

Remote Controlled Mobile Phone Signal Jammers

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Abstract: - With the growing number of mobile users, the need to disable the mobile phone in specific places, where the ringing of a mobile phone would be disruptive, has increased. All phones within the effective jammer radio are muted. The mobile jammer is a device that disturbs communication between the mobile base station and the mobile equipment by transmitting the noise signal to the frequency, in which both are attempting to communicate with each other. Interrupting a cell phone is the same as interfering with any other type of radio communication. A cell phone works by communicating with your service network through a cellular tower or base station. A remote control is a component of an electronic device used to operate the device wirelessly from a distance. Here the proposed system is that the mobile jammer can be controlled via remote. As with other radio interferences, mobile blockers block the use of the mobile phone by sending radio waves along the same frequencies as mobile phones. This causes enough interference with communication between mobile phones and communication towers to make the phone unusable. The task of blocking a cellular signal or preventing the cell phone from receiving or transmitting signals is difficult.

Key words: Mobile jammer, Remote control, Radio jamming.

I. INTRODUCTION

A mobile phone jammer is an instrument used to prevent cellular phones from receiving signals from base stations. 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 have both benign and malicious uses. Police and the military often use them to limit or disrupt communications during hostage situations, bomb threats or when military action is underway. Portable personal jammers are available to enable their owners to stop others in their immediate vicinity (up to 60-80 feet away) from using cell phones. Similar equipment is manufactured to block signals in environments where cell phone activity may not be desirable, such as theaters, churches and operating rooms. A jamming device transmits on the same radio frequencies as the cell phone, disrupting the communication between the phone and the cell-phone base station in the tower.

II. APPLICATIONS

- silence in library: To maintain the complete silence in library, office and in lecture hall where the complete silence is required.

- To avoid fraud: To avoid fraud in examination hall by disabling the mobile networks.
- Disturbance in lecture hall: To avoid disturbance in class room by installing jammers.
- Conference Security: For providing security in business conference, board of direction room, seminars, etc..
- Hospital Maintenance: For providing calm and peaceful atmosphere in hospitals. In which the mobiles may disturb the patients in hospitals.
- Important places: It is useful in where cell-phone can disturb.

III. SYSTEM ANALYSIS

A. PROBLEM DEFINITION

Here in this proposed system the mobile jammer is used in many places such as hospitals, lecture hall, business conference and etc., Unfortunately, restaurants, movie-theaters, concerts, shopping-malls, hospitals, banks, libraries, and churches all do suffer from the spread of cell-phones because not all cell-phone-users recognize, or make any account, that it could be a restricted for mobile-use-area, or, even if they understand that the use is restricted, still, they cannot control themselves and keep-on talking and talking, sometimes, for a long-time; in addition, some of them do talk very-loudly, making a whole-experience of listening to that mobile-conversation (as outsider's point of view) as annoyance and unnecessary-interruption, v and

particularly disturbing because silence, peace or concentration is expected.

B. Proposed System Features:

Jamming devices overpower the cell phone by transmitting a signal on the same frequency and at a high enough power that the two signals collide and cancel each other out. Cell phones are designed to add power if they experience low-level interference, so the jammer must recognize and match the power increase from the phone. Cell phones are full-duplex devices, which means they use two separate frequencies, one for talking and one for listening simultaneously. Some jammers block only one of the frequencies used by cell phones, which has the effect of blocking both. The phone is tricked into thinking there is no service because it can receive only one of the frequencies.



Inside Cell Phone Jammers:

Electronically speaking, cell-phone jammers are very basic devices. The simplest just have an on/off switch and a light that indicates it's on. More complex devices have switches to activate jamming at different frequencies. Components of a jammer include:

Antenna:

Every jamming device has an antenna to send the signal. Some are contained within an electrical cabinet. On stronger devices, antennas are external to provide longer range and may be tuned for individual frequencies. Cell phone jamming devices were originally developed for law enforcement and the military to interrupt communications by criminals and terrorists. The bombs that blew up commuter trains in Spain in March 2004, as well as blasts in Bali in October 2002 and Jakarta in August 2003, all relied on cell phones to trigger explosives. It has been widely reported that a cell-phone jammer thwarted an assassination attempt on Pakistani President Musharraf in December 2003. When President Bush visited London in November 2004, it was reported that British police considered using jammers to protect the president's motorcade through London. During a hostage situation, police can control when and where a captor can make a phone call. Police can block phone calls during a drug raid so suspects can't communicate outside the area. Cell-phone jammers can be used in areas where radio transmissions are

dangerous, (areas with a potentially explosive atmosphere), such as chemical storage facilities or grain elevators. The TRJ-89 jammer from Antenna System & Supplies Inc. carries its own electrical generator and can block cellular communications in a 5-mile (8-km) radius. Corporations use jammers to stop corporate espionage by blocking voice transmissions and photo transmissions from camera phones. On the more questionable end of the legitimacy spectrum, there are rumors that hotel chains install jammers to block guests' cell-phone usage and force them to use in-room phones at high rates.

Cell phone jamming legal issues:

In the United States, United Kingdom, Australia and many other countries, blocking cell-phone services (as well as any other electronic transmissions) is against the law. In the United States, cell-phone jamming is covered under the Communications Act of 1934, which prohibits people from "willfully or maliciously interfering with the radio communications of any station licensed or authorized" to operate. In fact, the "manufacture, importation, sale or offer for sale, including advertising, of devices designed to block or jam wireless transmissions is prohibited" as well. Jamming is seen as property theft, because a private company has purchased the rights to the radio spectrum, and jamming the spectrum is akin to stealing the property the company has purchased. It also represents a safety hazard because jamming blocks all calls in the area, not just the annoying ones. Jamming a signal could block the call of a babysitter frantically trying to contact a parent or a someone trying to call for an ambulance.

Alternatives to Cell Phone Jamming:

While the law clearly prohibits using a device to actively disrupt a cell-phone signal, there are no rules against passive cell-phone blocking. That means using things like wallpaper or building materials embedded with metal fragments to prevent cell-phone signals from reaching inside or outside the room. Some buildings have designs that block radio signals by accident due to thick concrete walls or a steel skeleton.

Remote Control Mobile jammer:

Remote controls are widely used in our daily life such as TV remote control, air conditioner remote control and remote control toy, remote control car and so on. Not all remote controls are with the same frequency bands as 315Mhz, 330Mhz, 390Mhz, 433Mhz, 868Mhz and so many other frequency bands. And there is no doubt that the design of the remote control of the remote control is to cut the signals of the remote control. REMOTE CONTROL MOBILE JAMMER On the one hand the remote controls like the remote control of the TV, the remote control of the

air conditioner can give us much comfort however there are also other types of device that is controlled by the remote control that can cause an effect Negative for people. Such as remote control robots, unmanned aerial vehicles (UAVs) and other surveillance drones operated by humans using the remote control, which is currently widely used. If so your privacy and life can be disturbed by these type of surveillance drones, to avoid this situation and protect your privacy the best and simple way is to block RF to block signals from the remote control signals. Therefore, the remote control of the remote control can also keep your children to pay attention to the studio because they can block the signals from the remote control of the TV when they are not willing to do the task and want to watch TV, You can just open the remote and jammer told them that the remote control of the TV is out of power or is broken and coax to do the work at home first. And here you can earn both the portable remote control and remote control desk according to your actual situation.

Flow Chart Of Mobile Jammer

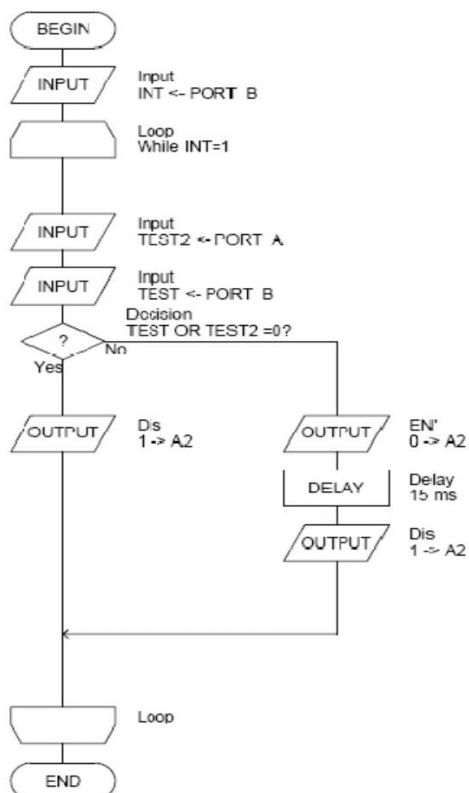


Fig: Mobile Jammer Flow Chart

IV. RESULT

This paper is effectively designed and tested working properly on 2G network. Hence, by designing this project

GSM CDMA, 3G mobile phone signals are blocked within the given time schedule i.e. a range of 850MHz to 2170MHz frequencies are blocked. Cell phone jammer can be effectively used in all area for maintaining security of data. Further we considered the types of mobile phone jammers such as adjustable mobile jammer, remote control mobile jammer, school mobile jammer , prison mobile jammer. As jamming device works it was able to jam the two GSM cell phone carriers i.e. 900 & 1800. The effective jamming range was around 20 meters. As the distance between the cell phone and the base station increases, the effective jamming distance will increase.

V. CONCLUSION

In this we discussed about Cell phone jammer that effectively jams the operation of cell phone such that providing high security to mankind. By this system we can deactivate all the mobile signals at any location. We designed a device that stops phone ringing in a particular time period. This device could be used in places where ringing is not desired at specific times, as these ringing may disturb people in such places. Overall recommendation is that, further and more deeper research is needed to produce more-sophisticated and better-jamming devices, as to not affect the other base station transmission systems.

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