

**FINAL YEAR PROJECT REPORT**

**DIPLOMA IN ELECTRICAL ENGINEERING**

**( ELECTRONICS )**

**SCHOOL OF ENGINEERING**

**INSTITUT TEKNOLOGI MARA**

**40450 SHAH ALAM**

**“ MOTORCYCLE INTERCOM ”**

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## PREFACE

The electronics industry is rapidly changing. Many new equipments were created to overcome the problems which came from the old equipments. The uses of equipment such as intercom makes it easier for everybody to communicate with the others without wasting time, energy and cost.

The new trend of intercom system have several advantages such as easy installation because it doesn't need extra wires and monitor and it is easy to use.

This report describes Motorcycle Intercom system, a two way line communication system. A wire cable is used for interconnection between two person. The system is designed to enable full duplex conversation made between two person.

## 1.1 INTRODUCTION

As the name of the system implies it is a two way internal communication between two person , rider and passenger. This system has the advantage of simplicity in design and low cost in construction. A rider converse with his passenger at any time while we are on the move. There is no push to talk button.

The intercom employs a detachable cable to each rider's helmet which plugs into a smallbox which houses the electronic circuitry. Power is obtained from the motorcycle battery.

Each rider's helmet is fitted with a microphone and an earpiece and these are terminated in a short cable fitted with a 3.5mm stereo line socket.

Both rider and passenger can speak at the same time because the system is two-way ( or duplex ) with two separate channels. Each channel has its own volume control which can be adjusted to suit each user. Separate channels eliminate the need for press-to-talk switches or vox ( voice-operated switch ) circuitry.