

## **Operational Circuit Description**

The wireless doorbell system, included Door Unit and In-Door Unit. Both build-in transceiver circuit to provide the wireless communication.

### **The Transmitter Unit**

1. The Transmitter circuit consists of a manual button from **K3A** to enable the timer circuit for the wireless communication as well as send a wireless signal to trigger the receiver unit. .
2. An audio input from **MIC1**, amplified by integrated circuit **U8**.
3. The Crystal Oscillator has provisions for changing center frequency by using **SWK1A** to select one of the two crystals of **X1**or **X2**. .
4. **U3** and **U1** is an amplified for the speaker output.
5. **U4** is an integrated circuit decoder to decode the receipt signal from the receiver unit and operates the relay **K2** with the matching code.
6. The **ANT1** is antenna coupled to the triple stage.

### **The Receiver Unit**

7. The Receiver circuit consists of audio input from **MIC1**, amplified by integrated circuit **U8**.
8. The Crystal Oscillator has provisions for changing center frequency by using **SWK1B** to select one of the two crystals of **X1** or **X2**.
9. **U3** and **U1** is an amplified for the speaker output.
10. **U4** is an integrated circuit encoder to send a wireless code to the Transmitter unit.
11. The **ANT1** is antenna coupled to the triple stage.

### **Power Supply and Ground**

Power is supplied by a 9V battery or an external 9 Volt source (AD/DC adaptor). No external connection is available for grounding.