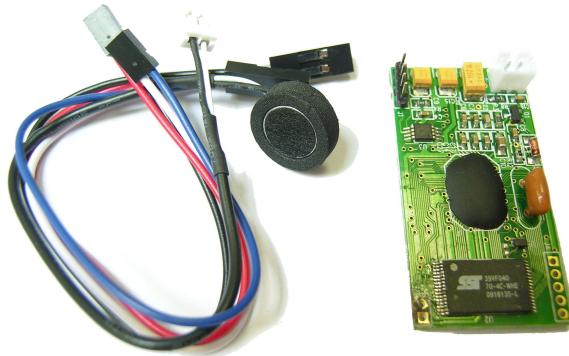# VRbot
Voice Recognition Module

Data Sheet
Ver. 1.0

Product Description

VRbot Module is designed to easily add versatile voice command functionality to robots (e.g. ROBONOVA-I, RoboZak, POP-BOT, …) or any other host (e.g. PIC, Arduino boards, …).

VRbot features:

- A host of built-in speaker independent (SI) commands for ready to run basic controls
- Supports up to 32 user-defined Speaker Dependent (SD) triggers or commands as well as Voice Passwords. *SD custom commands can be spoken in ANY language.*
- Easy-to-use and simple Graphical User Interface to program Voice Commands
- Languages currently supported for SI commands: English U.S., Italian, Japanese and German. More languages available in the near future.
- Module can be used with any host with an UART interface (powered at 3.3V - 5V)
- Simple and robust documented serial protocol to access and program through the host board

Technical specifications

Physical dimensions and pin assignment

VRbot Module

45 mm

24 mm

ETX
ERX
VCC
GND

MIC

Pin number	Pin name	Type (Input/Output)	Description
1	GND	-	Ground
2	VCC	I	Voltage DC input
3	ERX	I	Serial Port Receive Data (TTL level)
4	ETX	O	Serial Port Transmit Data (TTL level)

Recommended Operating Conditions

Symbol	Parameter	Min	Typ	Max	Unit
VCC	Voltage DC Input	3.3	5.0	5.5	V
Ta	Ambient Operating Temperature Range	0	25	70	℃
ERX	Serial Port Receive Data	0	-	VCC	V
ETX	Serial Port Transmit Data	0	-	VCC	V

Power Supply Requirements

Symbol	Parameter	Min	Typ	Max	Unit
I_{Sleep}	Sleep current		< 1		mA
I_{Oper}	Operating current		12		mA

Communications

Adjustable Asynchronous Serial Communication:
- Baud Rate: **9600** (default), 19200, 38700, 57600, 115200
- 8 Data bits
- No parity
- 1 Stop bit

Communications are established using the VRbot protocol. Refer to the appropriate Document available on www.VeeaR.eu.

VeeaR © TIGAL KEG 2009

All VeeaR branded boards and software are designed and manufactured by RoboTech srl

Go to www.VeeaR.eu for updated documents and samples!