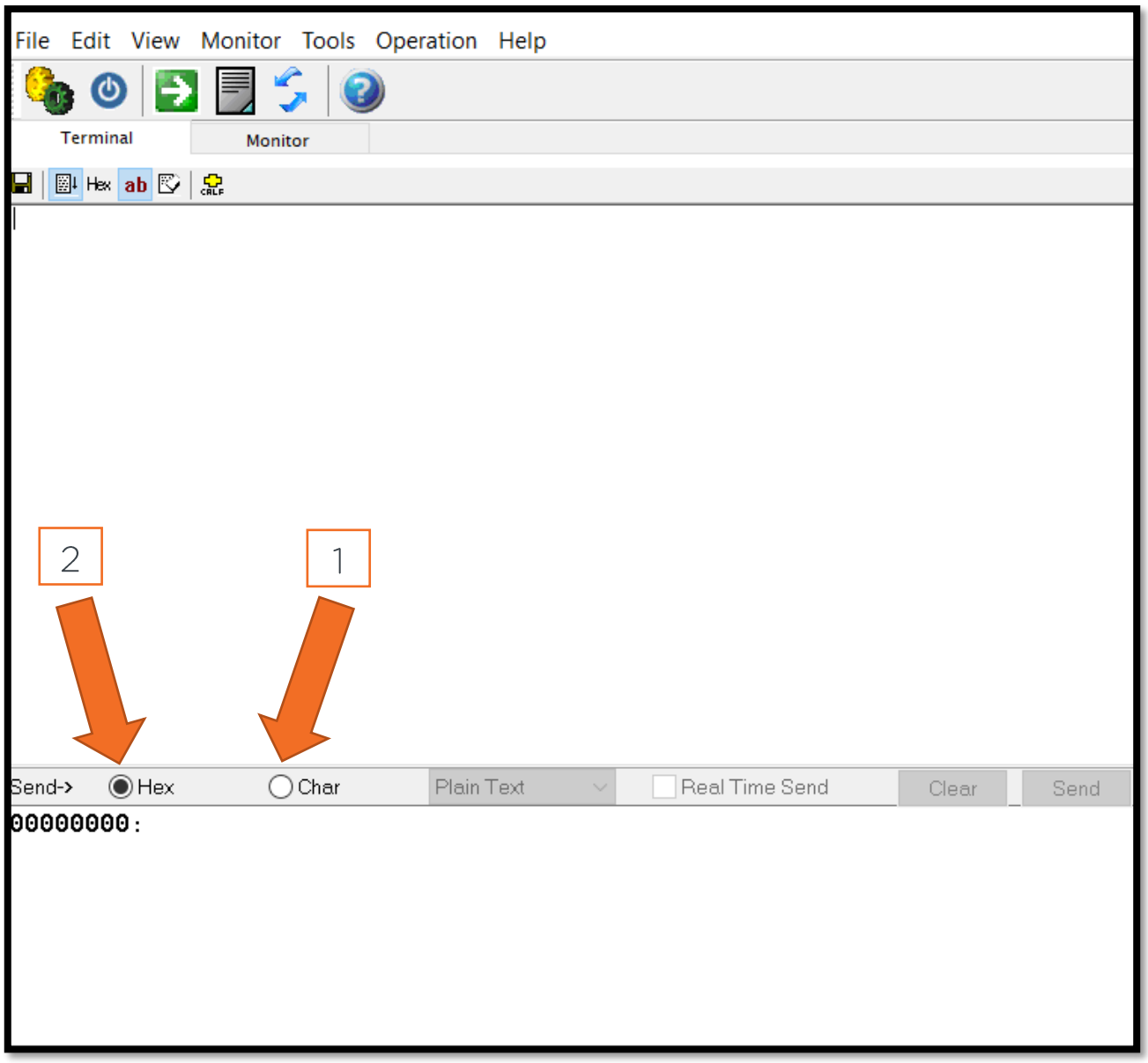
Once your module is connected to your computer, go to the device manager to identify the COM port assigned by your machine.

Then open AccessPort and configure the software as follows via Tools-> Configuration taking care to modify the COM port to enter the one assigned to it.



After having validated your parameters, then click on Char sending mode then on Hex mode in order to correctly initialize

the type of message to be transmitted, you should normally find yourself with the following window :



We are now able to configure the module itself. To do this, you must record a first group of voices. The list of commands to be transmitted is available on GEEETECH's website, and here is an example of a procedure to follow, enter the following commands and send them to the module via the Send button:

1. AA36 : set the module in « Common Mode » to have a verbose return, it should print back « Common Mode » on the screen. If it is not the case, try the command several times, it is sometimes a little capricious.
2. AA00 : (*Optional*) set the module in « Waiting Mode », the state LED starts blinking continuously it allows us to check if it is correctly set in « Common Mode » thanks to the answer « Waiting » on the screen.
3. AA11 : starts recording the first group of voices. Once interpreted by the module, the recording sequence will begin once it prints « START » (*you must know that once the sequence started you won't be able to stop it till you recorded the 5 voices, the module won't answer to any command during recording process*). It is important to speak only after the module has returned a « START ». You will have to repeat every order 2 or 3 times to gain precision after each « AGAIN » followed by a « START », before a « Finish one » when he has correctly registered the order. If he thinks that the difference between two successive recordings is too big, he will start again by returning a « Different » and « No voice » if he does not hear sound. Finally, once the 5 voices have been correctly recorded, it will print « Group1 finished ! ».

At this point, these voices are saved in the module, but to use them, you need to import them via the command AA21 which will return « Group1 imported ! » and the state LED blinks now way slower.

Now, if you say one of the records, the module should return the number associated to it if it is recognized.