

TELEPHONE INTERCEPTION
CODE 306 **LEVEL 1**

This telephone interception circuit is a kind of small amplifier circuit. This single ended expansion gives the clear signal. This circuit uses only few components compares to other circuit, and needs only 3 volts supply. It is working by connecting tel together across any telephone line and having 3 volts supply. Signal will be presented at speaker output.

Technical specifications:

- power supply: 3VDC.
- consumption: 20mA max.
- adjustable sound level by trimmer potentiometer.
- PCB dimensions : 1.58 x 1.10 inches.

How to works:

Signal from TEL will pass R 15K to volume 10K for signal adjustment, then pass C1 to the base of TR1 for signal amplification at the collector of TR1 and send to the base of TR2 for reamplification and send out through output.

PCB assembly:

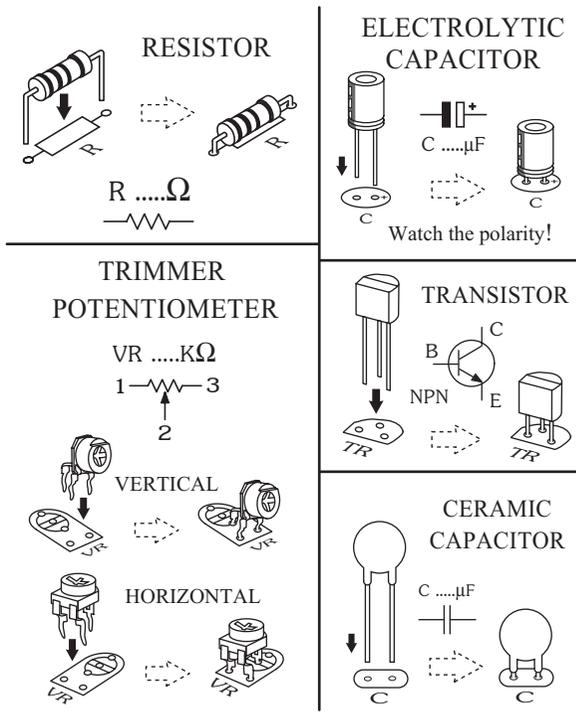
Shown in Figure 3 is the assembled PCB. Starting with the lowest height components first, taking care not to short any tracks or touch the edge connector with solder. Some tracks run under components, and care should be taken not to short out these tracks. If the pins will not enter the holes with ease, use a small drill to slightly enlarge the opening. All components with axial leads should be carefully bent to fit the position on the PCB and then soldered into place. Make sure that the electrolytic capacitors are inserted the correct way around. Some components are particularly sensitive to heat (ie: Transistors, IC's, diodes etc.) extra care must be taken to only apply the iron for as little time as possible, using a pair of pliers to grip the leads will help

conduct heat away. Trim components leads with wire cutters to prevent excess lengths causing a short circuit. Now check that you really did mount them all the right way round!

Testing:

Connect TEL line from telephone wall to "TEL IN" point and telephone to "TEL OUT" point. When have the ringing signal in TEL line, All LED illuminate follow the ringing signal.

Figure 1. Installing the components



Troubleshooting:

The most problem like the fault soldering. Check all the soldering joint suspicious. If you discover the short track or the short soldering joint, re-solder at that point and check other the soldering joint. Check the position of all component on the PCB. See that there are no components missing or inserted in the wrong places. Make sure that all the polarised components have been soldered the right way round.

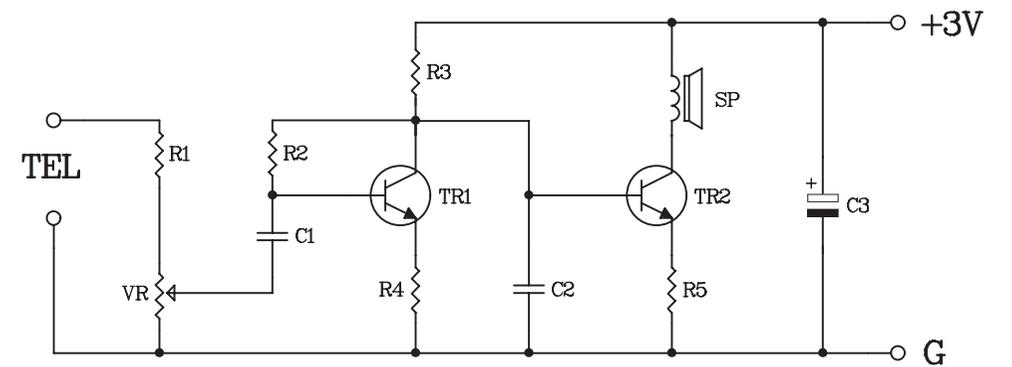
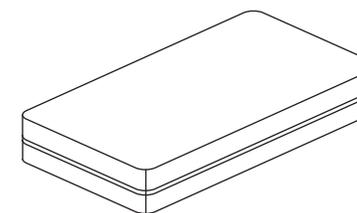
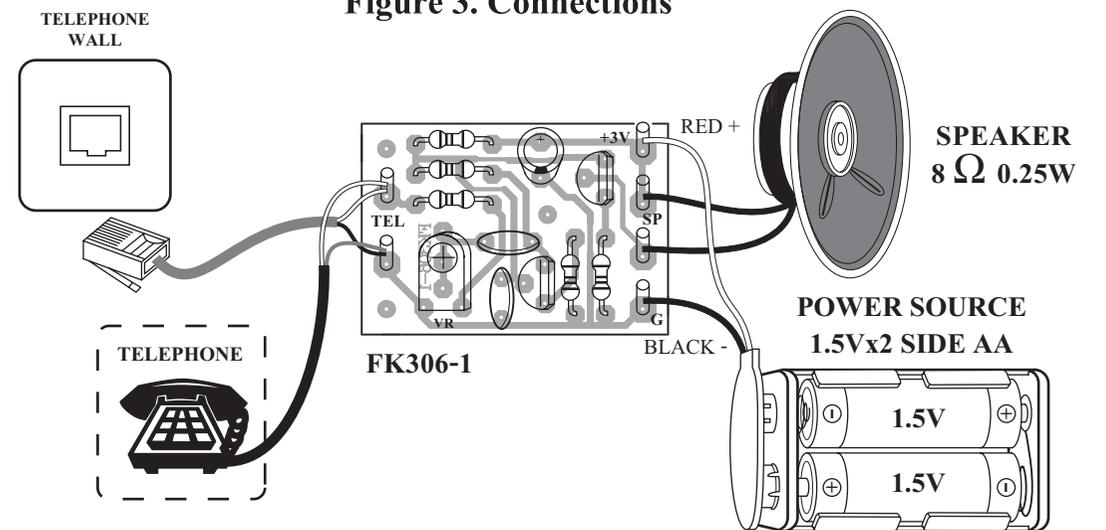


Figure 2. The telephone interception circuit

Figure 3. Connections



NOTE:
FUTURE BOX FB17 is suitable for this kit.

NEW KIT SET

CODE FK	DESCRIPTION	POWER
156	MINI TRAFFIC LIGHT 3 LED	9-12VDC
157	TWO WAY CHASING LIGHT TWO COLOUR 10 LED	9-12VDC
158	STROBOSCOPE 220V	220VAC
159	SHAKING DICE	9-12VDC
160	RANDOM NUMBER GAME 1 DIGIT	9-12VDC
273	MUSIC DOOR (WITH MAGNATIC SWITCH)	3VDC
274	MINI ORGAN 13 TONE (WITH MAGNATIC SWITCH)	9VDC
325	RINGING SIGNAL LIGHT 5 LED	NONE
672	MINI MEGAPHONE (WITH SPEAKER)	4.5-12VDC