



INTRODUCTION OF SPHERE DISPLAY

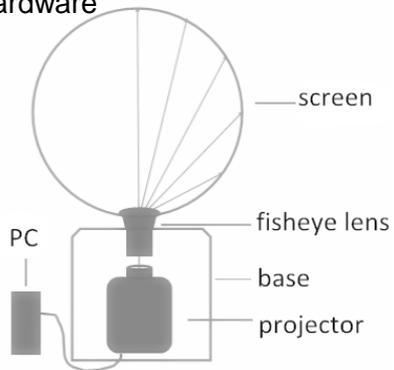
E-Sphere design and develop new platforms for the display of digital content outside of the confines of traditional flat screen media.

Our range of spherical display systems let you deliver a 360 video simply and quickly across a range of commercial and artistic projects.



SPHERE DISPLAY COMPONENTS

➤ Hardware



- Software: operation software
- Contents

FEATURES AND FUNCTIONS

- 360° dynamically display
- Interactive multi-touch system on sphere
- Compatible with other multimedia devices
- Easy operation and low energy consumption
- Widely used in the education, exhibition, advertising, entertainment

KEY TECHNOLOGY AND UNIQUE PATENT

- Seamless hard sphere
- Brightness enhancement system for spherical display (60% improvement for the original projector)
- Superposition technology double lumens of the aperture (support 12 sets of projectors)
- Interactive multi-touch system on sphere
- Compatible with other screen

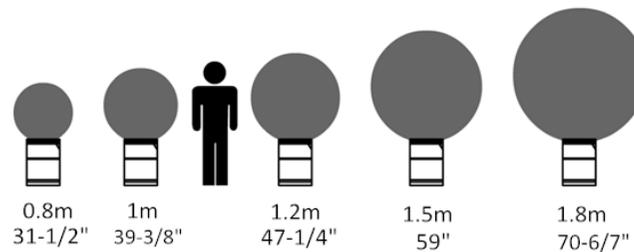
SPHERE DISPLAY (HARDWARE/SOFTWARE) TECHNICAL COMPOSITION

category	Item	Specification
Hardware	Spherical screen	Hard sphere Φ :0.64m-1.8 m /25"-70"
		Inflatable sphere Φ :1.8m-25m /70"-980"
	Fisheye lens	YF-FLS series
	Projector	Brightness: 4000-10000 lm
		Resolution:WUXGA/1080P/XGA Display technology: 1DLP/3LCD
	Graphic workstation	PC/ tablet/Ipad
software	Base	Custmizeable
	E-sphere Player	Automatically converts visual sources in any format for playing on spherical screen
	Efee Touch	Interactive Multi-touch system on sphere
	Calibration Grid	Used in position calibration and multiple-projectors superposition for spherical, annulus or cylindrical screen.

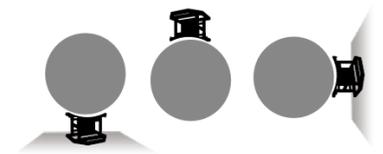
INTRODUCTION OF HARDWARE

➤ SPHERICAL SCREEN

Item	Hard Sphere	Inflatable Sphere
Material	acrylic, optical resin	flexible PVC
Craft	seamless	seaming
Projection Method	interior rear	rear/front
Diameter	0.64m-1.8m 25"-70"	1.8m-25m 70"-980"



Hard seamless sphere



Any orientation- even during operation

➤ FISHEYE LENS

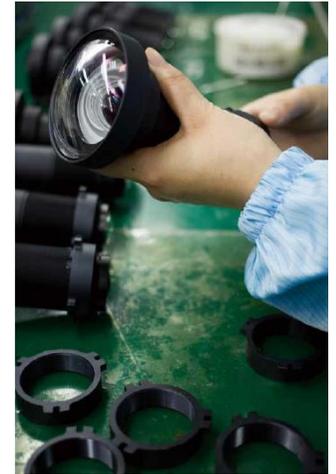


In 2007, E-Sphere top-notch Optical experts designed and developed the first projector fisheye lens in China after 3 years dedication. In 2008, it passed the test of 2008 Beijing Olympic Plaza for spherical display items.

E-Sphere built two series of fisheye lens (YF-FLA series & YF-FLS series) for different spherical projection applications.

YF-FLA series are widely used in digital planetarium, dome cinema, spherical virtual simulation. Especially for digital planetarium, which is high-demanding in brightness uniformity, resolution uniformity, distortion and aberration.

YF-FLS series are mainly used in interior rear projection sphere, which demands not only high image quality, but also particular distribution of brightness on sphere.



INTRODUCTION OF SOFTWARE

➤ Software -E-Sphere Player

Category	Item	Specification
Software	E-sphere Player	<p>1.Contains two parts:</p> <ul style="list-style-type: none"> (1)E-sphere Player Item Automatically converts the visual resources into .esi format for playing (2)E-Sphere player Supports the .esi format files created by E-sphere Player Item <p>2.Founctions</p> <ul style="list-style-type: none"> (1)supports video, photos, motion graphics, text and any other visual resources (2)supports video signals captured by camera/Video Capture Card (3)supports Serial Port and Network communication (4)real-timely converts the visual resources (5)synchronously display up to 10 windows from different visual resources at different locations on one screen (6)can add other visual resources when playing



single screen



multi-screen



multi-window

➤ Software-Calibration Grid

Category	Item	Specification
software	Calibration Grid	<ul style="list-style-type: none"> (1)Used in position calibration and multiple-projectors superposition for spherical, annulus or cylindrical screen. (2)Accurate calibration data can be obtained from projection grids generated by the software . (3)Supports superposition of 12 sets of projectors(11 times brightness enhancement)



➤ Software-EfeeTouch

Category	Item	Specification
Software	EfeeTouch	<p>(1)Interactive multi-touch system on sphere Sphere is a multi-user, multi-touch-sensitive spherical display in which an infrared camera used for touch sensing shares the same optical path with the projector used for the display.</p> <p>(2)Connect sphere with other multimedia display devices,such as annulus screen, digital projection sandbox, electronic whiteboard, large screen LCD TV etc.</p> <p>(3)Couple sphere with flat touch screen displays, tablets, ranging from a single control position to multiple stations.</p> <p>(4)Combined with gestured-based technologies like Kinect,</p> <p>(5)Supports Serial Port and Network communication.</p> <p>(6)Other customized interactive solution is available.</p>

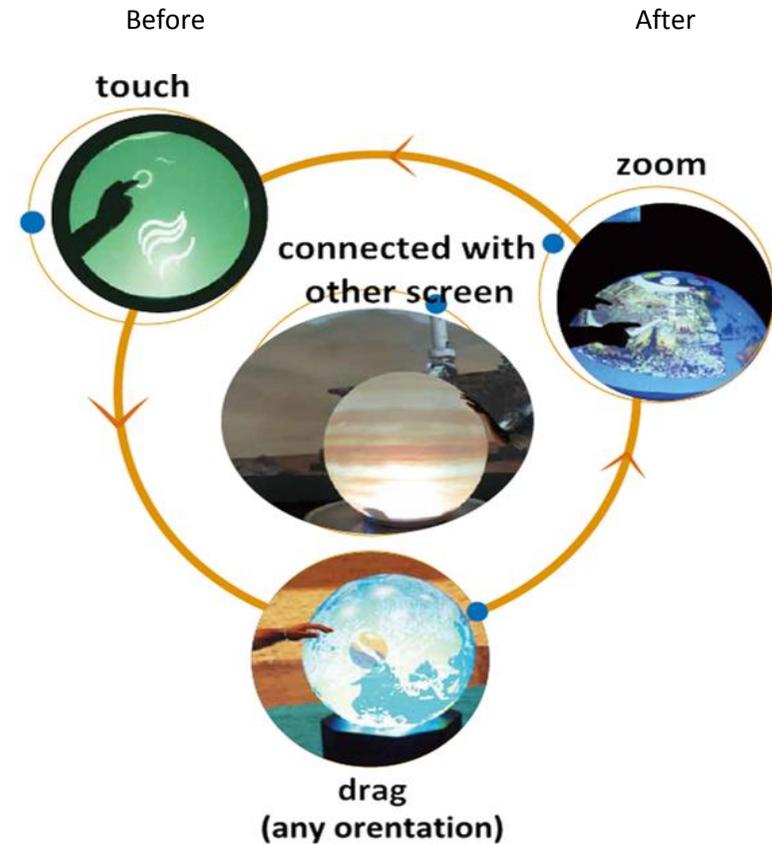
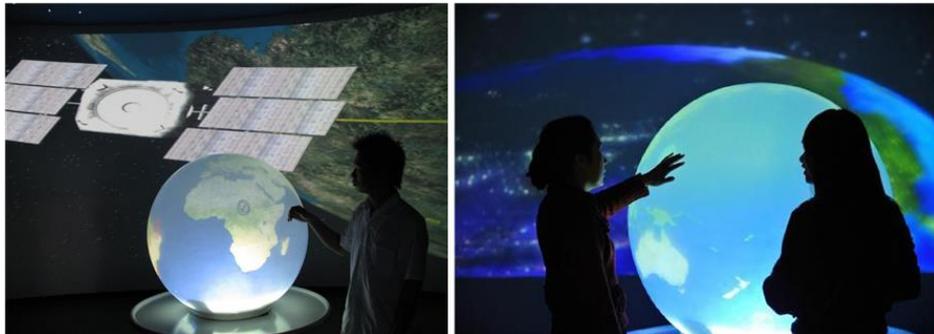
INTERACTIVE CASES

Interactive technology: Connect 1m sphere with 4.4*2.5 annulus screen

Location: The State Bureau of Surveying and Mapping (SBSM)

Date: Oct.2008

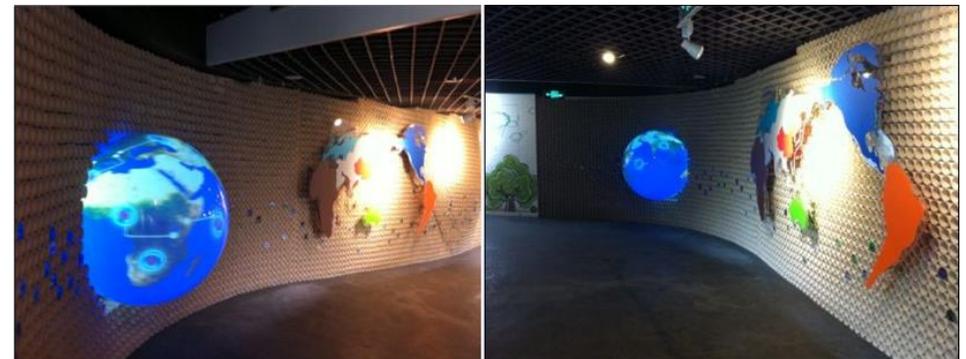
Interactive technology: connect 1.2m hemisphere with digital projection



sandbox

Location: Nanjing Qi Qiao Weng Wetland Park Science Museum

Date: Oct.20



CONTENTS

- We provide adequate free contents
- Customizable contents is accepted
- Also can provide yourself

by NASA are available, with undoubtable scientific, rigour, professionalism and audio visual effects. Furthermore, E-Sphere provides professional resources site for updates and downloading, so that our partners can get access to the latest information about astronomy, atmosphere, geology, ocean, etc.

High brightness, high resolution Contents made

Item Code	Screen Diameter	Screen Type	Lens Model	Brightness	Resolution	Contrast	Inter-active	Brightness enhancement
YF-PF/WH0840A	0.8m	Hemisphere	YF-FLS08190	4000 lm	1024*768	800: 1	✓	×
YF-PF/WH0840	0.8m	Hard whole sphere	YF-FLS08170	4000 lm	1024*768	800: 1	×	×
YF-PF/WH1050	1m		YF-FLS08170B	5000 lm	1920*1080	1500: 1	×	×
YF-PF/WH1050T	1m		YF-FLS08170B	5000 lm	1920*1080	1500: 1	✓	×
YF-PF/WH1052	1m		YF-FLS08170B	5200 lm	1024*768	2500: 1	×	×
YF-PF/WH1070	1m		YF-FLS08170B	7000 lm	1024*768	1500: 1	×	×
YF-PF/WH1270	1.2m		YF-FLS08170M	7000 lm	1024*768	1500: 1	×	×
YF-PF/WH15100	1.5m		YF-FLS07170	10000 lm	1024*768	2000: 1	×	×
YF-PF/WH1880	1.5m		YF-FLS07190	12000 lm	1024*768	2000: 1	×	×
YF-PF/WH1880	1.8m		YF-FLS10190	14000 lm	1920*1200	7500: 1	×	✓
YF-PF/WI1880	1.8m		Inflatable	YF-FLS07190	8000 lm	1920*1200	1500: 1	×

STANDARD CONFIGURATION OF SPHERE DISPLAY

APPLICATIONS AREA

- Education
- museum
- Exhibition (science museum, planning museum, enterprise exhibition hall)
- Entertainment
- Advertising
- Road show and virtual simulation
- Conference & meeting

