*** USER'S MANUAL ***

FCC ID : 2AB4U-KWS82-RX

The Federal Communication Commission Statement

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 instruction, 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 of 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.**

Use only shielded cables to connect I/O devices to this equipment. You are cautioned that change or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

THIS DEVICE COMPLIES WITH PART 15 OF 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.

The antenna used for this transmitter must not be collocated or operation in conjunction with any other antenna or transmitter.

Notice : The changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

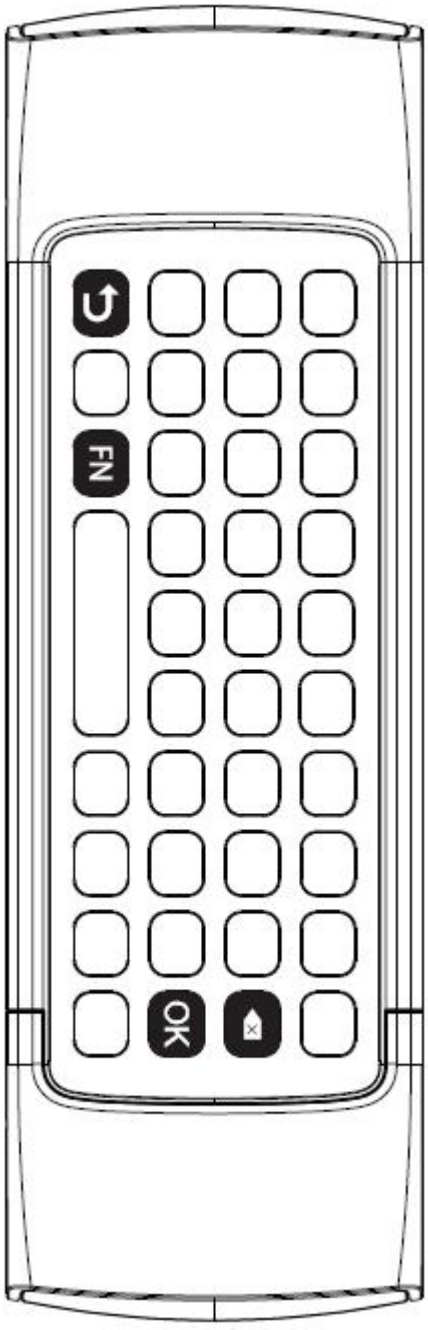
IMPORTANT NOTE: To comply with the FCC RF exposure compliance requirements, no change to the antenna or the device is permitted. Any change to the antenna or the device could result in the device exceeding the RF exposure requirements and void user's authority to operate the device.

Product Profile

1. QWERTY Keyboard for character and number
2. Both IR and 2.4G transmission

◎Controller and Dongle

Side A



Side B

RF Dongle

◎Electrical Characteristic

USB Dongle	Transmit rate	250KHz bps
	Frequency	2404 MHz – 2480 MHz
	Power out	-18dBm - 0dBm
	Function	HID-compliant device, USB Audio device
Controller	Transmit rate	250KHz bps
	Frequency	2404 MHz – 2480 MHz
	Power out	-18dBm - 0dBm
	Function	IR Key, 2.4G QWERTY Key Board

◎Key Value for Side A

1. Switch between RF mode and IR Mode

MX3N-V will work at RF mode when the batteries are inserted into. The LED is off. LED will flicker once any key is pushed. When press the key " 

", MX3N-V will move to IR mode. The LED is on, and it will flicker when any key is pushed as well.

To push the key " 

" to turn IR to RF Mode, LED will be off right now.

◎The key value is default as below:

Button	Function	Wireless Code Value		IR Code Value	Remark
		Usage Page(Hex)	Usage ID(Hex)		
	Power	01	81	02	三星用户码：0707
	Search	07	0x3A		F1
	Settings	07	0x3C		F3
	Share	07	ctrl-alt+ 0x0B		ctrl-alt-h
	Toggle	07	ctrl-alt+ 0x17		ctrl-alt-t
	Speaker Mute	07	ctrl-alt+ 0x08	0F	ctrl-alt-e
	Layout	07	ctrl-alt+ 0x1B		ctrl-alt-x
	UI	07	ctrl-alt+ 0x10		ctrl-alt-m

	Self View	07	ctrl-alt+ 0x19		ctrl-alt-v
	Connect	07	0x3B		F2
	Back	07	0x29		esc
	Disconnect	07	Ctrl+0x2A		ctrl-backspace
	Up arrow	07	52		
	Left arrow	07	50		
	ENTER	07	28		
	Right arrow	07	4F		
	Down arrow	07	51		
	Volume Up	0C	ctrl-alt+ 0x57	07	ctrl-alt-+
	Volume down	0C	ctrl+alt+0x2D	0B	ctrl-alt--
	Mic Mute	07	0x4D		end
	Privacy	07	ctrl-alt+0x13		ctrl-alt-p
	Zoom Up	07	0x4B		pageup
	Zoom Down	07	0x4E		pagedown
	1	07	1E		
	2	07	1F		
	3	07	20		
	4	07	21		
	5	07	22		
	6	07	23		
	7	07	24		

	8	07	25		
	9	07	26		
	0	07	27		
	Enable IR mode				
	Enable RF mode				
	.	07	0x37		
	@	07	Shift+0x1f		
	,	07	0x36		
	backspace	07	0x2A		
	#	07	0x54		
	A	07	ctrl-alt+0x04		ctrl-alt-a
	B	07	ctrl-alt+0x05		ctrl-alt-b
	C	07	ctrl+alt+0x35		ctrl-alt-`
	D	07	ctrl-alt+0x07		ctrl-alt-d

Note 1: Defined as Samsung IR code, Customer code is 0707.

◎RF code for Side B

1. All button at Side B are defined as 2.4G RF button, the key value refer to HID Usage Tables.
2. Press  one times, the CAPS will be locked, and press  again, it will be released.
3. Press  one times, the numbers and punctuation symbol will be locked, and press  again, it will be released.

Function Description

1. USB Dongle

Which is defined as standard HID device, as soon as plug in USB dongle, The USB Dongle will receive RF signal from MX3N-V transmitter.

2. Pair

2.1 Power on the MX3N-V, press “OK” continuously then press “TV” buttons on side A when the LED will be flicking, pair mode is on

2.2 Plug USB dongle into and wait about 3 seconds, LED will stop flicking, then pairing is successful.

◎ MX3N-V power consumption

1、Normal mode

When User operates the MX3N-V, it’s in normal mode; power consumption is less than 50mW.

2、Sleeping mode

If user hasn’t used the MX3N-V for 1 secs, it will enter sleeping mode, power consumption is less than 0.1mW.