

6. Titulkovací LED panel – komplet s příslušenstvím

6.1. 3x LED zobrazovací panel

- Technologie typu SMD LED s provedením vysokého kontrastu.
- Rozteč obrazových bodů maximálně 1,95 mm.
- Rozlišení panelu alespoň 512 x 256 obrazových bodů.
- Rozměry panelu 1000 x 500 mm (s odchylkou maximálně 5 mm)
- Tloušťka profilu včetně konstrukce maximálně 35 mm.
- Pasivní chlazení bez nutnosti aktivních ventilátorů.
- Jas minimálně 700 cd/m² (nits) s možností plynulé regulace od 1%.
- Obnovovací frekvence větší než 3800 Hz.
- Pozorovací úhel minimálně 160° horizontálně a 140° vertikálně.
- Možnost jednoduché výměny jednotlivých panelů pomocí magnetických nástrojů.
- Celková maximální hmotnost 10 kg.
- Barva panelu černá.
- Odolnost proti dešti a prachu alespoň IP20.
- Předpokládaná životnost panelu minimálně 50000 hodin.

6.2. 3x Mechanický závěsný systém

- Závěsný systém kompatibilní s výše uvedenými panely.
- Matný, černý, hliníkový profil s vysokou nosností.
- Možnost zavěšení alespoň 15 daných panelů pod sebou.
- Splňující bezpečnostní normy pro zavěšení nad osobami.
- Alespoň dvě kruhová úchytná místa pro karabiny nebo úvazy.

6.3. 1x Řídicí a procesorový systém

- Kompatibilní s výše uvedenými panely.
- Procesor musí umět obsloužit minimálně 2 miliony pixelů.
- Možnost úpravy velikosti výstupního signálu na rozlišení LED přímo v zařízení.
- Vstupní porty minimálně 1x HDMI ve verzi minimálně 1.3, 1x DVI a 1x 3G-SDI.
- Výstup minimálně 4x Ethernet RJ45 s gigabitovou rychlostí, 1x výstup na optické vlákno a 1x HDMI ve verzi minimálně 1.3
- Možnost nastavení pomocí rozhraní USB nebo LAN a standardizovaného softwaru.
- Možnost volby režimu s nízkou latencí.
- Možnost práce s minimálně dvěma vrstvami s nastavitelnou velikostí, polohou a prioritou.
- Obsahující LCD displej, otočný encoder a minimálně 16 tlačítek pro rychlou obsluhu.
- Zařízení černé barvy ve velikosti umožňující instalaci do standardizovaného 19" rack systému.
- Maximální hmotnost 5 kg.
- Odolnost proti dešti a prachu alespoň IP20.
- Hlučnost maximálně 45 dB.

6.4. 1x Převravní case

- Převravní kufr s dostatečným prostorem pro uložení celé výše uvedené sestavy.
- Stěny vyrobené z minimálně 8 mm překližky.
- Kovem zpevněné veškeré hrany.
- Na spodní straně jsou minimálně 4 kolečka, z toho alespoň dvě mají brzdu.
- Uzamčení kufru probíhá pomocí motýlkových zámků.
- Na vnější straně jsou celkem alespoň 4 madla pro zvednutí celého kufru.

TECHNICKÁ SPECIFIKACE PRO ČÁST 6

6. Titulkovací LED panel – komplet s příslušenstvím

6.1. 3x LED zobrazovací panel

ADJ / WMS1 (specifikace viz produktový list)

6.2. 3x Mechanický závěsný systém

ADJ / WMSRB1 (specifikace viz produktový list)

6.3. 1x Řídicí a procesorový systém

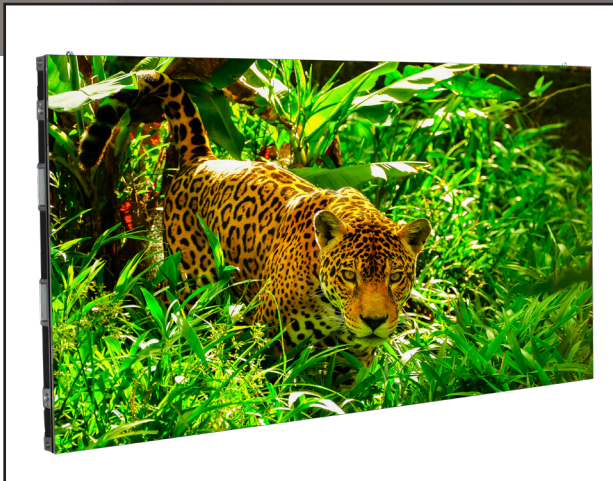
Novastar / VX400 (specifikace viz produktový list)

6.4. 1x Převravní case

Flyght Pro Accessory Case (specifikace viz produktový list)

V Praze dne 11. 5. 2025

jednatel
WD LUX, s.r.o.



WMS1

1.95mm Pixel Pitch Wall Mount Panel

Ideal for integration projects of all types, the WMS1 is ADJ's highest resolution video panel to date. WMS1 boasts a 1.95mm pixel pitch delivering unparalleled vibrance and clarity with a pixel density of 262,144/m² and a brightness of 700 NITS. WMS1 is wall mountable, or temporary hangable, with a front serviceable design in a horizontal or vertical configuration.*

Discover the cutting-edge ADJ WMS1 LED Video Panel – a pinnacle in high-resolution display technology designed for seamless integration into a diverse array of projects. Expanding ADJ's professional LED video panel portfolio, the WMS1 stands out as the company's highest resolution offering to date. Perfectly suited for integration applications, including shop window displays, museums, boardrooms, digital signage, and entertainment venues, this video panel is a versatile solution for immersive visual experiences. A Novastar A8s-N receiving card is built-in allowing the WMS1 to be displayed horizontally or vertically when wall mounting.

Boasting a super high-res pixel pitch of 1.95mm and a pixel density of 262,144/m², the WMS1 guarantees exceptional definition, even at close viewing distances. The RGB SMD1212 color mixing LEDs produce a vibrant spectrum, supported by a brightness of 700 NITS. With a wide viewing angle of 160-degrees (horizontal) by 140-degrees (vertical) and a rapid refresh rate of 3840Hz, this video panel ensures a captivating and smooth visual performance.

Measuring 39.3" x 19.6" (1000mm x 500mm), the WMS1 consists of eight individual modules, each with 128 x 128 pixels, offering flexibility in arrangement. Each panel's overall resolution is 512 x 256 pixels (horizontally) or 256 x 512 (vertically). The panel's frame assembly features a secure locking mechanism, allowing for the seamless joining of adjacent panels. Installation is simplified with mounting points for direct wall installation. The front-serviceable design enables easy module replacement, ensuring uninterrupted operation.

With a slim 1.3" (33mm) thickness and a weight of 21 lbs. (9.5 kgs.), the WMS1 is a lightweight and compact solution. Its versatility extends to wall-mounting, hanging, or stacking, both horizontally or vertically, catering to various installation preferences. Join the LED video panel revolution with ADJ's crystal clear, and incredibly vibrant WMS1.

SPECIFICATIONS:

- Pixel Pitch (mm): 1.95mm
- Pixel Density (dot/m2): 262,144
- LED sealing Type: SMD1212 Kinglight Cooper
- Module Size (mm x mm): 250 x 250
- Module Resolution (PX x PX): 128 x 128
- Panel Resolution (PX x PX): 512 x 256 pixels (horizontally) or 256 x 512 (vertically).
- Average Life (Hours): 50000H

FEATURES:

- Installation Method: Hang, Stack or Wall Mount
- Maintenance: Front Service
- Configuration*: Horizontal (wall mount, ground stack or hang); Vertical (wall mount only)

CONNECTIONS:

- Data: IP20 Indoor locking 5-pin DMX In/Out
- Power: IP20 Indoor locking power In/Out
- Safety Loop

OPTICAL RATING:

- Brightness (cd/m2): 700 NITS
- Horizontal Viewing Angle (Deg): 160°
- Vertical Viewing Angle (Deg): 140°
- Grey Scale (Bit): ≥ 14 , DP32655
- Refresh Rate (Hz): 3840Hz

POWER SUPPLY:

- Input Voltage (V): 100-240VAC
- Max Power Dissipation (W/m²): 370
- Average Power consumption (W/m²): 140

CONTROL SYSTEMS:

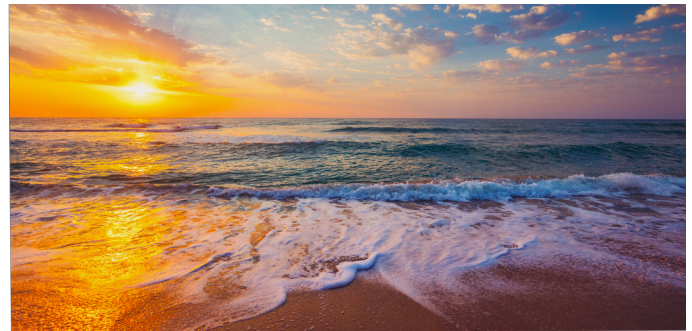
- Receiving Card: Novastar A8s-N

ENVIRONMENTAL:

- Working Environment: Indoor
- Waterproof Level: IP20
- Working Temperature (°C): -20 ~ +40, (°F) -4 ~ 104
- Work humidity (RH): 10%~90%
- Storage temperature range: (°C) -40 ~ +80, (°F) -40 ~ 176
- Operation humidity (RH): 10%~90%

APPROVALS:

- Certificates: ETL



HORIZONTAL (WALL MOUNT, GROUND STACK OR HANG); VERTICAL (WALL MOUNT ONLY)



FRONT SERVICEABLE



WEIGHT / DIMENSIONS:

- Cabinet Size (mm x mm): 39.3" x 19.6" / 1000 x 500mm
- Cabinet Weight: 21 lbs. / 9.5Kg
- Cabinet Thickness (mm): 33mm

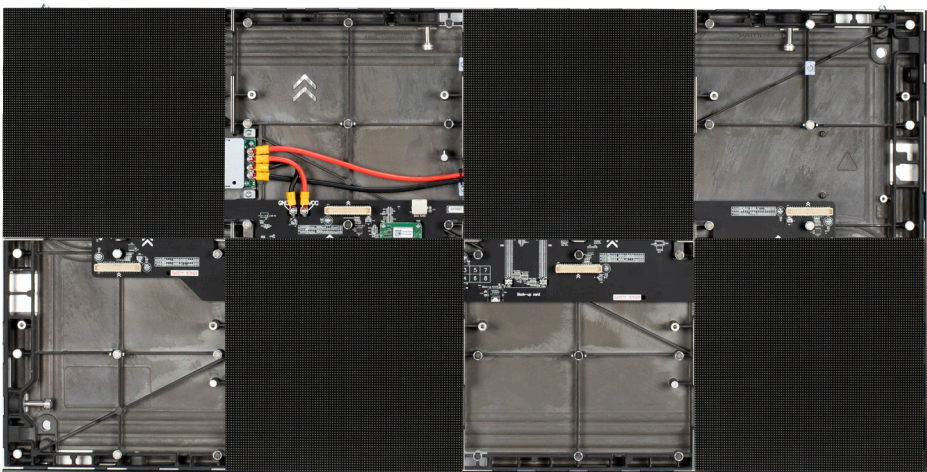
ACCESSORIES:

- EVSVAC (EVSAC) - Vacuum Tool to Remove Modules
- WMSHDC (WMS132) - Horizontal Data Cable for WMS Panel Series
- WMSHPC (WMS106) - Horizontal Power Cable for WMS Panel Series
- WMSMAT (WMS080) - WMS2 Magnet Adjustment Tool
- WMSMDC32 (WMS158) - 32-foot, MainData Cable for WMS Panel Series
- WMSMPC16 (WMS145) - 16.4-foot, Main Power Input Cable for WMS Panel Series
- WMSRB1 (WMS015) - Free Hang, 1-Meter Rigging Bar
- WMST2X2 (WMS041) - Frame Trim for 2x2 WMS Video Wall
- WMST3X3 (WMS054) - Frame Trim for 3x3 WMS Video Wall
- WMST4X4 (WMS067) - Frame Trim for 4x4 WMS Video Wall
- WMSVDC (WMS119) - Vertical Data Cable for WMS Panel Series
- WMSVPC (WMS093) - Vertical Power Cable for WMS Panel Series
- WMSWB1 (WMS028) - 1-Meter, Wall Mount Bracket

WALL MOUNT



TEMPORARY HANG WITH RIGGING BAR



Specifications subject to change without notice..

Revised November 2024

WMSHDC SELECT



4.59ft. (1.4m) Horizontal Data Cable for WMS Panel Series. CAT.6A. RJ45 to RJ45.

SPECIFICATION

- CAT.6A
- RJ45 to RJ45
- WL TT
- E475889
- S/FTP
- ISO/IEC
- EIA/TIA-568B
- Length: 4.59ft. (1.4m)



4.27ft. (1.3m) Horizontal Power Cable for WMS Panel Series.



SPECIFICATION

- UL Approved
- 16AWGx3C
- SJT
- VW-1 Rated
- Length: 4.27ft. (1.3m)

WMSMDC32 9,7M SELECT



10M (32 Foot), Main Data Cable for WMS Panel Series. CAT.6A RJ45 to RJ45.



SPECIFICATION

- CAT.6A
- RJ45 to RJ45
- WL TT
- E475889
- S/FTP
- ISO/IEC
- EIA/TIA-568B
- Length: 32.8ft. (10m)



The ADJ WMSRB1 is a free hang, 1-Meter Rigging Bar for one WMS2 Panel.

PRODUCT INFORMATION

SKU: 1226300169

GTIN: 810087372309

HS-Code: 7326909890

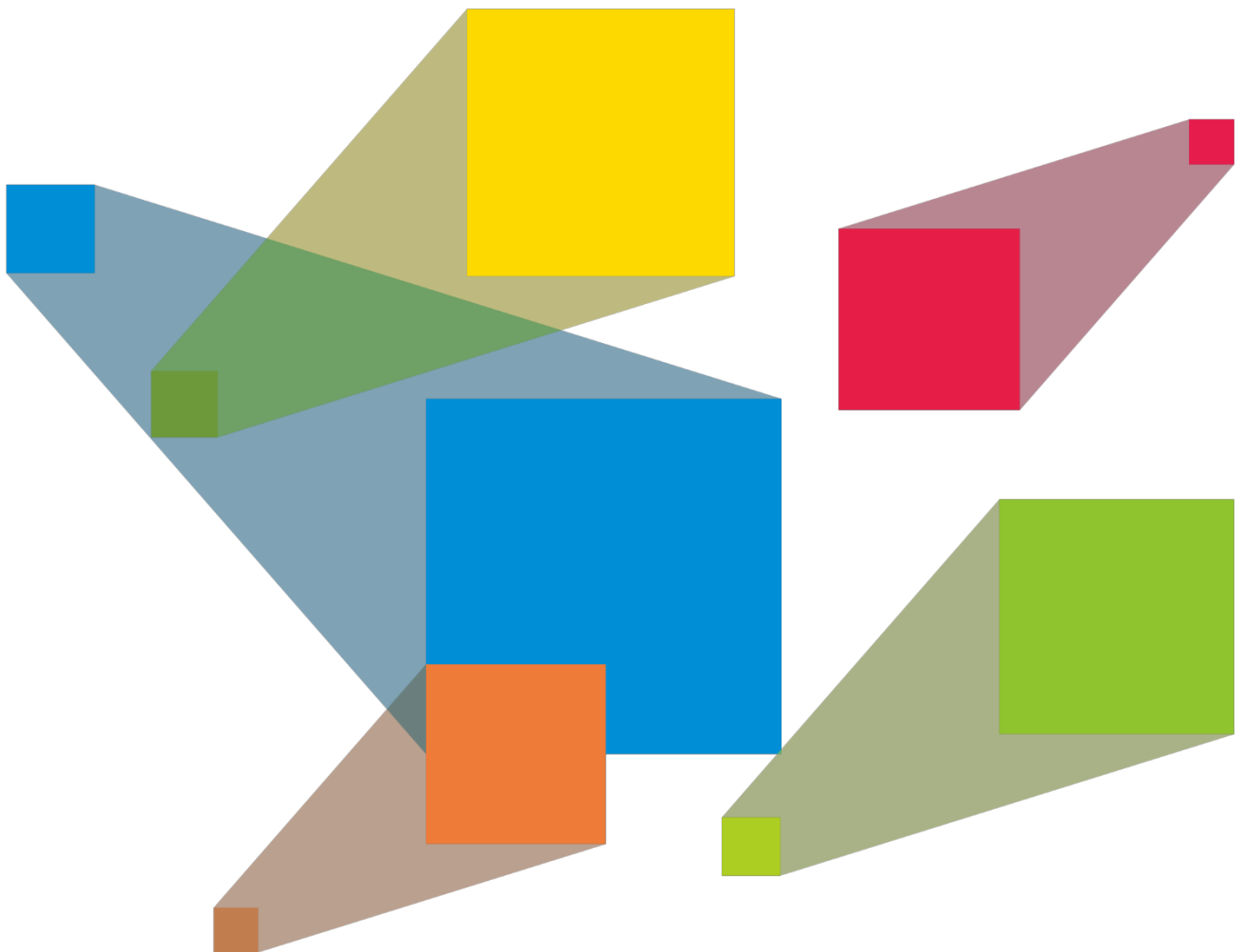
The ADJ WMSRB1 is a free hang, 1-Meter Rigging Bar for one WMS2 Panel.

GALLERY



VX400

All-in-One Controller



Specifications

Change History

Document Version	Release Date	Description
V1.2.0	2024-07-08	• Added the description of the function limitations. • Updated the rated power consumption information.
V1.1.1	2024-01-29	• Updated the product rear panel picture. • Updated the current information.
V1.1.0	2023-11-09	Updated the certification information.
V1.0.0	2022-08-30	First release

Introduction

The VX400 is NovaStar's new all-in-one controller that integrates video processing and video control into one box. It features 4 Ethernet ports and supports video controller, fiber converter and Bypass working modes. A VX400 unit can drive up to 2.6 million pixels, with the maximum output width and height up to 10,240 pixels and 8192 pixels respectively, which is ideal for ultra-wide and ultra-high LED screens.

The VX400 is capable of receiving a variety of video signals and processing high-resolution images. In addition, the device features stepless output scaling, low latency, pixel-level brightness and chroma calibration and more, to present you with an excellent image display experience.

What's more, the VX400 can work with NovaStar's supreme software NovaLCT and V-Can to greatly facilitate your in-field operations and control, such as screen configuration, Ethernet port backup settings, layer management, preset management and firmware update.

Thanks to its powerful video processing and sending capabilities and other outstanding features, the VX400 can be widely used in applications such as medium and high-end rental, stage control systems and fine-pitch LED screens.

Certifications

CE, CB, CMIM, EAC, FCC, IC, KC, RCM, UKCA, UL

If the product does not have the relevant certifications required by the countries or regions where it is to be sold, please contact NovaStar to confirm or address the problem. Otherwise, the customer shall be responsible for the legal risks caused or NovaStar has the right to claim compensation.

Features

- Input connectors
 - 1x HDMI 1.3 (IN & LOOP)
 - 1x HDMI 1.3
 - 1x DVI (IN & LOOP)
 - 1x 3G-SDI (IN & LOOP)
 - 1x optical fiber port (OPT1)

- Output connectors
 - 4x Gigabit Ethernet ports

A single device unit drives up to 2.6 million pixels, with a maximum width of 10,240 pixels and a maximum height of 8192 pixels.
 - 2x Fiber outputs

OPT 1 copies the output on 4 Ethernet ports.

OPT 2 copies or backs up the output on 4 Ethernet ports.
 - 1x HDMI 1.3

For monitoring or video output
- Self-adaptive OPT 1 for either video input or sending card output

Thanks to the self-adaptive design, OPT 1 can be used as either an input or output connector, depending on its connected device.
- Audio input and output
 - Audio input accompanied with HDMI input source
 - Audio output via a multifunction card
 - Output volume adjustment supported
- Low latency

Reduce the delay from the input to receiving card to 20 lines when the low latency function and Bypass mode are both enabled.
- 2x layers
 - Adjustable layer size and position
 - Adjustable layer priority
- Output synchronization

An internal input source can be used as the sync source to ensure the output images of all cascaded units in sync.
- Powerful video processing
 - Based on SuperView III image quality processing technologies to provide stepless output scaling
- One-click full screen display
- Free input cropping
- Automatic screen brightness adjustment

Adjust the screen brightness automatically based on the ambient brightness collected by the external light sensor.
- Easy preset saving and loading

Up to 10 user-defined presets supported
- Multiple kinds of hot backup
 - Backup between devices
 - Backup between Ethernet ports
- Mosaic input source supported

The mosaic source is composed of two sources (2K×1K@60Hz) accessed to the OPT 1.
- Up to 4 units cascaded for image mosaic
- Three working modes
 - Video Controller
 - Fiber Converter
 - Bypass
- All-round color adjustment

Input source and LED screen color adjustment supported, including brightness, contrast, saturation, hue and Gamma
- Pixel level brightness and chroma calibration

Work with NovaLCT and NovaStar calibration software to support brightness and chroma calibration on each LED, effectively removing color discrepancies and greatly improving LED display brightness and chroma consistency, allowing for better image quality.
- Multiple operation modes

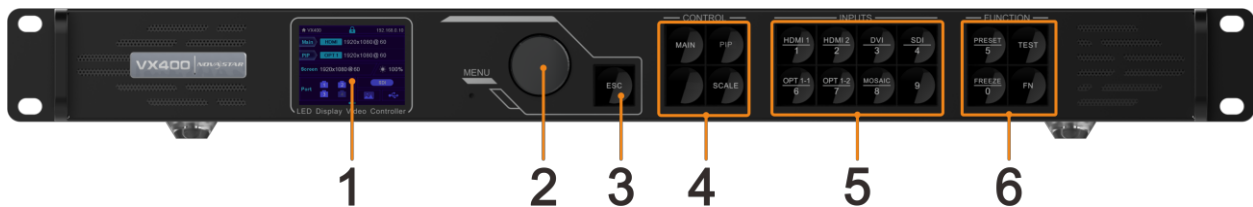
Control the device as you wish via V-Can, NovaLCT or device front panel knob and buttons.

Table 1-1 Function limitations

Function	Limitation	Mutually Exclusive Function
Low Latency	All cabinets loaded by Ethernet ports must be aligned at the top of the circumscribed rectangle.	N/A
Mosaic	- Only the main layer can use the mosaic source. - When the main layer uses the mosaic source, the PIP layer cannot be opened.	PIP layer
Image Mosaic	After the image mosaic function is turned on, the full screen scaling and pixel-to-pixel display of the layer are unavailable.	N/A
Main Layer Transition Effect	- When the PIP layer is opened, the fade effect is unavailable. - When the main layer uses the mosaic source, the fade effect is unavailable.	N/A

Appearance

Front Panel



No.	Area	Function
1	LCD screen	Display the device status, menus, submenus and messages.
2	Knob	- Rotate the knob to select a menu item or adjust the parameter value. - Press the knob to confirm the setting or operation.
3	ESC button	Exit the current menu or cancel an operation.
4	Control area	- MAIN/PIP: Open or close a layer, and show the layer status. Status LEDs: - On (blue): The layer is opened. - Flashing (blue): The layer is being edited. - On (white): The layer is closed. - SCALE: A shortcut button for the full screen function. Press the button to make the layer of the lowest priority fill the entire screen.

No.	Area	Function
		Status LEDs: - On (blue): Full screen scaling is turned on. - On (white): Full screen scaling is turned off.
5	Input source buttons	Show the input source status and switch the layer input source. Status LEDs: - On (blue): An input source is accessed. - Flashing (blue): The input source is not accessed but used by the layer. - On (white): The input source is not accessed or the input source is abnormal. Notes: - When a 4K video source is connected to OPT 1, OPT 1-1 has a signal but OPT 1-2 does not have a signal. - When two 2K video sources are connected to OPT 1, OPT 1-1 and OPT 1-2 both have a 2K signal.
6	Shortcut function buttons	- PRESET: Access the preset settings menu. - TEST: Access the test pattern menu. - Freeze: Freeze the output image. - FN: A customizable button

Note:

Hold down the knob and **ESC** button simultaneously for 3s or longer to lock or unlock the front panel buttons.

Rear Panel



Input Connectors

Connector	Qty	Description
3G-SDI	1	- ST-424 (3G), ST-292 (HD) and ST-259 (SD) standard video inputs supported - Max. input resolution: 1920×1080@60Hz - Deinterlacing processing supported 3G-SDI loop output supported - DOES NOT support input resolution and bit depth settings.
HDMI 1.3	2	- Max. input resolution: 1920×1200@60Hz - HDCP 1.4 compliant - DOES NOT support interlaced signal inputs

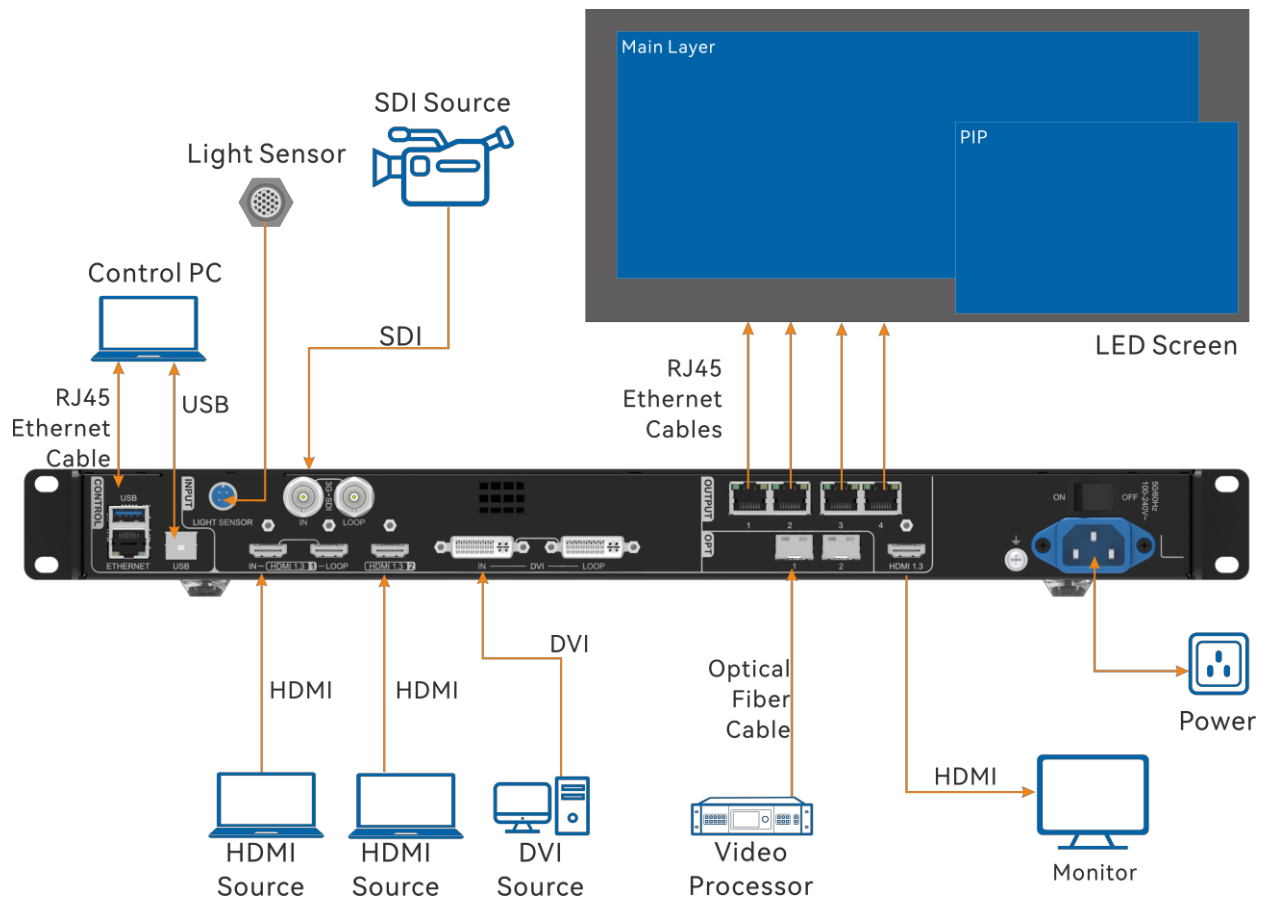
		• Custom resolutions supported – Max. width: 3840 (3840×648@60Hz) – Max. height: 2784 (800×2784@60Hz) – Forced inputs supported: 600×3840@60Hz • Loop output supported on HDMI 1.3-1
DVI	1	• Max. input resolution: 1920×1200@60Hz • HDCP 1.4 compliant • DOES NOT support interlaced signal inputs • Custom resolutions supported – Max. width: 3840 (3840×648@60Hz) – Max. height: 2784 (800×2784@60Hz) – Forced inputs supported: 600×3840@60Hz • Loop output supported on DVI.
Output Connectors		
Connector	Qty	Description
Ethernet ports	4	Gigabit Ethernet ports • Max. loading capacity: 2.6 million pixels • Max. width: 10,240 pixels • Max. height: 8192 pixels Ethernet ports 1 and 2 support audio output. When you use a multifunction card to parse the audio, be sure to connect the card to Ethernet port 1 or 2. Status LEDs: • The top left one (green) indicates the connection status. – On: The port is well connected. – Flashing: The port is not well connected, such as loose connection. – Off: The port is not connected. • The top right one (yellow) indicates the communication status. – On: The Ethernet cable is short-circuited. – Flashing: The communication is good and data is being transmitted. – Off: No data transmission
HDMI 1.3	1	• Support monitor and video output modes. • The output resolution is adjustable.
Optical Fiber Ports		
Connector	Qty	Description

OPT	2	• OPT 1: Self-adaptive, either for video input or for output – When the device is connected with a fiber converter, the port is used as an output connector. – When the device is connected with a Pixelhue video processor, the port is used as an input connector. – Max. capacity: 1x 4K×1K@60Hz or 2x 2K×1K@60Hz video inputs • OPT 2: For output only, with copy and backup modes OPT 2 copies or backs up the output on 4 Ethernet ports.
Control Connectors		
Connector	Qty	Description
ETHERNET	1	Connect to the control PC or router. Status LEDs: • The top left one indicates the connection status. – On: The port is well connected. – Flashing: The port is not well connected, such as loose connection. – Off: The port is not connected. • The top right one indicates the communication status. – On: The Ethernet cable is short-circuited. – Flashing: The communication is good and data is being transmitted. – Off: No data transmission
LIGHT SENSOR	1	Connect to a light sensor to collect the ambient brightness, allowing for automatic screen brightness adjustment
USB	2	• USB (Type-B): – Connect to the control PC. – Input connector for device cascading • USB (Type-A): Output connector for device cascading

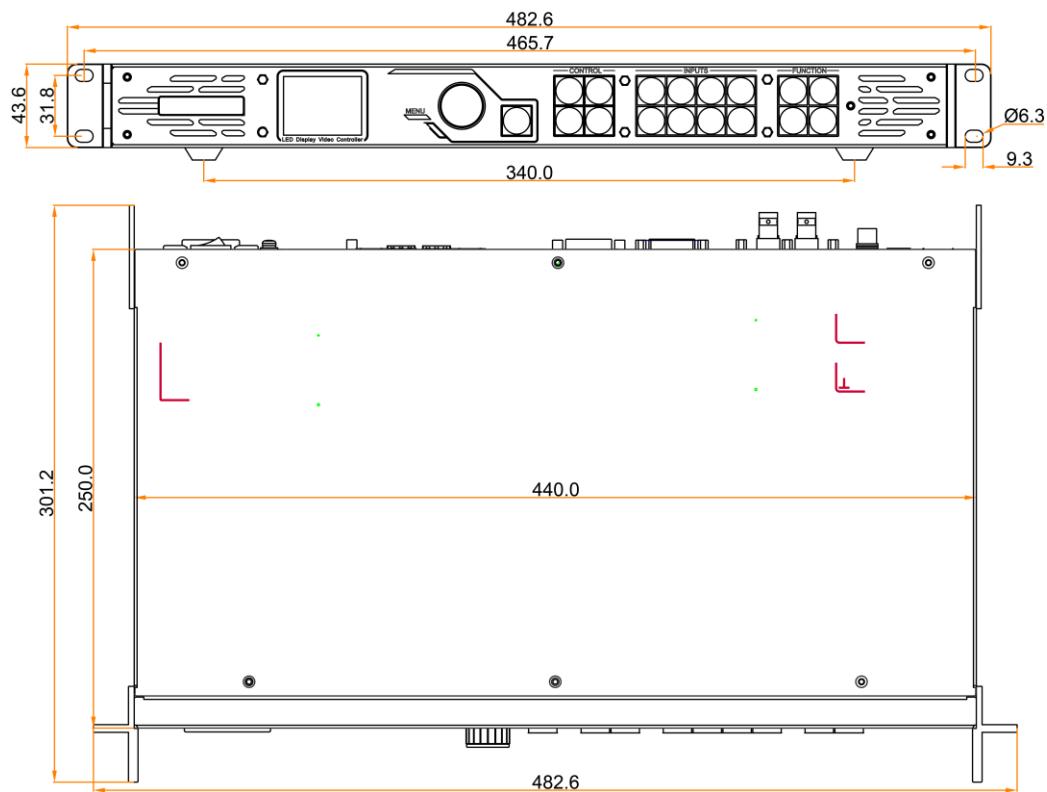
Note:

Only the main layer can use the mosaic source. When the main layer uses the mosaic source, the PIP layer cannot be opened.

Applications



Dimensions



Tolerance: ± 0.3 Unit: mm

Carton



Tolerance: ± 5 Unit: mm

Specifications

Electrical Parameters	Power connector	100–240V~, 1.5A, 50/60Hz
	Rated power consumption	35 W
Operating Environment	Temperature	0°C to 45°C
	Humidity	20% RH to 90% RH, non-condensing
Storage Environment	Temperature	–20°C to +70°C
	Humidity	10% RH to 95% RH, non-condensing
Physical Specifications	Dimensions	483.6 mm × 301.2 mm × 50.1 mm
	Net weight	4 kg
Packing Information	Accessories	1x Power cord 1x HDMI to DVI cable 1x USB cable 1x Ethernet cable 1x HDMI cable 1x Quick Start Guide 1x Certificate of Approval 1x Safety Manual
	Packing size	550.0 mm × 175.0 mm × 400.0 mm
	Gross weight	6.8 kg
Noise Level (typical at 25°C/77°F)		45 dB (A)

Video Source Features

Input Connectors	Bit Depth		Max. Input Resolution
- HDMI 1.3 - DVI - OPT 1	8-bit	RGB 4:4:4	1920×1200@60Hz (Standard)
		YCbCr 4:4:4	3840×648@60Hz (Custom)
		YCbCr 4:2:2	600×3840@60Hz (Forced)

Input Connectors	Bit Depth		Max. Input Resolution
		YCbCr 4:2:0	Not supported
	10-bit		Not supported
	12-bit		Not supported
3G-SDI	• Max. input resolution: 1920×1080@60Hz • DOES NOT support input resolution and bit depth settings. • Supports ST-424 (3G), ST-292 (HD) and ST-259 (SD) standard video inputs.		

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| [Official website](http://www.novastar.tech)
| www.novastar.tech

| [Technical support](mailto:support@novastar.tech)
| support@novastar.tech

Flyht Pro Accessory Case 117x60x57

★★★★★ (21)



Accessory Case

- Universal and durable case for molton, cables, tripods, etc.
- Made of 10 mm Multiplex
- Black coated
- 30 x 30 mm Aluminium edges
- 2 Butterfly latches
- 2 Medium-sized lid stays
- 4 Folding handles
- Large rounded ball corners
- 4 Blue Wheels (100 mm), 2 with brakes
- Exterior dimensions (W x H x D): 1220 x 785 x 620 mm incl. castors
- Interior dimensions (W x H x D): 1177 x 607 x 577 mm
- Weight approx. 35.6 kg

Available since	February 2018
Sales Unit	1 piece(s)
Interior	No
Stackable	no
Trolley	no
Colour	Black
Inner width	1177 mm
Inner Height	607 mm
External Width	1220 mm
External Height	620 mm

Item number	424640
Type	Universal Case
Material	Multiplex 10 mm
Wheels	Yes
IP Certification	No
Weight	35,6 kg
Inner Depth	577 mm
Varinats	Flyht Pro Accessory
External Depth	785 mm

Příloha č. 2 smlouvy - Rekapitulace ceny - Titulkovací LED panel – komplet s příslušenstvím

<u>Část 6</u>	Název	MJ	Počet / MJ	Jednotková cena v Kč bez DPH	Jednotková cena v Kč včetně 21% DPH	Cena bez DPH za Počet celkem	<u>Cena vč. 21% DPH za Počet celkem</u>
Položka č.1	LED zobrazovací panel	komplet	3	35380,00	42 809,80	106140,00	<u>128 429,40</u>
Položka č.2	mechanický závěsný systém	komplet	3	4228,75	5 116,79	12686,25	<u>15 350,36</u>
Položka č.3	řídící a procesorový systém	komplet	1	40765,00	49 325,65	40765,00	<u>49 325,65</u>
Položka č.4	přepravní case	komplet	1	8256,20	9 990,00	8256,20	<u>9 990,00</u>
<u>Část 6</u>	<u>Celková cena za dodávku všech zařízení</u>					<u>167847,45</u>	<u>203 095,41</u>

Poznámka: Jednotkové ceny dle výše uvedených položek dodávky zařízení jsou stanoveny včetně kompletního příslušenství (dle technické specifikace uvedené v příloze č. 1 kupní smlouvy)

Poznámka k vyplnění Soupisu - Rekapitulace ceny - *Doplnit do tabulky pouze číselné hodnoty do takto podbarvených buněk. (tj. Jednotková cena v Kč bez DPH).*

↑ Cena Celkem ↑
bez DPH

↑ Cena Celkem ↑
včetně 21% DPH

