



VIZIO (XRT271)

BLE RCU

Engineering Reference Manual



Kyung In Electronics Co., Ltd
Development Team

Mar 30th, 2021

Contents

1	FEATURE	5
2	BLE KEY CODE TABLE & DESIGN	6
3	BLE PAIRING PROCESS.....	7
4	FACTORY DEFAULT SETTING (UN-PAIRING)	7

Revision History

Version	Date	Originator	Change Description
0.1	2019.12.17	Thomas	Initial

1 Feature

- 1.1 Remote control controls TV(Set-top box, Smart TV, etc).
- 1.2 It use BLE [Bluetooth Low Energy] 4.2
- 1.3 Using Profile : HOGP(HID Over GATT Profile)
- 1.4 Device name: KIE_RCUvXX(The last two digits of the version.)
- 1.5 Frequency range: 2.402GHz ~ 2.480GHz
- 1.6 RF output power: 0dBm (MAX 4dBm)
- 1.7 Voltage of Operating: 2.2V ~ 3.2V
- 1.8 Type of modulation: GFSK(Gaussian Frequency Shift Keying)
- 1.9 Channel spacing: 2MHz (40 channel)
- 1.10 Duty cycle: Very low duty cycle
- 1.11 Simplex/duplex: Full duplex
- 1.12 Declared (RF) interface on which the apparatus is intended to operate: BLE
- 1.13 ITU code

BLE Key Code Table & Design



No	Key Name	IR code	Key Code
1	INPUT	2F	0x2F (07)
2	POWER	08	-
3	PEACOCK	EC	0xEC (07)
4	NETFLIX	EB	0xEB (07)
5	PRIME VIDEO	EA	0xEA (07)
6	DISNEY+	6F	0x6F (07)
7	CRACKLE	F9	0xF9 (07)
8	TUBI	42	0x42 (07)
9	HOME	40	0xED (07)
10	WATCH FREE	F7	0xF7 (07)
11	SETUP	4F	0x41 (07)
12	▲ (UP)	45	0x52 (07)
13	◀ (LEFT)	47	0x50 (07)
14	OK	44	0x28 (07)
15	▶ (RIGHT)	48	0x4F (07)
16	▼ (DOWN)	46	0x51 (07)
17	BACK	4A	0x29 (07)
18	MIC	2D	0x4A (07)
19	CC	39	0x39 (07)
20	CAMERA	03	0x42 (07)
21	VOL +	02	0x36 (07)
22	VOL -	09	0x37 (07)
21	MUTE	36	0x39 (07)

2 BLE Pairing Process

- Remote control automatically goes into pairing mode when batteries are inserted into a remote which is not currently paired

2.1 Press and hold [MIC] key and [MUTE] key for 5secs

3 Factory default setting (un-pairing)

3.1 Press and hold [INPUT] key and [MUTE] key for 5secs

FCC Warning Statement

FCC Part 15.19

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.

FCC Part 15.21

Any changes or modifications (including the antennas) to this device that are not expressly approved by the manufacturer may void the user's authority to operate the equipment.

FCC Radiation Exposure Statement

This equipment complies with FCC Radiation exposure limits set forth for an uncontrolled environment. This device and its antenna must not be co-located or operating in conjunction with any other antenna or transmitter.