

RF BOEBot Instruction Manual

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**CAUTION!!!
READ THIS FIRST!**

Use caution when handling BOEBot and RF module. Subject to static electrical discharge if handled incorrectly. Parts susceptible to damage.

Do not leave 9v servo battery pack plugged in over an extended unsupervised time. Do not leave AA PC-side RF in the “ON” position for an extended unsupervised time.

Due to lack of engineering design efficiency and time constraints, power supply connections are not 100% proven safe. No joints have been soldered and wiring connections may come loose or cause faulty circuits that may be damaging to the circuit itself.

NEVER connect the PC-side RF module via RS-232 serial connection to the BOEBot before the Visual Basic terminal program is up and running. Due to engineering design, RF circuitry will currently only operate without potential damage to circuitry only when program is running on PC. Voltages are unsafe for RF circuit when COM port being used is closed – safe when COM port being used is open.

Please read all instructions thoroughly before attempting to connect and run BOEBot applications.

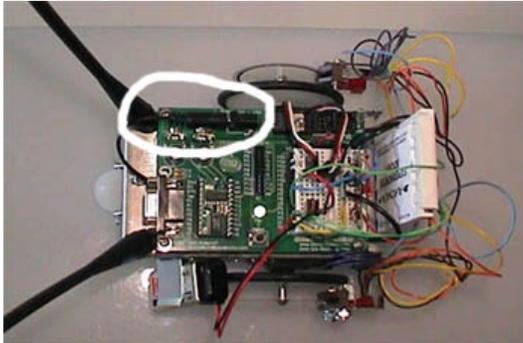
Enjoy the BOEBot and always take precautions when using project materials.

BASIC Stamp program download:

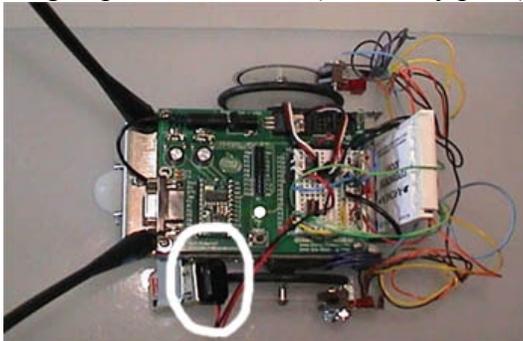
Open PBasic program “SimulationRF.bs2” with Stampw.EXE



Plug in power to BOE (AA battery back)



Plug in power to servos (9v battery pack)



Connect serial cable (female end) to back of PC and to BOE (male end)



Download PBasic program into BASIC Stamp



Unplug serial cable from PC and from BOEBot

Your robot is now ready for wireless functioning!

Visual Basic PC software interface:

Run “VBRFTerminal.EXE”



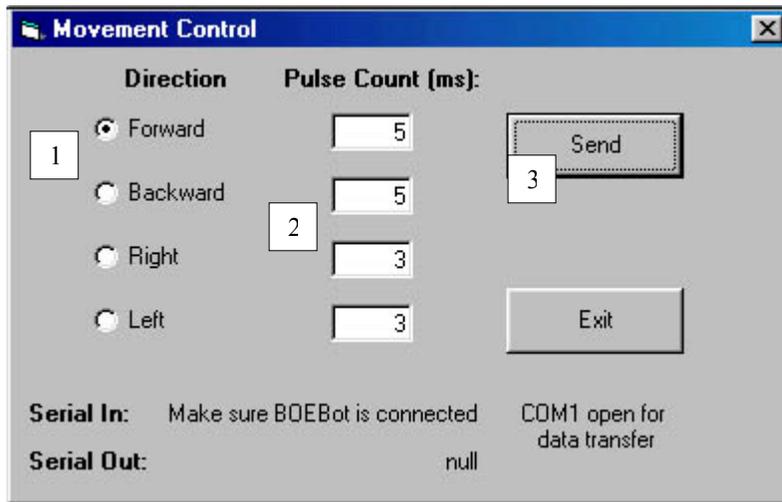
Connect serial cable (female end) to back of PC and to RF module (female end)



Turn switch to “ON” on RF module



Control of robot:



- 1) Select a direction
- 2) Set a distance (increment of “1” sends 10x as many pulses to BOEBot servo)
- 3) Click on “SEND”

Data is now transferred from PC to BASIC Stamp by RF

Watch the BOEbot go!

Shutting down BOEBot:

Turn of PC-side RF module



Unplug serial cable from BOEBot



Unplug serial cable from PC



Shut down Visual Basic terminal program by clicking “EXIT”



Unplug 9v servo battery pack



Unplug AA battery pack



all photos courtesy of [Randy Vail](#)