

## TC100 – Tone Controller

Program Password #0\*

When you lift the receiver you have 3 seconds to enter program password before it goes into tone control mode. After the 3 seconds the unit will ignore the program password.

Register 01 : Cadence On Time in Milliseconds (Default = 4000)

Valid entries 1-20000

Example 01 beep 500 ##

Register 02 : Cadence Off Time in Milliseconds (Default =0)

Valid entries 0-20000

Example 02 beep 500 ##

Register 03 : Cadence Tolerance in Milliseconds (Default = 0)

Valid entries 0-500

Example 03 beep 500 ##

Register 04 : Cadence Matches (Default = 1)

Valid entries 1-20

Example 01 beep 2 ##

Register 05 : Frequency Watch (Default = 10100000)

Enter the 8 frequency settings followed by ##

1 = look for frequency,

0=ignore frequency

|               |     |     |     |     |     |      |      |      |
|---------------|-----|-----|-----|-----|-----|------|------|------|
| Frequenc<br>y | 350 | 400 | 440 | 480 | 620 | 1400 | 2060 | 2600 |
| Entry         | 0/1 | 0/1 | 0/1 | 0/1 | 0/1 | 0/1  | 0/1  | 0/1  |

Example 05 beep 10100000 ## ( Unit will look for 350hz or 440hz)

## Programming Examples:

How to detect a tone of 400hz and minimum duration of 1000 milliseconds

|                      |   |
|----------------------|---|
| #0* beep             | ;enter program mode   |
| 01 beep 1000 ## beep | ;set duration to detect                                     |
| 02 beep 0 ##         | ;set cadence off time to 0, only care about when tone is on |
| 03 beep 0 ##         | ;no need for cadence tolerance                              |

```
04 beep 1 ## ;match one time
05 beep 01000000 ## ;Match 400hz only
```

How to detect a busy tone that has frequency components of 480 Hz and 620 Hz, with a on cadence of 500 milliseconds and off cadence of 500 milliseconds.

```
#0* beep ;enter program mode
01 beep 500 ## beep ;set cadence on to detect
02 beep 500 ## ;set cadence off time to detect
03 beep 50 ## ;set tolerance for cadence 50ms (+-10%)
04 beep 4 ## ;match 4 cadence on and off cycles
05 beep 00011000 ## ;Match 480hz and 620hz frequency components
```

How to detect 4000 milliseconds of silence.

```
#0* beep ;enter program mode
01 – Register ignored in this example, value does not matter
02 beep 4000 ## ;set cadence off time to detect 4000ms of silence
03 beep 0 ## ;set tolerance to 0
04 beep 1 ## ;match 1
05 beep 00000000 ## ;disable all frequency components
```