

PRODUCT SPECIFICATION AND MANUAL

2018.11

BUYER / PROJECT	SYMC / C300
BUYER MODEL	PCB PACKAGE ASSAY – FOLDINGKEY
PART No.	
COMPANY	MOTOTECH Co., Ltd.
MAKER/NATION	MOTOTECH Co., Ltd./Republic of Korea
DRAFT PART	Research Center
DRAFTER	J. Y. HAM

Title	Certification Request Document		
Project Name	C300	Drawn	2018-11-08
Model Name		Released	2018-11-08
		Made by	J. Y. HAM

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1. Contents

TYPE	Wireless controller about wireless electronic equipment of specific
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	low output radio station
MODEL NAME	PCB PACKAGE ASSAY – FOLDINGKEY
USE	Vehicle of door keyless controller what use 433.92 MHz frequency
SUMMARY	<p>1. This equipment use semiconductor and integrated circuit, so it designs to get high reliability.</p> <p>2. This equipment use oscillation circuit of crystal, so it designs to satisfy about legally frequency an allowable error and bandwidth of exclusive frequency.</p> <p>3. The transmitter has each other specific identification code.</p> <p>4. The power use Li-ion coin Battery (DC 3.0V)</p>
COMPOSITION	<p>1. RF Transmitter part</p> <p>2. Pattern Antenna</p>

2. ELECTRONIC SPEC

List	UNIT	PCB PACKAGE ASSAY – FOLDINGKEY
Rated voltage		DC 3.0V
Voltage range		DC 2.7 ~ 3.3V
Operating Temperature range		-10 ~ +60℃
Storage temperature range		-20 ~ +70℃
Dark current		Lower than 1uA

3. Specification

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TYPE	PCB PACKAGE ASSAY – FOLDINGKEY
NAME	Wireless controller about wireless electronic equipment of specific low output radio station
Equipment List	RF Transmitter
Frequency	433.920MHz
Antenna composition	Pattern ANTENNA
Oscillation method	Crystal oscillation
Modulation method	FSK
Communication method	One-Way Communication
Frequency multiplier	32 multiplier

4. Repair of Unit & Circuit Explanation

4.1 Repair of Unit

- Exchange an old unit.

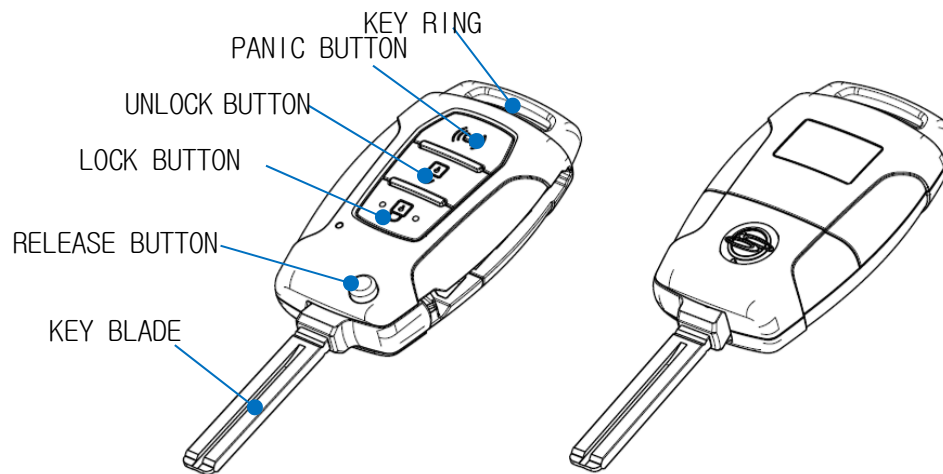
4.2 Circuit Explanation


- If User presses specific Switch of transmitter, MCU makes inherent serial value and Encryption value, it Data transmit to Inside the MCU TX Module.
- It transmit by Pattern antenna though matching circuit of output stage.

5. The Method of Unit Operating

5.1 REMOTE OPERATING METHOD

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 [PICTURE OF UNIT]	FUNCTION		SWITCH FUNCTION
	LOCK BUTTON	DOOR LOCK	SHORT PRESSING LOCK BUTTON OVER 0.03s – LED flicker once as short time
	UNLOCK BUTTON	DOOR UNLOCK	SHORT PRESSING UNLOCK BUTTON OVER 0.03s – LED flicker once as long time
	PANIC BUTTON	PANIC	LONG PRESSING PANIC BUTTON OVER 1s – LED flicker once as short time

6. The System of Each Unit Code Discrimination

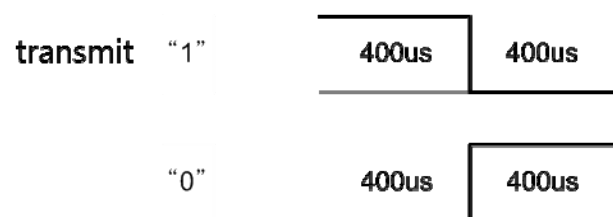
6.1 TRANSMISSION CODE

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RKE RF DATA : 84EA Manchester Code(168bits)

- 20 codes : Preamble
- 8 codes : SYNC
- 4 codes : VID
- 16 codes : KEY ID
- 4 codes : FUNCTION
- 8 codes : SEQ NO
- 16 codes : SEQ RES
- 8 codes : CRC

6.2 DATA STRUCTURE ("1", "0")



FCC

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Part 15.19

This device comply with part15 of FCC rules. Operation is subject to the following two conditions:

- This device may not cause harmful interference.
- This device & its accessories must accept any interference received, including interference that may cause undesired operation.

Part 15.105

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 communications. 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 different from that to which the receiver is connected.

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

Part15.21

Changes or modifications not expressly approved by the manufacturer (or party responsible) for compliance could void the user's authority to operate the equipment

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