Constitution of the Radio Frequency Keyless Entry System for Vehicle

The radio frequency keyless entry system controls door lock/unlock by wireless remote control.

This system consists of 2 components the TRANSMITTER and the RECEIVER.

The TRANSMITTER, when activated by pressing the appropriate button, sends a signal that consists of several synchronous codes, unique identification code and security code and function code.

The second component is the RECEIVER, which is installed in the vehicle.

It works intermittently to reduce the battery exhaustion of the car.

It runs continuously to receive signals completely when it detects the synchronous code.

The user can select the following functions by pressing one of two buttons on the TRANSMITTER.

BUTTON	FUNCTION
LOCK	Lock the door
UNLOCK	Unlock the door

Features

1. Door lock control

The RECEIVER sends "LOCK" signal to the door-lock actuators when LOCK button on the TRANSMITTER

is pressed. The RECEIVER also sends "UNLOCK" signal to the door-lock actuators when

UNLOCK button on the TRANSMITTER is pressed.

These functions don't work if the key is in the key cylinder.

2. Automatic locking

The RECEIVER sends "LOCK" signal to the door-lock actuators if any of the doors are not opened within 30 seconds after UNLOCK button on the TRANSMITTER is pressed.

This function prevents the key from continuing the state of UNLOCK when the UNLOCK button is pressed by accident, such as the key is in user's pockets.

3. Battery saving

Because the power source of the receiver is the car battery, it is very important to minimize power consumption. The RECEIVER (CPU: within RECEIVER) works intermittently to reduce the battery exhaustion.

SUPPLEMENT

G8C-224M is an integrated controller for function of the car, such as door lock (includes the keyless entry) , theft alarm, turn signal-light, interior light, power window timer, ignition key illumination, warning buzzer, etc. This controller has many input and output signals, some of them are concerned with the keyless entry system. This document refers only to keyless entry system (not refers to other functions.)