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DESIGN AND CONSTRUCTION OF A FM TRANSMITTER
FOR THE SCHOOL BELL SYSTEM OF
CAVITE STATE UNIVERSITY

DESIGN PROJECT

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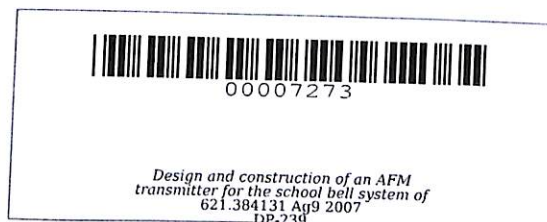
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**DESIGN AND CONSTRUCTION OF A FM TRANSMITTER
FOR THE SCHOOL BELL SYSTEM OF
CAVITE STATE UNIVERSITY**

Undergraduate Design Project
Submitted to the Faculty of the
Cavite State University
Indang, Cavite

In partial fulfillment
of the requirements for the degree of
Bachelor Science in Electronics and Communication Engineering



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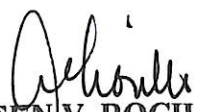
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ABSTRACT

AGUSTIN, APRIL O. and DAYANDAYAN, JOANNE MAURICE G. Design and Construction of a FM Transmitter for the School Bell System of Cavite State University. Undergraduate Design Project. Bachelor of Science in Electronics and Communications Engineering, Cavite State University, Indang, Cavite. April 2007: Engr. Edwin R. Arboleda.

The main purpose of the design project was to design a centralized school bell system that can produce synchronized bell ring at scheduled time over a distance of 400 meters away from the base station which is the New Library Building.

The design was composed of an FM transmitter, an omni-directional antenna connected to the antenna port of the transmitter, a computer wherein the Bell Commander software was installed and FM receivers such as radio, MP3/MP4 player and 12-volt FM receiver.

The device can transmit sound over 400-meter distance however the reception was greatly affected by obstructions like trees and buildings.

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**DESIGN AND CONSTRUCTION OF A FM TRANSMITTER
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CAVITE STATE UNIVERSITY^{1/}**

**April O. Agustin
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^{1/}An undergraduate design project submitted to the faculty of the Department of Computer and Electronics Engineering, College of Engineering and Information Technology, Cavite State University, Indang, Cavite in partial fulfillment of the requirements for graduation with the degree of Bachelor of Science in Electronics and Communication Engineering with Contribution No. ECE-2006-07-016. Prepared under the supervision of Engineer Edwin R. Arboleda.

INTRODUCTION

When it comes to wireless communication, transmitters are always on the first list. This is because transmitters are considered to be one of the main frames of communication. It is an electronic unit that accepts the information signal to be transmitted and converts it into RF signal capable of being transmitted over long distances.

It could serve as multipurpose equipment that is being used in different communication link because of its efficiency and reliability. An important tool in communication that continuous to expand due to its rapid demand in our technology.

Since then, it became a common scenario to use a transmitter in any kind of mass communication and became the basic solutions for any link problems.