Assembly and use instructions for new Babblebot™ speech board.

**Parts list:**

- **R1** - 1K Res (BrBiRd)
- **R2** - 1K Res (BrBiRd)
- **R3** - 1K Res BrBiRd
- **R4** - 10K Res BrBiRd
- **R5** - 10K Res (BrBiRd)
- **R6** - 100ohm Res (BrBiRd)
- **R7** - 10K Pot (Blue)
- **C1-C4** - 10uf Cap (Radial)
- **C5** - 1uf Cap (Brown)
- **C6** - 0.022uf Cap (Yellow) → TAN
- **C7** - 0.022uf Cap (Blue) → TAN
- **C8** - 1uf Cap (Brown)
- **IC1** - LM386N-1
- **IC2** - SpeakJet IC

**Sample Code**

```c
OOPic

Dim A as New eSerialX
Sub Main()<
  A.ioines = 20
  A.Baud = 9600
  Oopic.delay = 100
  Do
    A = 20
    A = 96
    A = 21
    A = 114
    A = 22
    A = 88
    A = 23
    A = 5
    A = 170
    A = 132
    A = 173
    A = 8
    A = 146
    A = 6
    A = 171
    A = 135
    A = 191
    A = 6
    A = 186
    A = 148
    A = 134
    A = 8
    A = 140
    A = 4
    A = 8
    A = 179
    A = 7
    A = 148
    A = 8
    A = 128
    A = 141
    A = 4
    A = 1
    A = 7
    A = 130
    A = 7
    A = 128
    A = 145
End Sub
```

- **BASCOM AVR**
  - Systval = 16000000 "your xtal value"
  - Sregfile = "m128def.dat" you regfile
  - config Portt + output
  - Open "com3,9600,8,n,1" For Output As #1
  - Do
    - Print #1, Chr(20)
    - Print #1, Chr(96)
  - // Continue adding Print #1, Chr( ) placing the numbers in the oopic code example inside the ()
  - Waitms = 400
  - Loop
  - Close #1
  - End

- **BASIC STAMP**
  ```c
  [S$TAME BS2]
  start:
  serout 9,50054,[20, 96, 21, 113, 22, 86, 23, 5, 170, 132, 173, 6, 146, 6, 171, 135, 191, 6, 166, 140, 134, 6, 140, 4, 8, 179, 7, 148, 6, 128, 141, 4, 1, 7, 130, 7, 130, 128, 145, 128, 8, 7, 131, 141, 148, 7, 137, 7, 164, 18, 171, 136, 191, 7, 129, 7, 4, 194, 7, 197]
  pause 1400
  goto start
  ```

Complete information can be found at:

- WWW.BABBLEBOT.NET
- WWW.SPEAKJET.COM

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Connecting your Babblebot.

OOPic "S" board users can do the above for a fast easy connection. Users of other controllers refer to the manufacturers data sheet and connect J1.

Only 1 control line is needed to operate the Babblebot. Send TTL serial data to the X location on J1 and your robot has a voice. The Babblebot will accept "bit banged" serial as well.

You may need to use the Ready/Flow line if you are sending large amounts of speech data to the Babblebot, as there is a limited memory capacity of the SpeakJet IC. The Ready/Flow line allows your micro controller pass data in as the buffer has room.

The S or Speaking line allows you to let your micro controller know the current status of the Babblebot, is there speech or not currently happening.

V+ MUST BE 5V+

GND MUST BE COMMON GROUND