

| Item | Qty | Ref | Value | Descr. | Source |
|------|-----|--------------------------|------------------------|-------------------------|------------------------|
| 1 | 6 | C3,C13,C14,C15,C16,C17 | 0.1uF (100n) | Ceramic cap (.1sp) | Any |
| 2 | 2 | C2,C20 | 0.1uF (100n) | Polyester cap (.1/.2sp) | Any |
| 3 | 4 | C8,C9,C10,C11 | 33pF (33p) | Ceramic cap (.1sp) | Any |
| 4 | 1 | C21 | .001uF (1n) | Polyester cap (.1/.2sp) | Any |
| 5 | | | | | |
| 6 | 1 | C12 | 33uF/25V | Electrolytic cap | Any |
| 7 | 4 | C4,C5,C6,C7 | 1uF/25V | Electrolytic cap | Any |
| 8 | 1 | C23 | not used | | |
| 9 | 1 | D1 | 1N4148 (alt 1N914) | Small Signal Diode | Any |
| 10 | 3 | D2,D3,D4 | 1N4006 (alt 4001-4007) | Rectifier Diode | Any |
| 11 | 5 | LED1,LED2,LED3,LED4,LED5 | | LED | Any |
| 12 | 1 | J1 | | 2.1mm Power Jack | Digikey (PJ-002AH) |
| 13 | 7 | J2,J3,J4,J5,J6,J7,J8 | | 3.5mm Phone Jack | Digikey (CP-3502MJ-ND) |
| 14 | 1 | P1 | DB-9 Female | 90 degr. Pcb mount | Any |
| 15 | 2 | K1,K2 | Omron GV5 or equiv. | 5 or 12vdc DPDT Relay | Any |
| 16 | 3 | Q1,Q2,Q3 | 2N2222A | TO-18 or TO-92 NPN | Any |
| 17 | 1 | Q4 | 2N7000 | (Optional FET) | Any |
| 18 | 1 | R1 | 4.7K | 1/ 4 Watt Resistor | Any |
| 19 | 3 | R3,R4,R5 | 100k | " | |
| 20 | 3 | R6,R8,R15 | 680 | " | |
| 21 | 2 | R14,R7 | 100 | " | |
| 22 | 3 | R10,R12*,R13* | 1k | " | |
| 23 | 1 | R16 | 120k | " | |
| 24 | 2 | R9,R17 | 50k | Trimpot | Digikey (EVN-D8A) |
| 25 | 1 | U1 + | 16F84 (-4,-10,-20) | PIC Ucontroller | Digikey |
| 26 | 1 | U2 + | HT9170B (MT8870) | DTMF Decoder | Any |
| 27 | 1 | U3 + | 74HC04 | Hex Inverter | Any |
| 28 | 1 | U4 + | MAX232E (HIN232) | RS-232 Level Shifter | Any |
| 29 | 1 | U5 | MC7805CT | 5 Volt Regulator | Any |
| 30 | 1 | Y1 | 4.0 MHZ | Crystal | Any |
| 31 | 1 | Y2 | 3.579 MHZ | Crystal | Any |

* Use 680 ohm resistors at R12 and R13 when using 5 volt relays.

+ IC Sockets are included with kits and built units.