

INFORMATION DOCUMENT NO. SCE-0006

RELATING TO FCC TYPE-APPROVAL
AS SEPARATE TECHNICAL UNIT
OF VEHICLE RF REMOTE KEYLESS ENTRY

CONTENTS LIST

Information Document	(5 sheets: including this sheet)
Attachment 1 - System diagram	(1 sheet)
Attachment 2 - Drawing of the transmitter	(3 sheets)
Attachment 3 - Drawing of the receiver	(4 sheets)

NOTE: 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.

SHINCHANG ELECTRICS CO., LTD.

-July, 26, 2000 -

Title : Information Document	NO. : SCE-0006
	Date : July 26, 2000

2. PRODUCT SPECIFICATION

2.1 SCOPE

2.1.1 KEY PART : TRANSMITTER is inside of the FOLDING KEY, and it sends the ROLLING CODE to the RECEIVER by Radio Frequency.

2.1.2 RECEIVER : It receives the ROLLING CODE and decodes that, and sends the DATA to ETACS*.

*ETACS : Electronic Time & Alarm Control System.

2.2 SPECIFICATIONS

2.2.1 TRANSMITTER

ITEM	SPECIFICATION
RATED SUPPLY VOLTAGE	DC 3V
OPERATING VOLTAGE RANGE	DC 2.5 - 3.2V
OPERATING TEMPERATURE RANGE	-20 ~+60℃
STORAGE TEMPERATURE RANGE	-30 ~ 85℃
Modulation	AM
Frequency	315.00MHz
Code	Rolling Code(Hopping Algorithm)
Electric field strength	100 ~ 500 μ V/m (315.00MHz)
SPURIOUS RADIATION	-43dBm (MAX)
BATTERY LIFE	2 YEAR(Lithium 3V 1EA)

2.2.2 RECEIVER

ITEM	SPECIFICATION
Rated Supply Voltage	DC 12V
Operating Voltage	DC 9 ~ 16V
Operating Temperature	- 30 ~ + 80℃
Storage Temperature	- 40 ~ + 85℃
StandBy Current	3.0mA (max)
Sensitivity	Min -98dBm

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3. USER MANUAL

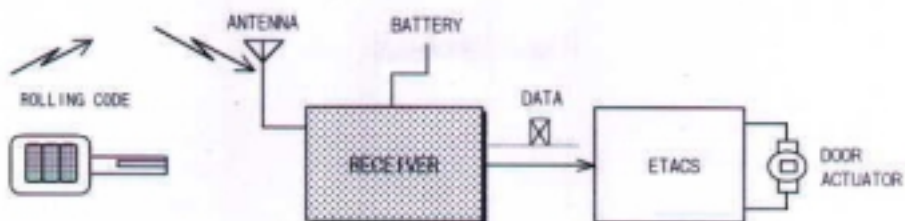
3.1 NAME : REMOTE KEYLESS ENTRY SYSTEM

This RKE System is to be installed on motor vehicles as OE(= original equipment) item.

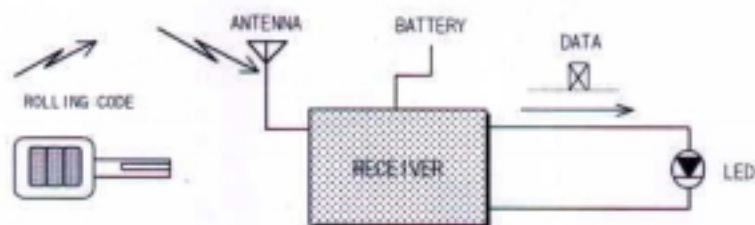
It is intended for auto-locking/unlocking of the door

3.2 SYSTEMS CONSTRUCTION

SYSTEM IN VEHICLE

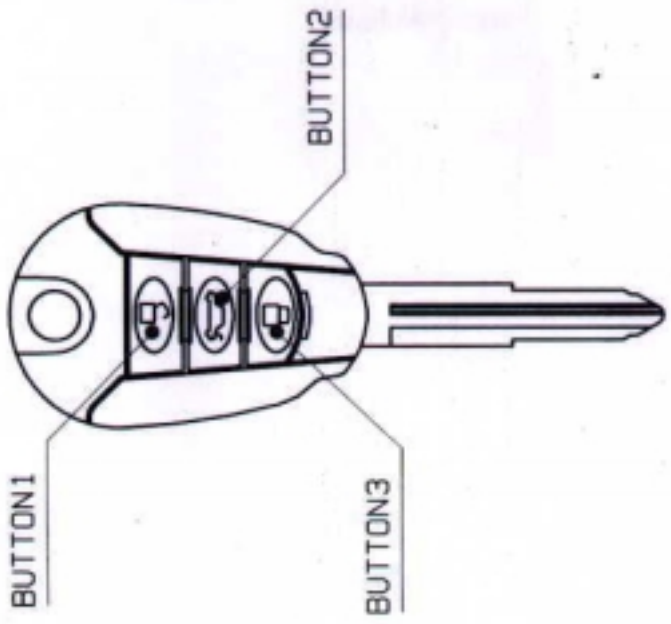
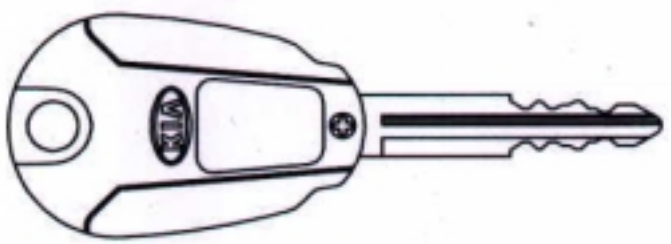


SYSTEM FOR TEST

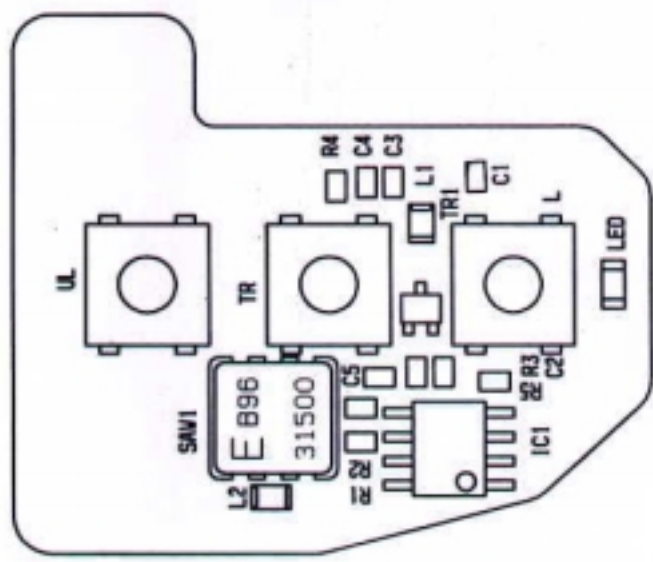
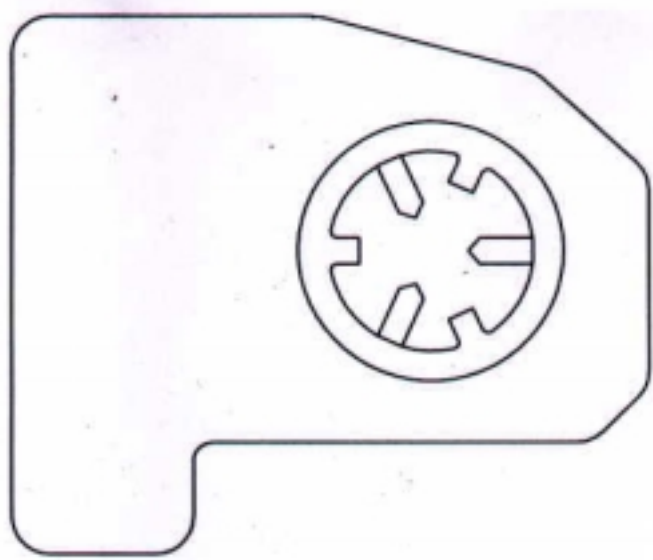


* Through the use of LED, operating state is displayed by LED.
LED 'ON' means that DATA is sent to the ETACS.

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<p data-bbox="324 535 625 577">3.3 <u>OPERATING SUMMARY</u></p> <ol style="list-style-type: none"> <li data-bbox="324 619 1112 651">① By the driver of the vehicle, TRANSMITTER's button is pushed <li data-bbox="324 661 998 693">② TRANSMITTER sends appropriate CODE by RF frequency. <li data-bbox="324 703 836 735">③ RECEIVER gets the code and decodes it. <li data-bbox="324 745 1177 808">④ When Rx proves it to be the right code, Rx sends DATA(instruction) to the ETACS. <li data-bbox="324 819 868 850">⑤ ETACS receive it, and drive the actuator. <p data-bbox="324 892 812 924">The system has the function as follows.</p> <ul style="list-style-type: none"> <li data-bbox="324 966 1023 997">* Whenever DATA is sended to ETACS, LED is turned 'ON'. <p data-bbox="324 1081 576 1113">3.3.1 LOCK & UNLOCK</p> <p data-bbox="406 1123 1153 1186">If LOCK or UNLOCK button is pushed for less than 1 sec, then TRANSMITTER sends the LOCK or UNLOCK DATA.</p> <p data-bbox="324 1228 544 1260">3.3.2 TRUNK OPEN</p> <p data-bbox="406 1312 1063 1375">If TRUNK button is pushed for more than 0.5 sec, then TRANSMITTER sends the 'TRUNK OPEN' DATA</p>	

NO.	PART NAME	QTY	REMARKS														
																	
																	
<table border="1" style="margin: auto;"> <thead> <tr> <th>FUNCTION</th> <th></th> </tr> </thead> <tbody> <tr> <td>BUTTON1</td> <td>DR UNLOCK</td> </tr> <tr> <td>BUTTON2</td> <td>TRUNK OPEN</td> </tr> <tr> <td>BUTTON3</td> <td>DR LOCK</td> </tr> </tbody> </table>		FUNCTION		BUTTON1	DR UNLOCK	BUTTON2	TRUNK OPEN	BUTTON3	DR LOCK	<table border="1" style="margin: auto;"> <thead> <tr> <th>NAME</th> <th>TRANSMITTER</th> </tr> </thead> <tbody> <tr> <td>TITLE</td> <td>EXTERIOR LAYOUT</td> </tr> <tr> <td>SCALE</td> <td>FREE</td> </tr> </tbody> </table>		NAME	TRANSMITTER	TITLE	EXTERIOR LAYOUT	SCALE	FREE
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NAME	TRANSMITTER
TITLE	PCB LAYOUT
SCALE	FREE