**FM Module**

The **FM Module** (not in SC-100 or SC-300) contains an integrated FM radio circuit. The inside looks like this:

![Antenna Symbol](image)

The antenna (Y) is a loose wire that should always be left unconnected and spread out for best radio reception.

This circuit is actually much more complex than it appears here, since it is built around an integrated radio circuit. A schematic of the circuitry within this part would be too large to show here, but this block diagram gives a summary of it:

![Block Diagram](image)

Its Snap Circuit's connections are like this:

**FM Module:**

(+): power from batteries  
(–): power return to batteries  
T: tune up  
R: reset  
OUT: output connection

The antenna (Y) is a loose wire that should always be left unconnected and spread out for best radio reception.

**Recording IC**

The **Recording IC** (not in SC-100 or SC-300) is a module containing a specialized recording integrated circuit and supporting resistors and capacitors that are always needed with it. The inside looks like this:

![Recording IC](image)

Note that the parts here are miniaturized and “surface-mounted” to the printed circuit board. The actual recording IC is under the black blob of protective plastic. Its actual schematic looks like this:

![Schematic](image)

Its Snap Circuits connections are like this:

**Recording IC Module:**

(+): power from batteries  
(–): power return to batteries  
RC: record  
Play: play  
OUT: output connection  
Mic +: microphone input  
Mic –: microphone input

The recording IC can record and play back a message up to eight seconds long. There are also three pre-recorded songs.