Hardware Demonstration

The following will demonstration the usage of the transmitter, say how to store the phone number to the device, and dial a phone, transmit the data. Then I will go to describe the receiver work, and how the data received and decoded by the receiver, and the linkage of the PC database.
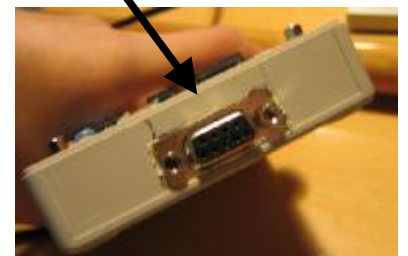*(PS: Because of the time limit, I can only develop the temperature sensor for the project "smart body checks system".)*
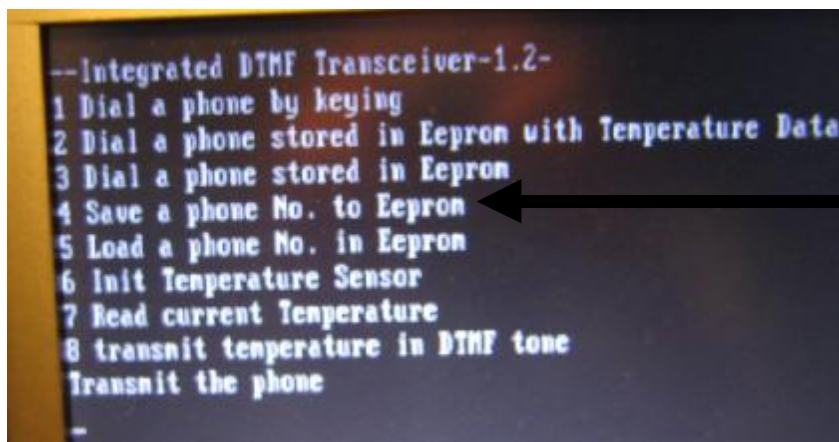
Transmitter

Transmitter have a com port plug, via the com port terminal, the phone number can be set and stored in the transmitter memory..
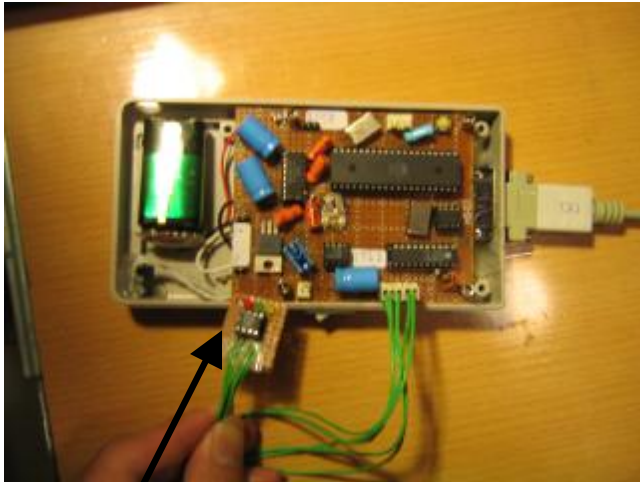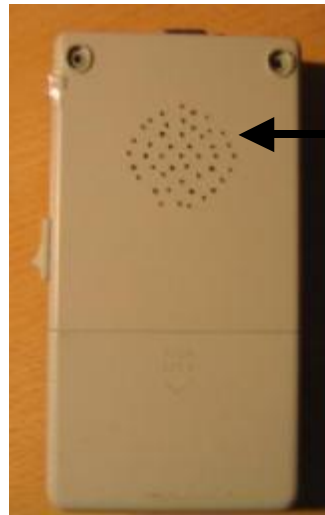
Pc plug

Transmitter

User can set the phone number of the transmitter.

Top view of the transmitter, with temperature sensor

Temperature sensor, used to measure body temperature.

Speaker, generate audio tone to dial a phone!

Bottom View of the transmitter,

Phone-Dialing

Press a button the devices will generate the audible sounds that used to dial the phone number

At this moment, put the tone generator's speaker next to the mouthpiece of your phone, and will try dialing a phone number!

When the dialing complete, my mobile phone will ring, as the transmitter store my mobile phone number in it memory.
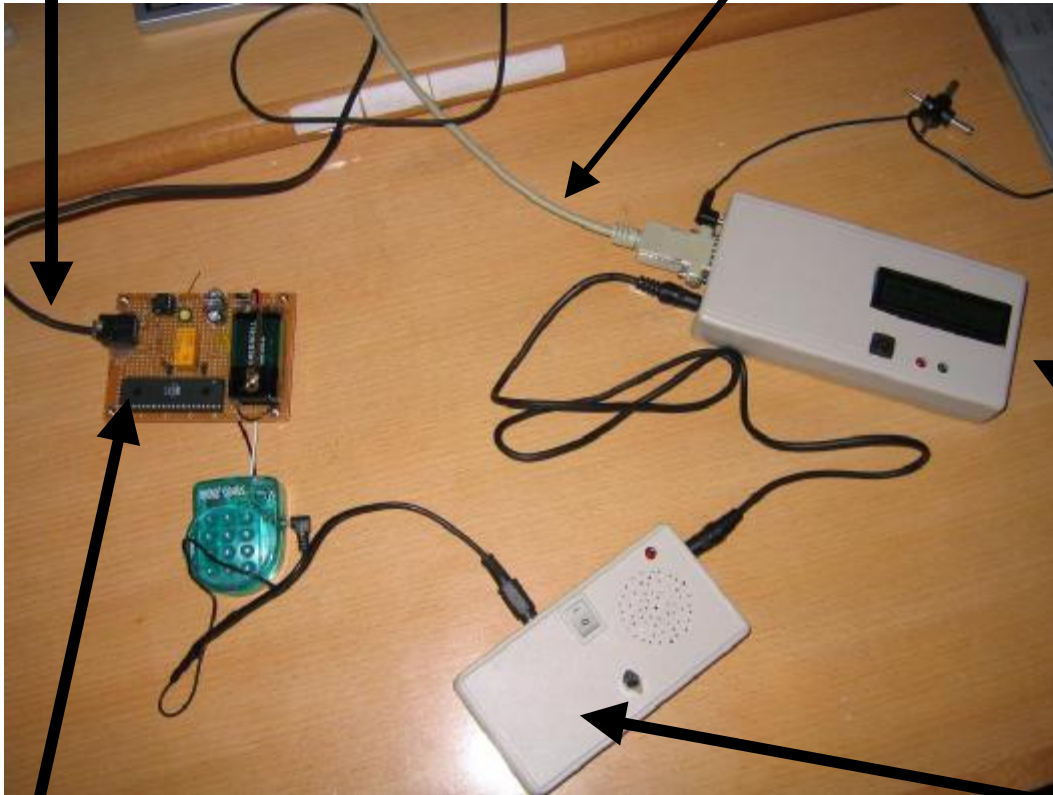
Receiver

Over view of the receiver circuit

Telephone Line

PC com-port, used to upload data to the PC database

Decoder circuit used to decode the audio signal from the phone line, then transmit the data to the computer via the PC com port.

This circuit used to auto-pick up (on-Hook) the telephone, when there is a ringing. After the data transmission complete, the telephone will auto-pick down (Off-hook)
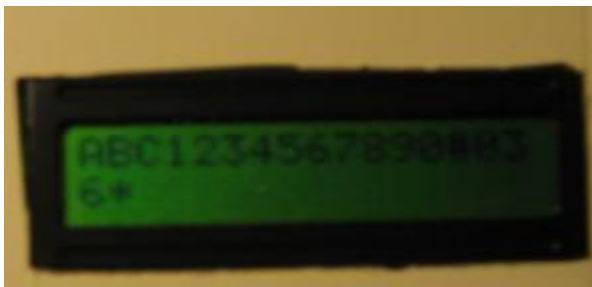
Just a audio amplifier, to fetch the audio signal from the phone line to the decoder
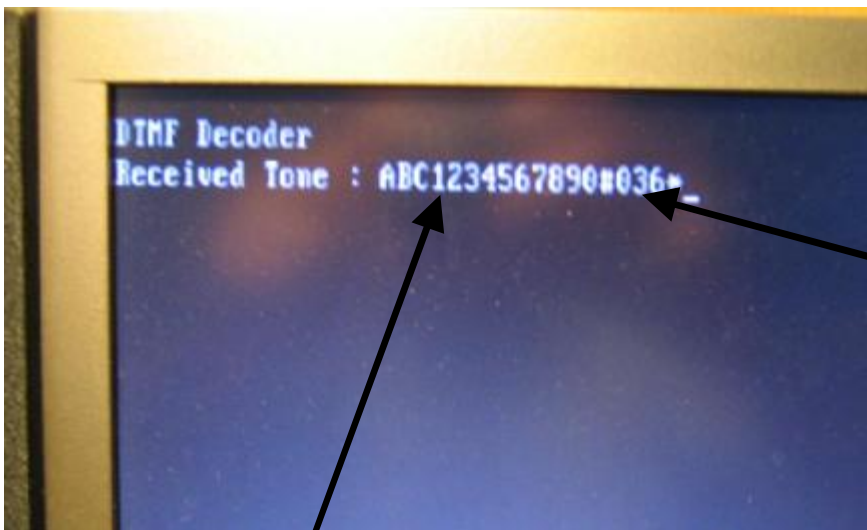
Data Receiving

When the signal receive, the valid lamp will flash

Audio signal from amplifier

LCD display the valid audio data

Meanwhile, PC will also receive the decoded data

036 is the temperature data, data is terminated by the * sign.

ABC1234567890 is the personal ID code, # signal used to distinguish the ID and data.