This circuit is a high gain amplifier designed to use the speaker as a microphone as well. Using 8 ohm speaker (66mm) the input is around 2mV. This is amplified by two transistor amplifiers and the low voltage TBA820M amplifier IC.

The volume is controlled by VR1. A preset was used in this case but wires can be attached for a potentiometer if required.

The master unit is usually set to receive and should be a DPDT push switch if possible.

PB1 is a call switch, but you must press transmit also which will sound a tone of about 400Hz to the slave unit.