

This product is composed of Brain and Remote.

The purpose of signal transmitted from Brain is informing the status of vehicle to user by Remote. After confirmed the status of the vehicle through LCD display and sound of the Remote, the user can do appropriate actions.

The Brain is operating to transmit the signal in case of two ways.

First, when receiving the signal to operate Door Lock, Door unlock, Panic, Trunk open, Find and Engine start from Remote, the Brain transmits the signal with results of its conduction to Remote as follows.

- 1) Brain operates Door motor, which is built in the door, to lock the door when receiving the order of Door lock.
- 2) After operating, Brain transmits the pulse code signal, which is frequency modulated from the pre-arranged pulse, to remote.

Second, When the condition of vehicle is changed, the Brain transmits the signal with status of vehicle to Remote as follows.

- 1) Door open

CPU of Brain senses the change of the voltage, 12V to 0V on Door pin switch if Door opens

- 2) Trunk open

CPU of Brain senses the change of the voltage, 12V to 0V on Trunk pin switch if Trunk opens

- 3) Hood open

CPU of Brain senses the change of the voltage, 12V to 0V on Hood pin switch if Hood opens

- 4) Shock sensor

CPU of Brain senses the change of the voltage, 5V to 0V if the impact to vehicle is transmitted to Shock sensor.

- 5) Engine start

CPU of Brain senses the change of the voltage, 0V to 12V if engine is started.

The above described cases, No. 1) ~ 5) are called as the events

For example,

If Door open while vehicle is in arm, the Brain transmits the signal, which is frequency modulated from its pre-arranged pulse, to Remote after CPU of Brain senses the change of the

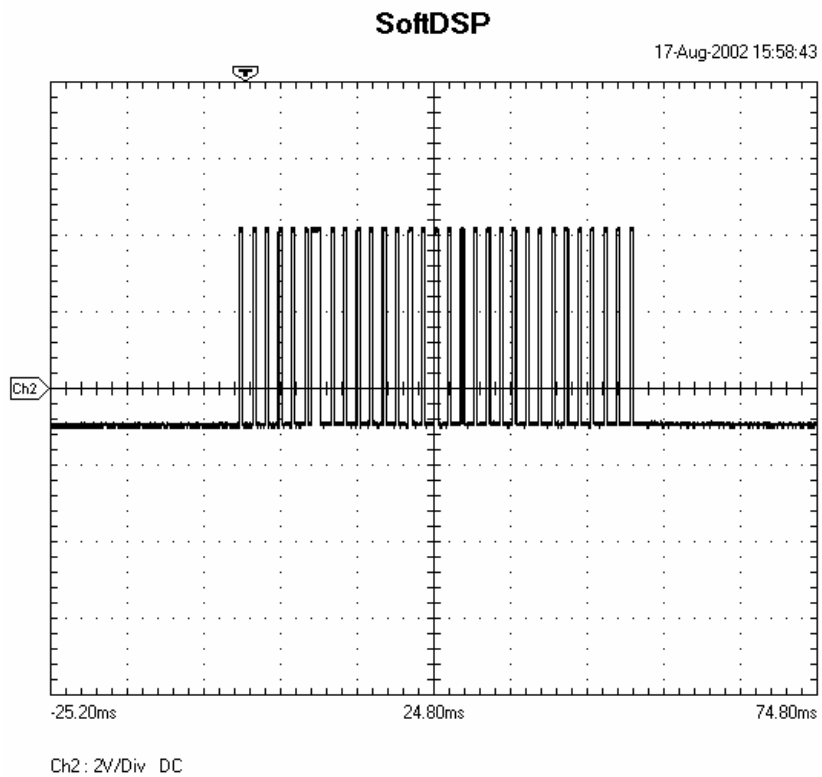
voltage on Door pin switch, 12V to 0V.

As a result, the transmission signal is not data but the pulse code signal, which is frequency modulated from the pre-arranged pulse.

Actually, the Remote is controlled to turn on LCD and sound when the Brain transmits the signal.

The information of code pulse and transmission time are following;

- 1 Bit = 430us
- 1 Frame = 120Bit(120x430us = 51.6ms)



- Total transmission time for one transmission = 4074.8 ms

Total transmission Time at event( $118.2\text{ms} \times 35 - 62.2 = 4074.8\text{ms}$ )

