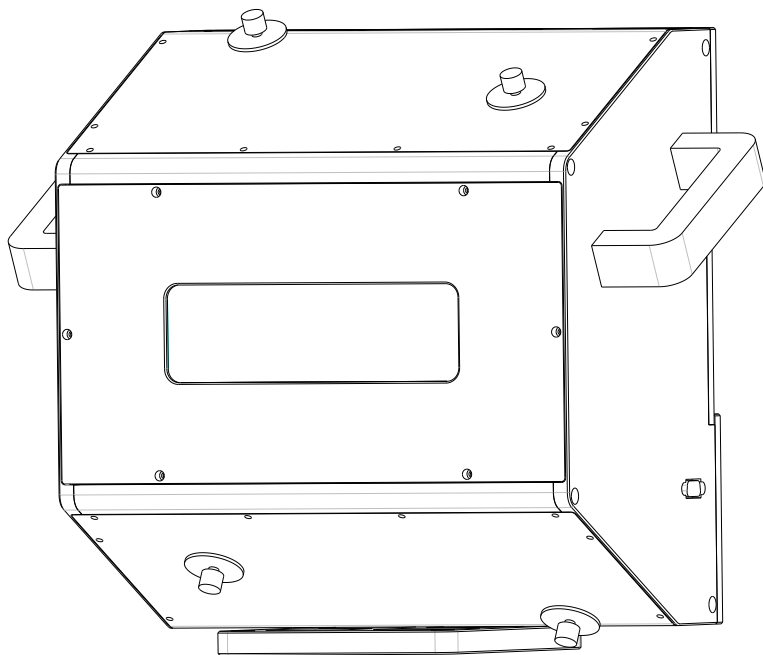


## Triple optical path polarized 3D system

### User Manual

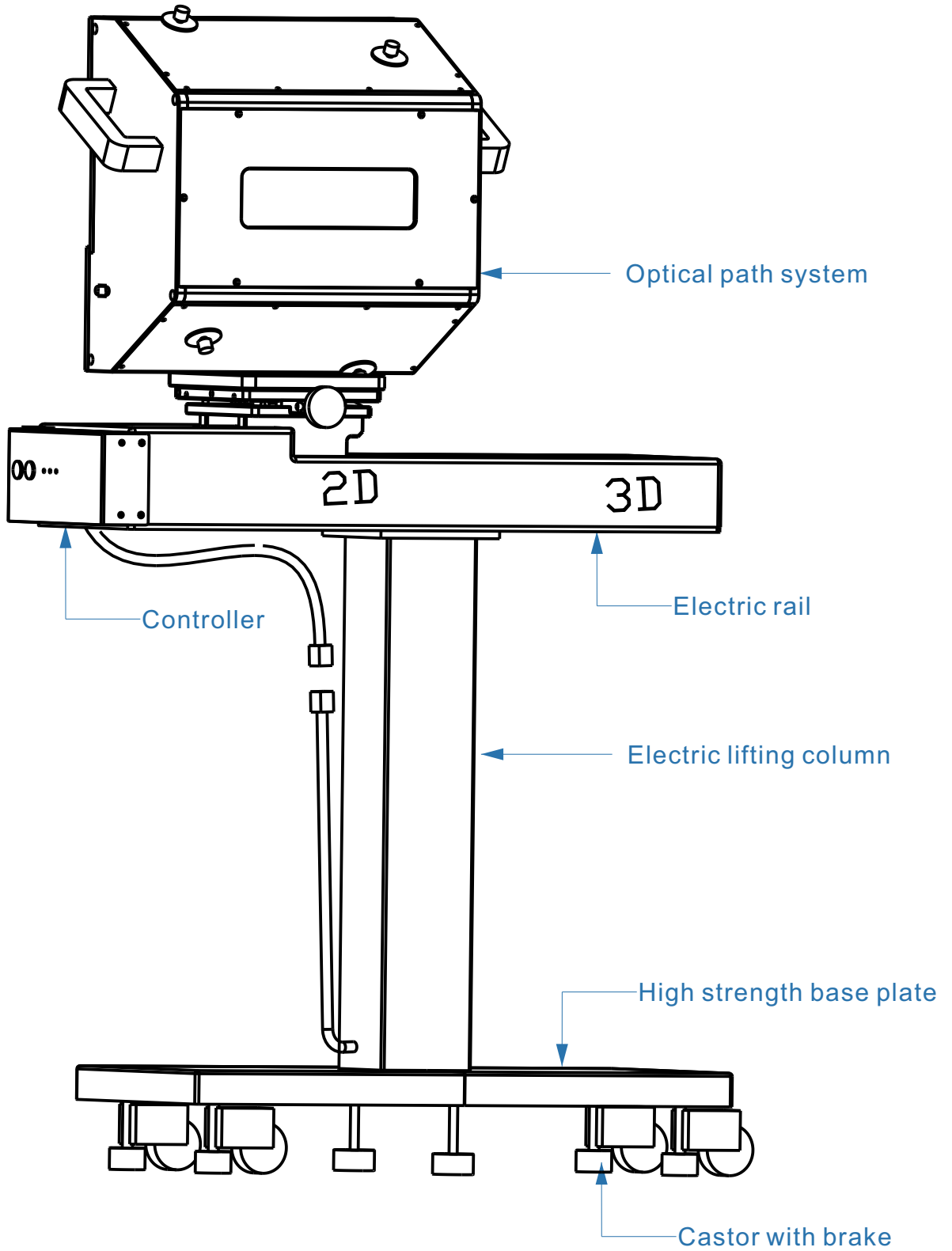


- Model : HUB005
- Please read the user manual carefully before using the product
- Please keep the user manual properly

Triple optical path polarized 3D system is a passive 3D system special for single projector. It can be easily installed on the projector's housing. HUB005 polarized system adopt multiple optical paths technology, to use more than 50% light energy which lost in past technology again, improved to double light efficiency. make high light 3D projection with only one projector, and reach the effect with accurate restore color.

HUB005 with the seal dustproof technology, to keep stability operation and excellent effect of the optical path system. Polarized lens with vacuum coating processing ,resistance to scratching, not easy to stain, maintain clean and convenience customer. Modular design, easy to install, detect and ruled out the faults.

- Easy installation method :  
Adapting modular electric height bracket, make quicker and easier installation;
- Simple Connection:  
There is only 2-4 connecting cables to finish the connection between the whole system and digital projector;
- 2D->3D Transition:  
The Beam splitter unit installed in front of the projection window can intelligently recognize 2D and 3D state, easy to operate ;
- Easy maintenance:  
LCD beam splitter unit can be cleaned and maintained quickly, polarized glasses decrease operation and management cost.



Mode	HUB005
Polarized Type	Circular Polarized
Transmittance	68%±2%
Light Efficiency	33%±1%
Ghosting Rate	<1
Response Time	<150μs
Contrast	150:1
Frequency	96~480Hz
Thow Ratio	1.2:1
Compatible Glasses	Passive Circular Polarized 3D Glasses
Working voltage	DC24V
Working current	100mA
Working temperature	0~60°C
Working humidity	20~90%rh
Storage temperature	-20~85°C
Storage humidity	10~95%rh

## Prerequisites

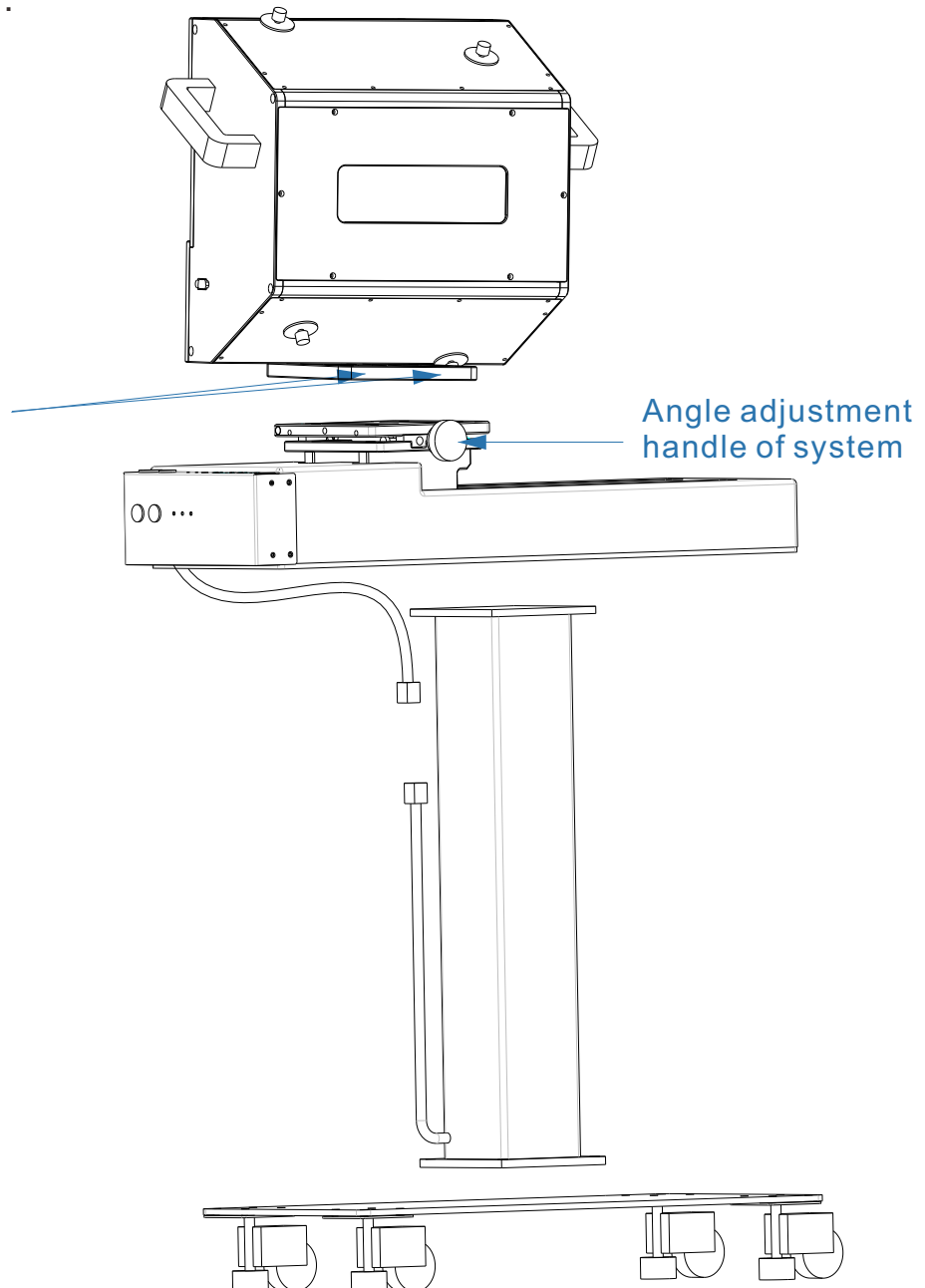
- 1)Projection window must larger than 400×400mm
- 2)Distance between projector lens and projection window at least 300mm
- 3)Keep in the same level between lens center and projection window center.
- 4)Throw ratio more than 1.2:1
- 5)The floor must be steady and smooth to put the projector's housing, no barriers.

## Notes

- 1) The wight of system about 20kgs,must be careful when install, suggest two person to operate.
- 2) It contains fragile components, please handle with care to prevent shock and drop.
- 3) Strictly forbid to touch any optical devices by hand directly, In case of damage anti-reflection coating to affect light transmittance.
- 4) The system installation should be stable and safe, can't be loose and making offset
- 5) After finished, please retain original package properly.

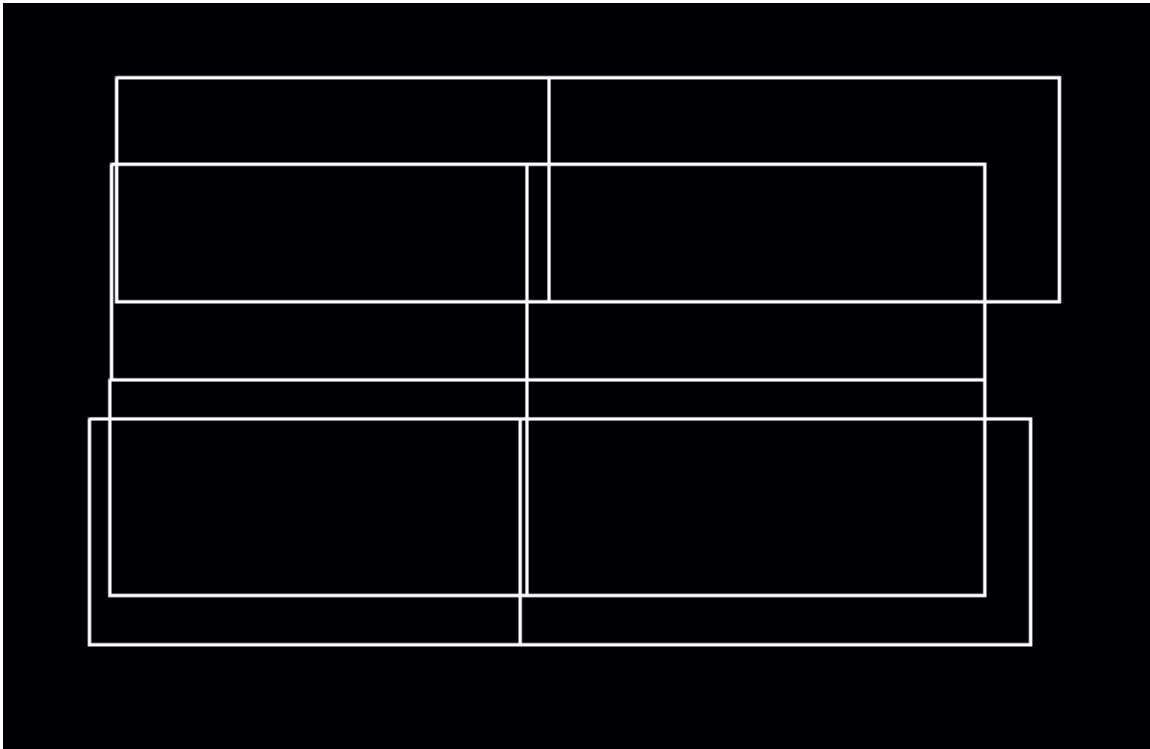
- 1) Open all packages, checking each part to see whether have any losses and damages.
- 2) Take out the base plate, fixed 4 castors on the placeholder; turn over the plate to the reverse side, hold on the brake to stop castor , fix the electric lifting column on the floor; then fix the electric rail on the top of column.
- 3) Bring out the main engine by two person, then put it on the base of electric rail. Connecting the main engine and the base firmly with 2pcs M8\*16 screws.

Connecting the main engine and the base firmly with 2pcs M8\*16 screws

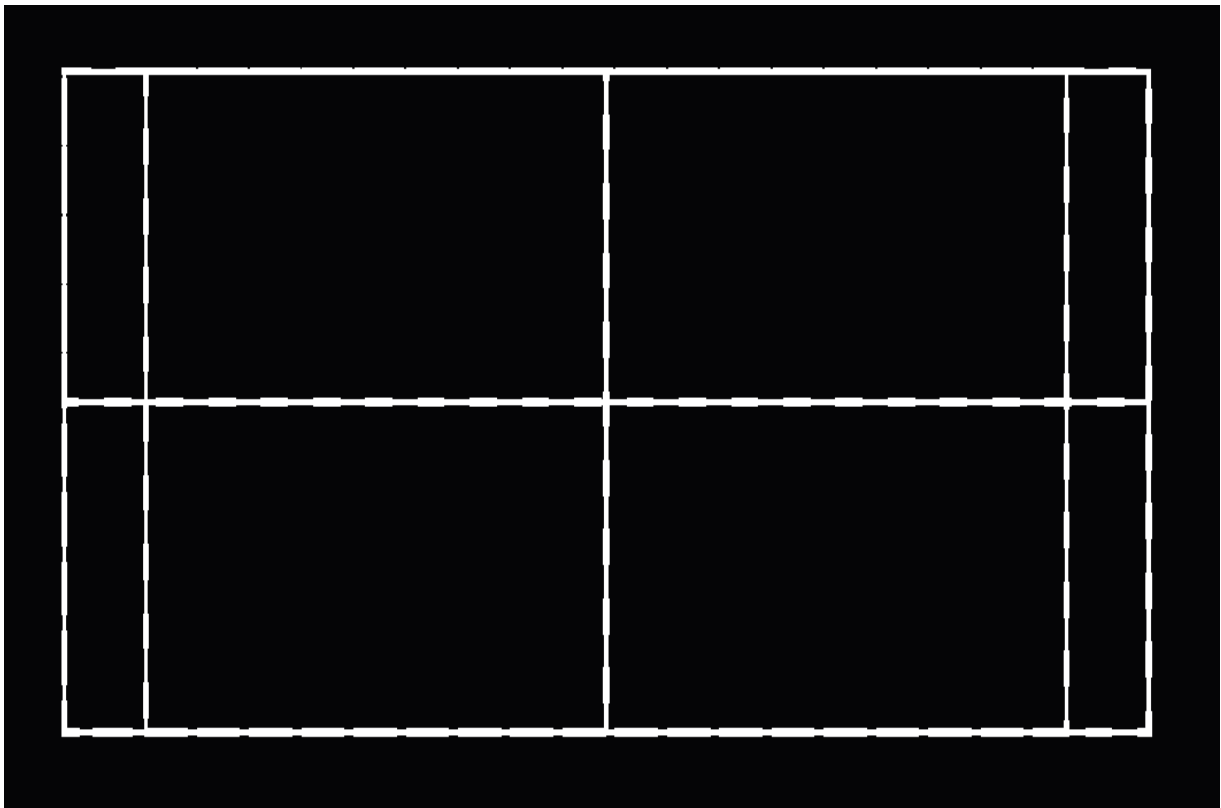
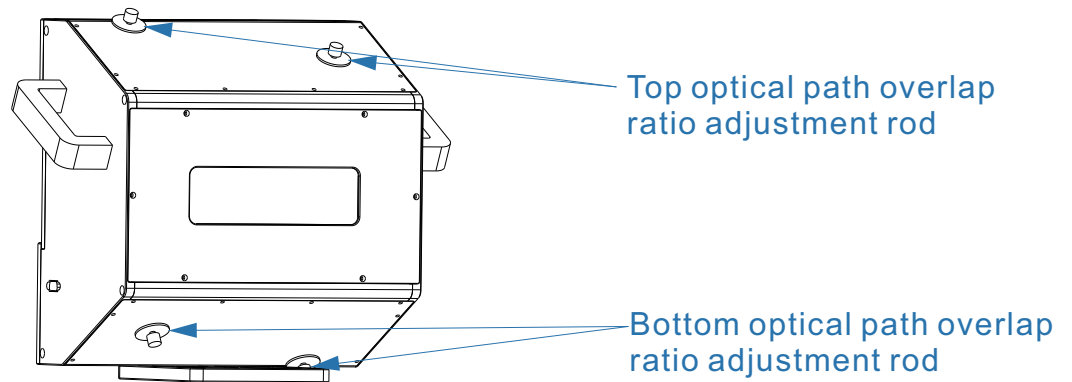


4) Loose the brake of castor, move the system to the front of projector, connecting the lifting column and the controller, then power on; press the controller button to adjust the system to the appropriate height, remove the protective board of the optical path and the incident window, adjust the image by moving around to pass the incident window of 3D system completely, and make the incident light spot at the center of the incident window, stop the castor by brake.

5) Project the cross-hair template for testing , there would appear three images: center optical path, top optical path, bottom optical path.



6)Through the “top optical path overlap ratio adjustment rod” and the “bottom optical path overlap ratio adjustment rod ”which in the back of system, make three images overlap on the screen.



Good alignment of the three optical paths

- 7) Properly connected all signal cables, switch 2D/3D channel, and don't touch the projector lens, projector's body , projector's housing . Observe whether the system will be moved around as the channel switching.
- 8) Enter the projector 3D setting page, set the dark time as  $900\mu\text{s}$ , delay time as  $-120\mu\text{s}$ . Playing 3D films, wearing polarized glasses, to observe whether the 3D effect and L/R switching is normal.
- 9) Check whether each screw is fastening, cables connection is reliable, castor brakes is locked, then disconnect the controller and electric lifting column. Finish the installation.

Clean up dirt and stains on the screen, please follow below instructions:

- 1) There is sophisticated optical anti-reflection coating on the LCD light valve, it is forbidden to touch the surface directly by hand.
- 2) Use flashlight and other highlight tools to check whether the surface of LCD light valve is clean.
- 3) Wear gloves before cleaning, blow away the dust on the surface of the LCD light valve by blowing mouth, gently wipe the fingerprints or stain on the surface of the screen in linear or circular way with microfiber cloth.
- 4) Forbid to use any organic solvent, Alcohol and other chemical reagent to wipe the surface of LCD light valve.

**Any questions, please feel free to contact with us.**