### The instructions

model name: RC96A,RC96XBB (X stands for A~Z, BB stands for 00~99)

- 1. Application Processor
  - 1.1. GP565
- 2. Application Device
  - 2.1. TV(U/R), STB
- 3. Application KEY
  - 3.1. TV key
    - TV Power, Vol+/-, Mute, Input → 5 keys
  - 3.2. STB Key
    STB Power, Google, Page up/down, Live, Vol+/-, Mute, Recent, Ch+/-, Backward, Menu, Guide, Up,
    Down, Left, Right, OK, Shows, Movies, Search, REC, REW, Play/Pause, FF, 0~9(Digit), Set → 37keys
- 4. LED
  - 4.1. Green LED: RF Check output signal and enter setting mode ON/OFF
  - 4.2. Red LED: Confirm for IR output signal & Confirm the detection of Low battery signal.
  - 4.3. Back-Light: Turns on when there is movement on the remote control → Fade out off after 3 seconds
- 5. Main Function
  - 5.1. 5Digit Code Entry.
  - 5.2. Auto-Search.
  - 5.3. RF Pairing
  - 5.4. RF Un-Pairing
  - 5.5. Battery Monitor
  - 5.6. Low battery detection
  - 5.7. Couch Function
  - 5.8. IR Un-Pairing
  - 5.9. Version Out
  - 5.10. Device Volume Setting
  - 5.11. RF Information
  - 5.12. Key function table
  - 5.13. Factory Reset

### 1. Code Entry Method

The function is set by inputting 5-digit CODE to Device for each manufacturer.

How to enter set-up Mode?

\*Press and hold the setting key for 3 seconds until Red is changed to Green LED → Enter Setting Mode.

- 1.1. UR Setting (TV).
  - 1.1.1. Enter Setting Mode.
  - 1.1.2. When the 5-digit entered in the brand list is present in the DB, the green LED turns off after blinking twice.
  - 1.1.3. If invalid Digit input is entered, Red LED and Green LED are blinked one time in sequence and then turned off.
- 1.2. When the UR setting is completed, TV Power, Vol+/-, Mute, Source key are sent in UR Code.

#### 2. Auto-Search Method

This function searches DB of Device by [CH+] or [CH-] key in turn, finds the setting numbers of the device, and sets remote.

- 2.1. Enter the setting mode.
- 2.2. Press [9][9][1] sequentially to turn off the Green LED after blinking twice.
- 2.3. Enter the [CH+] or [CH-] key.
  - 2.3.1. 3-Frame Power Code is output by [CH +] or [CH -] key input.
- 2.4. If the desired code is searched, enter the [OK] key.
  - 2.4.1. Save the searched code and exit the setting mode after Green LED blinking twice.
- 2.5. If there is no key input for 10 seconds before [OK] key is input, Red LED and Green LED are turned off after blinking one time in sequence, leaving setting mode

## 3. RF Pairing

This function is to transmit the key data of the cable device through RF

- 3.1. Process
  - 3.1.1. Enter the setting mode
  - 3.1.2. If you press [MENU] key, Green LED blinks and enters Discovery mode.
  - 3.1.3. Check the 3-digit validation code on the STB screen and enter it with the remote control.
  - 3.1.4. If the pairing is completed normally with entered input, the Green LED turns off after blinking twice.
- 3.2. Sending Data
  - 3.2.1. When the pairing is completed, all the key data related to STB transmit through RF.
  - 3.2.2. TV key data transmit through IR.

## 4. RF Un-Pairing

This function is to cancel the pairing between the STB and the remote control.

- 4.1 Enter the setting mode.
- 4.2 If you press [9][8][7], Green LED will blink twice with un-pairing.

### 5. Battery Monitor

This function is to check battery status.

- 5.1 Enter the setting mode.
- 5.2 Press [9][9][9], and check the LED status.
  - 5.2.1. If the Green LED blinks 4 times, battery status is excellent.
  - 5.2.2. If the Green LED blinks 3 times, battery status is good.
  - 5.2.3. If the Red LED blinks 2 times, battery status is low.
  - 5.2.4. If the Red LED blinks 1 times, battery status is very low.(should be replace)

### 6. Low Battery Detection

This function blinks the Red LED 5 times, each time the key is pressed and released when the battery voltage is below 2.4V.

#### 7. Couch Function

This function is to stop the IR output to reduce the battery consumption when any key is pressed for 30 seconds continuously.

## 8. IR Un-Pairing

This function is to switch the set TV key to the default state.

- 8.1. Enter the setting mode.
- 8.2. Press [9][8][6], and the Green LED blinks 2 times with IR Un-Pairing.

#### 9. Version Out

This function outputs 4-digit version of the remote control through LED.

- 9.1. Enter setting mode.
- 9.2. Press [9][8][3], the Green LED blinks 2 times.
- 9.3. Press [1] and check Red LED blink count
- 9.4. Press [2] and check Red LED blink count
- 9.5. Press [3] and check Red LED blink count
- 9.6. Press [4] and check Red LED blink count.
- 9.7. Red LED and Green LED sequentially blink 1 time and turn off. Finally setting mode is exited.
- 9.8. Example,
  - 9.8.1. Press [1], Red LED blink 1 time.
  - 9.8.2. Press [2], Red LED blink 8 times
  - 9.8.3. Press [3], Red LED blink 1 times
  - 9.8.4. Press [4], Red LED blink 0 times
  - 9.8.5. Then, Remote version is 1.8.1.0.

## 10. Device Volume Setting

This function switches the Vol +/-, Mute Key to TV volume control or STB volume control mode.

- 10.1. TV Volume Control Mode
  - 10.1.1. Enter setting mode
  - 10.1.2. Press [Vol+] key and Green LED blinks 2 times and it switch to TV Volume control mode.
- 10.2. STB Volume Control Mode(Default)
  - 10.2.1. Enter Setting Mode
  - 10.2.2. Press [Vol-] key and Green LED blinks 2 times and it switch to STB Volume control mode.

# 11. RF Information

Vendor ID	0x10D0
Vendor String	KAON
User String	RC96B
Device Type	0x01
Profile ID	0x01

12. Key Function Table

Key Functi	ion Table				
MODEL		RC96B	S(KUR1)		
FORMAT	Nec		$Data(8) + Data_Bar(8) + B$	End)	
DUTY			/ 2	•	
CARRIER	37.9 KHz				
LEAD	9.0 / 4.5 ms				
BIT "0"	0.56 / 0.56 ms				
BIT "1"	0.56 / 1.69 ms				
1st WORD	108ms				
2nd WORD	108ms (Simple Repeat)				
Repeat	9.0 / 2.25 / 0.56 ms				
Custom	C96A (h)				
NO	Function	Data (IR)	Data (RF)	TV	
1	TV Power	TV code	-	Y	
2	Input	TV code	-	Y	
3	STB Power	6B (h)	6B (h)	N	
4	Google	77 (h)	77 (h)	N	
5	Page Up	37 (h)	37 (h)	N	
6	Page Down	38 (h)	38 (h)	N	
7	Live	78 (h)	78 (h)	N	
8	Vol+	41 (h)	41 (h)	Y	
9	Vol-	42 (h)	42 (h)	Y	
10	Mute	43 (h)	43 (h)	Y	
11	Last	32 (h)	32 (h)	N	
12	Ch+	30 (h)	30 (h)	N	
13	Ch-	31 (h)	31 (h)	N	
14	Backward	4C (h)	4C (h)	N	
15	Menu	09 (h)	09 (h)	N	
16	Guide	53 (h)	53 (h)	N	
17	Up	01 (h)	01 (h)	N	
18	Down	02 (h)	02 (h)	N	
19	Left	03 (h)	03 (h)	N	
20	Right	04 (h)	04 (h)	N	
21	OK	00 (h)	00 (h)	N	
22	Shows	79 (h)	79 (h)	N	
23	Movies	52 (h)	52 (h)	N	
24	Search	3C (h)	3C (h)	N	
25	REC	47 (h)	47 (h)	N	
26	REW	48 (h)	48 (h)	N	
27	Play/pause	61 (h)	61 (h)	N	
28	FF	49 (h)	49 (h)	N	
29	1	21 (h)	21 (h)	N	
30	2	22 (h)	22 (h)	N	
31	3	23 (h)	23 (h)	N	
32	4	24 (h)	24 (h)	N	
33	5	25 (h)	25 (h)	N	
34	6	26 (h)	26 (h)	N	
35	7	27 (h)	27 (h)	N	
36	8	28 (h)	28 (h)	N	
37	9	29 (h)	29 (h)	N	
38	Set	-	-	N	

-END-

## 13. Factory Default

This function clears all data that is currently set, and then returns to the factory default state.

- 13.1. Enter setting mode
- 13.2. Press [9][8][1] and Green LED blinks 2 times. All data set in the RAM and Flash area is switched to factory default.

\* The Above soft specification may change later



Antenna Gain: -1.6dBi

Antenna Type: Chip antenna

Type of Modulation: BLE: GFSK

RF Operating Frequency (ies): BLE: 2402-2480 MHz

Antenna Gain: 0dBi

Antenna Type: Pattern antenna

Power: 94.61dBuV/m

Type of Modulation: : O-QPSK

RF Operating Frequency (ies): RF4CE: 2425MHz, 2450MHz, 2475MHz

FCC warning

§ 15.21 Information to user.

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

§ 15.105 Information to the user.

Note: 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.
- 15. RF exposure statement
- \* RF warning for Portable device:

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.

16. label statement

§ 15.19 Labelling requirements. This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.