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PROJECT REPORT ON SIMPLE MOBILE PHONE JAMMER

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**PRINCIPLE OF WORKING**

[Mobile phone jammers](http://www.phone-jammer.com/) works on the principle of radio wave frequency.All the mobile phone have the specified radio frequency under which they are operating.Phone jammers interfere with the working frequency of the mobile phone and results in noisy and interference frequency.In this way  cell phone jammers block cell phone use by sending out radio waves along the same frequencies that cellular phones use (as described above). This causes plenty of interference with the [communication](http://www.techprone.com/tag/communication/) between cell phones and signal generated from the mobile towers.

Most cell phones use different bands to send and receive communications from towers (called full duplexing). Jammers can work by either disrupting phone to tower frequencies or tower to phone frequencies. Smaller handheld models block all bands from 800MHz to 1900MHz within a 30 foot range (9 meters). Small instruments tend to use the former method, while larger more costly models may interfere directly with the tower. The radius of cell phone jammers can range from a dozen feet for pocket models to kilometers for more dedicated units. The TRJ-89 jammer can block cellular communications for a 5-mile (8 km) radius.

Their are several types of duplexing like single duplexing , double duplexing mode and multiple duplexing.Duplexing basically defines the transfer of signal (voice signal) in a manner.These manner are defined from the way of duplexing.Hence duplexing can carry out the jamming of voice signals.

You could replace the 555 chip with an electret microphone and listen to yourself talk on a scanner, so the unit could easily couple as a UHF Bug.

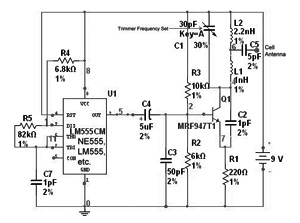
**INTRODUCTION**

A Mobile Phone Jammer is an instrument used to prevent [cellular phones](http://en.wikipedia.org/wiki/Mobile_phone) from receiving signals from [base stations](http://en.wikipedia.org/wiki/Base_station). When used, the jammer effectively disables cellular phones. These devices can be used in practically any location, but are found primarily in places where a phone call would be particularly disruptive because silence is expected.

Cell phone jammers block cell phone use by sending out [radio waves](http://en.wikipedia.org/wiki/Radio_wave) along the same frequencies that cellular phones use. This causes enough interference with the communication between cell phones and towers to render the phones unusable. It transmits low power radio signals to cut off communication between cell phone and cellular base stations. The choice of mobile jammers are based on the required range starting with the personal pocket mobile jammer that can be carried along with you to ensure undisrupted meeting with your client or a personal portable mobile jammer for your room or medium/high power mobile jammer for your organisation to very high power/military jammers to jam a large campuses.

**TECHNICAL SPECIFICATION**

1. **Circuit Diagram**

[](http://www.circuit-projects.com/cimg/cell-phone-jammer.jpg)

**Component list**

* + 1. RESISTOR

|  |  |
| --- | --- |
| VALUE | QUANTITY |
| 6.8K | 1 |
| 8.2K | 1 |
| 6K | 1 |
| 10K | 1 |
| 220 | 1 |

* + 1. CAPACITOR

|  |  |
| --- | --- |
| VALUE | QUANTITY |
| 1pF | 2 |
| 5Pf | 1 |
| 30pF | 1 |
| 50pF | 1 |
| 5µF | 1 |

* + 1. INDUCTOR

|  |  |
| --- | --- |
| VALUE | QUANTITY |
| 1 nH | 1 |
| 2.2nH | 1 |

* + 1. 555 TIMER IC
    2. TRANSISTOR:

MRF947/BC547

* + 1. 9V BATTERY

**APPLICATIONS**

* Military application for jammer-

The US military routinely uses jammers to protect secure military areas from electronic surveillance. Jammers can also be used to protect traveling convoys from cell phone triggered roadside bombs in places like Iraq.

* Other areas-

It is suitable in board meeting, seminar, cinema, hospitals, religious places, educational institutes’ etc.It provides ultimate solution in any area where cellular communication frequently cause nuisance either by loud incoming calls or loud telephone conversation.

**REFERENCES**

1.website references

* [www.wikipedia.com](http://www.wikipedia.com)
* [www.electronicsforyou.com](http://www.electronicsforyou.com)
* [www.mobilejammer.co.in](http://www.mobilejammer.co.in)

2.Book references

* Ramakant.A.Gayakward
* Boylestead