



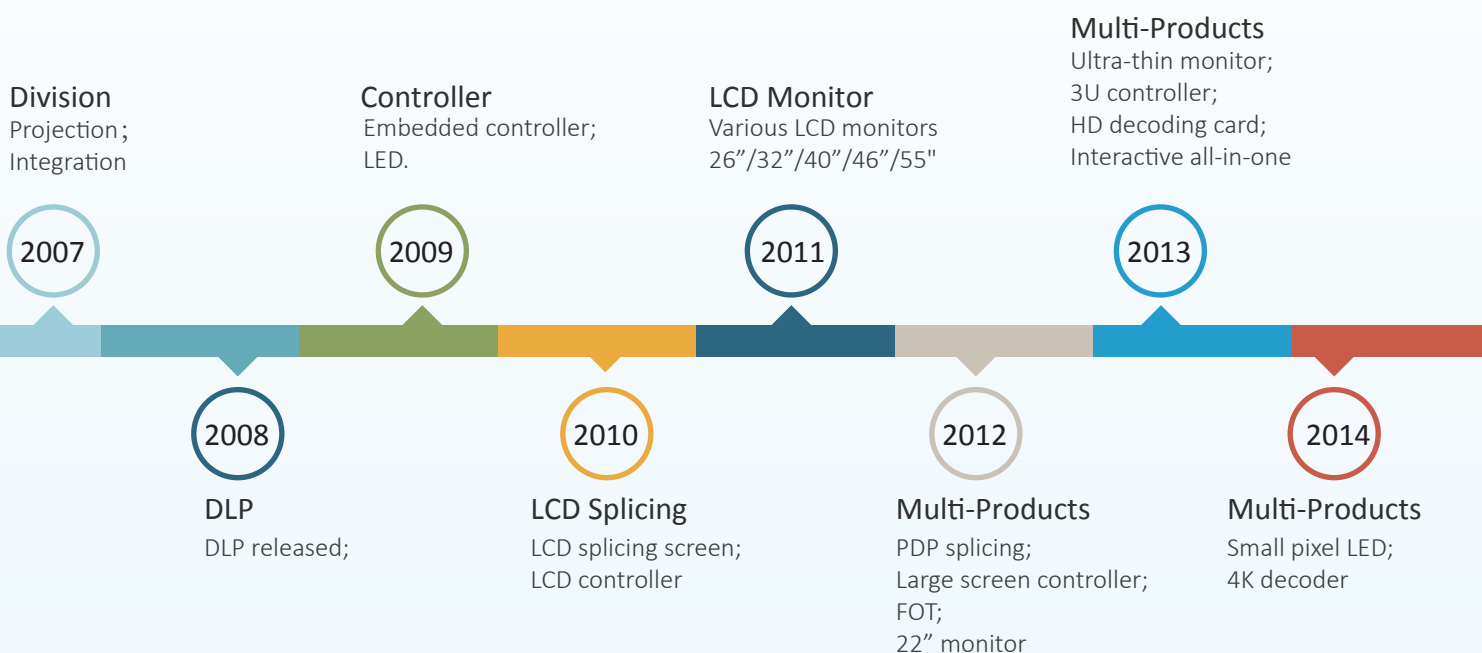
# Display and Control Solutions Perfect Vision



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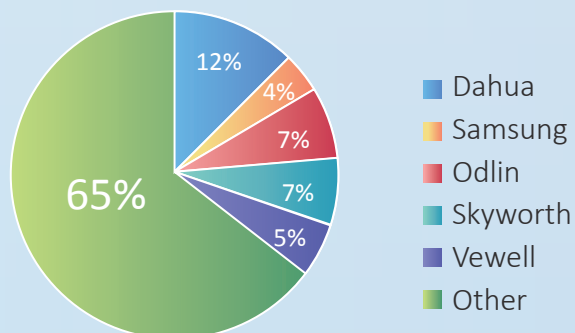
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# OUR DEVELOPMENT

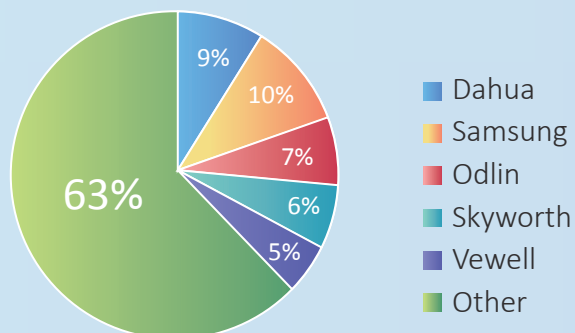


## MARKET

In 2014 LCD splicing market, Samsung ranked the 1<sup>st</sup> place with 10.4% followed by Dahua with 9.1% according to sales revenue. However, Dahua, with great price advantage, ranked the top with the highest sales amount of 12.5% while Samsung only covered 4% and the share of other brands is all below 10%.



Sales Amount



Sales Revenue

\* The data is based on the domestic market



# Industrial Application: Bank

The surveillance center consists of 46" or 55" LCD splicing screens, monitors and NKB3000.





# Industrial Application: Casino



LCD video wall and indoor LED video wall provide vivid color and image.  
Multiple video signals: News, Sports, Weather, Report table, etc.



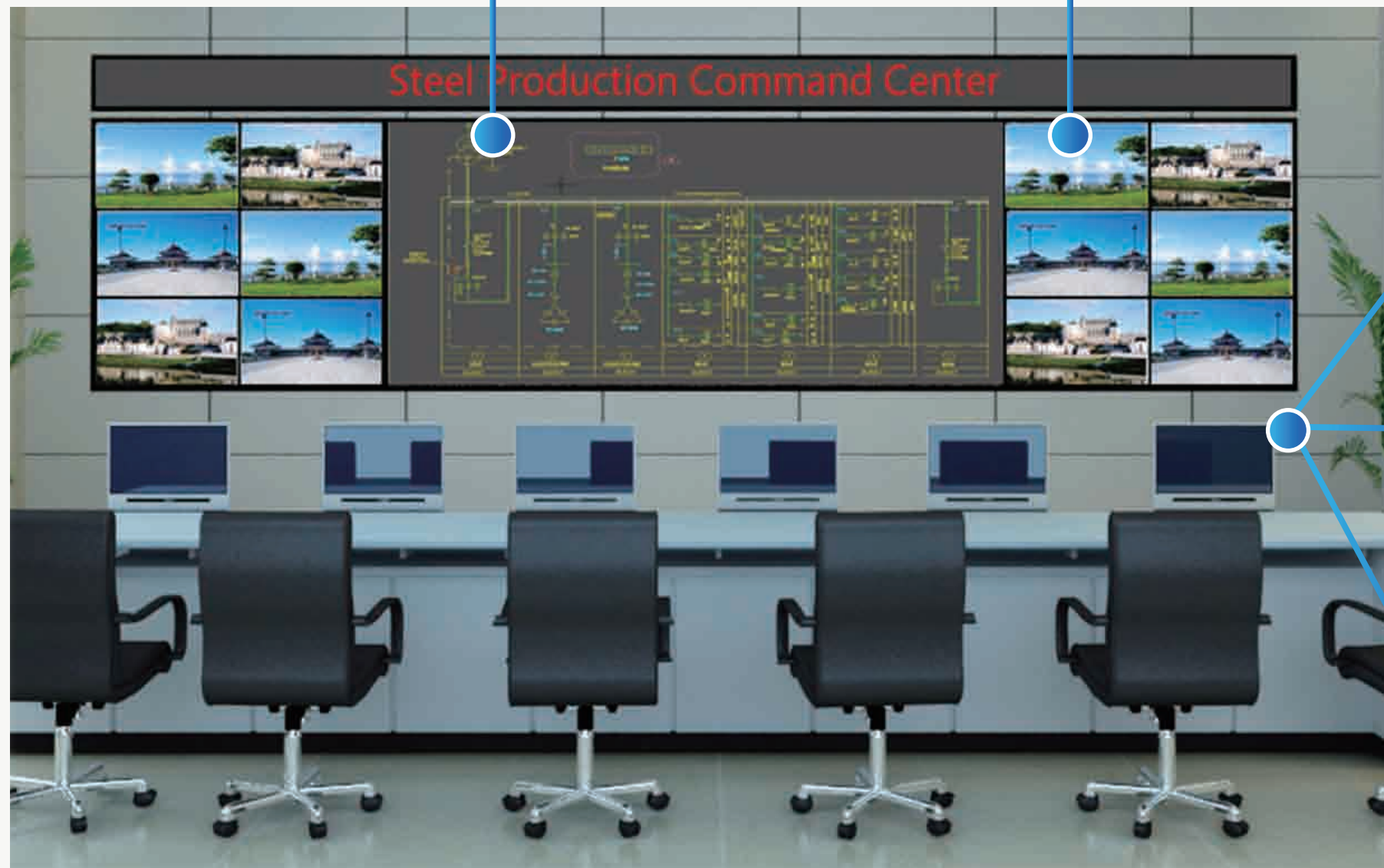
Proper brightness control adapts to various environment  
Real-time update of information release and etc.



## Industrial Application: Energy

LED Splicing Screens

LCD Splicing Screens



Power Grid



Coal Mine



Smelt

LED splicing screens are especially suitable for the energy industry because of their seamless image, and the LCD can offer perfect display for common surveillance.

LCD splicing screens are suitable for common surveillance in energy scene.



# Industrial Application: Network Media Release

B/S structure Programming, release, approval, terminal management and setting, remote surveillance.

Leisure, information guidance, office zone, interactive query.



Outdoor Advertising Board



Digital Signage



Store Advertising



Guidance

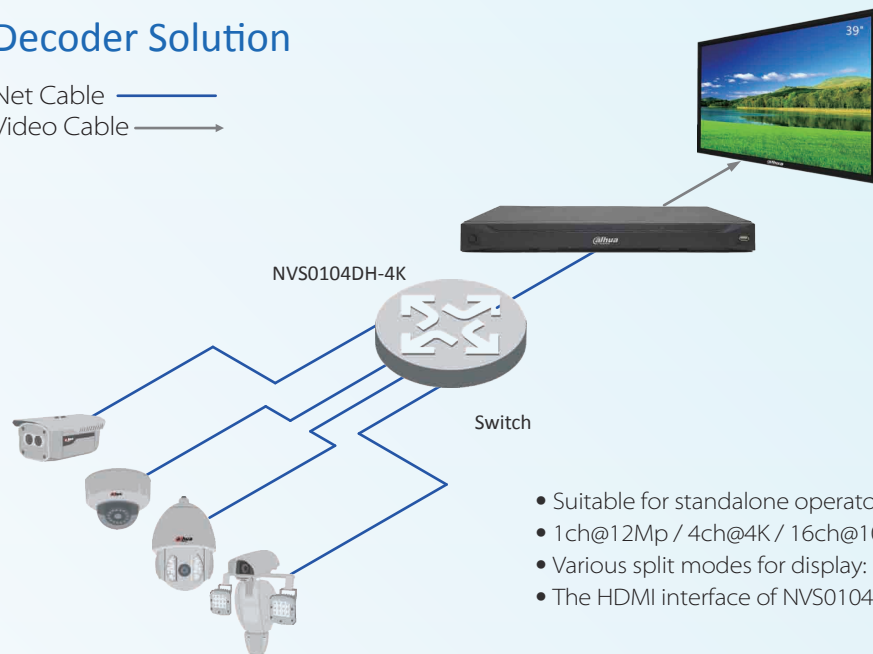




## Basic Solution

### Decoder Solution

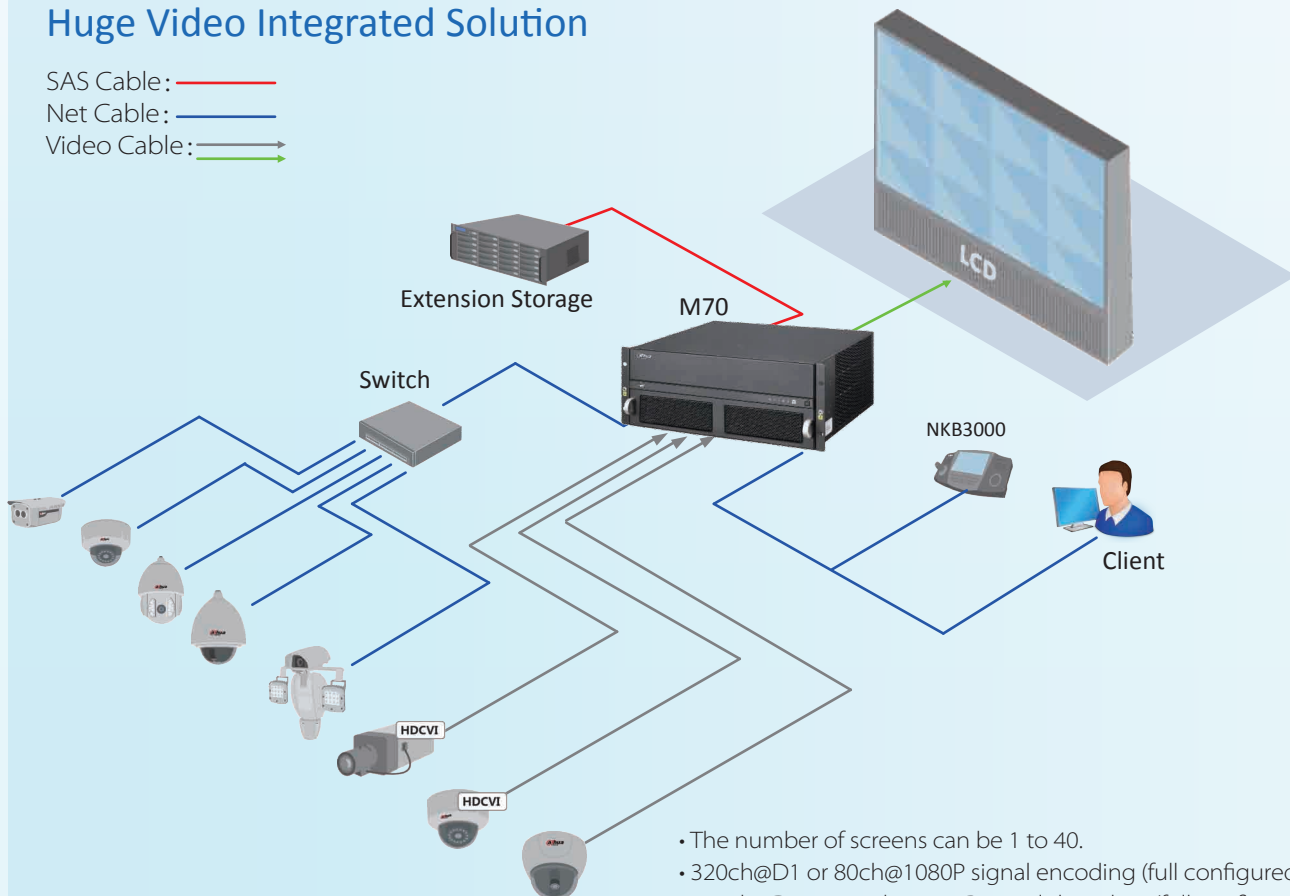
Net Cable: —  
Video Cable: —→



- Suitable for standalone operator viewers.
- 1ch@12Mp / 4ch@4K / 16ch@1080P / 64ch@D1 decoding ability.
- Various split modes for display: 1 / 4 / 9 / 16 / 25 / 36 / 64.
- The HDMI interface of NVS0104DH-4K supports Ultra HD 4K output.

### Huge Video Integrated Solution

SAS Cable: —  
Net Cable: —  
Video Cable: —→



- The number of screens can be 1 to 40.
- 320ch@D1 or 80ch@1080P signal encoding (full configured).
- 640ch@D1 or 160ch@1080P signal decoding (full configured).
- NKB3000 for Speed Dome and M70 control.
- Use ESS extension cabinet for storage.



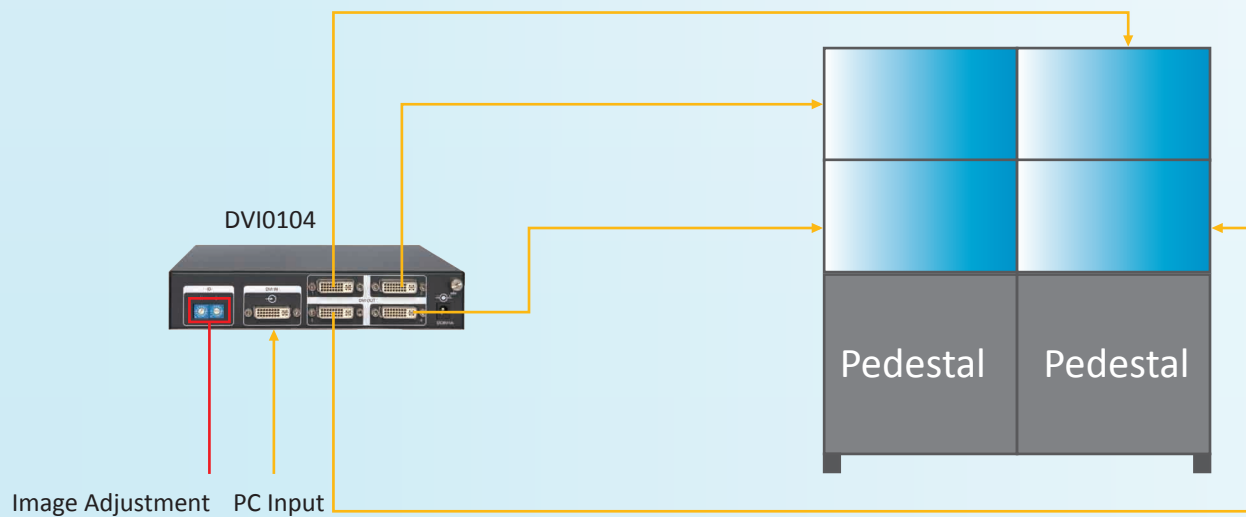
## Indoor LED Splicing Solution

Net Cable: — (blue line)  
Video Cable: — (green line)



## Video Distributor Solution

Video Signal: — (yellow line)



- Input 1 signal to Video Distributor (DVI0104), and output 4 same signals to each LCD screen.
- Get a complete image on each LCD screen or you can use remote control to get a complete image consists of 4 screens.
- High cost performance solution for splicing display.
- The image quality can be adjusted for perfect display.
- We also have DVI0109 and DVI0116 for 9 screens and 16 screens.

# Display Product

## LCD Splicing

- 5.3mm delicate splicing
- Infrared, RS232 double mode, supporting remote PC control
- 1920×1080 resolution
- Built-in 3D COMB filter and 3D noise reduction
- Intelligent light & temperature controlling

## Model List

Model	DHL460UTS-E	DHL460UT-E	DHL550UTS-E	DHL550UT-E
Appearance				
Physical seam	5.3mm	5.3mm	5.3mm	5.3mm
Backlight	LED	LED	LED	LED
Luminance( Standard )	500 cd/m <sup>2</sup>	700 cd/m <sup>2</sup>	500 cd/m <sup>2</sup>	700 cd/m <sup>2</sup>
Resolution	1920X1080	1920X1080	1920X1080	1920X1080
Power Consumption( Standard )	133W	200W	130W	150W

## Splicing Series



### DHL460UTS-E/DHL460UT-E 46" Full-HD LCD Display Unit

#### Product Features

- 1920×1080 resolution
- 5.3mm delicate splicing
- Built-in 3D COMB filter and 3D noise reduction
- Intelligent light & temperature controlling
- Infrared, RS232 double mode, supporting remote PC control
- Fan smart detection, OSD prompt
- Interfaces: CVBS (BNC)×2, VGA (D-Sub)×1, DVI×1, HDMI×1

### DHL550UTS-E/DHL550UT-E 55" Full-HD LCD Display Unit

#### Product Features

- 1920×1080 resolution
- 5.3mm delicate splicing
- Built-in 3D COMB filter and 3D noise reduction
- Intelligent light & temperature controlling
- Infrared, RS232 double mode, supporting remote PC control
- Fan smart detection, OSD prompt
- Interfaces: CVBS (BNC)×2, VGA (D-Sub)×1, DVI×1, HDMI×1



## LED Splicing

Tiny pixel pitch, seamless for image  
High-definition, arbitrary split screen,  
large viewing angle cabinet design, easy  
to install and maintain coating technology,  
good moisture-proof effect.

## Model List

Model	PHSA2.5-SH	PHSA1.9-SH	PHSA1.6-SH
Appearance			
Pixel Pitch	2.5mm	1.9mm	1.6mm
LED Type	SMD1010	SMD1010	SMD1010
Pixel density	160,000 pixels/m <sup>2</sup>	275625 pixels/m <sup>2</sup>	360000 pixels/m <sup>2</sup>
Brightness	800 cd/m <sup>2</sup>	800 cd/m <sup>2</sup>	800 cd/m <sup>2</sup>
Recommended viewing distance	≥2.5m	≥2m	≥1.7m
Power Consumption	174 W/m <sup>2</sup>	251 W/m <sup>2</sup>	250 W/m <sup>2</sup>

## Splicing Series

### PHSA2.5-SH/PHSA1.9-SH/PHSA1.6-SH

#### Small Pixel LED Display Unit

##### Introduction

Indoor LED splicing unit uses high-end LED light-emitting devices and the pixel pitch can reach 2.5mm or less to realize real seamless display. High brightness, strong adaptability to environment and easy to adjust. No reflect light, wide viewing angle, high-contrast, energy saving, long service life, easy to install and maintain. It can be widely used in the military industries, electric power, energy and transport industries

##### Product Features

High-definition, arbitrary split screen, large viewing angle  
Good color expressive capacity, clear picture; high refresh rate, smooth picture  
Coating technology, good moisture-proof effect  
Seamless, high mechanical strength, good heat dissipation effect  
Easy installation fast, concise and beautiful appearance



Indoor Die-casting Al Cabinet

##### Technical Specifications

Parameter	PHSA2.5-SH	PHSA1.9-SH	PHSA1.6-SH
Pixel Pitch	2.5 mm	1.904 mm	1.667 mm
Pixel configuration	1R1G1B	1R1G1B	1R1G1B
LED type	3-in-1 black SMD1010	3-in-1 black SMD1010	3-in-1 black SMD1010
Brightness	1000cd/ m <sup>2</sup> (before calibration)	800 cd/m <sup>2</sup>	800 cd/m <sup>2</sup>
Color temperature	6500K	6500K	6500K
Viewing angle	H: 160°; V:160°	H: 160°; V:160°	H: 160°; V:160°
Pixel density	160,000 pixels/m <sup>2</sup>	275625 pixels/m <sup>2</sup>	360000 pixels/m <sup>2</sup>
Recommended viewing distance	≥2.5M	≥2M	≥1.7M
Module size	240mm×240mm	240mm×240mm	240mm×240mm
Cabinet size(mm)	W480×H480×D88.24	W480×H480×D86	W480×H480×D86
Contrast ratio	4000:1	4000:1	4000:1
Video frame rate	50/60 Hz	50/60 Hz	50/60 Hz
Rate refresh	≥3200 Hz	≥3200 Hz	≥3200 Hz
Life Time	≥100,000 Hours	≥100,000 Hours	≥100,000 Hours

## Monitor

- A variety of sizes optional
- Vertical and wall mounting
- High resolution, perfect display performance
- DHL22-F600 built-in speaker, high cost performance
- DHL28-4K & DHL42-4K provide super performance of 4K resolution
- Infrared point-to-point remote control

### Model List

Model	DHL28-4K	DHL42-4K	DHL22-F600	DHL22-M600	DHL27	DHL32	DHL39	DHL46	DHL55
Diagonal	28"	42"	20.7"	21.5"	27"	32"	39"	46"	55"
Backlight	LED	LED	LED	LED	LED	LED	LED	LED	LED
Luminance(Standard)	350 cd/m <sup>2</sup>	450 cd/m <sup>2</sup>	200 cd/m <sup>2</sup>	200 cd/m <sup>2</sup>	450 cd/m <sup>2</sup>	450 cd/m <sup>2</sup>	450 cd/m <sup>2</sup>	450 cd/m <sup>2</sup>	450 cd/m <sup>2</sup>
Resolution	3840×2160	3840×2160	1920×1080	1920×1080	1920×1080	1366×768	1920×1080	1920×1080	1920×1080
Audio	--	--	3.5mm/HDMI	--	--	--	--	--	--
Power Consumption(Standard)	30w	160w	23w	30w	24w	50w	120w	150w	180w

### 4K Series

#### DHL28-4K/DHL42-4K

##### Product Features

- 4K extremely high resolution
- Professional narrow frame structure design, beautiful appearance
- Adopt imported industrial LCD screen, designed for monitoring
- High contrast and high brightness greatly enhance the video layer
- 16.7M colors, present the details of the video
- Build-in 3D COMB filter and 3D Noise Reduction
- 5ms fast response time, remove the picture ghosting and eliminate the ghosting automatically
- 178° wide view angle, ensure the image deformation, without distortion
- Long lifespan, high stability, suitable for 7×24 continuous works
- All metal design, anti-static, magnetic field, anti-interference, no radiation.
- Humanized design of menu, more convenient for controlling
- Abundant interfaces to meet various application requirements



### Common Series

#### DHL22-F600/DHL22-M600

##### Product Features

- ABS material, mirage black technique
- Built-in 3D DNR
- IR remote control
- Support 1ch audio input for DHL22-F600
- 1920×1080 resolution
- Angle of view: 130°/178° for DHL22-F600; 90°/130° for DHL 22-M600
- Interfaces: VGA(D-Sub)×1, HDMI×1, DHL22-F600 built-in speaker





## DHL27/DHL32

### Product Features

- Metal drawing process, once shaping technique
- Build-in 3D COMB filter and 3D noise reduction
- Support point-to-point remote control
- Intelligent brightness control, energy saving
- Built-in power, low energy consumption, ultra-quiet
- 1920×1080 resolution
- Angle of view: 178°/178°
- Interfaces: VGA(D-Sub)×1, HDMI×1, CVBS(BNC)×2, DVI-D×1

## DHL46/DHL55

### Product Features

- Metal drawing process, once shaping technique
- Build-in 3D COMB filter and 3D noise reduction
- Support point-to-point remote control
- Intelligent brightness control, energy saving
- 1920×1080 resolution
- Angle of view: 178°/178°
- Interfaces: VGA(D-Sub)×1, HDMI×1, CVBS(BNC)×2, DVI-D×1



## Other

### NVP-E

- B/S structure, 1 RJ-45 100/1000Mbps
- Programing, release, approval, terminal management and setting, remote surveillance
- HDMI output, Android System
- Leisure, information guidance, office zone, interactive query

### DVI0104

- Input 1 signal, and output 4 same signals
- Easy to adjust the image quality



## Controller

Encoding & decoding, support audio & alarm local and network video signal input VGA/DVI/HDMI output to display WEB configuration, remote control various display split mode for video wall.

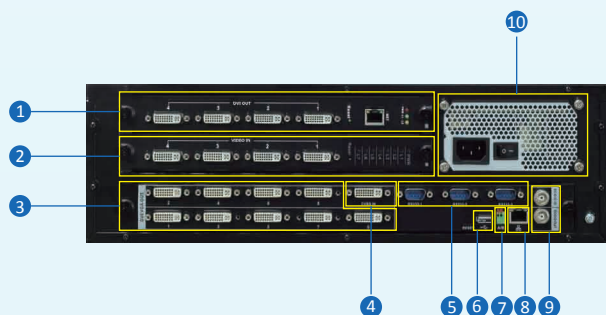


## Image Controller

### NVS0104DH-4K

#### Product Features

- H.265/H.264/MPEG-4 video decoding
- 1ch@12Mp / 4ch@4K / 16ch@1080P / 64ch@D1 decoding ability
- Support multiple resolution decoding: up to 8Mp and 12Mp network vide
- Support 1ch HDMI/VGA output, HDMI support Ultra HD 4K output
- Support 1 / 4 / 9 / 16 / 25 / 36 / 64 display split
- Support audio, alarm, bi-directional talk, RS485



- |                 |                   |
|-----------------|-------------------|
| 1 Decoding Card | 6 USB             |
| 2 DVI Input     | 7 RS-485          |
| 3 DVI Output    | 8 RJ45            |
| 4 Analog Input  | 9 Audio Interface |
| 5 RS-232        | 10 Power          |

### M30

#### Product Features

##### Hardware Structure:

- 3U 19" Standard industry box
- Support up to 9 video-wall display units
- Support configuration of 2x2, 2x3, 2x4, 3x3

##### Video Input: Local Video:

- Support CVBS/VGA/DVI/HDMI/HD-SDI

##### Network Video:

- IPC/DVR/NVR, etc.

##### Video Output:

- 9ch@DVI, support split, merge, splice, roam

##### Matrix Switch:

- Support control of external D1, VGA & DVI video matrix

##### Network & Control:

- Support 10M/100M/1000M for network video decoding & video-wall control
- Support control for matrix, video-wall, dome camera with RS485 & RS232
- Support mainstream manufacturers' protocol
- Support ONVIF/PSIA/GB28181/DB33/DB41/RTP/RTSP
- Support user authority management

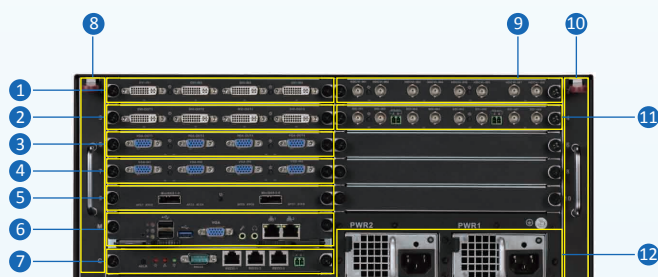


# M70

## Multi-Service Matrix Platform

### Product Features

- 19" standard 4U ATCA industry box
- Easy and flexible configuration with pluggable card module design
- 320ch@D1 or 80ch@1080P signal encoding (full configured)
- 640ch@D1 or 160ch@1080P signal decoding (full configured)
- Support analog/digital video signals input and matrix output
- Support SD/HD video signal matrix switch and output
- Support non-compressed digital signal encoding output
- 2 RJ-45 gigabit network ports for matrix control, preview and online central storage
- Support TCP/IP/RTSP/RTSP/TCP/UDP/DHCP/PPPoE and etc. network protocols
- Remote cast analog/digital video onto the video-wall
- Remote reboot/upgrade/default setting and etc. operations



- |              |                     |
|--------------|---------------------|
| 1 DVI Input  | 7 Control Board     |
| 2 DVI Output | 8 Redundant Fan     |
| 3 VGA Input  | 9 HDCVI Input       |
| 4 VGA Output | 10 Redundant Fan    |
| 5 Raid Board | 11 SDI Input        |
| 6 Main Board | 12 Power(Redundant) |

### Video Input

Model	VEC0404HD-M70 ( 4ch DVI-I )	VEC0404HH-M70 ( 4ch HDMI )	VEC0404HV-M70 ( 4ch VGA )	VEC3204FB-M70 ( 32ch BNC )	VEC0804HC-M70 ( 8ch BNC )	VEC0804HS-M70 ( 8ch BNC )
Encoding	H.264/MPEG4, 4ch@1080P, Support: 1080P/720P/UXGA	H.264/MPEG4, 4ch@1080P, Support: 1080P/720P/UXGA	H.264/MPEG4, 4ch@1080P, Support: 1080P/720P/UXGA	H.264/MPEG4, 32ch@D1	H.264/MPEG4, 8ch@1080P	H.264/MPEG4, 8ch@1080P

### Video Output

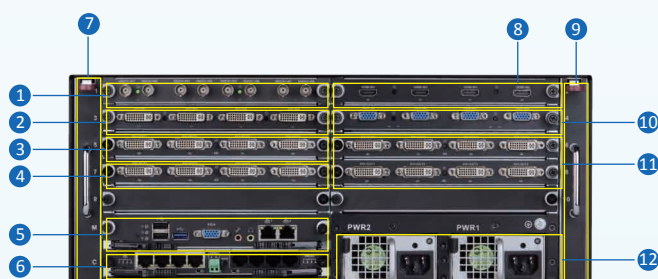
Model	VDC0404D-M70 ( 4ch DVI-D )	VDC0404H-M7 ( 4ch HDMI )	VDC0404V-M70 ( 4ch VGA )
Decoding	16ch@1080P/32ch@720P/64ch@D1	16ch@1080P/32ch@720P/64ch@D1	16ch@1080P/32ch@720P/64ch@D1
Split	1/4/9/16	1/4/9/16	1/4/9/16

# M70-E

Multi-service Matrix Platform

## Product Features

- 19" standard 4U ATCA industry box
- Easy and flexible configuration with pluggable card module design
- 320ch@D1 or 80ch@1080P signal encoding (full configured)
- 1280ch@D1 or 320ch@1080P or 40ch@4K signal decoding (full configured)
- Support 80ch @1080P(6Mbps) SVAC real time output(full configured)
- Support analog/digital video signals input and matrix output
- Support SD/HD video signal matrix switch and output
- Support non-compressed digital signal encoding output
- 2 RJ-45 gigabit network ports for matrix control, preview and online central storage.
- Support TCP/IP/RTSP/RTCP/TCP/UDP/DHCP/PPPoE and etc. network protocols
- Remote cast analog/digital video onto the video-wall



- |                 |                    |
|-----------------|--------------------|
| ① HDCVI Input   | ⑦ Redundant Fan    |
| ② DVI Input     | ⑧ HDMI Input       |
| ③ DVI Input     | ⑨ Redundant Fan    |
| ④ DVI Output    | ⑩ VGA Input        |
| ⑤ Main Board    | ⑪ DVI Output       |
| ⑥ Control Board | ⑫ Power(Redundant) |

## Video Input

Model	VEC0404HD-M70 ( 4ch DVI-I )	VEC0404HH-M70 ( 4ch HDMI )	VEC0404HV-M70 ( 4ch VGA )	VEC3204FB-M70 ( 32ch BNC )	VEC0804HC-M70 ( 8ch BNC )	VEC0804HS-M70 ( 8ch BNC )
Encoding	H.264/MPEG4, 4ch@1080P, Support: 1080P/720P/UXGA	H.264/MPEG4, 4ch@1080P, Support: 1080P/720P/UXGA	H.264/MPEG4, 4ch@1080P, Support: 1080P/720P/UXGA	H.264/MPEG4, 32ch@D1	H.264/MPEG4, 8ch@1080P	H.264/MPEG4, 8ch@1080P

## Video Output

Model	VDC0404UD-M70 ( 4ch DVI-D )
Decoding Capability	4ch@4K/32ch@1080P/64ch@720P/128ch@D1
Split Capability	1/4/6/8/9/16
SVAC	8ch@1080P SVAC decoding
Resolution	4096×2160@20fps,3840×2160@30fps,1920×1080P@30fps, 1280×1024P@30fps,1280×720P@30fps, 1024×768P@30fps

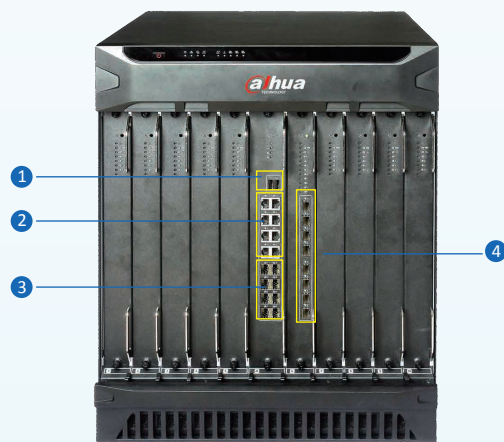


# M60

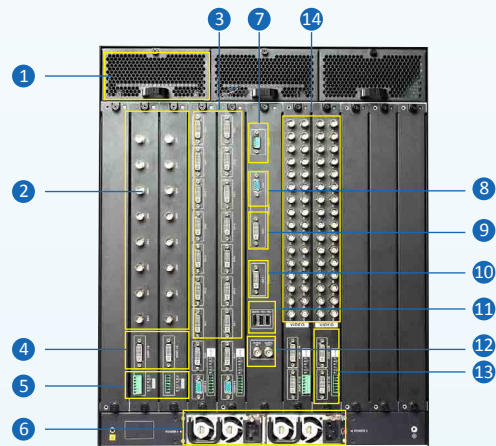
## Video Platform

### Product Features

- 19" standard 12U
- Easy and flexible configuration with pluggable card module design
- 320ch@D1 or 160ch@1080P signal encoding (full configured)
- 1280ch@D1 or 320ch@1080P signal decoding (full configured)
- Support analog/digital video signals input and matrix output
- Support SD/HD video signal matrix switch and output
- Support non-compressed digital signal encoding output
- 8 RJ-45 ports and 8 optical ports
- Support TCP/IP/RTSP/RTCP/TCP/UDP/DHCP/PPPoE and etc. network protocols
- Support network extended alarm signal input and output
- Remote cast analog/digital video onto the video-wall



- ① USB
- ② Gigabit Ethernet Port
- ③ Fiber Interface
- ④ Cascade Fiber Interface



- ① Fan
- ② HD-SDI Output
- ③ DVI Output
- ④ Audio Input
- ⑤ RS-485
- ⑥ Power
- ⑦ RS-232
- ⑧ VGA Display
- ⑨ Main Board Control Information
- ⑩ Main Board Status Information
- ⑪ USB&ESATA
- ⑫ Voice Intercom
- ⑬ Audio Input&RS-485
- ⑭ BNC Input

### Video Input

Model	VEC3204FB-M60 ( Analog )	VEC0804HS-M60 ( HD-SDI )	VEC1604HS-M60 ( HD-SDI )	VEC0804HD-M60 ( DVI-I )	VEC1604HC-M60 ( HDCVI )
Encoding	32ch@D1,BNC	8ch@1080P	16ch@1080P	8ch@1080P	16ch@1080P
Audio	32ch, DB26(2.0Vp-p,1KΩ), G.711a	82ch, DB26(2.0Vp-p,1KΩ), G.711a	16ch, DB26(2.0Vp-p,1KΩ), G.711a	8ch, DB26(2.0Vp-p,1KΩ), G.711a	16ch, DB26(2.0Vp-p,1KΩ), G.711a

### Video Output

Model	VDC1204B-M60 ( 12ch BNC )	VDC0804V-M60 (8ch VGA)	VDC0804D-M60 (8ch DVI)
Decoding	48ch@D1	32ch@1080p/64ch@720p/128ch@D1	32ch@1080p/64ch@720p/128ch@D1
Split Capability	1/4	1/4/9/16	1/4/9/16
Audio	12ch, DB15 Line Out	8ch, DB15 Line out	8ch, DB15 Line out
RS485	2 Ports	2 Ports	2 Ports

# Typical Cases

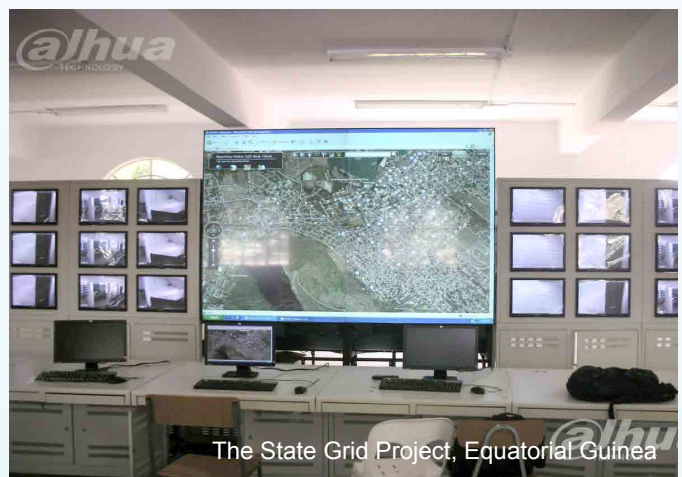
More Projects in



The State Grid Project, Equatorial Guinea



Hebei ICBC Project



The State Grid Project, Equatorial Guinea



Zhuji PBOC Project



Tianjin BOC Project



Mexico TVC



Pakistan Urban Unit





Operating Center Project



Binjiang Police Bureau Command Center



Traffic Command Center Project



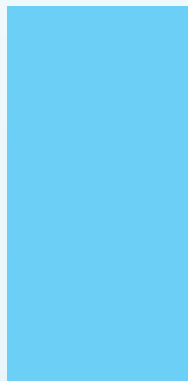
The State Grid Project,  
East Timor Grid



The Energy Power Station Project



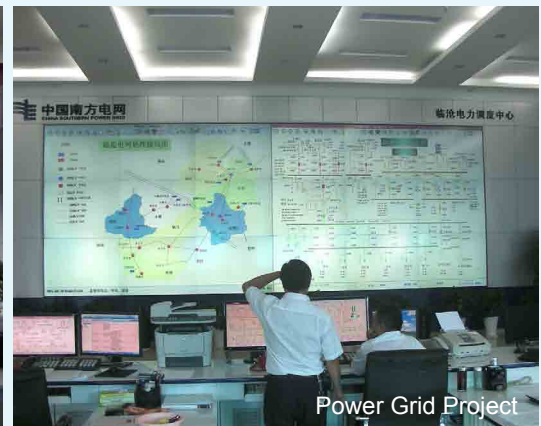
Hebei ICBC Project



Petroleum Project



Changxing Police Bureau Command Center



Power Grid Project

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Display and Control Solutions Perfect Vision - 02, Sep 2015



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