



# SE14 Specification

## Splicing Server

Version: V2.0.1

Release Date: July 2025

## Revision History

Version Number	Brief description of the revised content	Revision Date	Revisionist
V 2.0.1	Optimize function description and specification format Support SEx_1×DP1.4_8K input board , SEx_2×IP input board , SEx_4×VGA input board	2 025-0 7 - 01	-
V 1.0.1	Updated 4K board silkscreen and rear panel image Optimize the function description about echo and monitoring	202 4 -0 3 - 26	-
V1.0.0	First version released	202 4 -0 2 - 01	-

## Product Overview

SE14 video splicing server is a professional video processing and control device featuring a pure hardware FPGA design architecture and a modular design. It offers a comprehensive range of input and output interfaces, allowing for flexible configuration of input and output boards to meet diverse project requirements. It is widely applicable in television stations, dispatch rooms, command centers, exhibition halls, conference rooms, stage performances, data centers, and multi-purpose halls.

SE14 splicing server supports 8K ultra -high-definition video access, multi-screen and multi-layer management, input and output EDID management , input preview and output echo, 3D output , and Genlock , meeting diverse and complex project requirements.

## Product Certification

CCC , EAC , DOC , ROHS

Kystar immediately for confirmation or processing. Otherwise, if any legal risks are caused, the customer shall bear them by himself or Kystar shall have the right to seek compensation.

## Features

### **14U chassis with flexible expansion and super load capacity**

- A single card supports 8-channel 2K@60Hz input and output.

- The single board supports 2-channel 4K@60Hz input and supports input of up to 8K × 2K@60Hz .
- The single-board card supports two-channel 4K@60Hz output and a maximum load of 8K × 2K@60Hz .
- The entire machine supports 160 channels of 2K@60Hz input and 128 channels of 2K@60Hz output simultaneously.

### **8K input, massive layers**

- Single channel supports DP1.4 input , with a maximum resolution of 8K × 4K @30Hz .
- A single card supports a maximum of 24 2K @60Hz layers, 12 4K @30Hz layers, or 6 4K @60Hz layers.
- A single machine supports a maximum of 192 2K layers.

### **Innovative architecture, layer sharing**

- Unique hardware output partition design, each zone builds an independent layer resource pool to achieve layer resource sharing within the zone .

### **Web control, convenient and fast**

- No software installation is required, it uses web -based control and is not restricted by operating systems or platforms.
- The operation is simple and fast, with real-time response and easy configuration of complex scenarios.



- Real-time preview function can be realized without the need for an external monitoring board .

### **Multiple management methods , easy management**

- Scene Management
  - Different preset parameters can be saved as scenes, supporting one-click call of single-screen scenes and multi-screen scenes for easy switching.
- Group screen management
  - Supports management of up to 8 groups of screens, and each group of screens can customize the output resolution, making it easy to complete complex scene display control.
- Patrol Management
  - Supports scene patrol to meet unmanned application scenarios.

### **Diverse display , rich visual experience**

- Input source logo
  - Characters are embedded in each input signal to identify the input signal, and the screen displays the embedded characters while displaying the input signal.
- Rolling subtitles

- Subtitles can be displayed statically or scrolled dynamically. Users can set the font, subtitle background, scrolling mode, etc.
- A single screen supports up to 8 subtitles.
- Seamless switching
  - When switching layer signals or calling scenes, there is no black screen, no flickering, and no lag during the entire process.

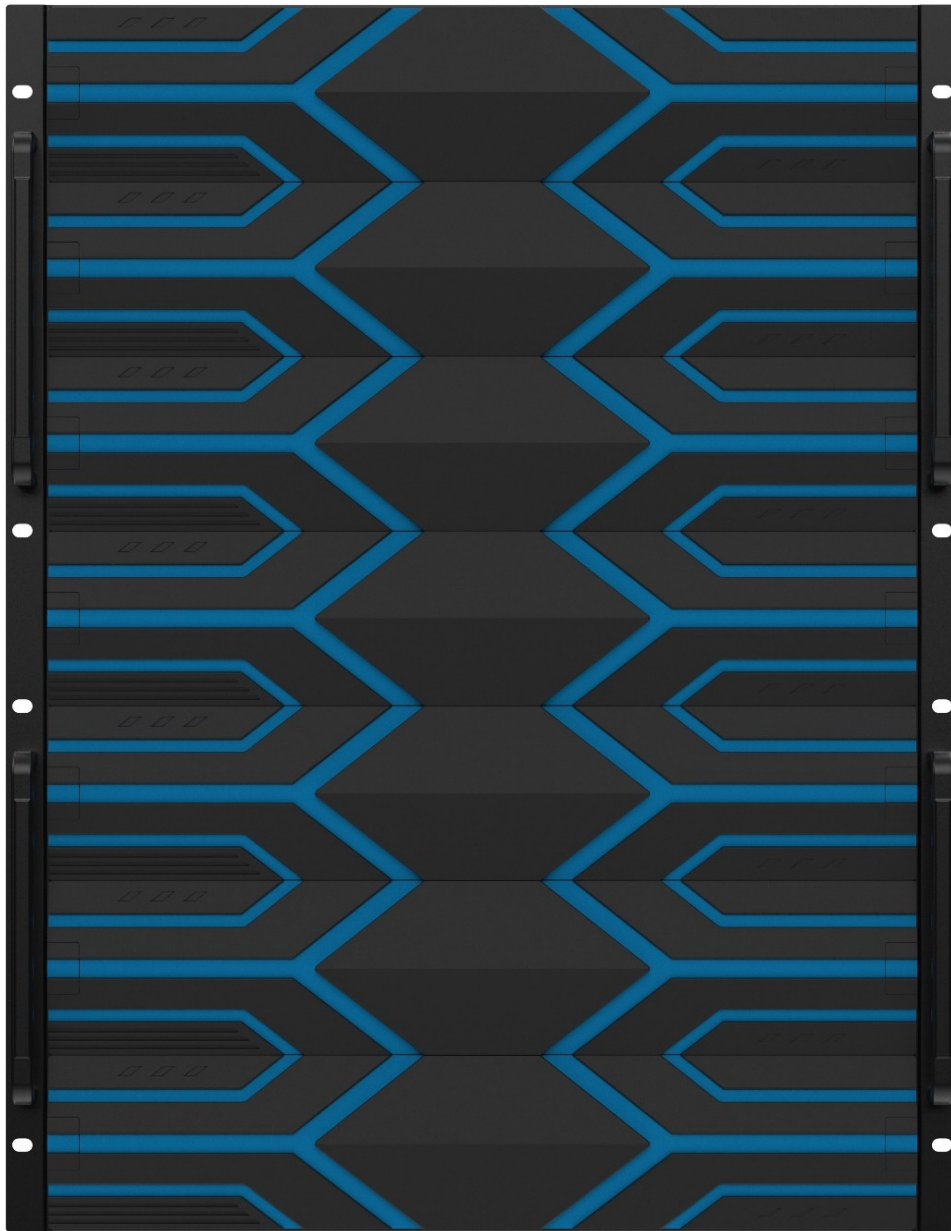
### **Intelligent monitoring and backup , stable and reliable**

- Real-time hardware monitoring
  - Supports hardware monitoring, including real-time monitoring of hardware module temperature and voltage , firmware version, operating status , fan speed , etc.
- Support remote upgrade
  - Program upgrades can be performed remotely, making system maintenance simple.
- Support redundant power supply
  - Supports adding two power supplies to improve system reliability and stability .
- Support input module and output module backup

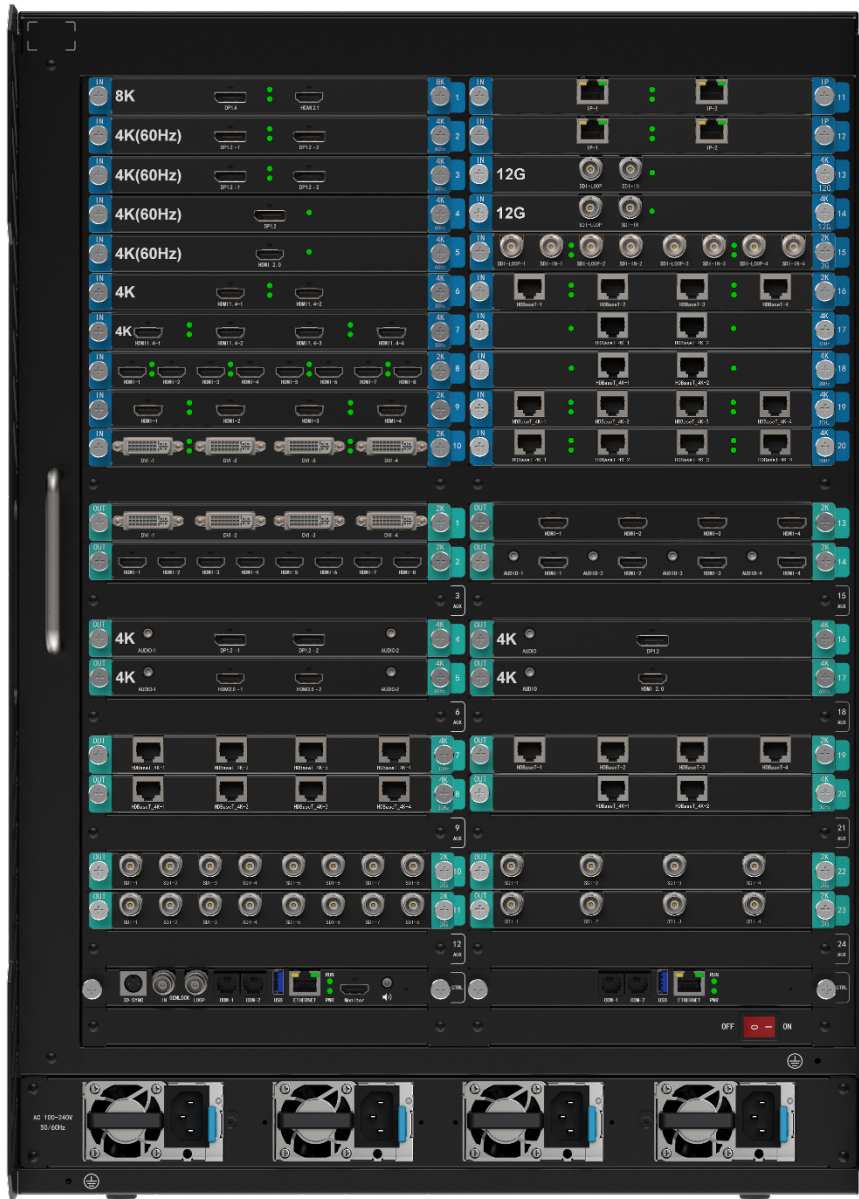
- Automatic switching in case of failure, double protection of system operation , and the switching process does not affect equipment operation.

## 外观 Appearance

Front panel appearance



## Rear panel appearance



Illustrate:

The machine back panels shown in this article are samples for reference only. Please refer to the actual product purchased.

Rear panel silk screen description:

**1** The marked slot is the input slot and can only be used to install input cards.

**7** The marked slots are output slots and can only be used to install

output cards.



The marked slot is the control board slot and can only be used to install a control board.

## Input Board Introduction

### SEx\_4×DVI Input Board



#### DVI input interface

- Number of input interfaces: 4-way DVI
- Maximum input resolution: 2048×1152@60Hz
- Custom resolution:
  - Maximum width 2048 (2 048 × 1152 @ 60 Hz)
  - Maximum height 2048 ( 1152 × 2048 @ 60 Hz)
- Video input formats: RGB444, YCbCr444 , 4x22 , 4x20

Performance  
parameters

#### Input card specifications

- Input signal level: TMDS /CML
- Impedance: Differential 100ohm
- Power consumption: 5W

#### Indicator status description

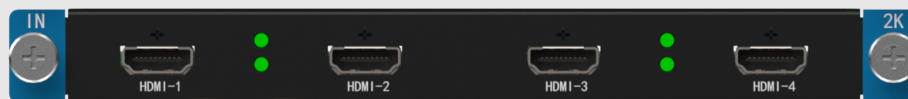
- Steady on: Input signal is connected normally
- Off: Input is not connected or input is abnormal

\*From left to right, the top side of the first column of lights indicates DVI-1 , and the bottom side indicates DVI-2 . Similarly, the top side of the second column of lights indicates DVI-3 , and

the bottom side indicates DVI-4 .

## SEx\_4×HDMI1.3 input board

Performance  
parameters



### HDMI 1.3 input interface

- Number of input interfaces: 4 HDMI1.3
- Maximum input resolution: 2048×1152@60Hz
- Custom resolution:
  - Maximum width 2048 (2 048 × 1152 @ 60 Hz)
  - Maximum height 2048 ( 1152 × 2048 @ 60 Hz)
- Video input formats: RGB444, YCbCr444 , 4x22 , 4x20

### Input card specifications

- Input signal level: TMDS /CML
- Impedance: Differential 100ohm
- Power consumption: 5 W

### Indicator status description

- Steady on: Input signal is connected normally
- Off: Input is not connected or input is abnormal

\*From left to right, the top of the first column of lights indicates HDMI-1, and the bottom indicates HDMI-2. Similarly, the top of the second column of lights indicates HDMI-3, and the bottom indicates HDMI-4 .

## SEx\_8×HDMI1.3 input board

Performance  
parameters



### HDMI 1.3 input interface

- Number of input interfaces: 8-way HDMI1.3

- Maximum input resolution: 2048×1152@60Hz
- Custom resolution:
  - Maximum width 2048 (2 048 × 1152 @ 60 Hz)
  - Maximum height 2048 ( 1152 × 2048 @ 60 Hz)
- Video input formats: RGB444, YCbCr444 , 4x22 , 4x20

### Input card specifications

- Input signal level: TMDS /CML
- Impedance: Differential 100ohm
- Power consumption: 10 W

### Indicator status description

- Steady on: Input signal is connected normally
- Off: Input is not connected or input is abnormal

\*From left to right, the first column of lights indicates HDMI-1 on the top and HDMI-2 on the bottom ; the second column of lights indicates HDMI-3 on the top and HDMI-4 on the bottom ; the third column of lights indicates HDMI-5 on the top and HDMI-6 on the bottom; the fourth column of lights indicates HDMI-7 on the top and HDMI-8 on the bottom .

## SEx\_4×3G-SDI 输入板卡



### 3G-SDI input interface

Performance parameters

- Number of input interfaces: 4 -channel 3G-SDI
- Maximum input resolution: 1920×1080@ 60Hz
- Video source standards: ST-424 (3G), ST-292 (HD) and SMPTE 259 SD
- Compatible with HD-SDI and SD-SDI standards
- Support loop-out, S DI loop-out interface corresponds to the input interface one to one
- Support 1080i/576i/480i deinterlacing
- Custom input resolution is not supported

### Input card specifications

- Input signal level: TMDS /CML
- Impedance: Coaxial 75ohm
- Power consumption: 10W

### Indicator status description

- Steady on: Input signal is connected normally
- Off: Input is not connected or input is abnormal

\*From left to right, the top of the first column of lights indicates SDI -1 , and the bottom indicates SDI -2 . Similarly, the top of the second column of lights indicates SDI -3 , and the bottom indicates SDI -4 .

## SEx\_4 × VGA input board



### Input card specifications

- Number of input interfaces: 4 -way VGA
- Maximum input resolution: 1920×1200@ 60Hz
- Video input format: RGB444
- Power consumption: 10W

Performance  
parameters

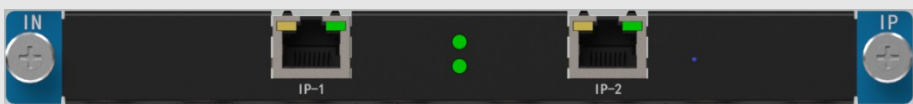

### Indicator status description

- Steady on: Input signal is connected normally
- Off: Input is not connected or input is abnormal

\*From left to right, the top of the first column of lights indicates VGA-1 , and the bottom indicates VGA-2 . Similarly, the top of the second column of lights indicates VGA-3 , and the bottom indicates VGA-4 .

## SEx\_2 × IP input board



<p>Performance parameters</p>	<div data-bbox="437 219 1353 322">  </div> <h3 data-bbox="437 383 804 421">Input card specifications</h3> <ul data-bbox="499 465 1353 1070" style="list-style-type: none"> <li>● of input interfaces: 2 RJ14</li> <li>● Supported protocols: R TSP</li> <li>● Support IPC video encoding formats: H.264, H.265</li> <li>● Supports video encoding with decoder encoder. <ul style="list-style-type: none"> <li>- Supports video decoding of unicast streams.</li> <li>- Supports H.264/H.265 YUV420 8-bit video decoding of I and P frames.</li> </ul> </li> <li>● Single card simultaneous decoding performance: <ul style="list-style-type: none"> <li>- 2-way 800W</li> <li>- 6-way 400W</li> <li>- 12-way 200W</li> </ul> </li> <li>● Power consumption: 10W</li> </ul> <h3 data-bbox="437 1120 847 1158">Indicator status description</h3> <ul data-bbox="499 1202 1037 1288" style="list-style-type: none"> <li>● Steady on: IP decoding function is normal</li> <li>● Off: IP decoding function is abnormal</li> </ul> <p data-bbox="437 1301 820 1328">IP-1 on the top and IP-2 on the bottom</p>
SEx_2 ×HDMI 1.4 input board	
<p>Performance parameters</p>	<div data-bbox="437 1453 1353 1556">  </div> <h3 data-bbox="437 1617 809 1655">HDMI 1.4 input interface</h3> <ul data-bbox="499 1700 1219 1944" style="list-style-type: none"> <li>● Number of input interfaces: 2 -way HDMI 1.4</li> <li>● Maximum input resolution: 4096×2160@30Hz</li> <li>● Custom resolution: <ul style="list-style-type: none"> <li>- Maximum width 4096 ( 4096 × 2160@30Hz )</li> <li>- Maximum height 4096 ( 2000 × 4096 @ 30 Hz)</li> </ul> </li> </ul>

- Video input formats: RGB444, YCbCr444 , 4x22 , 4x20
- Support channel-associated audio

### Input card specifications

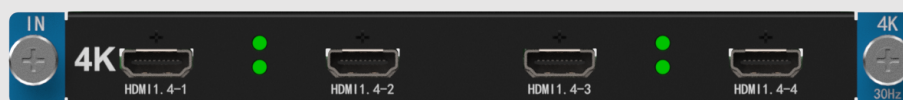
- Input signal level: TMDS /CML
- Impedance: Differential 100ohm
- Power consumption: 5W

### Indicator status description

- Steady on: Input signal is connected normally
- Off: Input is not connected or input is abnormal

\*The first column of lights from left to right indicates HDMI1.4-1 on the upper side and HDMI1.4-2 on the lower side .

## SEx\_4 × HDMI 1.4 input board



### HDMI 1.4 input interface

- Number of input interfaces: 4 -way HDMI 1.4
- Maximum input resolution: 4096×2160@30Hz
- Custom resolution:
  - Maximum width 4096 ( 4096 × 2160@30Hz )
  - Maximum height 4096 ( 2000 × 4096 @ 30 Hz)
- Video input formats: RGB444, YCbCr444 , 4x22 , 4x20
- Support channel-associated audio

### Input card specifications

- Input signal level: TMDS /CML
- Impedance: Differential 100ohm
- Power consumption: 10W

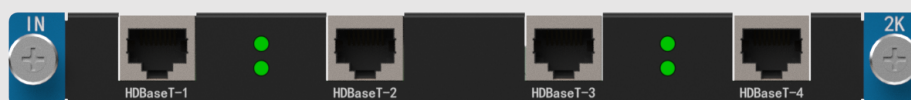
Performance  
parameters

### Indicator status description

- Steady on: Input signal is connected normally
- Off: Input is not connected or input is abnormal

\*From left to right, the top of the first row of lights indicates HDMI 1.4-1 , and the bottom indicates HDMI 1.4-2 . Similarly, the top of the second row of lights indicates HDMI 1.4-3 , and the bottom indicates HDMI 1.4-4 .

## SEx\_4 ×HD Base T\_2K input board



### HDBase T\_2K input interface

- of input interfaces: 4 RJ45 interfaces
- Maximum input resolution: 2048×1152@60Hz
- Custom resolution:
  - Maximum width 2048 (2 048 × 1152 @ 60 Hz)
  - Maximum height 2048 ( 1152 × 2048 @ 60 Hz)
- Support channel-associated audio

Performance  
parameters

### Input card specifications

- Input signal level: TMDS /CML
- Impedance: Differential 100ohm
- Power consumption: 20W
- Transmission distance: Maximum 100 meters (category 6 twisted pair)

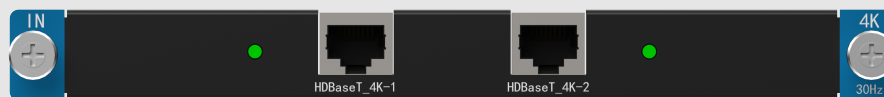
### Indicator status description

- Steady on: Input signal is connected normally
- Off: Input is not connected or input is abnormal

\*From left to right, the top of the first column of lights indicates HDB enzyme T-1 , and the bottom indicates HDB enzyme T-2 . Similarly, the top of the second column of lights indicates

HDB enzyme T-3 , and the bottom indicates HDB enzyme T-4 .

## SEx\_2 ×HD Base T\_4K30 input board



### HDBaseT\_4K30 input interface

- of input interfaces: 2 RJ45 interfaces
- Maximum input resolution: 4096×2160@30Hz
- Custom resolution:
  - Maximum width 4096 ( 4096 × 2160@30Hz )
  - Maximum height 4096 ( 2000 × 4096 @ 30 Hz)
- Support channel-associated audio

Performance  
parameters

### Input card specifications

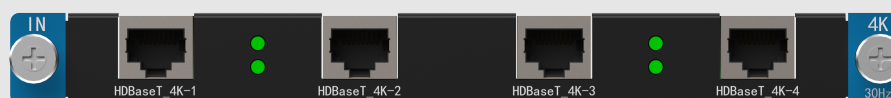
- Input signal level: TMDS /CML
- Impedance: Differential 100ohm
- Power consumption: 10W
- Transmission distance: Maximum 100 meters (category 6 twisted pair)

### Indicator status description

- Steady on: Input signal is connected normally
- Off: Input is not connected or input is abnormal

HDB enzyme T-1 on the upper side and HDB enzyme T-2 on the lower side .

## SEx\_4 ×HD Base T\_4K30 Input Board



Performance  
parameters

### HDBaseT\_4K30 input interface

- of input interfaces: 4 RJ45 interfaces

- Maximum input resolution: 4096×2160@30Hz
- Custom resolution:
  - Maximum width 4096 ( 4096 × 2160@30Hz )
  - Maximum height 4096 ( 2000 × 4096 @ 30 Hz)
- Support channel-associated audio

### Input card specifications

- Input signal level: TMDS /CML
- Impedance: Differential 100ohm
- Power consumption: 20W
- Transmission distance: Maximum 100 meters (category 6 twisted pair)

### Indicator status description

- Steady on: Input signal is connected normally
- Off: Input is not connected or input is abnormal
- \*From left to right, the top of the first column of lights indicates HDBase T\_4K -1 , and the bottom indicates HDBase T\_4K -2 . Similarly, the top of the second column of lights indicates HDBase T\_4K -3 , and the bottom indicates HDBase T\_4K -4 .

## SEx\_1 × 12G-SDI Input Board



### 12G-SDI input interface

Performance parameters

- Number of input interfaces: 1- channel 12G-SDI
- Maximum input resolution: 4096×2160@ 60Hz
- Video source standards: ST-2082-1 (12G), ST-2081-1 (6G), ST-424 (3G), ST-292 (HD), and SMPTE 259 SD
- Compatible with 6G-SDI, 3G-SDI, HD-SDI and SD-SDI standards
- Support loop-out
- Support 1080i/576i/480i deinterlacing
- Custom input resolution is not supported

### Input card specifications

- Input signal level: TMDS /CML
- Impedance: Coaxial 75ohm
- Power consumption: 10W

### Indicator status description

- Steady on: Input signal is connected normally

Off: Input is not connected or input is abnormal

## SEx\_1 × HDMI 2.0 input board



### HDMI 2.0 input interface

- Number of input interfaces: 1 -way HDMI 2.0
- Maximum input resolution: 4096×2160@60Hz or 7680×1200@60Hz
- Custom resolution:
  - Maximum width 8192 ( 8192 × 1080@60Hz )
  - Maximum height 8192 ( 1000 × 8192 @ 60 Hz)
- Video input formats: RGB444, YCbCr444 , 4x22 , 4x20
- Support channel-associated audio

Performance  
parameters


### Input card specifications

- Input signal level: TMDS /CML
- Impedance: Differential 100ohm
- Power consumption: 5W


### Indicator status description

- Steady on: Input signal is connected normally
- Off: Input is not connected or input is abnormal

## SEx\_1 × DP1.2 input board

Performance parameters	
	<p><b>DP 1.2 input interface</b></p> <ul style="list-style-type: none"> <li>• Number of input interfaces: 1 DP 1.2</li> <li>• Maximum input resolution: 4096×2160@60Hz or 7680×1200@60Hz</li> <li>• Custom resolution: <ul style="list-style-type: none"> <li>- Maximum width 7680 ( 7680 × 1200@60Hz )</li> <li>- Maximum height 7680 ( 1080 × 7680 @ 60 Hz)</li> </ul> </li> <li>• Video input formats: RGB444, YCbCr444 , 4x22 , 4x20</li> <li>• Support channel-associated audio</li> </ul> <p><b>Input card specifications</b></p> <ul style="list-style-type: none"> <li>• Input signal level: TMDS /CML</li> <li>• Impedance: Differential 100ohm</li> <li>• Power consumption: 5W</li> </ul> <p><b>Indicator status description</b></p> <ul style="list-style-type: none"> <li>• Steady on: Input signal is connected normally</li> <li>• Off: Input is not connected or input is abnormal</li> </ul>

## SEx\_2 × HDMI2.0 input board

Performance parameters	
	<p><b>HDMI 2.0 input interface</b></p> <ul style="list-style-type: none"> <li>• Number of input interfaces: 2 -way HDMI 2.0</li> <li>• Maximum input resolution: 4096×2160@60Hz or 7680×1200@60Hz</li> <li>• Custom resolution: <ul style="list-style-type: none"> <li>- Maximum width 8192 ( 8192 × 1080@60Hz )</li> </ul> </li> </ul>

- Maximum height 8192 ( 1000 × 8192 @ 60 Hz)

- Video input formats: RGB444, YCbCr444 , 4x22 , 4x20
- Support channel-associated audio

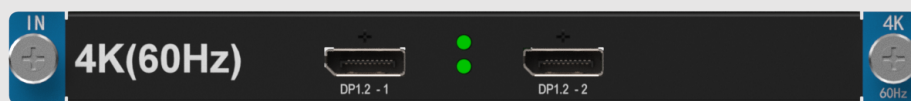
### Input card specifications

- Input signal level: TMDS /CML
- Impedance: Differential 100ohm
- Power consumption: 10W

### Indicator status description

- Steady on: Input signal is connected normally
- Off: Input is not connected or input is abnormal
- \*From left to right, the first column of lights, the upper side indicates HDMI2.0-1 , and the lower side indicates HDMI2.0-2 .

## SEx\_2 × DP1.2 input board



### DP 1.2 input interface

- Number of input interfaces: 2 -way DP 1.2
- Maximum input resolution: 4096×2160@60Hz or 7680×1200@60Hz
- Custom resolution:
  - Maximum width 7680 ( 7680 × 1200@60Hz )
  - Maximum height 7680 ( 1080 × 7680 @ 60 Hz)
- Video input formats: RGB444, YCbCr444 , 4x22 , 4x20
- Support channel-associated audio

### Input card specifications

- Input signal level: TMDS /CML
- Impedance: Differential 100ohm
- Power consumption: 10W

Performance  
parameters

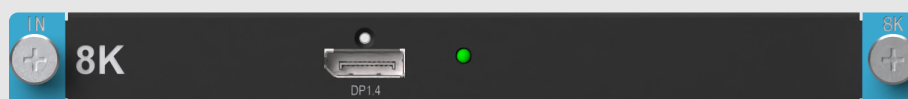


### Indicator status description

- Steady on: Input signal is connected normally
- Off: Input is not connected or input is abnormal

\*From left to right, the first column of lights, the upper side indicates DP1.2-1 , and the lower side indicates DP1.2-2 .

## SEx \_1 × DP1.4 \_ 8K input board



### DP1.4 input interface

- of input interfaces: 1 DP1.4
- Maximum input resolution: 7680 x 4320@30Hz or 7680 x 2160@60Hz or 3840 x 2160@ 120Hz
- Custom resolution:
  - Maximum width 15360 ( 15360 × 1080@30Hz )
  - Maximum height 15360 ( 1000 × 15360 @ 30 Hz)
- Video input formats: RGB444, YCbCr444 , 4x22 , 4x20
- Support channel-associated audio

Performance  
parameters

### Input card specifications


- Input signal level: TMDS /CML
- Impedance: Differential 100ohm
- Power consumption: 1.5W

### Indicator status description


- Steady on: Input signal is connected normally
- Off: Input is not connected or input is abnormal

## Output Board Introduction

### SEx \_4×DVI output board

Performance parameters	
	<p><b>DVI output interface</b></p> <ul style="list-style-type: none"> <li>● Output interface quantity: 4 -way DVI</li> <li>● Maximum output resolution: 2048×1152@60Hz</li> <li>● Custom resolution: <ul style="list-style-type: none"> <li>- Maximum width 4096 (4096×616@60Hz)</li> <li>- Maximum height 4096 (480×4096@60Hz)</li> </ul> </li> <li>● Video output format: RGB444</li> <li>● Support channel-associated audio</li> </ul> <p><b>Output card specifications</b></p> <ul style="list-style-type: none"> <li>● Output signal level: TMDS /CML</li> <li>● Impedance: Differential 100ohm</li> <li>● Power consumption: 5W</li> </ul>

## SEx\_4×HDMI1.3 output board

Performance parameters	
	<p><b>HDMI 1.3 output interface</b></p> <ul style="list-style-type: none"> <li>● Output interface quantity: 4 -way HDMI 1.3</li> <li>● Maximum output resolution: 2048×1152@60Hz</li> <li>● Custom resolution: <ul style="list-style-type: none"> <li>- Maximum width 4096 ( 4096×616@60Hz )</li> <li>- Maximum height 4096 ( 480×4096@60Hz )</li> </ul> </li> <li>● Video output format: RGB444</li> <li>● Support channel-associated audio</li> </ul> <p><b>Output card specifications</b></p> <ul style="list-style-type: none"> <li>● Output signal level: TMDS /CML</li> </ul>

- Impedance: Differential 100ohm
- Power consumption: 5W

## SEx\_4×HDMI1.3\_AUDIO output board



### HDMI 1.3 output interface

- Output interface quantity: 4- way HDMI 1.3 , 4- way 3.5 mm audio output
- Maximum output resolution: 2048×1152@60Hz
- Custom resolution:
  - Maximum width 4096 ( 4096×616@60Hz )
  - Maximum height 4096 ( 480×4096@60Hz )
- Video output format: RGB444
- Support channel-associated audio

### Output card specifications

- Output signal level: TMDS /CML
- Impedance: Differential 100ohm
- Power consumption: 5 W

## SEx\_8×HDMI1.3 output board



### HDMI 1.3 output interface

- Output interface quantity: 8 -way HDMI 1.3
- Maximum output resolution: 2048×1152@60Hz
- Custom resolution:
  - Maximum width 4096 ( 4096×616@60Hz )
  - Maximum height 4096 ( 480×4096@60Hz )
- Video output format: RGB444
- Support channel-associated audio

### Output card specifications

- Output signal level: TMDS /CML
- Impedance: Differential 100ohm
- Power consumption: 10W

## SEx\_4×3G-SDI Output Board



### 3G-SDI output interface

Performance parameters

- Output interface quantity: 4 -channel 3G-SDI
- Maximum output resolution: 1920×1080@ 60Hz
- Output video source standards: ST-424 (3G), ST-292 (HD) and SMPTE 259 SD
- Compatible with HD-SDI and SD-SDI standards
- Support 1080i deinterlaced output
- Support output timing selection

### Output card specifications

- Output signal level: TMDS /CML
- Impedance: Coaxial 75ohm
- Power consumption: 5W

## SEx\_8×3G-SDI Output Board



### 3G-SDI output interface

Performance parameters

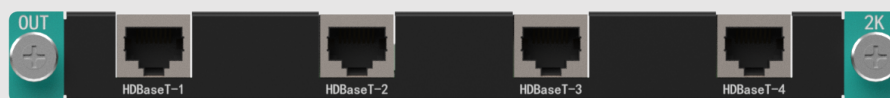
- Output interface quantity: 8 -channel 3G-SDI
- Maximum output resolution: 1920×1080@ 60Hz
- Output video source standards: ST-424 (3G), ST-292 (HD) and SMPTE 259 SD
- Compatible with HD-SDI and SD-SDI standards

- Support 1080i deinterlaced output
- Support output timing selection

### Output card specifications

- Output signal level: TMDS /CML
- Impedance: Coaxial 75ohm
- Power consumption: 10W

## SEx\_4×HDBaseT\_2K Output Board



### HDBase T\_2K output interface

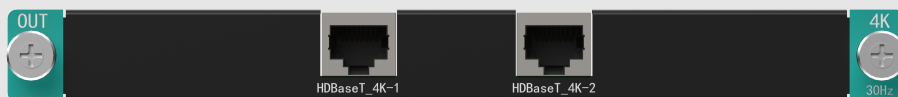
- of input interfaces: 4 RJ45 interfaces
- Maximum output resolution: 2048×1152@60Hz
- Custom resolution:
  - Maximum width 4096 ( 4096×616@60Hz )
  - Maximum height 4096 ( 480×4096@60Hz )
- Support channel-associated audio

Performance parameters

### Input card specifications

- Input signal level: TMDS /CML
- Impedance: Differential 100ohm
- Power consumption: 20W
- Transmission distance: Maximum 100 meters (category 6 twisted pair)

## SEx\_2×HDBaseT\_4K30 Output Board



Performance parameters

### HDBase T\_4K output interface

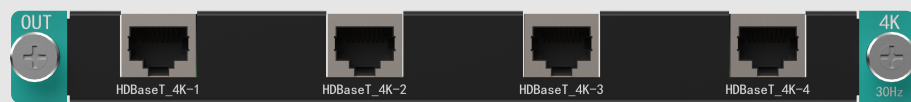
- of input interfaces: 2 RJ45 interfaces
- Maximum output resolution: 4096×2160@30Hz

- Custom resolution:
  - Maximum width 4096 ( 4096×2160@30Hz )
  - Maximum height 4096 ( 2160×4096@30Hz )
- Backward compatible with HDBaseT\_2K
- Support channel-associated audio

### Input card specifications

- Input signal level: TMDS /CML
- Impedance: Differential 100ohm
- Power consumption: 10W
- Transmission distance: Maximum 100 meters (category 6 twisted pair)

## SEx\_4×HDBaseT\_4K30 Output Board





### HDBase T\_4K output interface

- of input interfaces: 4 RJ45 interfaces
- Maximum output resolution: 4096×2160@30Hz
- Custom resolution:
  - Maximum width 4096 ( 4096×2160@30Hz )
  - Maximum height 4096 ( 2160×4096@30Hz )
- Backward compatible with HDBaseT\_2K
- Support channel-associated audio

### Input card specifications

- Input signal level: TMDS /CML
- Impedance: Differential 100ohm
- Power consumption: 20W
- Transmission distance: Maximum 100 meters (category 6 twisted pair)

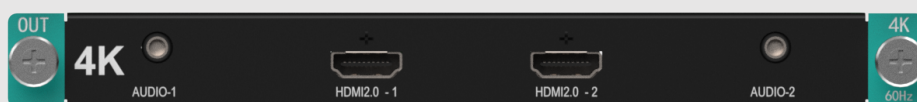
## SEx\_1×HDMI2.0 output board

<p>Performance parameters</p>	<div data-bbox="438 224 1348 324">  </div> <h3>HDMI 2.0 output interface</h3> <ul style="list-style-type: none"> <li>● Output interface quantity: 1- way HDMI 2.0 , 1- way 3.5 mm audio output</li> <li>● Maximum output resolution: 4096×2160@60Hz or 7680×1200@60Hz</li> <li>● Custom resolution: <ul style="list-style-type: none"> <li>- Maximum width 8192 ( 8192 × 1080@60Hz )</li> <li>- Maximum height 8192 ( 1000 × 8192 @ 60 Hz)</li> </ul> </li> <li>● Video output format: RGB444</li> <li>● Support channel-associated audio</li> <li>● Support 3.5mm audio output</li> </ul> <h3>Output card specifications</h3> <ul style="list-style-type: none"> <li>● Output signal level: TMDS /CML</li> <li>● Impedance: Differential 100ohm</li> <li>● Power consumption: 5W</li> </ul>
<div data-bbox="228 1171 1356 1254" style="background-color: #008080; color: white; padding: 5px;"> <b>SEx _1×DP1.2 output board</b> </div>	
<p>Performance parameters</p>	<div data-bbox="430 1265 1340 1366">  </div> <h3>DP 1.2 output interface</h3> <ul style="list-style-type: none"> <li>● Output interface quantity: 1 DP 1.2 , 1 3.5 mm audio output</li> <li>● Maximum output resolution: 4096×2160@60Hz or 7680×1200@60Hz</li> <li>● Custom resolution: <ul style="list-style-type: none"> <li>- Maximum width 7680 ( 7680 × 1200@60Hz )</li> <li>- Maximum height 7680 ( 1000 × 7680 @ 60 Hz)</li> </ul> </li> <li>● Video output format: RGB444</li> <li>● Support channel-associated audio</li> <li>● Support 3.5mm audio output</li> </ul>

### Output card specifications

- Output signal level: TMDS /CML
- Impedance: Differential 100ohm
- Power consumption: 5W

## SEx\_2×HDMI2.0 output board



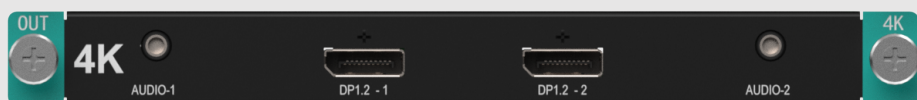
### HDMI 2.0 output interface

- Output interface quantity: 2- way HDMI 2.0 , 2- way 3.5 mm audio output
- Maximum output resolution: 4096×2160@60Hz or 7680×1200@60Hz
- Custom resolution:
  - Maximum width 8192 ( 8192 × 1080@60Hz )
  - Maximum height 8192 ( 1000 × 8192 @ 60 Hz)
- Video output format: RGB444
- Support channel-associated audio
- Support 3.5mm audio output

### Output card specifications

- Output signal level: TMDS /CML
- Impedance: Differential 100ohm
- Power consumption: 10W

## SEx\_2×DP1.2 output board



### DP 1.2 output interface

- Output interface quantity: 2- way DP 1.2 , 2 -way 3.5 mm audio output
- Maximum output resolution: 4096 × 2160@60Hz or 7680 ×



1200@60Hz

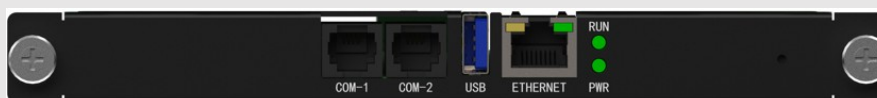
- Custom resolution:
  - Maximum width 7680 ( 7680 × 1200@60Hz )
  - Maximum height 7680 ( 1000 × 7680 @ 60 Hz)
- Video output format: RGB444
- Support channel-associated audio
- Support 3.5mm audio output

### Output card specifications

- Output signal level: TMDS /CML
- Impedance: Differential 100ohm
- Power consumption: 10W

## Control Board Introduction

### SEx \_Control Board



### Interface parameters

- COM-1: RS232 control port, can be connected to the central control system
- COM-2: RS232 control port, can be connected to the central control system; can be used as the COM-1 loop-out port
- USB: USB 3.0 port, used for system upgrades only and cannot be used to power other devices.
- ETHERNET: Gigabit Ethernet port, communication interface, connected to control computer, router or switch for Web control and pre-monitoring

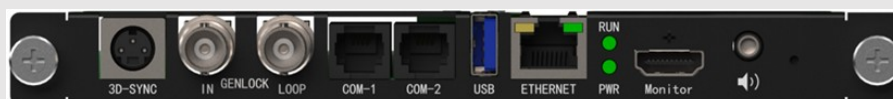
### Indicator status description

- RUN light status
  - Flashing: The device is starting up


Performance parameters

- Fixed frequency flashing: 1/2S, the system is operating normally
- No flash or no light: System failure (after the device is turned on)
- PWR light
  - Steady on: The device is powered normally.
- Off: The device power supply is abnormal.

## SEx \_ Enhanced Control Card



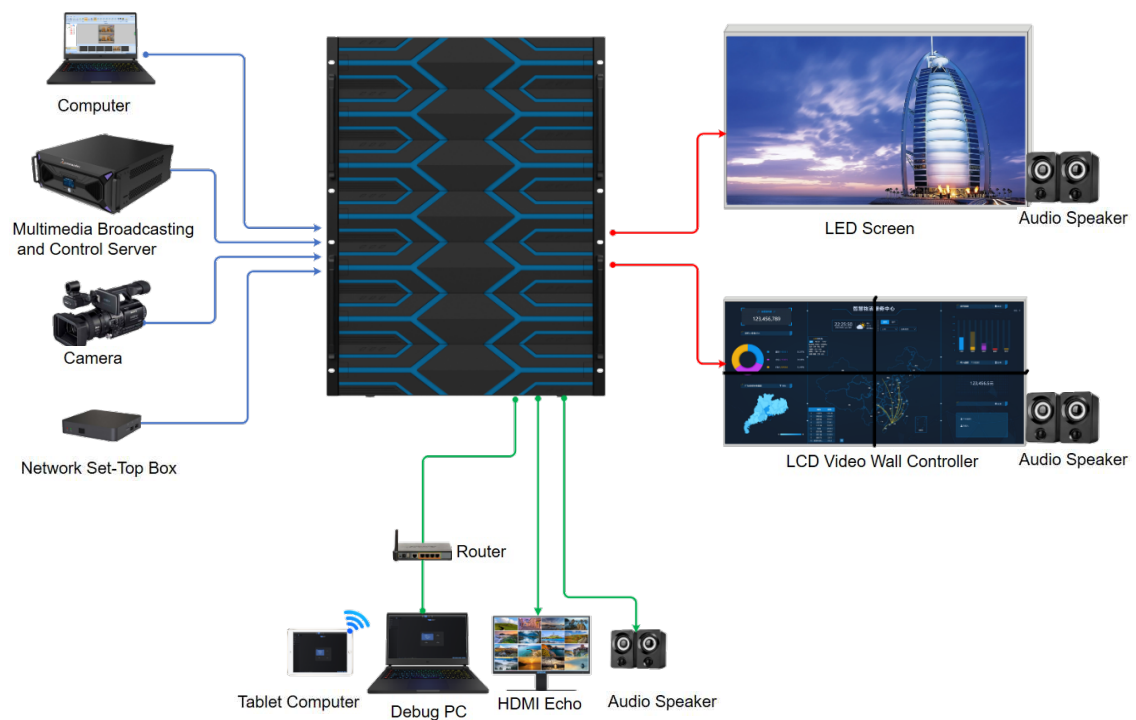
### Interface parameters

- 3D-SYNC : 3D synchronization signal output interface
- GENLOCK : External synchronization signal source
  - IN: External signal source input
  - LOOP: Synchronous output of external signal source
- COM-1 : RS232 control port, can be connected to the central control system
- COM-2 : RS232 control port, can be connected to the central control system; can be used as COM-1 loop-out port
- USB : USB 3.0 port , used only for system upgrades and cannot be used to power other devices.
- ETHERNET : Gigabit Ethernet port, communication interface, connected to control computer, router or switch for Web control and pre-monitoring
- Monitor : HDMI display interface . Output resolution: 1920×1080@60Hz
-  Audio output interface : You can set a certain input source audio output to the large screen speaker or for audio monitoring in the control room

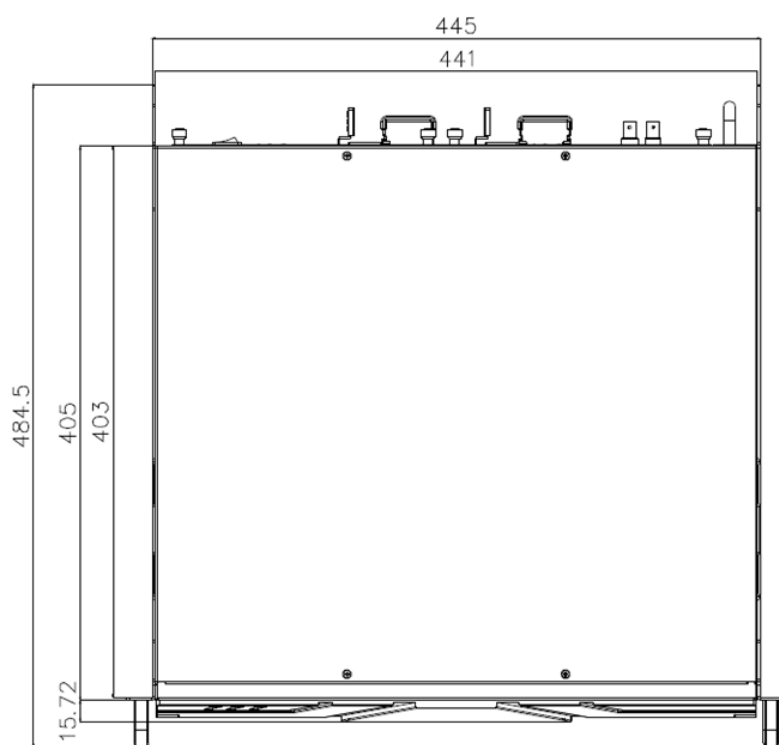
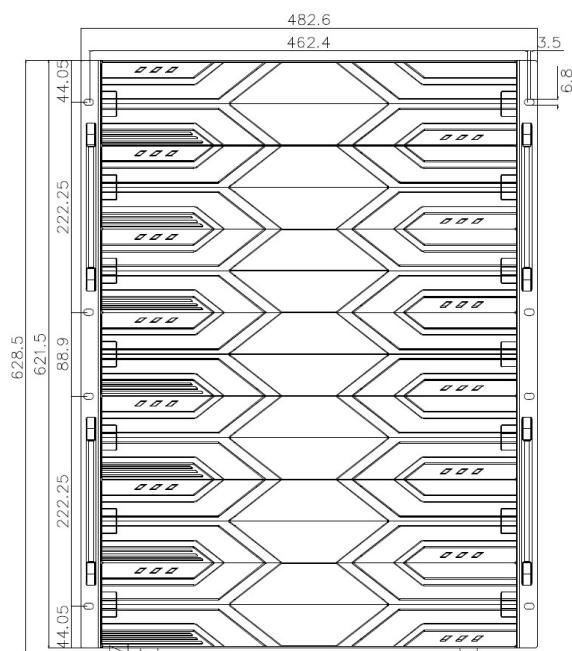
### Indicator status description

- RUN light status
  - Flashing: The device is starting up
  - Fixed frequency flashing: 1/2S, the system is operating normally
  - No flash or no light: System failure (after the device is turned on)
- PWR light
  - Steady on: The device is powered normally.
  - Off: The device power supply is abnormal.

## Scene topology diagram



## Size



Unit: mm


## Specification

Product Specification	
Model	SE14
Chassis specifications	14U
Maximum number of supported input cards	20 sheets
Maximum number of supported input channels	Route 160
Maximum number of supported output cards	16 sheets
Maximum supported output channels	Route 128
Maximum number of layers	192
Input power	110-240V~, 47-63Hz, 1A
Power consumption of the whole machine	600W
Work Environment	0 ~45 °C, 0% RH ~ 80% RH, non-condensing
Storage environment	-20 °C ~65 °C, 0%RH ~ 95%RH, non-condensing
Dimensions	4 82.6mm × 484.5mm × 628.5mm (L×W×H)
Packing size	670mm × 630mm × 900mm (L×W×H)
Net weight	42KG
Gross weight	52KG

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