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"INTERCOM BETWEEN ROOMS TO ROOM"

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ABSTRACT

Intercom is the one of the device will use in the smart home as similar like telephone system but it only use half duplex operation system.

The user can place it at user house to house gate, door to screen visitor to user house, room to rooms, etc. It also the primary use of this type of system is in live or media productions where for example the video director speaks to camera operators, or where the stage manager speaks to the stage hands and lighting operator, etc.

The benefits of this system in the smart home as the security for user to identify the visitors, it also friendly user because it easy to communicate from ~~rooms~~ to rooms without moving to another room.

From that explanation we can get many benefits from the intercom. Intercom also can make the communication very easy & effective.

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In the name of Allah s.w.t, the most gracious and merciful, praise to Allah the lord of universe and may blessing and peace of Allah be upon his messenger Muhammad s.a.w.

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TABLE OF CONTENT	PAGE
Abstract	1
Acknowledgement	2
CHAPTER	
1 INTRODUCTION	5
2. CIRCUIT DESIGN AND OPERATIONS	
2.1 Schematic diagram	10
2.2 Circuit Description	11
2.3 Circuit Operation	16
2.4 Component list and data	18
2.5 Functions of the components	21
2.6 PCB design	23
3. PCB EXPOSURE	
2.1 The tools and material	25
2.2 Preparations- Precautions	25
2.3 The report	27
2.4 The development	28
2.5 The etching	29
2.6 The final washing	29
2.7 The piercing	29
4. DRILLING & SOLDERING	
4.1 Drilling	30
4.2 Assembling	30
4.3 Soldering	31
4.4 Soldering advice for component	33
4.5 Desoldering	36
4.6 Circuit Testing & Trouble Shooting	37

CHAPTER 1-INTRODUCTION

Intercom is a private telecommunication system that allows typically two or more locations to communicate with each other like telephone does.

Simple two stations wired intercom system can be used as an intercom and door phone. We can use an intercom system from our house to house gate/door to screen visitors to our house.

Many productions which needs co-operation of more than a few people need special intercoms that cover many users. Intercom systems used in TV and stage productions are usually headset type intercoms connected to one line using party line arrangement. The primary use of this type of system is in live or media productions where (for example) the video director speaks to the camera operators, or where the stage manager speaks to the stage hands and lighting operator, etc.

Intercom systems, by definition, may be comprised of many different types of intercoms and subsystems. The basic building blocks can be categorized, however, into four basic types or elements: Party-line Systems, Matrix Systems, Wireless Systems, and Accessories.

The most basic intercom circuit consists of two intercom stations linked to each other with a push to talk (PTT) switch. This kind of circuits are simple and generally consist of only one or two amplifiers and generally use the speaker as normal speaker and microphone (how it is used depends on talk switch position). Depending on the circuit design there could be one PTT switch on one end, or separate PTTs on both stations.

When we want go get rid of push to talk switch and want full duplex, things get more complicated to build. In case we have possibility of having four wires between the two nodes and typical headsets on the nodes (separate speaker and microphone, good isolation from sound coming from speaker to the mic element). In this kind of two headset system, we can simply use two amplifiers, one for sound in each direction.