

## Operating Instructions for Use

### 1、 2. 4G function

#### (1) The code function:

Inserted into the receiving end, Key disk "CAPS key" keyboard surface is released after 3 seconds LED starts flashing code

The success of the code keyboard surface LED off; Code 5s after unsuccessful stop code, LED is off, into sleep,

Basis having the code to enter the code function。

#### Power switch control and the sleep wake function:

1、 Power switch can control the whole power of the remote control to open and close

2、 Goes to sleep and wake up (after the success of the code):

After the button is not operated 60s into sleep, three seconds after the receiver off into sleep

3、 The receiving end does not insert code on the remote control within 3 seconds after power goes to sleep。

#### (2) Mouse Functions

01、 Using a six-axis gyroscope empty mouse X, Y coordinates relative value reported;

02、 By 2.4g usb communication transmitted to the receiving end, follow the USB HID protocol;

03、 HID MOUSE agreement follows:

Total size: 4 bytes

Byte 0: control byte, bit.0~bit.2, Sequence is left, right, middle button, bit.3 ~ bit.7 fixed to 0


Byte 1: X axis data range: +127~ -127

Byte 2: Y axis data range: +127~ -127

Byte 3: wheel data range: +127~ -127

There are mouse information change only send data

04、 open air mouse / key control: (Follow protocol USB HID KEYBOARD)

Method of operation	function	Usage page	Usage D
Left mouse button 	Left mouse button	0x09	0X01

05、 the default power-mouse is turned off, press the left mouse button to open the air mouse

06、 no operating 20 seconds after entering the low power consumption, wake air mouse function press the left mouse button;

07、 air mouse if drift, placed on a horizontal table and save the data automatically

corrects for 3 seconds;

### (3) 2.4G Key Functions

#### 1) Hair code agreement

PC remote control plane to send air protocol 2.4G wireless usb to the receiving end, the master MCU sends the key name in accordance with standard usbHID Key Description key specific USB HID packet is described as follows:

##### Keyboard format:

Total Size: 8 bytes

Byte 0: modifier keys

Byte 1: reserved

Key array: 6 bytes, Each button represents a bytes can accommodate up to six buttons.

There are mouse information change only send data

The following table represents the keyboard input report (8 bytes).

Byte	Description
0	Modifier keys
1	Reserved
2	Keycode 1
3	Keycode 2
4	Keycode 3
5	Keycode 4
6	Keycode 5
7	Keycode 6

Modify keys: Wherein the GUI key is the key microsoft banner

Bit	Key
0	LEFT CTRL
1	LEFT SHIFT
2	LEFT ALT
3	LEFT GUI
4	RIGHT CTRL
5	RIGHT SHIFT
6	RIGHT ALT
7	RIGHT GUI

The following example shows the reports generated by a user typing ALT+CTRL+DEL, using a bitmap for the modifiers and a single array for all other keys.


Transition	Modifier Byte	Array Byte
LEFT ALT down	00000100	00
RIGHT CTRL down	00010100	00
DEL down	00010100	4C
DEL up	00010100	00
RIGHT CTRL up	00000100	00
LEFT ALT up	00000000	00

#### 2) PC key name and key below report descriptor:







Remote control plane (when the button is pressed, the remote front left LED blinks to indicate)

Key	name	Function	Usage page	Usage ID	AKC
K62	MUTE	Mute	0x0C	0xE2	0x00a4
K93	REW	Rewind	0x0C	0XB4	0x0059

K95	PLAY/P AUSE	Play / Pause	0x0C	0xCD	0x0055
K97	STOP	Stop	0x0C	0XB7	0x0056
K99	FF	Fast Forward	0x0C	0XB3	0x005a
K94	RED	Red (F1 function)	0x07	0x3A	0x0083
K96	GREEN	Green (F2 function)	0x07	0x3B	0x0084
K98	YELLOW	Yellow (F3 function)	0x07	0x3C	0x0085
K100	BLUE	Blue (F4 function)	0x07	0x3D	0x0086
K70	PLAY	Play	0x0C	0XB0	0x007e
K78		Left mouse button	0x09	0x01	Left mouse button
K6	GAMES	F6 function	0x07	0x3F	0x0088
K71					
K7					
K80	UP	UP	0x07	0x52	0x0013
K84	DOWN	DOWN	0x07	0x51	0x0014
K81	LEFT	LEFT	0x07	0x50	0x0015
K85	RIGHT	RIGHT	0x07	0x4F	0x0016
K83	OK	Confirm	0x07	0x28	0x0042
K88	BACK	Return	0x0C	0x224	0x0004
K92	I	Information (F10 function)	0x07	0x43	0x008c
K87	VOL+	VOL+	0x0C	0xE9	0x0018
K16	VOL-	VOL-	0x0C	0xEA	0x0019
K89		Menu	0x0C	0x40	0x0052
K24		Home	0X0C	0X0223	0x0003
K91	CH+	CH+	0x0C	0x9C	0x00a6
K32	CH-	CH-	0x0C	0x9D	0x00a7
K15	1	1	0x07	0x1E	0x0008
K23	2	2	0x07	0x1F	0x0009
K31	3	3	0x07	0x20	0x000a
K14	4	4	0x07	0x21	0x000b
K22	5	5	0x07	0x22	0x000c
K30	6	6	0x07	0x23	0x000d
K38	7	7	0x07	0x24	0x000e
K46	8	8	0x07	0x25	0x000f
K54	9	9	0x07	0x26	0x0010
K39	GUIDE	F8 function	0x07	0x41	0x008a
K47	0	0	0x07	0x27	0x0007

K55		F9 function	0x07	0x42	0x008b
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**3) Keyboard surface (when the button is pressed, the keyboard surface LED blinks to indicate)**

Name	Usage page	Usage ID	AKC	Name	Usage page	Usage ID	AKC
ESC	0x07	0x29	0x006f		0x07	0x50	0x0015
Q	0x07	0x14	0x002d		0x07	0x51	0x0014
W	0x07	0x1a	0x0033		0x07	0x4f	0x0016
E	0x07	0x08	0x0021	PgDn	0x07	0x4E	0x005d
R	0x07	0x15	0x002e	1	0x07	0x1e	0x0008
T	0x07	0x17	0x0030	2	0x07	0x1f	0x0009
Y	0x07	0x1c	0x0035	3	0x07	0x20	0x000a
U	0x07	0x18	0x0031	4	0x07	0x21	0x000b
I	0x07	0x0c	0x0025	5	0x07	0x22	0x000c
O	0x07	0x12	0x002b	6	0x07	0x23	0x000d
P	0x07	0x13	0x002c	7	0x07	0x24	0x000e
	0x07	0x2a	0x0043	8	0x07	0x25	0x000f
TAB	0x07	0x2b	0x003d	9	0x07	0x26	0x0010
A	0x07	0x04	0x001d	0	0x07	0x27	0x0007
S	0x07	0x16	0x002f				
D	0x07	0x07	0x0020				
F	0x07	0x09	0x0022	?	0x07	0x02+0x38	0x004c
G	0x07	0x0a	0x0023	!	0x07	0x02+0x1e	0x0008
H	0x07	0x0b	0x0024	#	0x07	0x02+0x20	0x000a
J	0x07	0x0d	0x0026	\$	0x07	0x02+0x21	0x000b
K	0x07	0x0e	0x0027	%	0x07	0x02+0x22	0x000c
L	0x07	0x0f	0x0028	&	0x07	0x02+0x24	0x000e
VOL+	0x0C	0xE9	0x0018	*	0x07	0x02+0x25	0x000f
	0x07	0x28	0x0042	(	0x07	0x02+0x26	0x0010
SHIFT	0x07	0x68	0x0076	)	0x07	0x02+0x27	0x0007
Z	0x07	0x1d	0x0036				
X	0x07	0x1b	0x0034				
C	0x07	0x06	0x001f				
V	0x07	0x19	0x0032	+	0x07	0x02+0x2e	0x0046
B	0x07	0x05	0x001e	-	0x07	0x2d	0x0045
N	0x07	0x11	0x002a	=	0x07	0x2e	0x0046
M	0x07	0x10	0x0029	/	0x07	0x38	0x004c
\	0x07	0x31	0x0049	_	0x07	0x02+0x2d	0x0045
	0x07	0x52	0x0013	“	0x07	0x02+0x34	0x004b
VOL-	0x0C	0xEA	0x0019	‘	0x07	0x34	0x004b
PgUp	0x07	0x4B	0x005c	;	0x07	0x33	0x004a

CTRL	0x07	0x01	0x0071	.	0x07	0x37	0x0038
Caps	0x07	0x39+69		:	0x07	0x02+0x33	0x004a
Alt	0x07	0x04	0x0039	WWW.	0x07	0x1ax3+0x37	0x0033x3+0x0038
LANG	Do not send code value, see the following Function			@	0x07	0x02+0x1f	0x0009
,	0x07	0x36	0x0037	.COM	0x07	0x37+0x06+0x12+0x10	0x0038+0x001f+0x002b+0x0029
SPACE	0x07	0x2C	0x003e				

4) Key Function:











- 1、 the shift key SHIFT (press SHIFT releasing press other keys to achieve the shift key Function)
- 2、 Caps Lock CAPS
- 3、 Ctrl key functions, with standard computer keyboard as a combination of the above
- 4、 AAlt key functions, with standard computer keyboard as a combination of the above

5)、 PC remote control plane surface with the same key (2.4G code as)

Remote control surface: up, down, left, right、 OK、 VOL+、 VOL-、 1、 2、 3、 4、 5、 6、 7、 8、 9、 0

Keyboard surface: up, down, left, right、 ENTER、 VOL+、 VOL-、 1、 2、 3、 4、 5、 key 6、 7、 8、 9、 0

6)、 After LANG key, pressing does not send code, but the key code transmitting mode within the table below as follows:

key	Hair code mode	Usage page	Usage ID	key	Hair code mode	Usage page	Usage ID
	CTRL+SHIFT+1	0x07	0x03+0x1E		CTRL+SHIFT+6	0x07	0x03+0x23
	CTRL+SHIFT+2	0x07	0x03+0x1F		CTRL+SHIFT+7	0x07	0x03+0x24
	CTRL+SHIFT+3	0x07	0x03+0x20		CTRL+SHIFT+8	0x07	0x03+0x25
	CTRL+SHIFT+4	0x07	0x03+0x21		CTRL+SHIFT+9	0x07	0x03+0x26
	CTRL+SHIFT+5	0x07	0x03+0x22		CTRL+SHIFT+0	0x07	0x03+0x27

**FCC Statement:**

This equipment has been tested and found to comply with the limits for 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 to an outlet on a circuit different from that to which the receiver is connected.

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.

**Note: Modifications to this product will void the user's authority to operate this equipment.**

**IC Statement :**

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device."

**IC Déclaration:**

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

**Remarque: Toute modification de ce produit annule l'autorité de l'utilisateur à utiliser cet équipement.**