20141022 - GeeeTech Voice Recognition Module for Arduino

What this device does is lets you record 3 groups of 5 commands. You have to record at least 5 “commands” and they need to be short one word commands.
Things like:
RED, GREEN, BLUE, ALL, OFF
it has 3 banks or groups - for a total of 15 “commands”. It uses Serial TTL for input and output, and a microphone to do the voice sampling.
Commands to start recording or listen for a voice are sent to it via a HEX command. When it is “listening” and it recognizes a word - it will send a number to the microcontroller or to the computer, or to whatever is hooked up to the TX/RX lines.

Link to the module on eBay: (retail about $23 bucks) http://www.ebay.com/itm/191150158415?_trksid=p2059210.m2749.l2649&ssPageName=STRK%3AMEBIDX%3AIT
Link with some information on the GeeeTech website, user manual download is on this page:
http://www.geeetech.com/voice-recognition-module-p-803.html
Link to an instructables page:
http://www.instructables.com/id/Arduino-voice-control/?ALLSTEPS

For the most part I followed the instructables page, and that page pretty much follows what is in the user manual. And I’ll do a brief outline of what is needed below:

Needed:
Geeetech VR module
FTDI USB to Serial or any USB to serial TTL adaptor
wires & breadboard
and 3 LEDs (I used a RGB LED, but it works the same as having three)
You’ll also need Accessport software - or any serial port terminal software that will send HEX commands.
Link to accessport: http://www.sudt.com/en/ap/download.htm

1st step is program the VR - it’s pretty easy to do, you hook the FTDI up to the VR chip, and send a couple of HEX commands, the VR chip response with START it is waiting for you to speak the 1st word. Once it hears its word, it will say “AGAIN”, speak the word again….if it’s a match, it will ask one more time. if the word wasn’t a match, it will start over on that word.

Neither the manual or the instructables is very clear what the hex commands are, as I suspect there are more commands then what is listed.

On the arduino or other microcontroller, you then send the hex command to “load” one of the groups of words the device should listen for. Then send the hex command to start listening.
It takes about 4 or 5 seconds before the device is ready to be used. Once it is ready, it seems to work very good.
The draw back as I see it, is it is keyed to one persons voice, and it needs to be used in a very quite area.