

QUASAR 'COB' PROJECT # SG03M - Sixteen Door Chimes, Dual Tone

Designed for use in high quality melody products. All songs are preprogrammed on the chip. The first song will be played with autostop after power on and a negative pulse is applied to pin TR1/11. Each song is played in turn on each subsequent trigger. An LED driver is available and its output synchronises with the rhythm of the song.

1K ROM memory, wide operating voltage between 2.5V & 5V. Standby current under 5uA. Operating current 5mA. Oscillating frequency (R1, 390K), 120 kHz. Power on reset. Dual tone with RC envelope effect.

Solder the COB PCB into the slot on the motherboard. Follow the overlay pattern to mount the other components. Note there is one link to add. Supply hookup wire as required.

Bonded on a 29mm x 16mm single sided PCB.

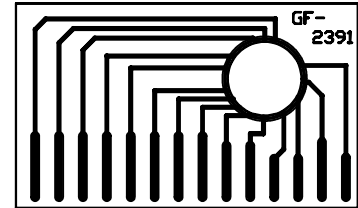
PCB Position Pin Function

| PCB Position | Pin | Function |
|--------------|-----|---------------------------|
| 1 | | Pre-amp output 1 |
| 2 | | Pre-amp output 2 |
| 3 | | Trigger input |
| 4 | | Modulator terminal 1 |
| 5 | | Envelope terminal 2 |
| 6 | | Modulator output |
| 7 | | Tone output |
| 8 | | LED drive |
| 9 | | Modulator terminal 2 |
| 10 | | Envelope terminal 1 |
| 11 | | VDD positive power supply |
| 12 | | Oscillator 1 |
| 13 | | Oscillator 2 |
| 14 | | VSS negative power supply |

The tune list is:

| | |
|----|------------------------|
| 1 | Cuckoo Waltz |
| 2 | The Farmer in the Dell |
| 3 | For Elsie |
| 4 | Home on the Range |
| 5 | Long, Long Ago |
| 6 | Lovers Concerto |
| 7 | Traumerei |
| 8 | Wiegenlied |
| 9 | Toy Symphony |
| 10 | Old Black Joe |
| 11 | Die Lorelei |
| 12 | Frohlicher Landman |
| 13 | Home Sweet Home |
| 14 | Swan Lake |
| 15 | Hush baby |
| 16 | Serenata Rimpinnt |

| COMPONENTS | |
|------------------------------------|---|
| 8 ohm speaker | 1 |
| 3V battery snap | 1 |
| LED | 1 |
| 390K resistor, R1 | 1 |
| 10uF electrolytic capacitor, C1, 3 | 2 |
| 0.1uF capacitor, C2 | 1 |
| SG3 Chip on Board PCB | 1 |
| BC547, Q1 | 1 |
| Push-on switch | 1 |
| SG03 Motherboard | 1 |



POSITION 1 2 3 4 5 6 7 8 9 10 11 12 13 14

