

User Manual

RF Keyless Entry System

(OKA-870T)

# Table of contents

- 1. USER INFORMATION ..... 3
- 2. GENERAL DESCRIPTIONS..... 4
- 3. REMOTE TRANSMITTER ..... 5
- 4. SPECIFICATIONS ..... 6
- 5. FEATURES ..... 7

## 1. USER INFORMATION

- Label Information

This device complies with the FCC and IC Rules.

Operation is subject to the following two conditions ;

- (1) This device may not cause harmful interference.
- (2) This device must accept any interference received. Including interference that may cause undesired operation.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

- (1) l'appareil ne doit pas produire de brouillage, et
- (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

- User's Caution

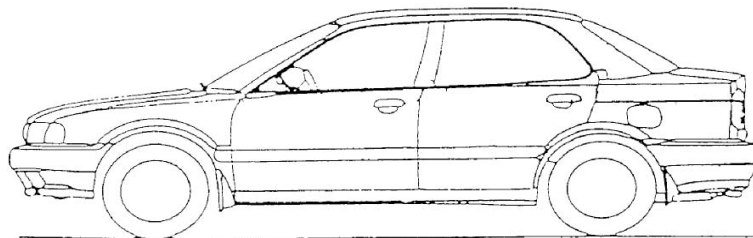
The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.

This device and its antenna(s) must not be co-located or operating in conjunction with any other antenna or transmitter except in accordance with FCC and IC multi-transmitter product procedures.

## 2. GENERAL DESCRIPTION

The radio frequency keyless entry is a system that it controls locking and unlocking the door and the trunk by wireless remote controller. This system consists of three components. The TRANSMITTER is a device that transmits the signal when the button is pressed. The transmission signal consists of several synchronous codes , unique identification code , security code and function code. The RECEIVER is fixed inside the vehicle. It works intermittently to prevent the battery exhaustion. When the receiver detects the synchronous code, it runs continuously to receive the signals completely. After receiving the signal, the receiver decides which operation will be performed. The user can select the following operations by pressing the button of the remote transmitter.

OPERATION	ACTION
LOCK	Lock the Door
UNLOCK	Unlock the Door
TRUNK	Open the Trunk
PANIC	



Transmitter  
f = 313.85MHz



### 3. REMOTE TRANSMITTER

You can lock and unlock your vehicle with the remote transmitter.

You cannot lock any of the doors with the remote transmitter if any door is open or the key is in the ignition switch.

- LOCK : When you push the LOCK button, all the doors will lock.
- UNLOCK : When you push the UNLOCK button, all the doors will unlock.  
You cannot unlock any of the doors with the remote transmitter if any door is open or the key is in the ignition switch.
- TRUNK : When you push the TAIL GATE button for 1.0sec, It will open.
- PANIC : When you push the PANIC button, horn will alarm.



## 4. SPECIFICATION

### 4-1. RF Part

Operating frequency	313.850 MHz
Oscillation type	X-TAL
Modulation type	FSK(Frequency shift keying)
Bit transmission rate	1 000 bps
Clock frequency	8 MHz
Communication type	Simplex

### 4-2. Control Part

CPU	uPD78F0567MC
Manufacturer : RENESAS Corporation	
ROM	4 Kbytes
RAM	128 bytes
Tx bit rate	1 000 bps
EEPROM	32 bytes
Package	20 pin SSOP

### 4-3. The other

Dimension	39.1(W)mm×70.9(L)mm×17.0(D)mm
Weigh	56g
Battery	Lithium cell coin (CR2032)
Manufacturer	PANASONIC Battery corporation
Operation Voltage	DC3V
Operating Temp'	-20℃ ~ +60℃

## 5. FEATURES

Transmission frame. The transmission begins immediately in case of LOCK and UNLOCK, PANIC button is pressed. The transmission frame consists of the synchronous frame and the data frame. The synchronous frame has 320bit synchronous codes that it will be used for the receiver to wake up. The data frame consists of 24bit length identification code, 16bit security code and 4bit function code and 8bit CRC code. 16million different identification codes are available. The security code is always changed in case of any of the buttons is pressed. The transmission time is typically 300 milliseconds.