The original circuit design is by Charles Wenzel. I used his schematic to design the layout and added my own 50Hz notch filter.

Notes (3)
- You build this at your own risk.
- The design of this VLF radio is not my own. The original design is by Charles Wenzel. I used his schematic to design the layout; this can be found at http://www.techlib.com/electronics/vlfwhistle.htm. I kept the name the same as I like it.
- Notch filter added to reduce hum caused by mains electricity. Filter set to filter approximately 50Hz (UK).
Boards (1)
BD1: 21 x 10

Trace cuts (32)

Jumpers (18)

Resistors (16)
R1: 1k ohms
R2: 22k ohms
R3: 4.7k ohms
R4: 10M ohms
R5: 10M ohms
R6: 1M ohms
R7: 1M ohms
R8: 1M ohms
R9: 1M ohms
R10: 47k ohms
R11: 1M ohms
R12: 100 ohms
R13: 220k ohms
R14: 220k ohms
R15: 220k ohms
R16: 220k ohms

Capacitors (19)
C1: 10uF (Electrolytic, black tag is negative)
C2: 47pF (Ceramic)
C3: 0.01uF (Ceramic)
C4: 100uF (Electrolytic, black tag is negative)
C5: 1uF (Electrolytic, black tag is negative)
C6: 1uF (Electrolytic, black tag is negative)
C7: 1uF (Electrolytic, black tag is negative)
C8: 10nF (Ceramic)
C9: 2.2nF (Ceramic)
C10: 2.2nF (Ceramic)
C11: 10nF (Ceramic)
C12: 2.2nF (Ceramic)
C13: 2.2nF (Ceramic)
C14: 10nF (Ceramic)
C15: 2.2nF (Ceramic)
C16: 2.2nF (Ceramic)
C17: 10nF (Ceramic)
C18: 2.2nF (Ceramic)
C19: 2.2nF (Ceramic)

ICs (1)
IC: CA3240

Potentiometers (1)
VR1: 100k ohms

Switches (5)
S1: Switch (2 position)
ICS1: 8 pin IC socket (solder this to the board rather than the chip)
ANT1: Antenna (60 cm)
HP1: 3.5mm headphone socket
BAT1: 9V battery connection
The original circuit design is by Charles Wenzel. I used his schematic to design the layout and added my own 50Hz notch filter.

Boards (1)
[ ] 1x (21 x 10)

Resistors (16)
[ ] 1x 100 ohms
[ ] 2x 10M ohms
[ ] 1x 1k ohms
[ ] 5x 1M ohms
[ ] 4x 220k ohms
[ ] 1x 22k ohms
[ ] 1x 4.7k ohms
[ ] 1x 47k ohms

Capacitors (19)
[ ] 1x 0.01uF
[ ] 1x 100uF
[ ] 4x 10nF
[ ] 1x 10uF
[ ] 3x 1uF
[ ] 8x 2.2nF
[ ] 1x 47pF

ICs (1)
[ ] 1x CA3240

Potentiometers (1)
[ ] 1x 100k ohms

Switches (5)
[ ] 1x 3.5mm headphone socket
[ ] 1x 8 pin IC socket (solder this to the board rather than the chip)
[ ] 1x 9V battery connection
[ ] 1x Antenna (60 cm)
[ ] 1x Switch (2 position)