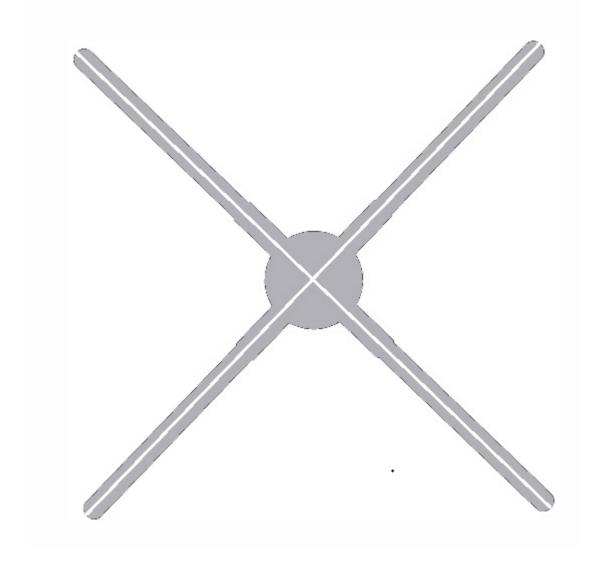
# **Smart65 3D Holographic Photon Display**



## **User Manual**

Warning: Please read the manual carefully before using the product.

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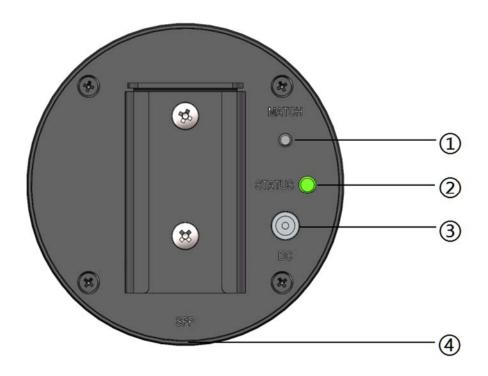
### **Notes**

- 1. The Fan shall be installed away from obstacles. Installed first and then powered on to avoid damage to the blades.
- 2. There is a risk of injury to people when the fan blades rotate at high speeds during device operation. A safe distance should be maintained from the device during operation, and the surrounding environment should be safe during installation to avoid injury.
- 3. Fiber optic cables are fragile products, so they should be avoided from bending forcefully during the wiring process to prevent equipment from not displaying.
- 4. When the fan is working, do not disassemble the fan, otherwise it may cause abnormal operation on the fan.
- 5. Keep away from high temperature and high humidity environment. Do not use it outdoor if it is raining.
- 6. Pay attention to maintenance and clean the fan regularly.

## Parts list

No.	Items	Quantity	
1	Device Host	1	
2	Fans	4 (Ax2, Bx2)	
3	Power Adapter	1	
4	Optical Module	1	
5	Optical Fiber	1	
6	Wall mounted fasteners	2	
7	Hexagon Socket Bolt	2	
8	Countersunk Screw	12	
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## **Interface Description**



- ① Function button: Test function.
- ② Indicator light: Indicate device status.
- 3 Source interface: Connect to the power adapter to supply power to the device.
- ④ Fiber optic input port (located on the side of the device): Connect to the fiber optic output port of the previous device or video box (HDMI) during cascading when connecting to the fiber optic.

### **How to Install**

- 1. Display Screen Installation
- 2. Fix the fixed parts directly to the wall with expansion screws or ordinary screws for the convenience of subsequent parts installation and fixation, as shown in Figure 1-1.

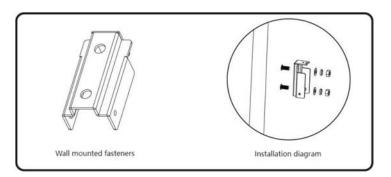


Figure 1-1

3. Take the host and light board, place the A light board in position A, place the B light board in position B, and tighten the screws, as shown in Figure 1-2.

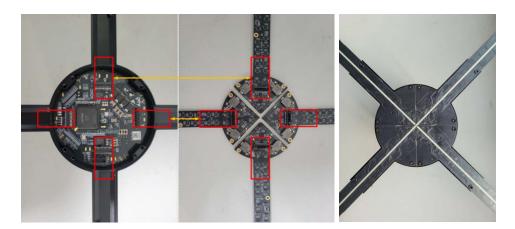


Figure 1-2

4. Insert the display device into the fixing part and lock the screws to complete the installation, as shown in Figure 1-3.

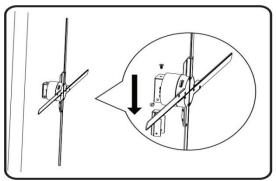


Figure 1-3

5. Take the optical module and fiber, insert the optical module, and connect the fiber, as shown in Figure 1-4.

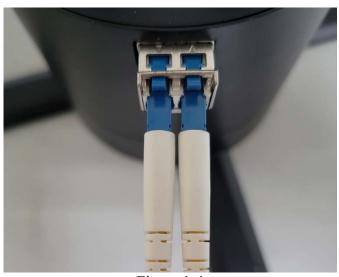


Figure 1-4

6. Take the power adapter, power on the device, and turn on the breathing light, as shown in Figure 1-5.

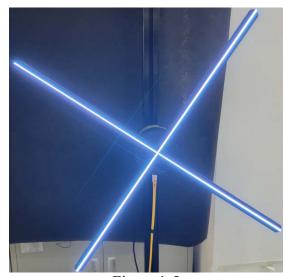


Figure 1-5

### Wiring Instruction

The back of the device contains two fiber optic interfaces, one for output and one for input. The " $\triangle$ " on the optical module represents the fiber optic signal input and the " $\nabla$ " represents the fiber optic signal output. When using screen connection, the output of the SmartBox video control box needs to be connected to the fiber input port of the first device through optical fiber, and then the fiber output port of the first device is connected in series with the input port of the next device, cascading in sequence. The fiber output of the last device is then connected back to the input of the video control box, forming a closed loop, as shown in Figure 1-6.

Please refer to the "SmartBox Video Box (HDMI) Product User Manual" for more information on the use of SmartBox video boxes.

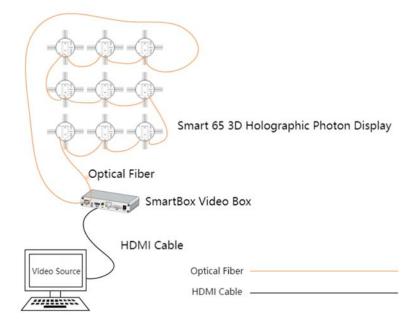


Figure 1-6

## **Holo Wall Operation**

#### 1, Holo Wall Installation

Taking the screen connection of four devices as an example.

- (1) Fix the base according to the corresponding spacing, and add shims to the first one (1-1) in the upper left corner to raise it, without raising it in adjacent positions, and so on, as shown in Figure 2-1 and Figure 2-2.
- (2) The SYN OUT of device 1-1 is connected to the SYN IN of device 1-2 and the SYN OUT of device 1-2 is connected to the SYN IN of device 2-2. The SYN OUT of device 2-2 is connected to the SYN IN of device 2-1, then from the SYN OUT of device 2-1 to the SYN IN of device 1-1:



Figure 2-1

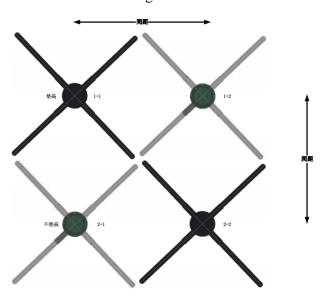


Figure 2-2

### **Instruction of Use**

#### 1. Clients:

#### (1) Software Upgrade

The upper computer software can upgrade the video box, rotor and stator software. Firstly, you need to select the upgrade type and fill in the stator ID. The first device connected to the control box is 0x02, which is accumulated in sequence. Then select the upgrade file and click the one click upgrade button. As shown in Figure 3-1:



Figure 3-1

#### (2) Set the cascading order for holo wall linking

Click the "Add" button on the main interface of the software, and then enter the initial setting interface for the screen connection. Set the number of rows and columns for screen linking based on the actual combination method. In this step, you can rename the current screen configuration and directly replace the demo text in the left name bar, as shown in Figure 3-2:

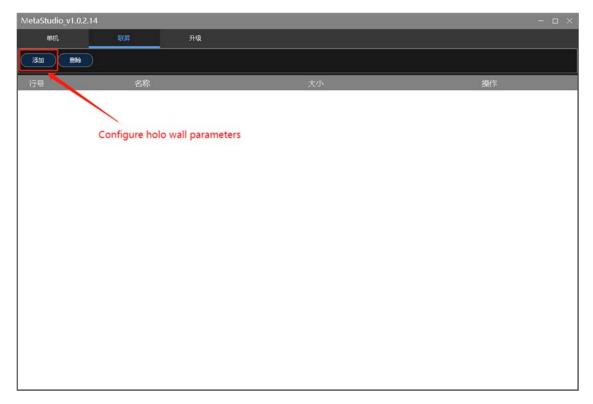


Figure 3-2

Then number the device in the order of fiber optic connection. The first holographic photon screen connected to the control box is numbered 1, the next holographic photon screen connected to number 1 is numbered 2, and so on. The numbering method is to click on the corresponding number from the left box in the following figure, and then click on the corresponding circle in the preview image on the right to edit the holographic photon screen model at that position as the corresponding number. Click the left mouse button to select, and right-click on the preview image on the right to clear the corresponding numbered numbers, as shown in Figure 3-3:



Figure 3-3

The "Height" button next to the row is used to switch the stacking order of devices. After clicking, the current cascading order will switch. Through this function, users can keep the preview image consistent with the actual stacked order of the linked screen, facilitating subsequent parameter configuration. After completing the configuration, click "Save", as shown in Figure 3-4.

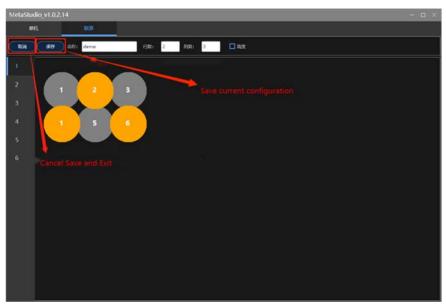


Figure 3-4

#### (3) Initialize screen parameters

Select a layout configuration that is consistent with the actual installation, click the "Details" button in the configuration list to enter the parameter configuration interface, as shown in Figure 3-5.

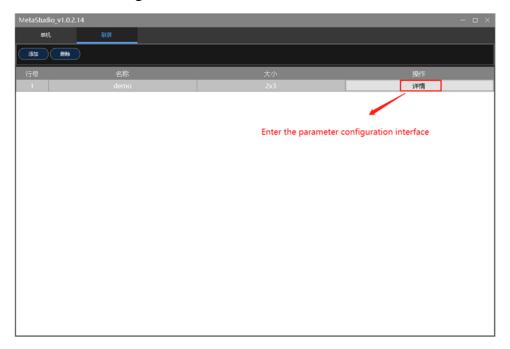


Figure 3-5

Click "Initialize", the software will calculate the parameters of the linked screen device according to the settings and issue it. The device will cut the screen based on the parameters and jointly complete the linked screen display, as shown in Figure 3-6.

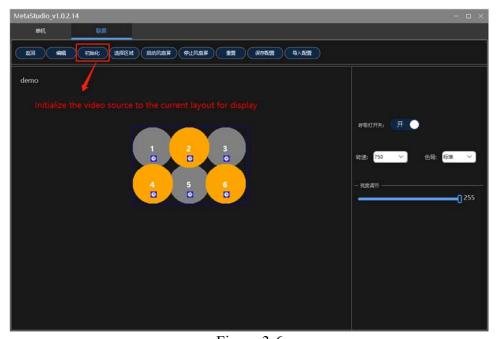


Figure 3-6

#### (4) Start, Stop Device

Click the "Start Fan Screen" button, and the entire screen will start and display the screen; Click "Stop Fan Screen" to stop all devices, as shown in Figure 3-7.

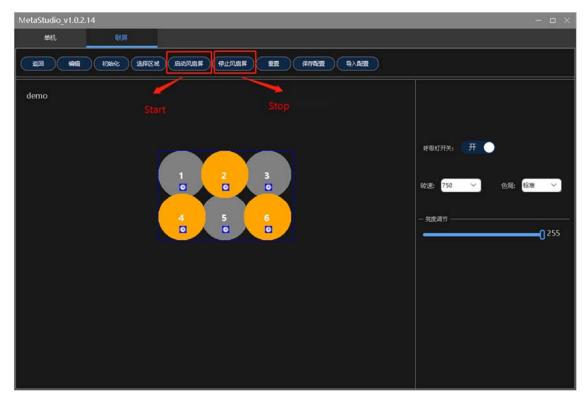
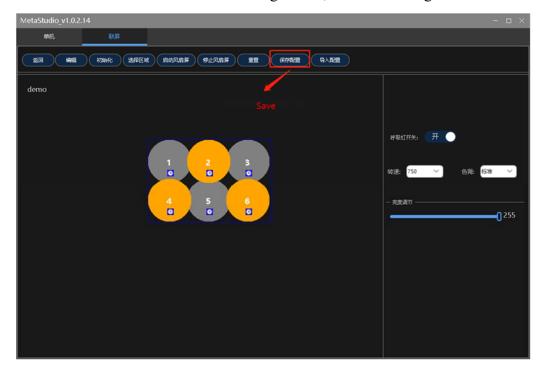


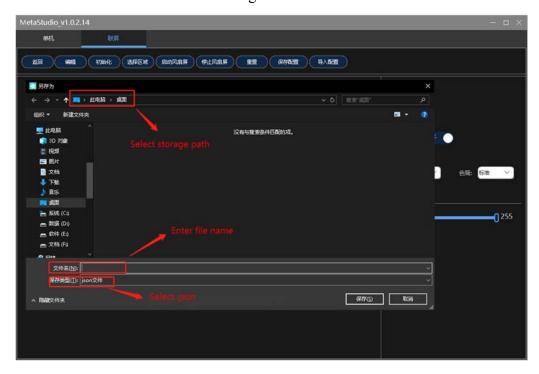
Figure 3-7

#### (5) Save, Import configuration

Click the "Save Configuration" button to save the entire screen parameters to a local folder on the PC side. In the pop-up file box, specify the storage path and file name, and then click "Save" to save the current configuration, as shown in Figures 3-8 and 3-9.



Figures 3-8



Figures 3-9

#### (6) Import Configuration

Click the "Import Configuration" button to import the configuration from the local folder on the PC side. In the pop-up file box, specify the storage path and file name, and then click "Save" to save the current configuration, as shown in Figure 3-6, Figure 3-10, and Figure 3-11.

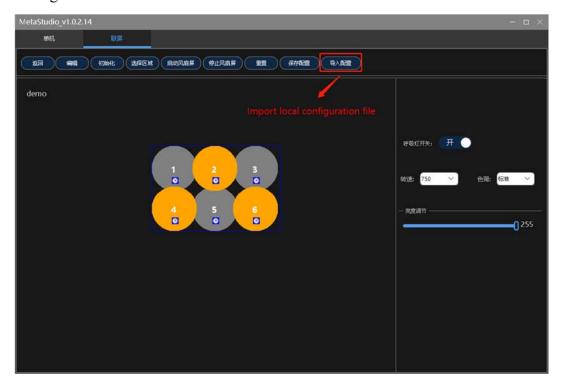


Figure 3-10

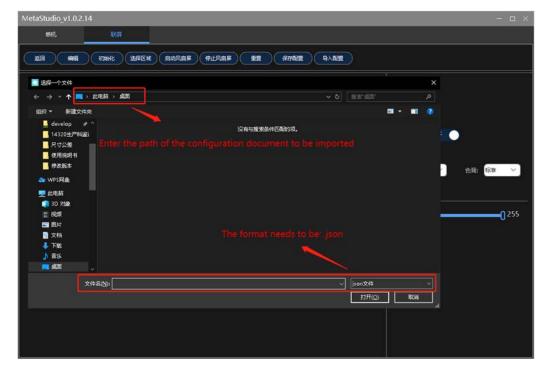


Figure 3-11

#### (7) Adjusting the holo wall area

Users can adjust the display range of the linked screen through the "Select Area" function. This function is based on the current operation of the PC display screen. Select an area on the PC display screen to display on the connected device, as shown in Figure 3-12.

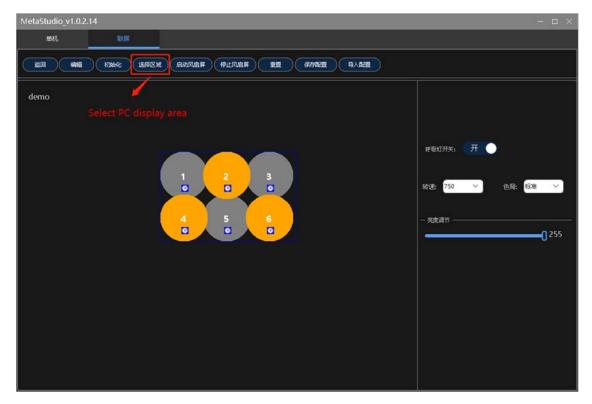


Figure 3-12

#### (8) Configure holo wall parameters

This function can achieve precise adjustment of parameters such as brightness and angle for a single device in the linked screen. Click on the gear icon of the corresponding device in the device preview area to enter the single device parameter configuration interface, as shown in Figure 3-13.

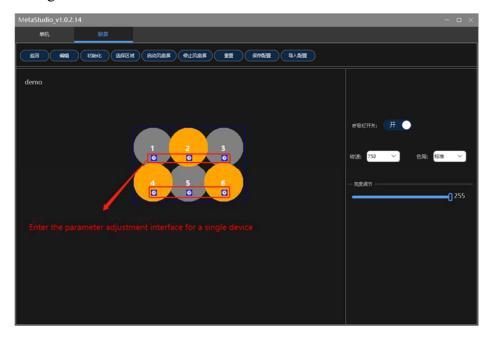


Figure 3-13

The operation panel in area 1 of the following figure can adjust the horizontal and vertical positions of the screen; The operation panel in area 2 can adjust the deflection angle and brightness of the device display screen, as shown in Figure 3-14.



Figure 3-14

The operation panel in Zone 3 can adjust the integration parameters of the device and the overlapping part of the device, as shown in Figure 3-15.

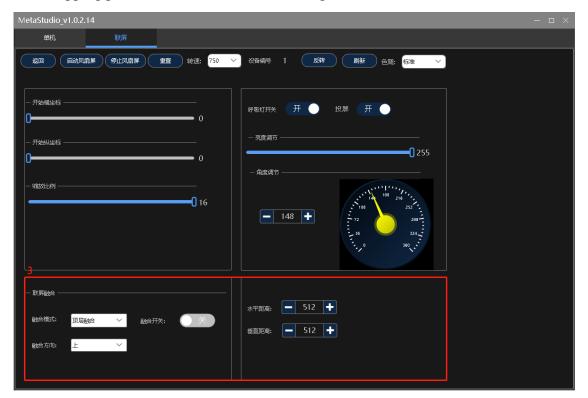


Figure 3-15

In the integration mode, select the integration mode through the drop-down menu, which includes "Top level fusion" and "Bottom level fusion". The fusion direction includes four directions: up, down, left, right.

Top level fusion refers to the gradient set for the fusion image in the specified area of the current specified device, which will take effect on the fused half arc.

Bottom level integration refers to the current designated area of the device being set to all black, which will take effect in the fused half arc.

After selecting the fusion mode and direction, the fusion switch needs to be turned on for the fusion effect to take effect. By changing the position of the fused half arc through "horizontal distance" and "vertical distance", the expected display effect can be achieved.

## **Troubleshooting**

1. After turning on the power, the LED on the fan blade does not light up or the indicator light on the back does not light up

**Solution:** Check if the power supply is connected properly and if the circuit is normal.

2. Rotating display with monochrome circles

**Solution:** There may be individual LED damage, please contact the supplier for repair.

3. Unable to start rotation

**Solution:** After power outage, power on again. If the problem persists, please contact the supplier.

4. After starting the rotation, there is no screen display

**Solution:** Check if the HDMI cable is connected correctly. If it cannot be resolved, please contact the supplier.

5. The client cannot control the holographic photon screen

**Solution:** Check if the fiber optic cable is properly connected and the wiring sequence is correct. If the problem persists, please contact the supplier.

# **Product Specification**

Product Model	Smart65 Holo Wall Display
Resolution	1280*1280
Device area	650mm±1mm
Number of light strips	4
Number of single lamp beads	320
Input voltage	32V
Device Speed	750RPM/900RPM
Video I/O interface	LC optical Interface
Video input resolution	1920*1080@60fps
Real time screen projection	Support
Rated power	73W