

# A93010

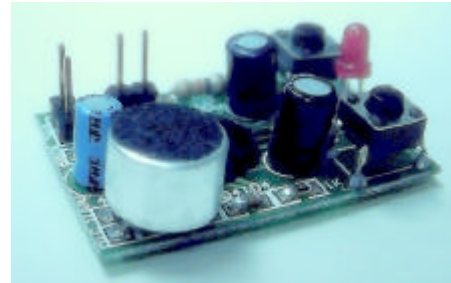
## 20" Voice Recording Module

### Description

The A93010 voice recording module offers true single chip solid state storage capability and requires no software or micro-controller support. It provides high quality recording and playback with single 20 second message.

### Features

- Non volatile flash memory technology
- No battery back up required
- User friendly, easy to use operation
- 2-keys operation, record and play back
- Low power consumption
- LED to indicate recording
- Built-in condenser mic
- Automatic power down
- 5V Operation



### Operation

#### Recording

1. Press key REC to start recording, release key when recording complete. LED will light up during recording. If voice message is longer than 20sec, LED will turn off and stop recording.
2. If there is a message recorded previously, press REC will erase the previous and record the new one.

#### Play Back

1. Press key PLAY once to start play back. The message will be played back from the beginning until ended. During play mode, if key PLAY is pressed, the message will stop immediately.
2. If the newly recorded message is shorter than the previously recorded message, the remaining portion of the previous message will be erased.

#### Standby

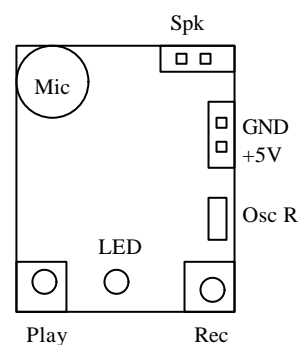
The module will automatically enter standby mode after recording or playback operation is completed.

### Electrical Spec

Parameter	Typical	Max	Unit
Operation Voltage	5	6	V
Operation Current (no load)			
Recording	25		mA
Playback	25		
Standby Current	5	10	uA

### PCB Layout of the module

Size : 34 x 23 mm



### Application Note

1. The module can store up to 30sec message by change the oscillation resistor. Default value is 52K for 20sec
2. The higher the sampling rate, the better the sound quality but shorter the duration. Resistor value for different sampling rate is as below:

20 sec	6.4KHz	R=52K
24sec	5.3KHz	R=67K
30 sec	4.0KHz	R=89K