Remote Keyless Entry
(BONTEC-T011)

BONTEC Co., Ltd.

#27-31, HANCHUN-RI, DUCK-SAN -MYUN,, JINCHUN-GUN,CHUNG-BUK,KOREA

– INDEX –

FCC NOTICE

THIS DEVICE COMPLIES WITH PART 15 OF THE FCC FULES.
OPERATION IS SUBJECT TO THE FOLLOWING TWO CONDITION:
(1) THIS DEVICE MAY NOT CAUSE HARMFUL INTERFERENCE, AND
(2) THIS DEVICE MUST ACCEPT ANY INTERFERENCE RECEIVED, INCLUDING INTERFERENCE THAT MAY CAUSE UNDERSIRED OPERATION.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communication. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures :

- Reorient or relocate the receiving antenna.

- Increase the separation between the equipment and receiver.

- Connect the equipment into an outlet on a circuit difference from that to which the receiver is connected.

- Consult the dealer of an experienced radio/TV technician for help.

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.

An outline of Transmitter and ETACS

1. How to use BONTEC-T011,R011

- BONTEC-T011,R011 is Remote Keyless System.
- This unit control door lock/unlock with wireless.
- Lock button push , then door lock.
- Unlock button push, then door unlock.
- Trunk button push, then Trunk Open
- Panic button push, then Panic Alarm

2. Introduction of Transmitter

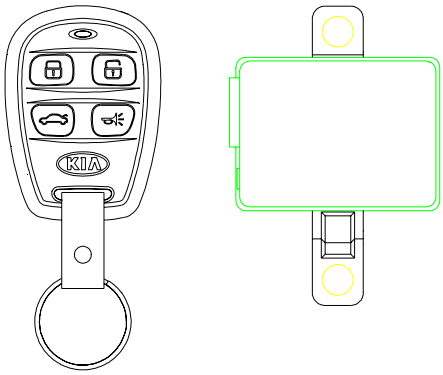
- Transmitter has three button
- Button marking are LOCK, UNLOCK, TRUNK, PANIC
- Transmitter use thee voltage battery
- Frequency is 315Mhz
- Modulation item is SAW Resonator
- Transmitter use Rolling code algorithm

3. Introduction of Receiver

- Receiver control car door
- Receiver has RF module(315)
- RF module use superregentive circuit
- Receiver send Door Lock/Unlock/Trunk open/Panic to ETACS
- Receiver has internal eeprom that save code

Description of Transmitter and ETACS

1. PRIMARY FUNTION



- Remote door lock/unlock
- Remote Back Glass Open/panic
- LED turn on (When button is pushed)
- Operating distance : 7~ 10 m
- Id input(setting mode)

2. ELECTRICAL CHARACTERISTICS

	TRANSMITTER	RECEIVER
Operating voltage	3 VDC	10 ~ 16 VDC
Consumption current	Max 20mA	Max 5mA
Operating frequency	315㎒	
Power	10mW under	-
Sensitivity	-	-100dBm(typical)
Operating temperature	-20 ~ +60℃	-30 ~ +80℃
etc	AM modulation	Superheterodyne

3. DESCRIPTION MODE

1) Mode

Mode	ID INPUT (Setting Mode)	Normal Mode
B+	ON	ON
CAR KEY	-	OFF
SETTING	ON	OFF

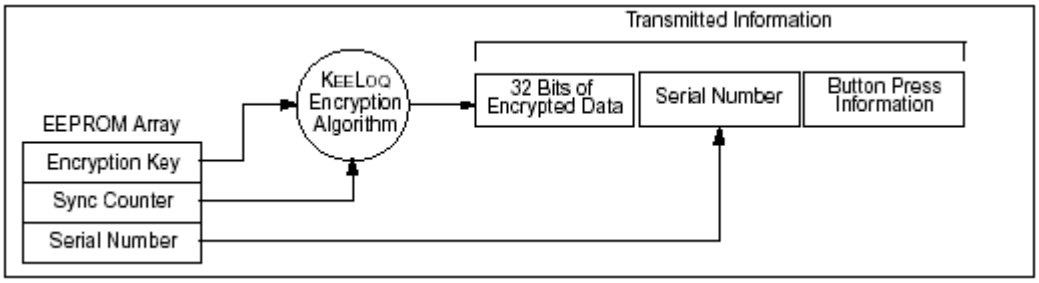
2) Id input(Setting Mode)

When Setting Mode, lock button push,

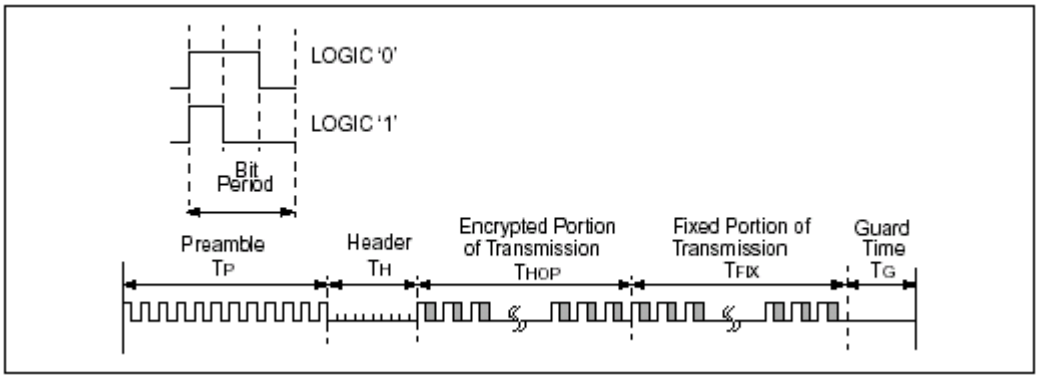
4. OPERATING DIAGRAM

1) TRANSMITTER

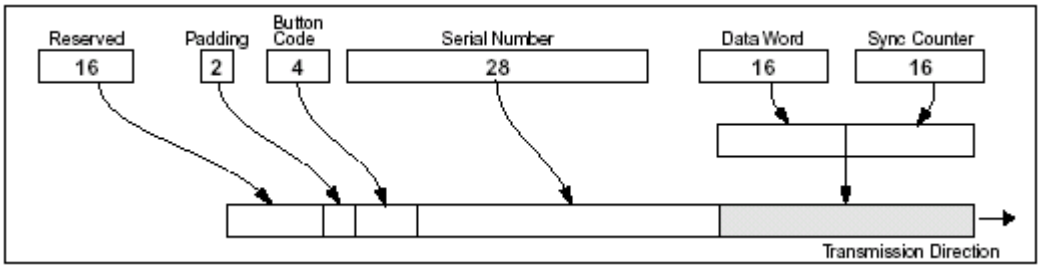
BASIC OPERATION OF TRANSMITTER (ENCODER)



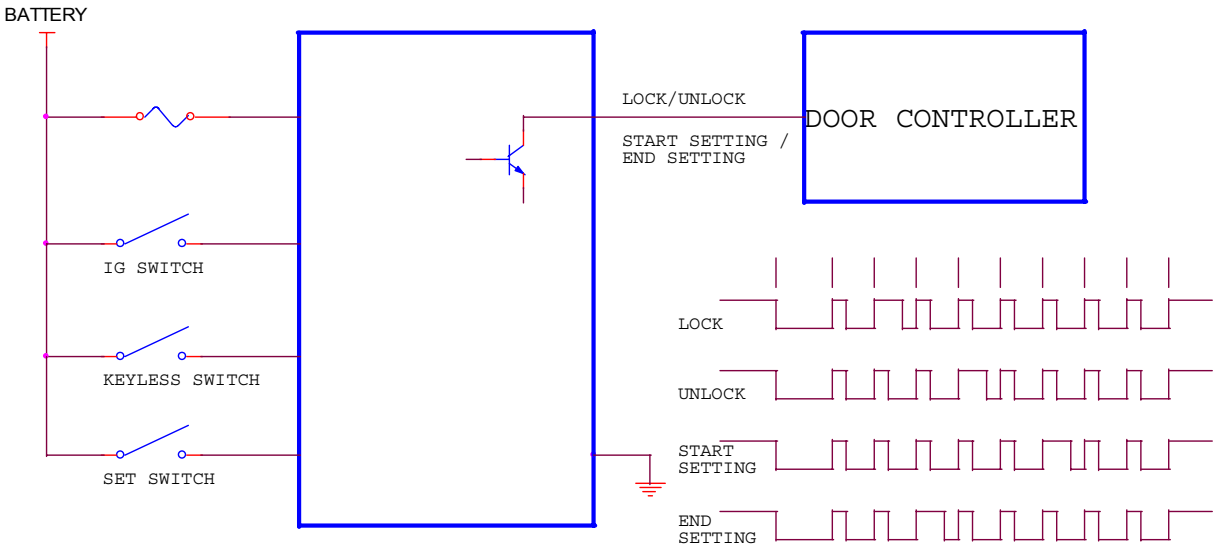
CODE WORD ORGANIZATION



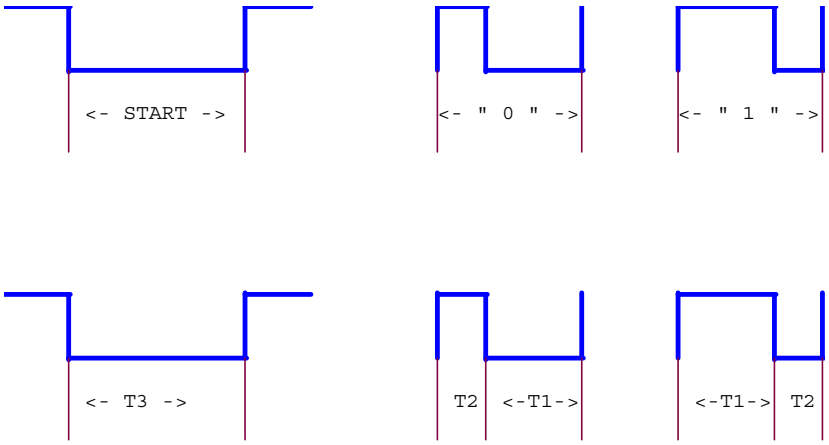
TRANSMISSION WORD FORMAT DURING SYNCHRONOUS TRANSMISSION MODE



5. OPERATING DIAGRAM



* DESCRIPTION OF OUTPUT SIGNAL



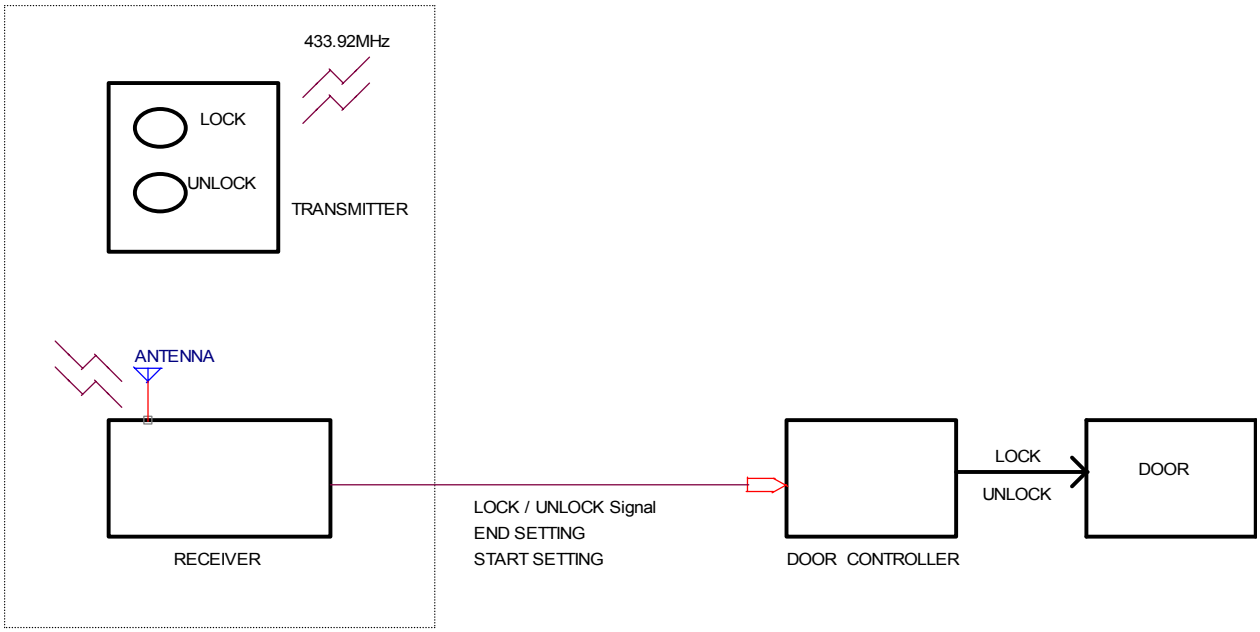
T1 : 24 msec

T2 : 8 msec

T3 : 49 msec

* A cause

BATTERY	IG SW.	SET SW.	KEYLESS SW.	OPERATING MODE	SETTING MODE
	OFF	OFF	OFF	ENABLE	DISABLE
	OFF	OFF	ON	DISABLE	DISABLE
	OFF	ON	OFF	DISABLE	DISABLE
	OFF	ON	ON	DISABLE	DISABLE
	ON	OFF	OFF	DISABLE	DISABLE
	ON	OFF	ON	DISABLE	DISABLE
	ON	ON	OFF	DISABLE	DISABLE
	ON	ON	ON	DISABLE	ENABLE



R.K.E(Remote keyless entry)