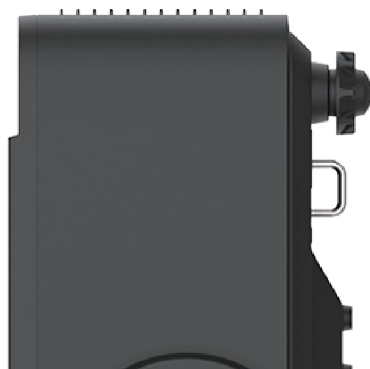


迪恒
股份

SH-DN9100

LASER PROJECTOR

海王星系列激光工程投影机



Product parameters

产品参数

海王星系列SH-DN9100工程激光投影机

Neptune Series SH-DN9100 Laser Engineering Projector

型号(Model): SH-DN9100	显示芯片(Display chip): 0.67" DMD
投影技术(Projection technology): DLP	画面尺寸(Screen size): 30"~300"
分辨率(Resolution ratio): 1920*1200 (16:10)	噪音(Noise): 34decibel
光源(Light source): MCL激光光源(laser source)	投影角度(Projection angle): 2*360°
光源寿命(Light source lifespan): 20000 hour	扬声器(Speaker): 10W*2
亮度(Brightness): 9100 ISO流明(lumen)	电压(Voltage): AC100-240,50/60H
中心亮度(Center brightness): 9300流明(lumen)	尺寸(Size): 480*139*376 (mm)
整机功率(Power): 505W@220VAC	重量(Weight): 14 (kg)

可更换镜头(Interchangeable Lenses): 1.22~1.53 (标镜)、0.35、0.48、0.53-0.65、0.6、0.7、0.75-1.12、0.8、0.75~0.95、0.95、0.95~1.22/1.5-3.0、1.52~2.92、2.90~5.50

镜头位移(Lens displacement): 电动(electric) V: ±55%, H: ±25%

对比度(Contrast ratio): 300000:1动态 (trends), 5000000:1极致黑 (Ultimate Black)

几何校正(Contrast ratio): 水平垂直梯形校正, 校正点拉伸
(Horizontal and vertical trapezoidal correction, correction point stretching)

控制协议(Control protocol): PJLink / AMX / Extron / TCP / RS232

HDBaseT: 可以实现10.2 Gbps的HDMI 1.4传输(包括 HDCP)和100Mbps以太网
(Can achieve 10.2 Gbps HDMI 1.4 transmission (including HDCP) and 100Mbps Ethernet)

HDMI 2.0: 支持4K输入 (Supports 4K input)

3D: 支持主动3D且带3D SYNC同步接口
(Supports active 3D with 3D SYNC synchronization interface)

输入接口(Input): HDMI1.4x1、HDMI2.0x1、3DSYN CIN*1

输出接口(Output interface): AudioOut Jack X1、3DSYN COUT*1

其它接口(Other interfaces): LAN*1、RS-232X1、USB*1、USB-A*1

BIC 系统 (systems)

APP控制投影(Controlling Projection): 支持 更改开机画面(Customized boot screen): 支持

画面矫正(Picture Correction): 水平/垂直/点/面, 支持2*2~40*40格点;

画面柔化(Screen Softening): 支持 边缘融合(Edge Fusion): 支持0%-100%融合区;

环幕融合(Ring Screen Fusion): 支持360°融合 色差调节(Chromatic aberration adjustment): 支持

开窗功能(window function): 支持窗口位置和大小精确定义、支持开多窗, 支持跨屏

遮罩功能(Mask function): 遮边、遮罩支持跨屏; 设备锁定(Device Lock): 支持定时锁定、立即锁定

飘屏功能(Floating Screen Function): 横幅/跑马灯 智能遥控(telecontrol): 支持手机app智能遥控;

弹幕(bullet screen): 支持弹幕分享, 支持多人弹幕发送同屏显示;

图片播放(Picture Playback): 支持

产品监控(Product Monitoring): 支持故障预警以及故障报警

片源商城(Source Mall): 支持手机app对接商城购买片源, 并在多机融合的画面播放片源

播放控制(Playback control): 支持手机app进行节目编排、切换片源、切换音量

Adopting telecentric optical architecture

采用远心光学架构

采用远心光学架构设计,相比非远心光学架构拥有更出色的色彩均匀度,亮度均匀度表现,更利于大屏融合的一致性表现。

Adopting a telecentric optical architecture design, compared to non telecentric optical architectures, it has better color uniformity and brightness uniformity performance, which is more conducive to the consistency performance of large screen fusion.

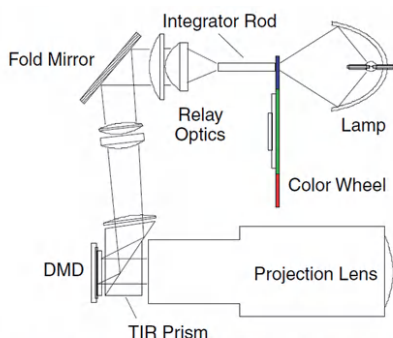
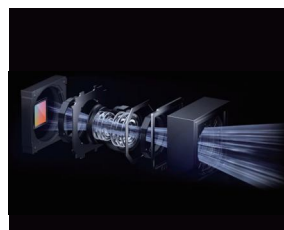


Figure 2. Generic Telecentric Optical System Components Using a TIR Prism

电动镜头设计,无需拆机可自由更换镜头,镜头投射比涵盖0.35~5.5 Motorized lens design, no need to disassemble the machine can be free to change the lens, the lens projection ratio covers 0.35~5.5

该系列产品全系配备了电动镜头,标镜支持电动位移、电动聚焦、电动变焦。同时具备镜头位置信息的存储和载入以及镜头复位功能。全面的镜头功能优于行业水平。

该系列产品支持更换1.22~1.53(标镜)、0.35、0.48、0.53-0.65、0.6、0.7、0.75-1.12、0.8、0.75~0.95、0.95、0.95~1.22、1.5-3.0、1.52~2.92、2.90~5.50等多款光学表现非常优秀的短焦镜头。短焦至长焦有丰富的镜头投射比覆盖,无论是狭小空间或是大空间远距离投影,均可以满足您的需求。



The whole series of products are equipped with motorized lenses, and the standard lens supports motorized shift, motorized focus, and motorized zoom. At the same time with the lens position information storage and loading and lens reset function. The comprehensive lens functions are better than the industry level.

This series of products support the replacement of 1.22~1.53 (standard lens), 0.35, 0.48, 0.53-0.65, 0.6, 0.7, 0.75-1.12, 0.8, 0.75~0.95, 0.95, 0.95~1.22, 1.5-3.0, 1.52-2.92, 2.90-5.50, etc., and other optical performance of the very excellent short focal length lenses. The short focal length to long focal length lenses have a wide range of projection ratios, which can satisfy your needs whether it is a small space or a large space for long-distance projection.

HDMI级联功能,多画面融合仅需一个信号源

具备HDMI级联功能,级联输出接口可以复制一份相同的HDMI IN信号作为输出。

该功能可以用来做预监回显,也可以将环出接口的连接在下一台同型号产品的输入接口的,多台设备依次环接,来达成融合信号的输入和同步,该方案是当前融合投影机更先进的方案。

HDMI cascading function, multiple image fusion only requires one signal source

Equipped with HDMI cascading function, the cascading output interface can replicate the same HDMI IN signal as the output.

This function can be used for pre monitoring echo, or to connect the loop out interface to the input interface of the next product of the same model. Multiple devices can be looped in sequence to achieve input and synchronization of fusion signals. This solution is a more advanced solution for current fusion projectors.

信号低延迟设计, 低延迟模式下延迟仅16毫秒 Signal low latency design with only 16 ms delay in low latency mode



该系列产品具备信号低延迟设计, 普通投影机信号延迟为40MS左右, 但新海王星系列投影机在低延迟模式下信号延迟仅16MS。在虚拟驾驶等应用中可为用户提供畅快迅捷的体验。

This series of products has a low-latency signal design, the signal delay of ordinary projectors is about 40ms, but the signal delay of the new Neptune series projectors in low-latency mode is only 16ms, which can provide users with a smooth and fast experience in applications such as virtual driving.

针对不同墙壁颜色, 选择不同的光输出以呈现更好效果 Select different light outputs for different wall colors for better results.

设置墙壁颜色, 以便投影机在特定墙面上达到最佳颜色效, 可选项包含黑板、浅黄色、浅绿色、浅蓝色、粉红色、灰色。

Set the wall color so that the projector achieves the best color effect on a specific wall. Options include chalkboard, light yellow, light green, light blue, pink, and gray.



2*360度均可以灵活投影 2 * 360 degrees can be flexibly projected

出色的散热功能确保其可以支持2*360度任意角度安装, 以满足不同投影环境的安装需求。
The excellent heat dissipation function ensures that it can support installation at any angle of 2 * 360 degrees to meet the installation needs of different projection environments.



主动和被动3D, 3D Warping以及Blending3D功能 Active and passive 3D, 3D Warping, and Blending3D functionality

产品支持DLP LINK 主动3D, 支持常见的左右格式、上下格式、帧顺序格式、帧封装格式等。
产品支持被动3D。

支持3D WARPING功能, 即投影在做了画面形变情况下, 依然支持主动3D。

支持BLENDING 3D功能, 即投影在4台融合情况下, 可以通过3D SYNC接口实现3D同步, 确保多台融合的画面, 在左右眼切换实时同步。

The product supports DLP Link active 3D, supporting common left and right formats up and down formats, frame order formats, frame packaging formats, etc.

The product supports passive 3D.

Supports 3D Warping function, which means that even when the projection is deformed, it still supports active 3D.

Support Blending 3D function, which means that when projecting on 4 fused cameras 3D synchronization can be achieved through the 3D sync interface, ensuring real-time synchronization of the fused images between multiple cameras and switching between left and right eyes.



7*24小时不间断稳定运行 7 * 24-hour uninterrupted stable operation

机器支持7*24小时不间断稳定运行, 无灯泡光源的炸灯风险。

The machine supports uninterrupted and stable operation for 7 * 24 hours, without light bulbs The risk of exploding lights at the source.



WUXGA (1920*1200) 物理分辨率 WUXGA (1920 * 1200) physical resolution

物理分辨率均高达1920*1200分辨率。同时支持4K@60HZ信号输入。投影画面更加细腻, 细节展示更丰富生动。

The physical resolution is as high as 1920 * 1200 resolution. Simultaneously supporting 4K@60hz Signal input. The projection screen is more delicate, and the details are displayed more vividly and richly.

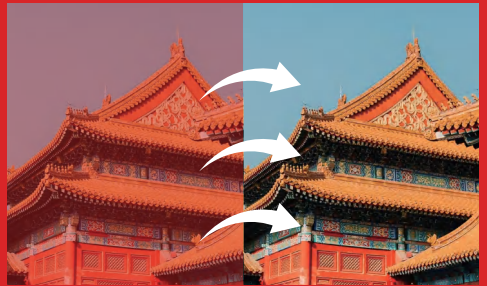
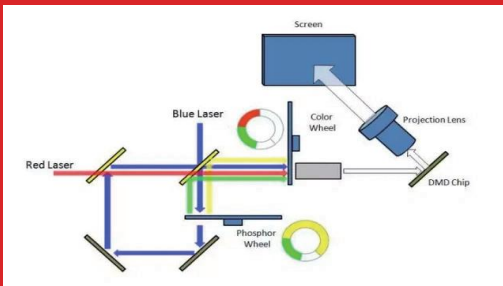


DLP投影技术,

选用市场更主流的DLP数字投影技术,在文字成像表现上更加清晰锐利,不存在晶格现象。

DLP projection technology

By using the more mainstream DLP digital projection technology in the market, the text imaging performance is clearer and sharper, without any lattice phenomenon.



多种增色技术加持, Rec.709色域占比高达108%, 色彩表现更优秀

Supported by various color enhancement techniques, Rec.709 has a color gamut ratio of up to 108%, resulting in better color performance

DLP色轮和荧光轮双色轮增加技术加之激光光源原生的出色表现力,使得该系列产品REC.709色域占比高达108%,色彩表现更加优秀。

The addition of DLP color wheel and fluorescent wheel dual color wheel technology, combined with the excellent performance of the original laser light source, results in a color gamut proportion of up to 108% for this series of products Rec.709, with even better color performance.

Brain in Cloud 智能云脑



通过云端服务器“大脑”与各个投影机节点连接,在大脑中实现片源商城购买、画面分割、故障信息分析与处理、远程控制等。采用OPENGL打造的图像算法,采用先进的分布式架构,兼具融合、开窗、横幅、娱乐等众多功能

By connecting to various projector nodes through the cloud server "brain", it can achieve film source shopping image segmentation, fault information analysis and processing, remote control, etc. in the brain. The image algorithm created using OpenGL adopts advanced distributed architecture, which combines many functions such as fusion, windowing, banners, entertainment, etc

辅助功能加持, 调试更便捷 Auxiliary functions, debugging more convenient

支持单点拉伸、整行/整列拉伸, 相比较传统的单点拉伸, 该产品可大幅提升调试的效率。同时支持墙角校正模式, 在墙角折角调整时更方便。

支持 $2^*2/3^*3/4^*4\dots\dots 40^*40$ 个校正点可调, 相比较传统的 $2^*2/3^*3/5^*5$ 格点, 该产品可以画面做更精细的调节, 确保重叠区画面的完全对齐。同时对于大弧形、倒圆角墙角等局部变形较大的场合, 该产品也可以轻松完成调试。

支持网格颜色在红/绿/蓝/白/黄等多种颜色之间切换。网格背景颜色也支持在黑/透明/白/红/绿/蓝/黄等多种颜色之间切换。网格宽度支持在4PX/格~120PX/格切换。调试步长支持长按快速移动。用户灵活选择上述配置, 助理融合调试更加方便快捷。

Support for single-point stretching, whole row/column stretching, compared with the traditional single-point stretching, the product can significantly improve the efficiency of debugging. At the same time support corner correction mode, more convenient in the wall corner corner adjustment.

Correction mode, more convenient in the wall corner corner adjustment.

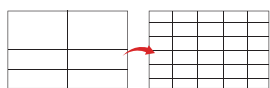
Support $2^*2/3^*3/4^*4\dots\dots 40^*40$ correction points adjustable, compared with the traditional $2^*2/3^*3/5^*5$ grid points, the product can do more fine picture

Adjustment, to ensure that the overlap area of the screen is completely aligned. At the same time for large arcs, chamfered corners and other local deformation of the occasion, the product can also be easily complete the debugging.

Support grid color switching between red/green/blue/white/yellow and other colors. Grid background color also support in black/transparent/white/red/green/blue/yellow and so on.

Grid background color also supports switching between black, transparent, white, red, green, blue, yellow and other colors. Grid width can be switched from 4px/grid to 120px/grid. The debugging step supports long press to move quickly. Flexible choice of the user

above configurations, the assistant fusion debugging more convenient and fast.



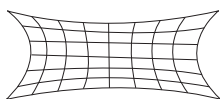
网格密度可调
Adjustable grid density



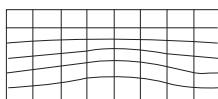
网格颜色可调
Grid color adjustable



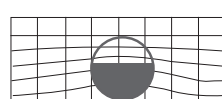
网格背景颜色可调
Grid background adjustable



更高弹性拉伸
Higher elastic stretch



中心形变
Central deformation



扭曲锐利度调节
Sharpness adjustment

融合区处理算法更优越 Superior fusion zone processing algorithms



产品融合带支持0%~100%可调节, 不仅可以满足常用的10%~50%融合带调节, 对于更小的融合带和更大融合带这种特殊场景也可以轻松适配。融合带平滑过渡与亮度叠加后的效果上展现出优于他牌产品的优异效果。同时该产品面向专业客户开放更精细的伽马与指数、系数调节。

The product fusion belt supports 0%~100% adjustable, not only can meet the commonly used 10%~50% fusion belt adjustment, for smaller fusion belts and larger fusion belts for this special scenario can also be easily adapted.

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