

REMOTE WIRELESS REPEATER TRANSMITTER

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ABSTRACT

This reports proposes a design of a wireless attachment which is capable of transmitting the audio output of any audio equipment like a tape recorder, directional mike and other radio output over a remotely located Frequency Modulation (FM) radio. This design when properly installed produces a crystal clear reproduction of the input. The transmitter is easily installed with a simple mating plug that fits the normal 8Ω output of most modern electronic equipment.

This audio transmitter allows one to listen to a tape or recording deck from remote location over any FM radio while outside without having to get off the comfortable cable. This transmitter also would offer other conveniences as well. Its can be used as other application like baby monitor, small radio station and educational tools.

The design transmitter is range-adjustable depending on the antenna system used with it. It is also designed to operate on clear spot around 96 MHz on or near this frequency. The transmitter is easy to install into any audio device because of its is simple design and small in size.

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CHAPTER 1

INTRODUCTION

In the fast-paced world, there is little time for inconveniences and a greater need for portability and adaptability. The idea for an Audio Transmitter stems from this need. There have probably been times when there is the need to listen to a tape or recording deck from a remote location over any portable FM radio while outside without having to get off the comfortable cable. An audio transmitter will allow this to be done.

Electronic communication techniques is intended to bridge the gap between circuit design and the system concept that predetermine circuit requirements in particular applications [1]. From this technique, the results of theoretical research are combined with engineering principles, equation form, and simulation systems helps to design and produce hardware.

An audio transmitter hardware has been designed to allow the transmitting of audio output of any audio equipment and easy to install. The circuit detail is included in this report to allow the discussion and improvement of the design. This FM transmitter need to be set up and connected to any audio device before transmitted this signal directly to a FM radio station that was tuned to the same frequency. There would be no need to deal with cumbersome wires and cables.