Mobile Signal Booster using LM386 IC

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Introduction

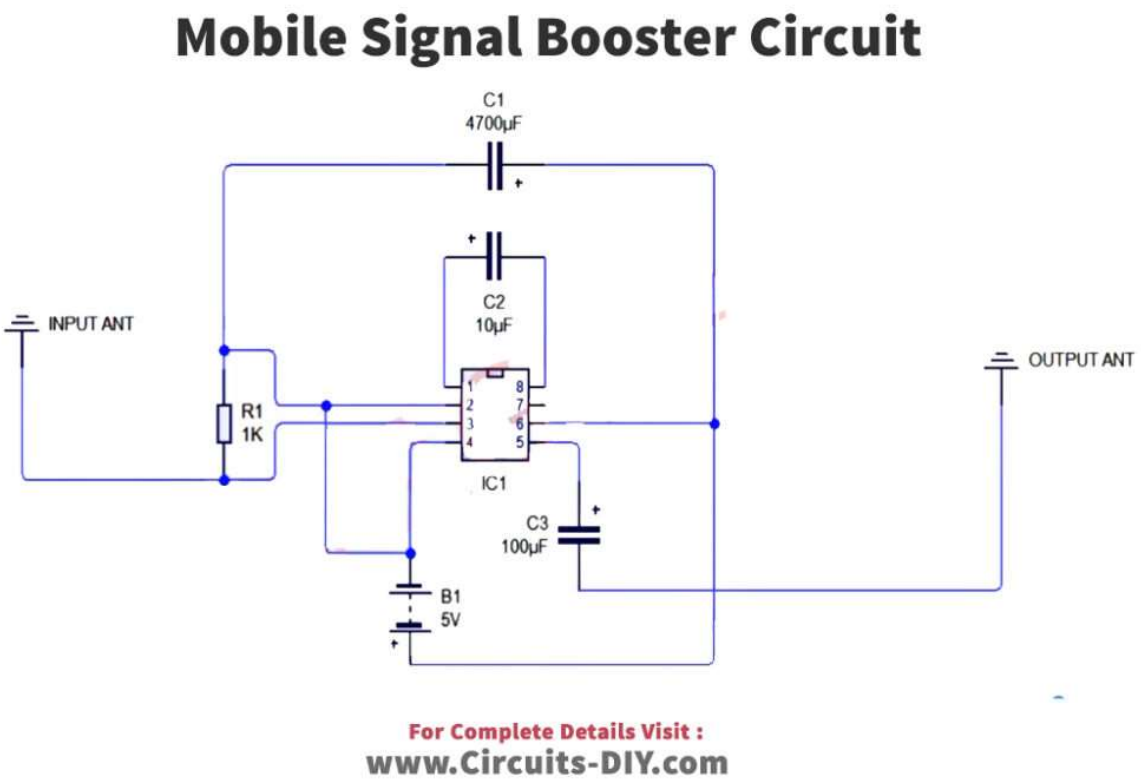
In many areas, the signal problems are genuine issues. And, hence it can cause complications for a person. If the mobile doesn't catch the signal. it means you cannot text or call from your phone and thus get disconnected from your loved ones, including your family and friends. It can also bring you work-related problems. For example, if you have a job meeting but get stuck somewhere where mobile signals are less, you may not able to reach your colleagues, which can cause problems for you.

In these cases, a mobile signal booster comes to help us. These boosters can help to enhance wireless coverage in a specific area. So in this article, we are going to make a Mobile Signal Booster.

Components Required

S. No	Components	Qty
1.	IC LM386	1
2.	Antenna	1
3.	Capacitors (10uf, 100uf, 470uf)	1, 1, 1
4.	Resistors (1K)	1
5.	Battery (5V)	1
5.	Wires	–

Circuit Diagram



Working Explanation

In this Mobile Signal Booster, when you give the supply to the circuit, the input antenna captures the weak transmission surrounding your cell phone. And, then, it transferred the captured transmission to the non–inverting input pin of the connected opamp IC. This IC is the amplification IC, therefore, it amplifies the given input signal The IC then gives the amplified output to the filtering capacitor, which is there to filter out the remaining noise of that amplified output. The cellular device then picked that signal up.

Applications and Uses

- In regions where mobile signals don't work properly.
- To boost 4G , 3G, or 2G voice signals.
- To boost internet speed quality. And, to maintain a reliable connection throughout at all times

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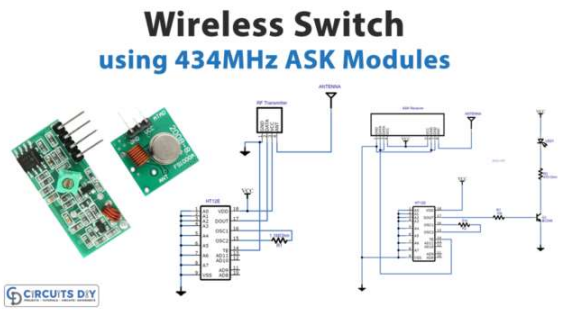

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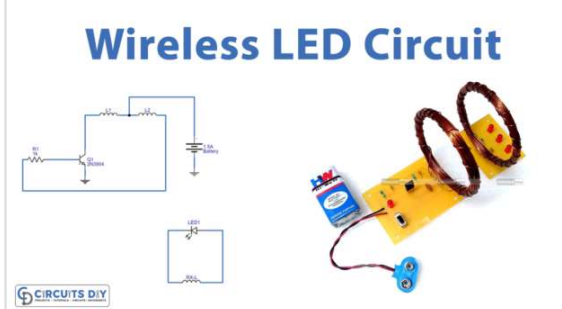

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