

【 OPERATION 】

The detail operation is described and illustrated as below:

Please refer to Figure 1 , which is the front views of the device. They include, 1) the remote control unit, 2) the USB receiver dongle.

- Remote control unit, which has : an array of cursor control buttons 11, Cursor control button array includes four directional buttons, which are upward button(YU button)114, downward button (YD button)111, leftward button (XL button)112, and rightward button(XR button)113 ; Also, if press simultaneously the upward button 114 and the leftward button 112, the cursor will move in the diagonal direction of upper left. If press simultaneously the upward button, 114 and rightward button 113, the cursor will move in the diagonal direction of upper right. If pressed simultaneously the downward button 111 and the leftward button 112, the cursor will move in the diagonal direction of down left. Simultaneously press the downward button 111 and the rightward button 113, the cursor will move in diagonal direction of down right.

Mouse click buttons 12 , which include one (Left mouse button)¹²¹、 one (Right mouse button)¹²². This has functions equivalent to regular mouse right/left click buttons. Please refer to Figure 2, on the reverse side of the remote control unit, has a battery compartment for power supply 19(Use two regular AAA battery or rechargeable ones) ; Connection button 18 , is used to establish wireless link with the receiver unit 2.

Please refer to Figure 3, which is the front view of the receiver unit. This receiver unit include : 1) Connection button 22 , which is used to establish link with the remote control unit ; 2) USB interface 21 , which is used to connect to the USB port of a compute, via USB interface, the control signals are passed to the computer to control its operations.

- The Mode button 13 , is used to switch the operation mode between the "PRESENTER Mode" and "MEDIA Mode" ;

- The Green LED 14 , flash in accordance with the mode switch button 13, when the remote is in "PRESENTER Mode", the LED 14 is off ; when the remote is in "MEDIA Mode" ,the LED 14 is on and

flashing ;

On the side of the remote control unit has :

- Laser pointer button 15 , when pressed, at the front of the remote control unit, laser out 16 will emit a laser beam and project a light spot on screen.
- Function buttons 17 , one of which is a “Up button” 171 and the other is a “Down button” 172 , their function are equivalent to “Page Up & Scroll Up” and ”Page Down and Scroll Down” in a Windows environment in “PRESENTER MODE”.

In “ MEDIA MODE”, when the upward button 114 is pressed, the Media Player application software in Window XP environment will be launched automatically.

When left mouse Click button 121 is pressed , the Media Player will start playing multimedia content. Pressed 121 again, it will pause.

When right mouse click button 122 is pressed the Media Player will stop playing.

The leftward button 112 is corresponding to backward or previous track function and the rightward button 113 is used to forward or next track function.

When Laser pointer button 15 is pressed in “MEDIA MODE” it functions as “MUTE”.

The UP button 171 and DOWN button 172 are used to

control volume up and down accordingly.

Please refer to Figure 4, which is the circuitry block diagram. Taking one transmission cycle as example, pressed buttons described here within trigger the micro-controller 1. The micro-controller receives the signals and interpreted by the embedded firmware 4. The micro-controller then generates a control signal and encodes before radiate out through the RF transmitter 5. The Receiver Unit receives 2 the signal through its RF receiver 6. The micro-controller in Receiver Unit 2, decodes the signal with the embedded firmware. Via USB interface 8, it sends the control signals to the I/O 9 of computer 3 to generate corresponding control.

【 ILLUSTRATION 】

Figure 1 , Front view of the Remote Control unit.

Figure 2 , Reverse view of the Remote Control unit.

Figure 3 , Front view of the Receiver unit.

Figure 4 , Operation block diagram.

【 SYMBOL DESCRIPTION 】

1 Remote Control Unit

11 Cursor Control Array

- 111 Downward Button
- 112 Leftward Button
- 113 Rightward Button
- 114 Upward Button
- 12 Mouse Click Buttons
 - 121 Left Mouse Click
 - 122 Right Mouse Click
- 13 Mode Switch Button
- 14 LED Indicator
- 15 Laser Pointer
- 16 Laser out
- 17 Function Button
 - 171 Up Button
 - 172 Down Button
- 18、 22 Connect Button
- 19 Power Source Compartment
- 2 Receiver Unit
 - 21 USB
- 3 Computer
- 4、 7 Micro-controller
- 5 Transmitter
- 6 Receiver
- 8 Interface
- 9 I/O