

USER MANUAL

Vertige™ Ref. VRC300



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Pioneer in Analog, Leader in Digital

—○ THANK YOU

By reading this manual you will be able to obtain the most from your powerful **Vertige™**.

—○ 1. INTRODUCTION	5
1.1 What is the Vertige™	5
1.2 Useful terms and definitions	5
—○ 2. HARDWARE INSTALLATION	6
2.1 Safety instructions	6
2.2 Environmental specifications	11
2.3 Hardware specifications	12
2.4 Unpacking and inspection	12
2.5 The Vertige™ rear panel	12
—○ 3. THE VERTIGE™ FRONT PANEL	13
3.1 Overview	13
3.2 Color codes	14
—○ 4. STARTING WITH THE VERTIGE™	15
4.1 System configuration	15
4.2 External controllers	16
4.3 Matrix library configuration	16
4.4 External device library configuration	18
4.5 User selection	20
4.6 Show selection	21
4.7 Iteration selection	21
4.8 Iteration wizard	23
4.9 Assembly configuration	25
4.10 Matrix configuration	33
4.11 External IP device configuration	39
4.12 Screen configuration	40
4.13 Confidence Screen configuration	42
4.14 Monitoring configuration	44
4.15 Source configuration	46
4.16 Native source configuration	47
4.17 Stream image configuration (before the event has started)	48
4.18 Stream image configuration (during the event)	49
4.19 Preset Viewer	49
4.20 Preset management	49
4.21 Macro management	51
4.22 Sequence management	53

—○ 5. OPERATING THE VERTIGE™	55
5.1 Layer section	55
5.1.1 Selecting layers from the touchscreen	
5.1.2 Selecting layers from the front panel	
5.1.3 Selecting layers on Program vs Preview	
5.1.4 Using the layer selection modifier keys	
5.2 Source section	57
5.2.1 Making live switching directly to Program	
5.2.2 Switching between plugs on the device inputs	
5.3 Preset section	58
5.3.1 How to save a preset	
5.3.2 How to load a preset	
5.4 Control section	59
5.5 Edit section	59
5.6 Transition section	62
5.7 Control transition section	63
—○ 6. MECHANICAL DIAGRAM	65
—○ 7. WARRANTY	66
7.1 Warranty conditions	66
7.2 Repair and return instructions	66
7.3 Return conditions	66
—○ 8. CONTACT INFORMATION	67

1. INTRODUCTION

1.1 What is the Vertige™

Vertige™ is a revolutionary Remote Controller integrating new ways to create and manage large events and multi-venues. The **Vertige™** brings a simple and flexible approach to show creation and management. **Vertige™** can control several screens and devices such as **Ascender 48**, **Ascender 32**, **Ascender 16**, **SmartMatriX Ultra**, **NeXtage 16** or **NeXtage 08** systems, independently or simultaneously in any kind of combination, including Soft Edge Blending. **Vertige™** also supports linked **LiveCore™** devices (additive modularity), **LiveCore™** Expansion modules and synchronized **LiveCore™** devices (associative modularity).

1.2 Useful terms and definitions

SHOW: a “Show” is a complete setup for an event containing several devices, screens, sources and presets.

ITERATION: an “Iteration” is a version of a show. Iterations can be used to create backups or variants of a show. On a broader level, iterations allow refining your setup step by step.

ASSEMBLY: an “Assembly” handles one or several identical devices that can operate on the same screens. **Vertige™** can handle several assemblies.

SCREEN: A “Screen” is a destination where a picture will be displayed. For example, it could be a single display or a projection surface composed of one or several outputs. Each screen might use one or several layers.

CONFIDENCE SCREEN: A “Confidence Screen” is a destination (single display or more) usually dedicated to the speaker/presenter, which can display the content visible to the audience and more.

PRESET: a “Preset” on the **Vertige™**, is a capture of a state of the scene (one or more screens). Preset allows storing the layout of the elements and their sources for a specific step of the event.

LAYER: a “Layer” is an image display element (such as a Background, a PIP, or a Logo) that has an associated visual priority — either in front of another layer or behind.

PIP: a “PIP” refers to Picture-in-Picture. It is a layer, typically not full size, which displays a stream on top of another layer. PIPs can be reduced, enlarged, bordered and shadowed. They can overlap one another, depending on their visual priority.

STREAM: a “Stream” can be Live (signal from an input plug) or Still (frame/logo) and allows you to display content with various settings (aspect ratio, brightness, crop...) in a layer.

SOURCE: a “Source” allows the user to assign a **Vertige™** front panel key to a stream (per screen).

FRAME: a “Frame” is an image, usually used to fill a background, which is selected from the still Frame library. It can be loaded to a **LiveCore™** device using the Web RCS.

LOGO: a “Logo” is a small image, usually used to display company logo or labels, which is selected from the still Logo library. It can be loaded to a **LiveCore™** device using the Web RCS.

SOFT EDGE: Soft Edge blending technology is used to compensate overlapping video projectors displaying content on a surface. The resulting image will appear as though it were a single unified picture.

HARD EDGE: Hard Edge technology is used to display continuous content using several outputs without any overlap. The outputs are “side by side”, they don’t overlap or share pixel information. (Opposed to Soft Edge where some parts of the image are sent simultaneously to several displays).

MATRIX ROUTER: A “Matrix router” is a device allowing to route video signals to multiple destinations on demand. It provides a 1-1 (router) or a 1-n (router & splitter) distribution. With the **Vertige™**, it will extend the total number of streams available to several **LiveCore™** devices.

2. HARDWARE INSTALLATION

2.1 Safety instructions

2.1.1 English

All of the safety and operating instructions should be read before the product is operated and should be maintained for further reference. Please follow all of the warnings on this product and its operating instructions.

- **WARNING:** To prevent the risk of electric shock and fire, do not expose this device to rain, humidity or intense heat sources (such as heaters and direct sunlight). Slots and openings in the device are provided for ventilation and to avoid overheating. Make sure the device is never placed near a textile surface that could block the openings. Also keep away from excessive dust, vibrations and shocks.
- **POWER:** Only use the power supply indicated on the device of the power source. Devices equipped with a grounding plug should only be used with a grounding type outlet. In no way should this grounding be modified, avoided or suppressed. Connection of equipment to main supply must be after branch circuit breaker of the building installation.
- **POWER CORD:** The device is equipped with 2 detachable power cords, to remove mains, disconnect them at appliance coupler.

Caution: The power cords constitute the only mean to completely disconnect the equipment from the main power. To make sure the device is not supplied, these two cords must be unplugged from the mains outlet.

Use the following guidelines:

- The equipment connected to the network must have a release system easily accessible and located outside the unit.
- Unplug both power cords; do not pull on the power cords but always on the plug itself.
- The outlets should always be near the device and easily accessible.
- Power supply cords should be routed so that they are not likely to be walked on or pinched by items placed on or against them.

If one of the power supply cords is damaged, unplug the device. Using the device with a damaged power supply cord may expose your device to electric shocks or other hazards. Verify the condition of the power supply cords periodically. Contact your dealer or service center for replacement if damaged.

- **CONNECTIONS:** All inputs and outputs (except for the power input) are Safety Extra Low Voltage (SELV) circuits as defined in UL/IEC 60950-1.
- **SERVICING:** Do not attempt to service this product yourself by opening or removing covers and screws since it may expose your device to electric shocks or other hazards. Refer all problems to qualified service personnel.
- **OPENINGS:** Never push objects of any kind into this product through the openings. If liquids have been spilled or objects have fallen into the device, unplug it immediately and have it checked by a qualified technician.

2.1.2 French

Afin de mieux comprendre le fonctionnement de cet appareil nous vous conseillons de bien lire toutes les consignes de sécurité et de fonctionnement avant utilisation. Conservez les instructions de sécurité et de fonctionnement afin de pouvoir les consulter ultérieurement. Respectez toutes les consignes marquées dans la documentation, sur le produit et sur ce document.

- **ATTENTION** : Afin de prévenir tout risque de choc électrique et d'incendie, ne pas exposer cet appareil à la pluie, à l'humidité ou à des sources de chaleur intense.
- **INSTALLATION** : Veillez à assurer une circulation d'air suffisante pour éviter toute surchauffe à l'intérieur de l'appareil. Ne placez pas l'appareil sur ou à proximité d'une surface textile susceptible d'obstruer les orifices de ventilation. N'installez pas l'appareil à proximité de sources de chaleur comme un radiateur ou une poche d'air chaud, ni dans un endroit exposé au rayonnement solaire direct, à des poussières excessives, à des vibrations ou à des chocs mécaniques. Ceci pourrait provoquer un mauvais fonctionnement et un accident.
- **ALIMENTATION** : Ne faire fonctionner l'appareil qu'avec la source d'alimentation indiquée sur l'appareil. Les appareils doivent être obligatoirement connectés sur une source équipée d'une mise à la terre efficace. En aucun cas cette liaison de terre ne devra être modifiée, contournée ou supprimée. Raccordement des équipements à l'alimentation principale doit être postérieur au disjoncteur de branchement de l'installation électrique du bâtiment.
- **CORDON D'ALIMENTATION** : Les appareils sont équipés de 2 cordons d'alimentation détachable, la mise hors tension se fait en débranchant ces cordons de l'appareil.

Attention : Les appareils sont équipés de 2 cordons d'alimentation détachable, la mise hors tension se fait en débranchant ces cordons de l'appareil.

Appliquer les consignes suivantes :

- Le matériel relié à demeure au réseau, doit avoir un dispositif de sectionnement facilement accessible qui doit être incorporé à l'extérieur de l'appareil.
- Débrancher les 2 cordons d'alimentation de la prise murale si vous prévoyez de ne pas utiliser l'appareil pendant quelques jours ou plus.
- Pour débrancher les cordons, tirez-les par la fiche. Ne tirez jamais sur les cordons proprement dit.
- Les prises d'alimentation doivent se trouver à proximité de l'appareil et être aisément accessibles.
- Ne laissez pas tomber les cordons d'alimentation et ne posez pas d'objets lourds dessus.

Si un des 2 cordons d'alimentation est endommagé, débranchez-le immédiatement de la prise murale. Il est dangereux de faire fonctionner un appareil avec un cordon endommagé ; un câble abîmé peut provoquer un risque d'incendie ou un choc électrique. Vérifiez les câbles d'alimentation de temps en temps. Contactez votre revendeur ou le service après-vente pour un remplacement.

- **CONNEXIONS** : Toutes les entrées et sorties (exceptée l'entrée d'alimentation) sont des circuits de très basse tension de sécurité (TBTS) tels que définis dans UL / IEC 60950-1.
- **RÉPARATION ET MAINTENANCE** : L'utilisateur ne doit en aucun cas essayer de procéder aux opérations de dépannage, car l'ouverture des appareils par retrait des capots ou de toutes autres pièces constituant les boîtiers ainsi que le dévissage des vis apparentes à l'extérieur, risquent d'exposer l'utilisateur à des chocs électriques ou autres dangers. Contactez le service après-vente, votre revendeur ou adressez-vous à un personnel qualifié uniquement.
- **OUVERTURES ET ORIFICES** : Les appareils peuvent comporter des ouvertures (aération, fentes, etc...), veuillez ne jamais y introduire d'objets et ne jamais obstruer ses ouvertures. Si un liquide ou un objet pénètre à l'intérieur de l'appareil, débranchez immédiatement l'appareil et faites-le contrôler par un personnel qualifié avant de le remettre en service.

2.1.3 Italian

Allo scopo di capire meglio il funzionamento di questa apparecchiatura vi consigliamo di leggere bene tutti i consigli di sicurezza e di funzionamento prima dell'utilizzo. Conservare le istruzioni di sicurezza e di funzionamento al fine di poterle consultare ulteriormente. Seguire tutti i consigli indicati su questo manuale e sull'apparecchiatura.

- **ATTENZIONE:** Al fine di prevenire qualsiasi rischio di shock elettrico e d'incendio, non esporre l'apparecchiatura a pioggia, umidità e a sorgenti di eccessivo calore.
- **INSTALLAZIONE:** Assicuratevi che vi sia una sufficiente circolazione d'aria per evitare qualsiasi surriscaldamento all'interno dell'apparecchiatura. Non collocare l'apparecchiatura in prossimità o su superfici tessili suscettibili di ostruire il funzionamento della ventilazione. Non installate l'apparecchiatura in prossimità di sorgenti di calore come un radiatore o una fuoruscita d'aria calda, né in un posto esposto direttamente ai raggi del sole, a polvere eccessiva, a vibrazioni o a shock meccanici. Ciò potrebbe provocare un erroneo funzionamento e un incidente.
- **ALIMENTAZIONE:** Far funzionare l'apparecchiatura solo con la sorgente d'alimentazione indicata sull'apparecchiatura. Le apparecchiature queste devono essere obbligatoriamente collegate su una sorgente fornita di una efficiente messa a terra. In nessun caso questo collegamento potrà essere modificato, sostituito o eliminato. Connessione delle apparecchiature alla rete elettrica deve essere successiva interruttore di circuito dell'impianto dell'edificio.
- **CAVO DI ALIMENTAZIONE:** Il dispositivo è dotato di due cavi di alimentazione removibile, per rimuovere le alimentazioni scollegare i cavi dalla Presa.

Attenzione: i cavi di alimentazione sono l'unico di disconnettere l'apparecchio all'alimentazione. Per assicurarsi che l'apparecchio è totalmente scollegato, i cavi devono essere disconnessi della presa murale.

Seguire le istruzioni seguenti:

- Il materiale collegato a residenza alla rete, deve avere un dispositivo di sezionamento facile da raggiungere e che deve essere inserito all'esterno del apparecchio.
- Scollegare l'apparecchiatura dalla presa a muro se si prevede di non utilizzarla per qualche giorno.
- Per disconnettere il cavo, tirare facendo forza sul connettore.
- La prese d'alimentazione deve trovarsi a prossimità dell'apparecchiatura ed essere facilmente accessibile.
- Non far cadere il cavo di alimentazione né appoggiarci sopra degli oggetti pesanti. Se il cavo di alimentazione è danneggiato, spegnere immediatamente l'apparecchiatura.

E' pericoloso far funzionare questa apparecchiatura con cavi di alimentazione danneggiati, cavi graffiati possono provocare un rischio di incendio o uno shock elettrico. Verificare spesso i cavi di alimentazione. Contattare il vostro rivenditore o il servizio assistenza per una sostituzione.

- **CONNESSIONE:** Tutti gli ingressi e le uscite (tranne che per la potenza in ingresso) sono bassissima tensione di sicurezza (SELV) circuiti definiti UL / IEC 60950-1.
- **RIPARAZIONI E ASSISTENZA:** L'utilizzatore non deve in nessun caso cercare di riparare l'apparecchiatura, poiché con l'apertura del coperchio metallico o di qualsiasi altro pezzo costituente la scatola metallica, nonché svitare le viti che appaiono esteriormente, poiché ciò può provocare all'utilizzatore un rischio di shock elettrico o altri rischi.
- **APERTURE DI VENTILAZIONE:** Le apparecchiature possono comportare delle aperture di ventilazione, si prega di non introdurre mai oggetti o ostruire le sue fessure. Se un liquido o un oggetto penetra all'interno dell'apparecchiatura, disconnetterla e farla controllare da personale qualificato prima di rimetterla in servizio.

2.1.4 German

Um den Betrieb dieses Geräts zu verstehen, raten wir Ihnen vor der Inbetriebnahme alle Sicherheits- und Betriebsanweisungen genau zu lesen. Diese Sicherheits- und Betriebsanweisungen für einen späteren Gebrauch sicher aufbewahren. Alle in den Unterlagen, an dem Gerät und hier angegebenen Sicherheitsanweisungen einhalten.

- **ACHTUNG:** um jegliches Risiko eines Stromschlags oder Feuers zu vermeiden, das Gerät nicht Regen, Feuchtigkeit oder intensiven Wärmequellen aussetzen.
- **EINBAU:** Eine ausreichende Luftzufuhr sicherstellen, um jegliche Überhitzung im Gerät zu vermeiden. Das Gerät nicht auf und in Nähe von Textiloberflächen, die Belüftungsöffnungen verschließen können, aufstellen. Das Gerät nicht in Nähe von Wärmequellen, wie z.B. Heizkörper oder Warmluftkappe, aufstellen und es nicht dem direkten Sonnenlicht, übermäßigem Staub, Vibrationen oder mechanischen Stößen aussetzen. Dies kann zu Betriebsstörungen und Unfällen führen.
- **STROMVERSORGUNG:** Das Gerät nur mit der auf dem Gerät bezeichnete Stromquelle betreiben. Gerät mit geerdeter Hauptstromversorgung muss an eine Stromquelle mit effizienter Erdung angeschlossen werden. Diese Erdung darf auf keinen Fall geändert, umgangen oder entfernt werden. Anschluss von Geräten ans Stromnetz muss nach Abzweigschalter des Gebäudes Installation.
- **NETZKABEL:** Das Gerät ist mit einem lösbaren Netzkabel ausgestattet ; um es völlig vom Netz zu trennen, ziehen Sie bitte das Netzkabel aus der Kaltgerätebuchse.

Achtung: Das Netzkabel stellt die einzige Möglichkeit dar, das Gerät vollständig vom Netzanschluss zu trennen. Um sicherzustellen, dass das Gerät nicht mehr versorgt wird, muss dieses Kabel aus der Netzsteckdose ausgesteckt werden.

Bitte beachten Sie die folgenden Hinweise:

- Wenn Geräte dauerhaft am Netz bleiben, müssen sie über eine leicht zugängliche Trennvorrichtung verfügen, die außen am Gerät angebracht sein muss.
- Das Kabel mittels des Steckers herausziehen. Niemals am Stromkabel selbst ziehen.
- Die Steckdose muss sich in der Nähe des Geräts befinden und leicht zugänglich sein.
- Das Stromkabel nicht fallen lassen und keine schweren Gegenstände darauf stellen.

Wenn eines der beiden Stromkabel beschädigt ist, das Gerät sofort abschalten. Es ist gefährlich, das Gerät mit einem beschädigten Stromkabel zu betreiben; ein abgenutztes Kabel kann zu einem Feuer oder Stromschlag führen. Die Stromkabel regelmäßig untersuchen. Für Ersatz wenden Sie sich an Ihren Verkäufer oder eine Kundendienststelle.

- **ANSCHLÜSSE:** Alle Eingänge und Ausgänge (mit Ausnahme der Stromversorgung) sind Safety Extra Low Voltage (SELV) Schaltungen wie in UL / IEC 60950-1 definiert.
- **REPARATUR UND WARTUNG:** Der Benutzer darf keinesfalls versuchen das Gerät selbst zu reparieren, die Öffnung des Geräts durch Abnahme der Abdeckhaube oder jeglichen anderen Teils des Gehäuses sowie die Entfernung von außen sichtbaren Schrauben zu Stromschlägen oder anderen Gefahren für den Benutzer führen kann. Wenden Sie sich an Ihren Verkäufer, Ihre Kundendienststelle oder an qualifizierte Fachkräfte.
- **ÖFFNUNGEN UND MUNDUNGEN:** Die Geräte können über Öffnungen verfügen (Belüftung, Schlitze, usw.). Niemals Gegenstände in die Öffnungen einführen oder die Öffnungen verschließen. Wenn eine Flüssigkeit oder ein Gegenstand in das Gerät gelangt, den Stecker herausziehen und es vor einer neuen Inbetriebnahme von qualifiziertem Fachpersonal überprüfen lassen.

2.1.5 Spanish

Para comprender mejor el funcionamiento de este aparato, le recomendamos que le acudadosamente todas las consignas de seguridad y de funcionamiento del aparato antes de usarlo. Conserve las instrucciones de seguridad y de funcionamiento para que pueda consultarlas posteriormente. Respete todas las consignas indicadas en la documentación, relacionadas con el producto y este documento.

- **CUIDADO:** Para prevenir cualquier riesgo de choque eléctrico y de incendio, no exponga este aparato a la lluvia, a la humedad ni a fuentes de calor intensas.
- **INSTALACIÓN:** Cerciórese de que haya una circulación de aire suficiente para evitar cualquier sobrecalentamiento al interior del aparato. No coloque el aparato cerca ni sobre una superficie textil que pudiera obstruir los orificios de ventilación. No instale el aparato cerca de fuentes de calor como radiador o boca de aire caliente, ni en un lugar expuesto a los rayos solares directos o al polvo excesivo, a las vibraciones o a los choques mecánicos. Esto podría provocar su mal funcionamiento o un accidente.
- **ALIMENTACIÓN:** Ponga a funcionar el aparato únicamente con la fuente de alimentación que se indica en el aparato. Los aparatos deben estar conectados obligatoriamente a una fuente equipada con una puesta a tierra eficaz. Por ningún motivo este enlace de tierra deberá ser modificado, cambiado o suprimido. Conexión del equipo a la red eléctrica debe ser posterior del interruptor de circuitos derivados de la instalación del edificio.
- **CABLE DE CORRIENTE:** El equipo se suministra con 2 cables de alimentación, si desconectamos los cables dejamos al equipo sin alimentación.

Atención: Los cables de alimentación constituyen el único medio de desconectar el aparato totalmente de la red eléctrica. Para estar seguro de que el aparato no está más alimentado, estos dos cables deben estar desconectados de la toma de corriente.

Aplicar las siguientes consignas:

- El material conectado a residencia a la red informática, debe de tener un dispositivo de seccionamiento fácilmente accesible que debe de ser incorporado al exterior del aparato.
- Desconectar el aparato del enchufe mural si no piensa utilizarlo durante varios días.
- Para desconectar los cables, tire de la clavija. No tire nunca de los cables propiamente dichos.
- El enchufes de alimentación debe estar cerca del aparato y ser de fácil acceso.
- No deje caer los cables de alimentación ni coloque objetos pesados encima de ellos.

Si uno de dos cables de alimentación sufriera algún daño, ponga el aparato inmediatamente fuera de tensión. Es peligroso hacer funcionar este aparato con un cable averiado, ya que un cable dañado puede provocar un incendio o un choque eléctrico. Verifique el estado los cables de alimentación de vez en cuando. Póngase en contacto con su distribuidor o con el servicio de posventa si necesita cambiarlo.

- **CONEXIONES:** Todas las entradas y salidas (a excepción de la entrada de alimentación) son de tensión extra baja de seguridad (SELV) circuitos definidos en UL / IEC 60950-1.
- **REPARACIÓN Y MANTENIMIENTO:** Por ningún motivo, el usuario deberá tratar de efectuar operaciones de reparación, ya que si abre los aparatos retirando el capó o cualquier otra pieza que forma parte de las cajas o si destornilla los tornillos aparentes exteriores, existe el riesgo de producirse una explosión, choques eléctricos o cualquier otro incidente. Contacte el servicio de posventa, a su distribuidor o diríjase con personal cualificado únicamente.
- **ABERTURAS Y ORIFICIOS:** Los aparatos pueden contener aberturas (aireación, ranuras, etc.). No introduzca allí ningún objeto ni obstruya nunca estas aberturas. Si un líquido o un objeto penetra al interior del aparato, desconéctelo y hágalo revisar por personal cualificado antes de ponerlo nuevamente en servicio.

2.2 Environmental specifications

- Cooling air flows from front side to rear.
- Max ambient operating temperature: < 40°C (< 104°F).
- Operating temperature: 0 to +40°C / +32°F to +104°F
- Storage temperature: -40 to +70°C / -40°F to +158°F
- Operating humidity: 10 to 80% (non condensing)
- Input voltage range: 100-240 VAC autosensing, 50/60 Hz
- Typical consumption: 225 W

ELECTRICAL SECURITY:

- IEC 60950-1:2005 (2nd Edition); Am 1:2009
- EN 60950-1:2006 + A1:2010 + A11:2009 + A12:2011, CSA C22.2; National Differences specified in the CB Test Report
- ETL listed (Canada & US)

ELECTROMAGNETIC COMPATIBILITY:

- IEC 61000-3-2 (2009)
- IEC 61000-3-3 (2008)
- CISPR22 (2008)
- CISPR24 (2010)
- FCC Part15 of 2012
- IECS-003 of August 2012

ENVIRONMENT:

- RoHS
- WEEE

USE/TRANSPORT:

- ETS 300 019-2-2: Environmental conditions and environmental tests for telecommunications equipment ; Part 2-2 : specification of environmental tests ; Transportation ; Specification T 2.3: Public transportation
- ETS 300 019-2-3: Environmental conditions and environmental tests for telecommunications equipment ; Part 2-3 : specification of environmental tests ; Stationary use at weather protected locations ; Specification T 3.1 and T 3.1 E: Temperature-controlled locations



Should your device loses power unexpectedly, you will lose any unsaved settings.

2.3 Hardware specifications

Dimensions:

- ▶ W 740 x D 510 x H 200 mm
- ▶ W 29.2" x D 20.0" x H 7.9"

Weight:

- ▶ 15 kg / 33 lbs

Shipping Weight:

- ▶ 20 kg / 44 lbs

Electrical Requirements:

Required Voltage: 100-240 VAC

Required Amperage: 2.5A between the two power supplies

2.4 Unpacking and inspection

- 1 x Vertige™ (VRC300) remote controller
- 2 x Power supply cords
- 1 x User manual (PDF version)*
- 1 x Quick start guide*

* The User manual and the Quick start guide are available on www.analogway.com

2.5 The Vertige™ rear panel



1. Power Supply: Dual, redundant power supply with fuse as standard equipment.

2. On/Off button: Switch on/off the device.

3. Connection Panel: Ethernet LAN adapters to control devices.



IMPORTANT: Audio, RS232 and HDMI connectors are reserved for Factory use only.

3. THE VERTIGE™ FRONT PANEL

3.1 Overview



1- Touch screen

The touch screen 15"6 Wide displays comfortably on the same page the representation of the Program & Preview of a typical scene (Blend + 2 satellites). It is important to have the whole scene represented to work on multiple layers from different screens at the same time (change of source of background, for example). It is useful to have both states Program/Preview shown at the same time as the LiveCore™ series allows you to change one or the other at any time (even during an effect).

2- Preset section

This section allows the user to save/load its scene presets (10 direct access presets and a page mechanism to organize them).



3- Layer section

This section enables the operator to select a set of layers which belong to different screens in order to edit them simultaneously. Various criteria are used to perform advanced combinations. It will be possible to save those combinations for later use.



4- Source section

This section allows assigning sources to the selected layers in Program or Preview. Twelve contextual buttons display the name of sources. The page mechanism allows benefiting from numerous sources.



5- Control section

This section enables the operator to select which preset to work with, and have direct access to basic functions applied to all selected layers (Freeze, Clear, Unify ...).



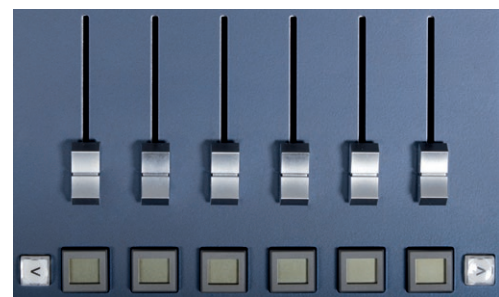
6- Edit section

This section allows the operator to edit the selected layers in three different ways: roughly via the joystick, finely via the encoders, or directly via the numpad. With its 12 contextual LCD keys, the block displaying the numpad (the **EDITpad**) also provides access to a variety of edit tools such as pages of shortcuts, layer presets and macros.



7- Transition section

This section enables the operator to use the T-Bar and sliders for transitions. Sliders are motorized in order to see the current state of the selection.



8- Control Transition



The **ALPHA** button will be used to switch the Transition section to **ALPHA**:

- When the **ALPHA** mode is disabled (key backlight turned off), sliders allow to individually mix each screen
- When the **ALPHA** mode is enabled (key illuminates in **RED**), each slider is assigned to a selection of layers and allows to control their master opacity (transparency).

The **CUE SEQUENCE** button is used to switch the Control Transition section to **CUE SEQUENCE** mode in order to control the cue sequence playback.



IMPORTANT: The front panel is available as soon as an iteration is loaded. The front panel is dedicated to presets and transitions and the touch screen state will never interfere with it.

3.2 Color codes

The **Vertige™** buttons were designed with a handy color code to guide users, avoid mistakes, and give a constant status of the device. Thus, all **Vertige™** buttons have two or three different states (and colors), depending on their function and their current state.

All standard buttons mapped to an available function/slot light up **GREEN**.

All contextual buttons mapped to an available function/slot light up **BLUE**.

Any of these buttons turns **YELLOW** when the function/slot is selected/filled.

If one of these buttons blinks **YELLOW**, it means the function/slot is waiting for a confirmation (a second consecutive press).

All double sized buttons like **PROGRAM** or **PREVIEW** are either **OFF** or lighten up in **RED** to indicate the current mode.

TAKE CUT & TAKE buttons are always **RED** and will **BLINK** when there is a Take in progress.

4. STARTING WITH THE VERTIGE™

4.1 System configuration

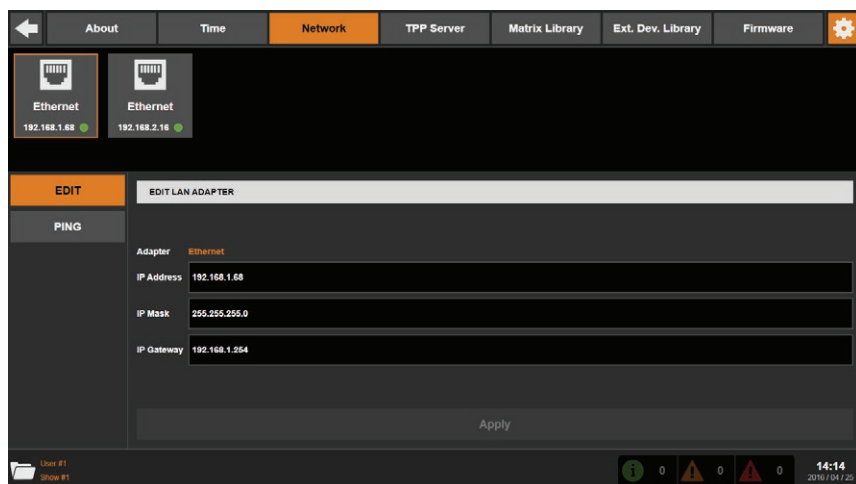
When the **Vertige™** starts up, the **Home** page is automatically displayed. Press the **START** button, then press the **Vertige™ SETTINGS** button in the upper-right corner.



The **Vertige™** Settings page allows you to configure the IP address of the **Vertige™** and update it via a USB port:

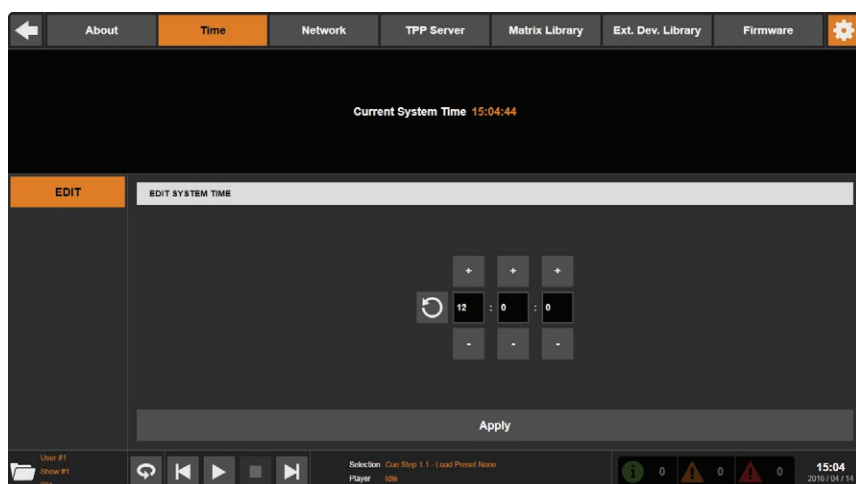
- **Configuring the network:**

In the top bar, select the **Network** tab. Select the Ethernet port used by the **Vertige™** on your network then enter the corresponding IP address, subnet mask and gateway. When ready, press the **Apply** button.



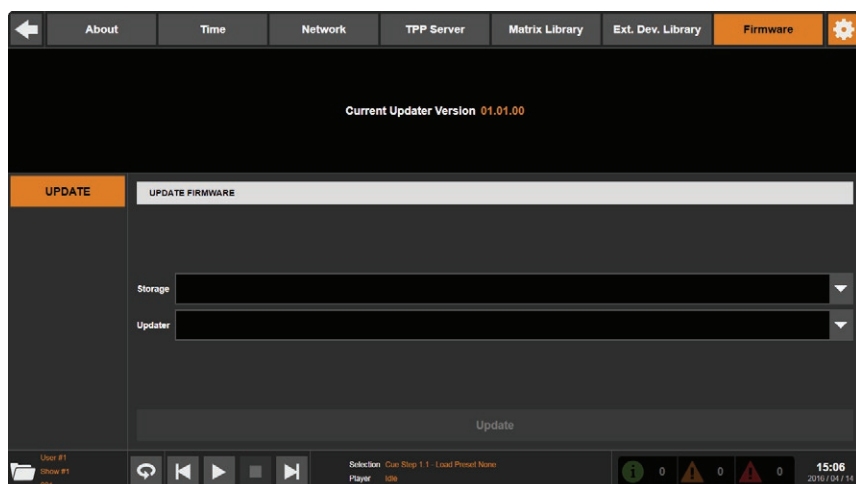
- **Configuring the system time:**

In the top bar, select the **Time** tab. Change the system time accordingly, by pressing the **+/-** buttons. When ready, press the **Apply** button.



- **Updating the firmware:**

In the top bar, select the **Firmware** tab. The upper area displays the current firmware version. Make sure the USB flash drive you are using contains an up-to-date version of the **Vertige™** firmware. Plug this USB flash drive into one of the **Vertige™** USB connectors. Wait for the device to appear in the **Storage** list then select it to display the firmware updaters available. Select the desired update from the list then press the **Update** button to start updating the **Vertige™**.



IMPORTANT: Do not remove the USB flash drive or turn off the power while updating.

4.2 External controllers

You can control your **Vertige™** from an external controller via TPP. The **Vertige™ - Programmer's Guide** provides detailed information on all the TPP commands that you can send and receive from the **Vertige™**. Please download the programmer's guide from our website.

To edit your **Vertige™** TPP settings, press the **SETTINGS** button in the upper-right corner then select the **TPP Server** tab. Select the LAN adapter, enter the local port and press **Apply**.

4.3 Matrix library configuration

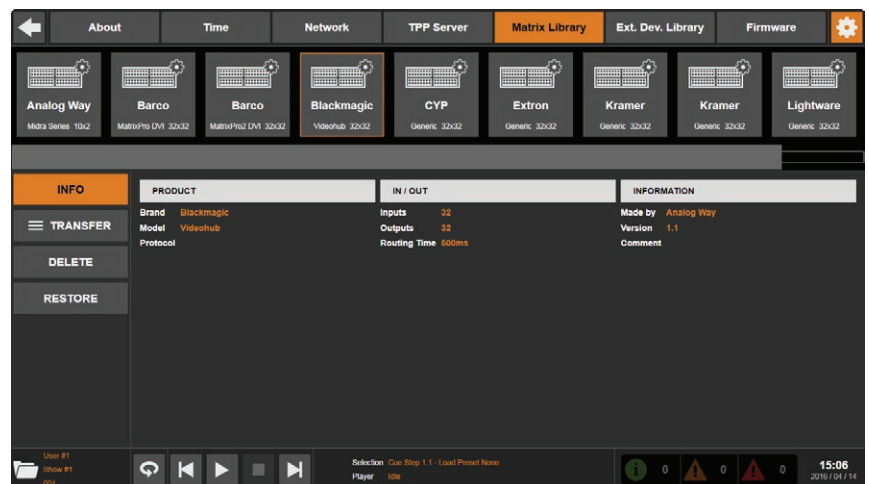
The **Vertige™** provides a list of matrix descriptors that allow you to control some of the most popular matrix routers. These descriptors are small documents that describe the matrix router capabilities and its external communication protocol. If your device is not in this default list, please contact **Analog Way** Technical Support: based on your matrix reference and user manual, we might be able to generate a descriptor that you can then import into your **Vertige™**.

To display the **Matrix Library** page, press the **Vertige™ SETTINGS** button in the upper-right corner then select the **Matrix Library** tab. The upper area displays all the matrix descriptors currently available in your **Vertige™**.



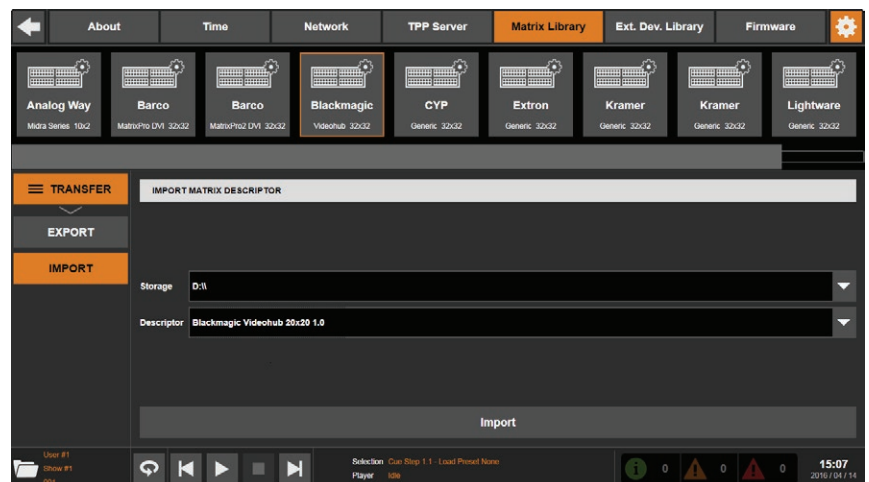
- **Displaying matrix descriptor information:**

In the left menu, select the **INFO** option then select the matrix descriptor for which you want to display further information.



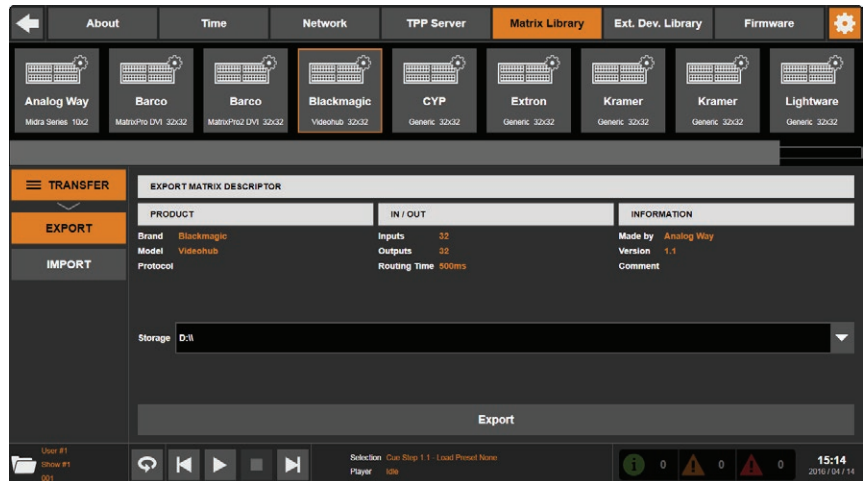
- **Importing a matrix descriptor from a USB key:**

In the left menu, select **TRANSFER** then select the **IMPORT** option. Plug a USB flash drive into one of the **Vertige™** USB connectors. Select your USB flash drive in the **Storage** list to display the matrix descriptors available. Select the matrix descriptor you want to import then press the **IMPORT** button to start importing it into the matrix library.



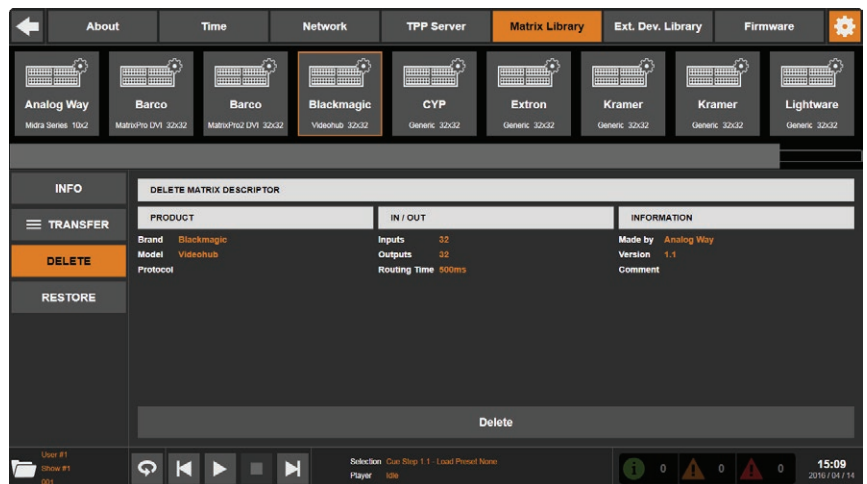
- **Exporting a matrix descriptor to USB key:**

In the left menu, select **TRANSFER** then select the **EXPORT** option. Select the matrix descriptor you want to export and plug a USB flash drive into one of the **Vertige™** USB connectors. Select your USB flash drive in the **Storage** list and press the **Export** button to start exporting this descriptor.



- **Deleting a matrix descriptor from the matrix library:**

In the left menu, select the **DELETE** option. Select the matrix descriptor you want to delete then press the **Delete** button.



This action cannot be undone (except for descriptors in the default list, which can be restored via the **RESTORE** option in the left menu).

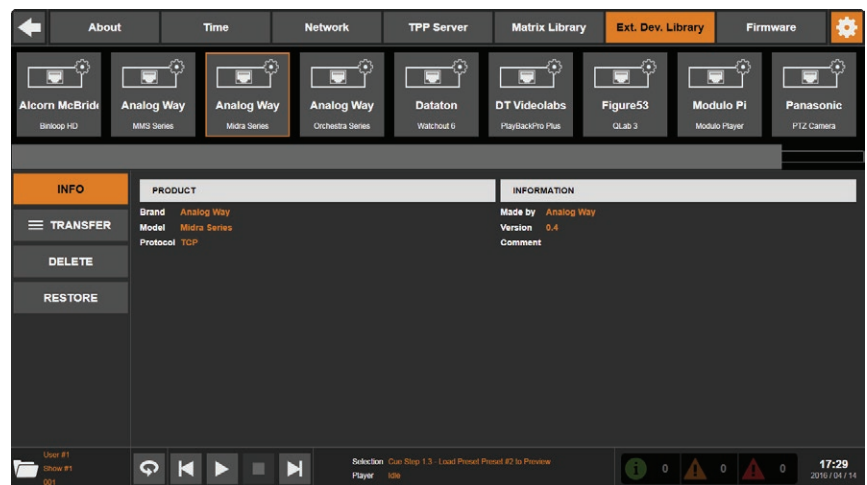
4.4 External device library configuration

The **Vertige™** provides a list of external device descriptors that allows you to easily control some popular A/V devices. These descriptors are small documents that describe the type of actions supported by the device and the device external communication protocol. If your device is not in this default list, please contact **Analog Way** Technical Support: based on your device reference and user manual, we might be able to generate a descriptor that you can then import into your **Vertige™**. Alternatively, if you know the device external control protocol, you can use the **Raw Device** descriptor to send manually formatted commands to the device.

To display the **External Device Library** page, press the **Vertige™ SETTINGS** button in the upper-right corner and then select the **Ext. Dev. Library** tab. The upper area will display all the external device descriptors currently available in your **Vertige™**.

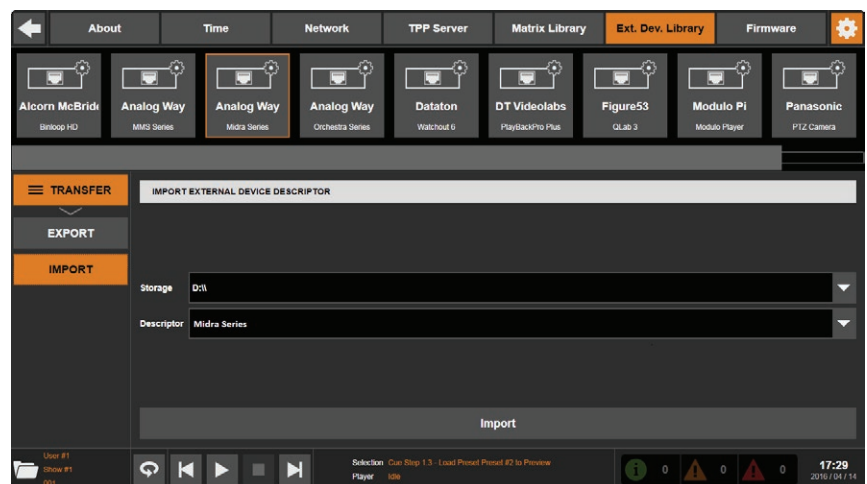
- **Displaying external device descriptor information:**

In the left menu, select the **INFO** option then select the external device descriptor for which you want to obtain further information.



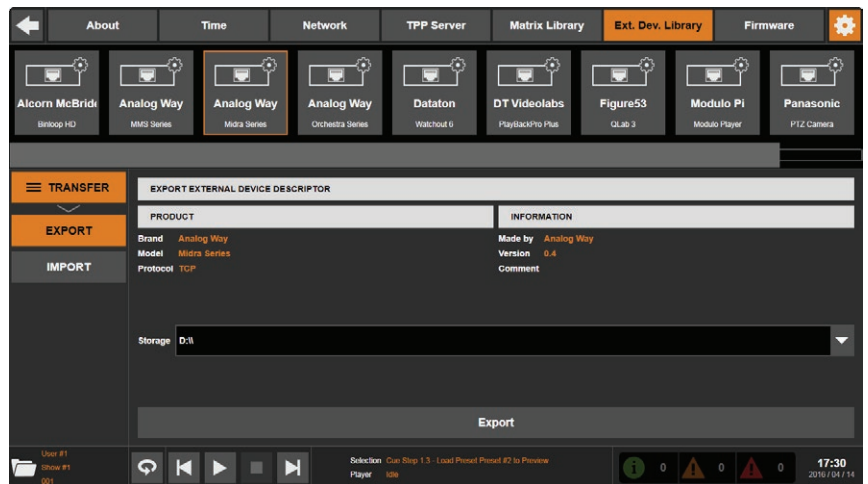
- **Importing an external device descriptor from a USB key:**

In the left menu, select the **TRANSFER** tab and then the **IMPORT** option. Plug a USB flash drive into one of the **Vertige™** USB connectors and select your USB flash drive from the **Storage** list. Select the external device descriptor you want to import and press the **IMPORT** button to start importing it into the external device library.



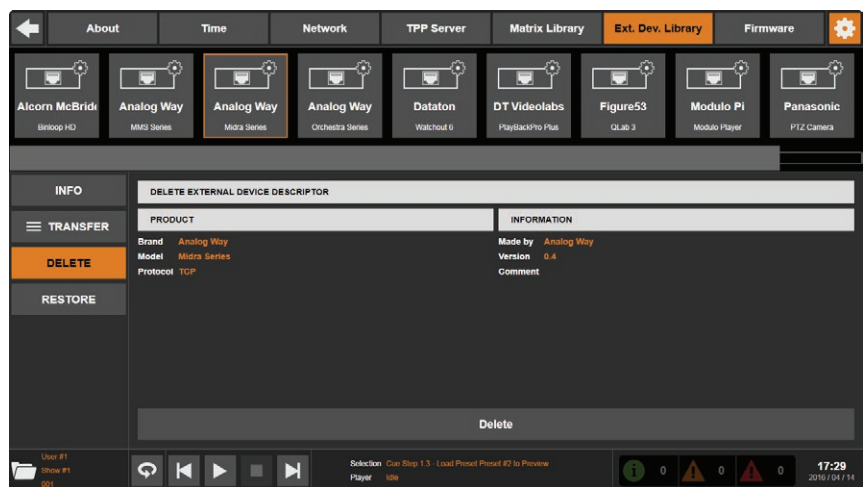
- **Exporting an external device descriptor to USB key:**

In the left menu, select the **TRANSFER** tab and then the **EXPORT** option. Select the external device descriptor you want to export and then plug a USB flash drive into one of the **Vertige™** USB connectors. In the **Storage** list, select your USB flash drive and then press the **Export** button to start exporting the descriptor.



- **Deleting an external device descriptor from the external device library:**

In the left menu, select the **DELETE** tab. Select the external device descriptor you want to delete. When ready, press the **Delete** button.



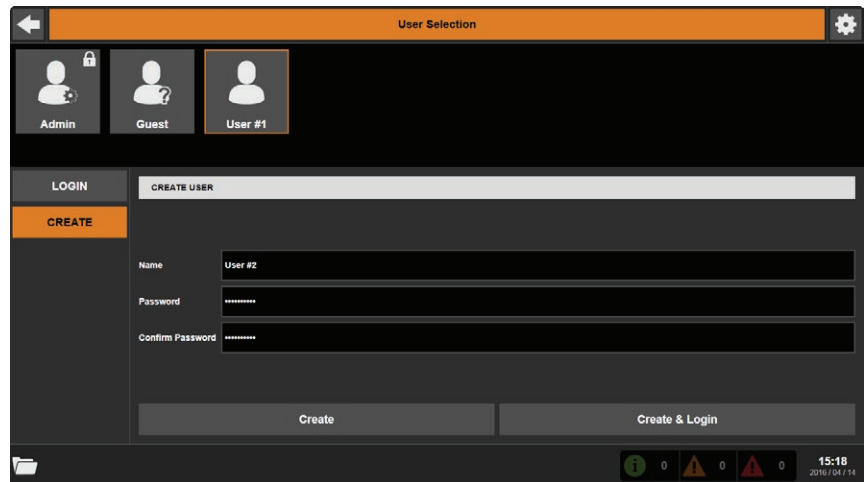
This action cannot be undone (except for descriptors in the default list, which can be restored via the **RESTORE** option in the left menu).

4.5 User selection

The **User Selection** page allows you to login and manage user accounts:

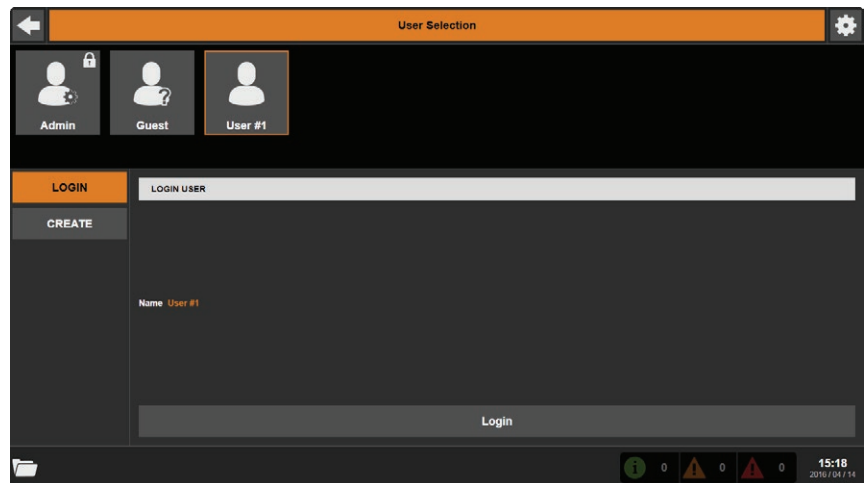
- **Creating a new user account:**

In the left menu, select the **CREATE** option. Enter the user's name. If this user account needs to be password-protected then enter the corresponding password in the **Password** and **Confirm Password** fields. When ready, press the **Create** button. You can also press the **Create & Login** button to create the user account and log in automatically.



- **Logging in:**

In the left menu, select the **LOGIN** option then select an existing user account. If this user account is password-protected, enter the corresponding password. When ready press the **Login** button to log in and display the **Show Selection** page.



Note: There are two predefined user accounts available: Admin and Guest. An Admin can only manage other user accounts (reset password, delete an account...). A Guest cannot create any show; he is only allowed to use shows that have been shared by other users (read only).



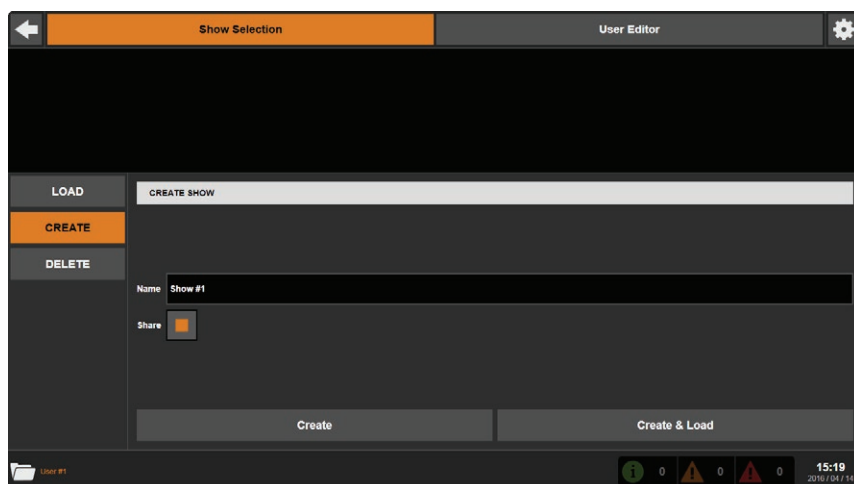
IMPORTANT: the password for the Admin account is "Password".

4.6 Show selection

The **Show Selection** page allows you to manage shows for the currently logged-in user:

- **Creating a new show:**

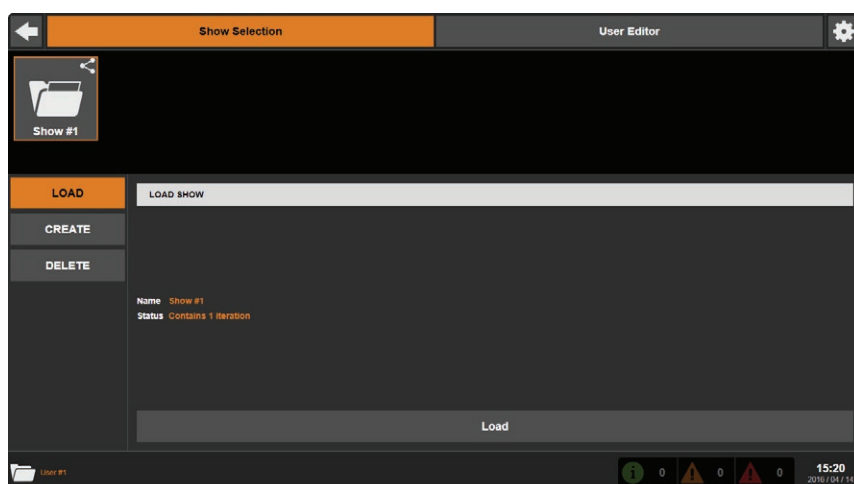
In the left menu, select the **CREATE** option then enter the name of the show. Check the **Share** box if you intend to share this show with any other users (read only). When ready, press the **Create** button. You can also press the **Create & Load** button to create the show and load it automatically.



Note: Creating a show will automatically create a default iteration.

- **Loading a show:**

In the left menu, select the **LOAD** option. Select the show you want to load and then press the **Load** button to load this show and display the **Iteration Selection** page.



- **Deleting a show:**

In the left menu, select the **DELETE** option. Select the show you want to delete and then press the **Delete** button to permanently erase this show.



This action cannot be undone.

4.7 Iteration selection

The **Iteration Selection** page allows you to manage iterations (versions) for the current show.

Each show can have many iterations, each representing a branch or restore point of your configuration. This way you can use iterations to create backups, variants, or step by step refinements of a show.

For example, if you re-use a file from a previous show, you may wish to create a new iteration as clone of the previous one, and work within the new iteration. This would allow you to make updates and changes to the show, but still allow you to use your previous version if necessary.

- **Creating a new iteration:**

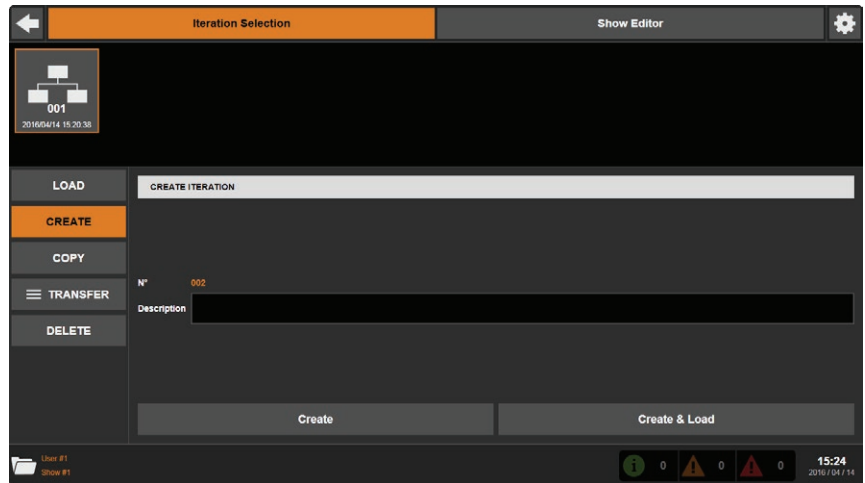
In the left menu, select the **CREATE** option then enter a description for this iteration. When ready, press the **Create** button. You can also press the **Create & Load** button to create the iteration and load it automatically.

- **Copying an iteration:**

In the left menu, select the **COPY** option. Select the iteration you want to duplicate in the **From** field. You can optionally enter a description for this iteration. When ready, press the **Copy** button. You can also press the **Copy & Load** button to copy the iteration and load it automatically.

- **Deleting an iteration:**

In the left menu, select the **DELETE** option. Select the iteration you want to delete and then press the **Delete** button.



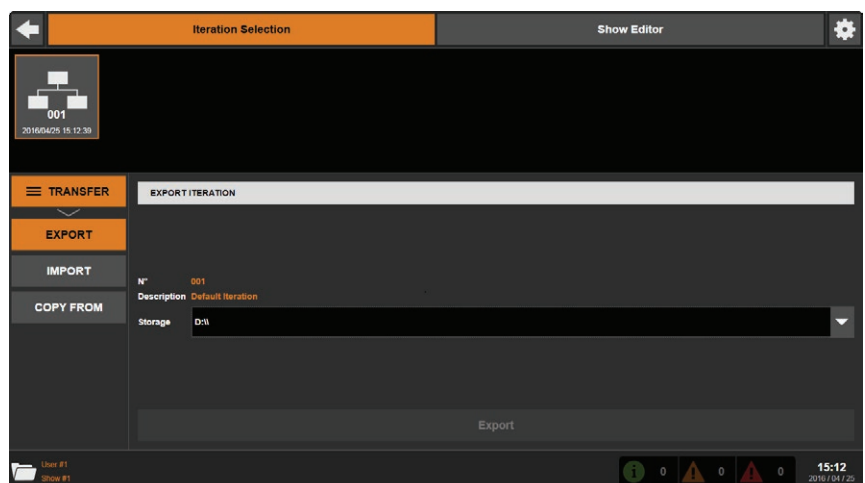
This action cannot be undone.

- **Loading an iteration:**

In the left menu, select the **LOAD** option. Select the iteration you want to load and then press the **Load** button to load this iteration and begin working on your event setup.

- **Exporting an iteration to a USB key:**

In the left menu, select **TRANSFER** then select the **EXPORT** option. Select the iteration you want to export then plug a USB flash drive into one of the **Vertige™** USB connectors. Select your USB flash drive in the **Storage** list and press the **Export** button to start exporting this iteration.

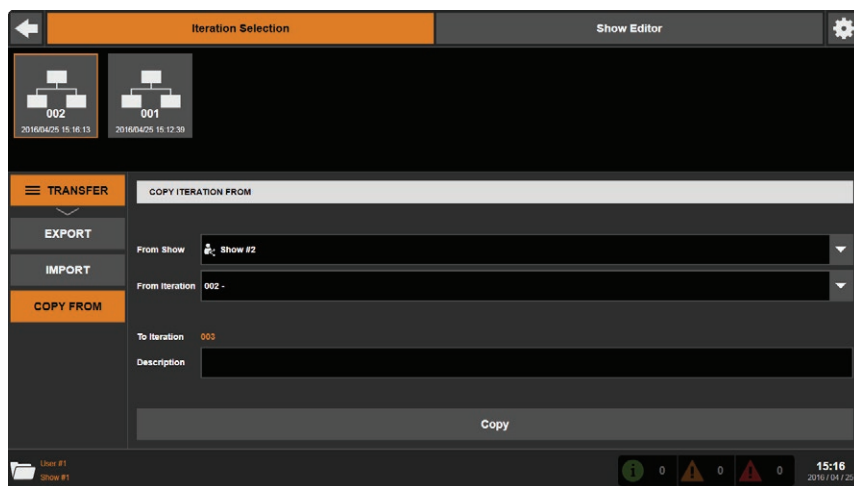


- **Importing an iteration from a USB key:**

In the left menu, select **TRANSFER** then select the **IMPORT** option. Plug a USB flash drive into one of the **Vertige™** USB connectors. Select your USB flash drive in the **Storage** list to display the iterations available. Select the iteration you want to import then press the **Import** button to start importing it into the current show (as a new iteration index).

- **Copying an iteration from another show:**

In the left menu, select **TRANSFER** then select the **COPY FROM** option. Select the show to copy from (one of your shows or a show shared with you within the Vertige), and then one of its iterations. When ready, press the **Copy** button to copy the selected show iteration as a new iteration of the current show.



4.8 Iteration Wizard

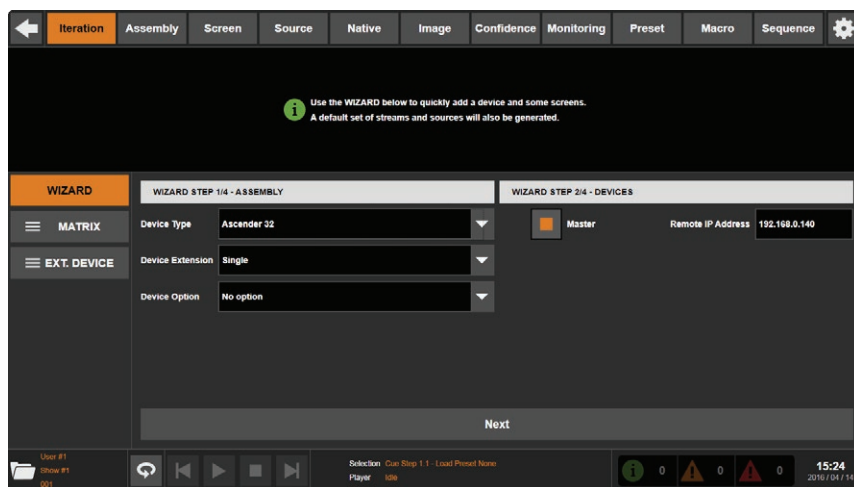
The **Iteration Wizard** allows you to quickly setup an iteration and thus have a version of your show up and running in just a few steps:

Wizard Step 1 (Assembly):

In the **Device Type** field, select the type of device that will be handled by this assembly.

In the **Device Extension** field, select the **Single** option if you have only one single device to control in this assembly.

Select the **Synchronized** option if two, three or four identical devices will be synchronized for achieving bigger screens (associative modularity). When synchronized, all the sources must be split and configured the same way on all devices (frames and logos included).

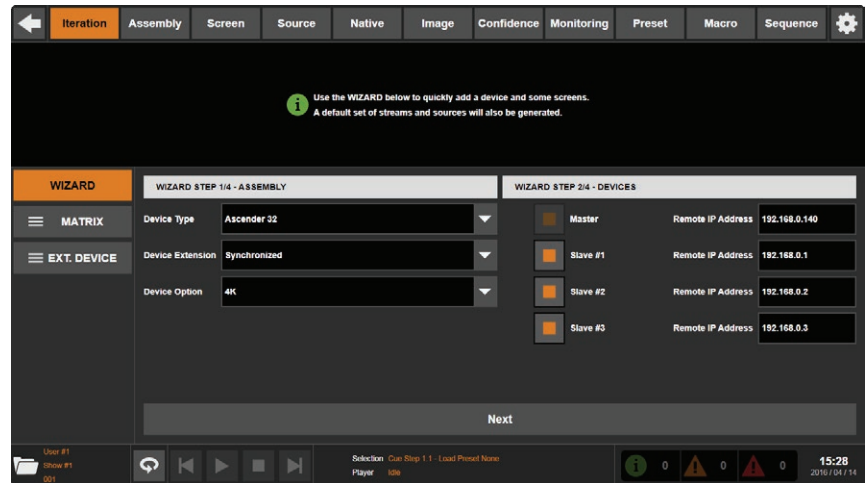


Select the **Linked with SLAVE** option, if the device is linked to another compliant device (additive modularity). Select the **Linked with LOE** option, if the device is linked to a **LiveCore™ Output Expander** (additive modularity). If your device(s) have an option (**4K** or **4K - PL**), then make sure to select it in the **Device Option** field.

Note: All synchronized devices of an assembly must be identical (you can try to manually downgrade a device via the WebRCS to overcome this limitation).

Wizard Step 2 (Devices):

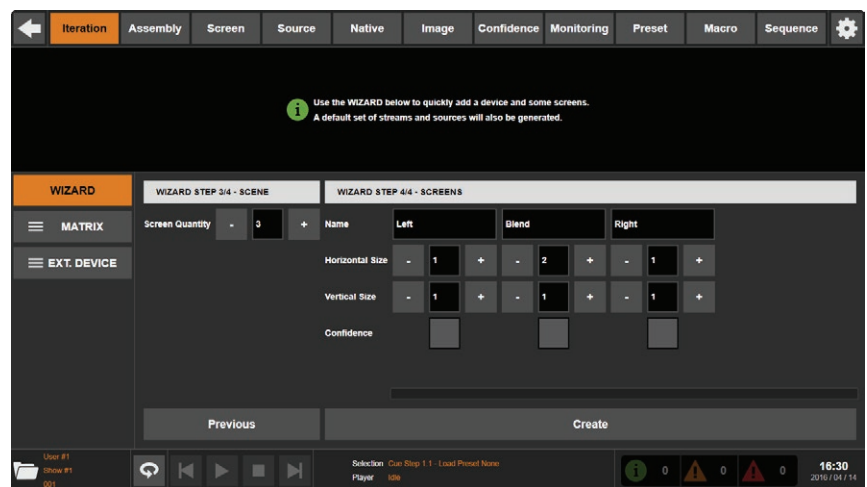
Enter the IP address of the Master device. If you have selected the **Synchronized** option, then check the **Slave #X** boxes to enable up to three additional devices that will be synchronized with the Master device. Then adjust each device IP address to match your network configuration. Press the **Next** button to continue.

**Wizard Step 3 (Scene):**

Select the total number of screens wired to your devices.

Wizard Step 4 (Screens):

Rename each screen if necessary. If some of the screens will be used for a blend, adjust their size accordingly. If a screen must be configured as a Confidence screen then check the **Confidence** box. (see chapter 4.13 *Confidence Screen configuration*). When ready, press the **Create** button to start creating automatically the assembly as well as the related devices, screens, streams, sources and front panel key bindings (with predefined default values).

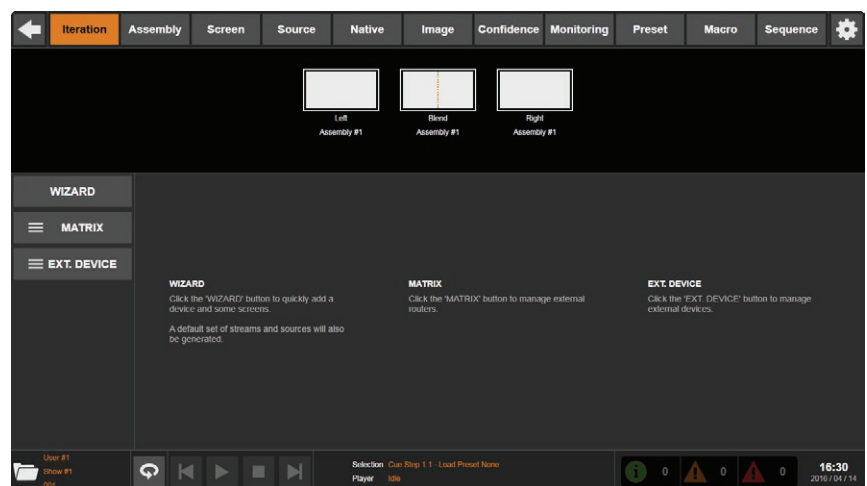


Once completed, the Wizard returns to the first page and the above area is updated to reflect the latest changes and the newly created screens.

If your event requires setting up more devices and screens, use the wizard as many times as necessary. After using the wizard, you may have to adjust some default settings in the assemblies, screens or sources: Select the **ASSEMBLY** tab in the top bar then select an assembly that has just been created. In the left menu, select **IN/OUT** then the **INPUT**

option and press the **All Inputs** button (**AUTO SET** panel) to set up automatically all the inputs.

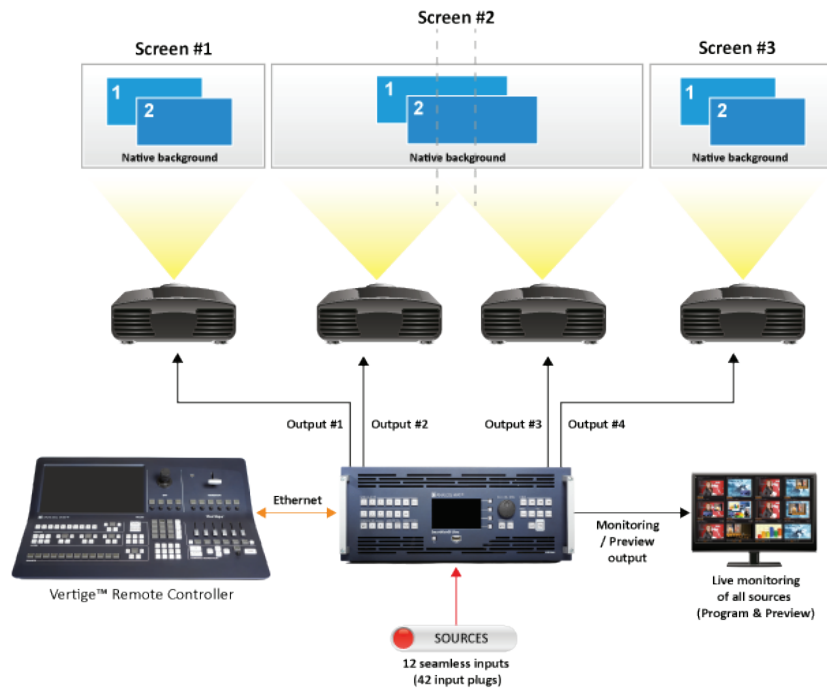
Back to the upper menu level, select **STREAM** then select the **LIVE** option to display the live streams automatically created for this assembly. Make sure each **Live** stream matches the correct input plug. When done, select the **NATIVE** option to configure native streams if necessary. Then you can go to the **Preset** page and start assigning sources to the screen layers (see chapter 5. *Operating the Vertige™*).



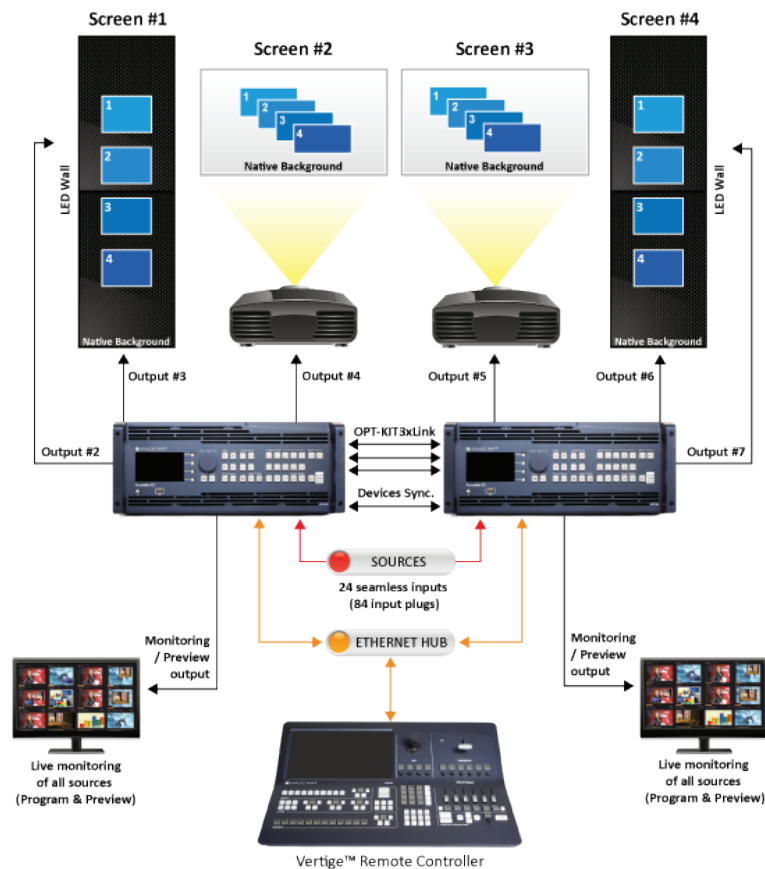
4.9 Assembly configuration

An assembly is a group of devices that can operate on the same screen(s):

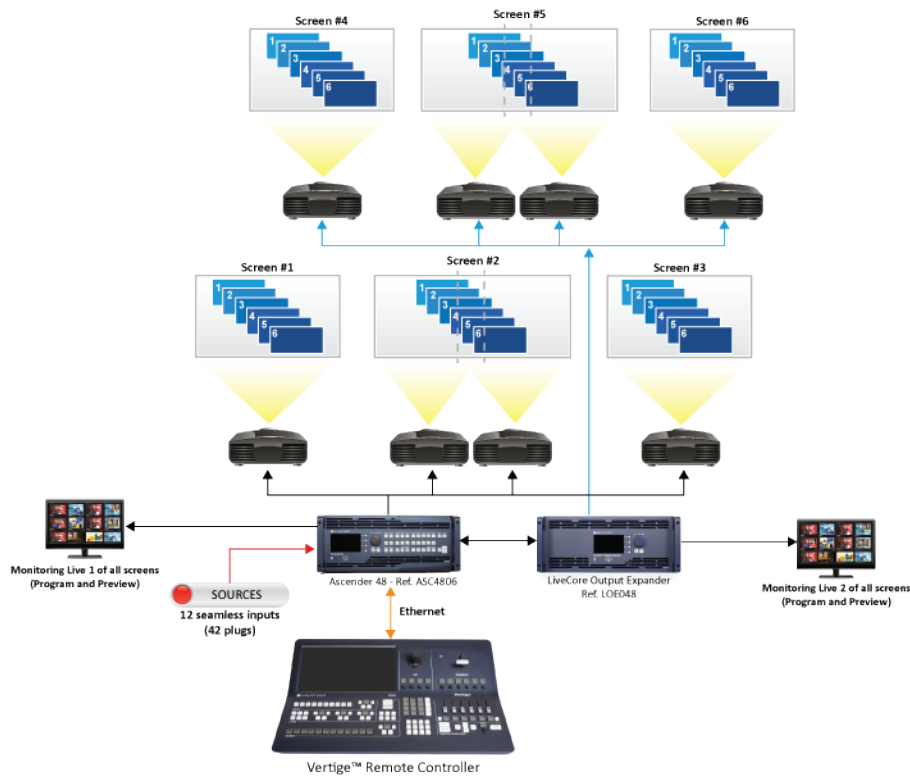
- One single **LiveCore™** device, for example:



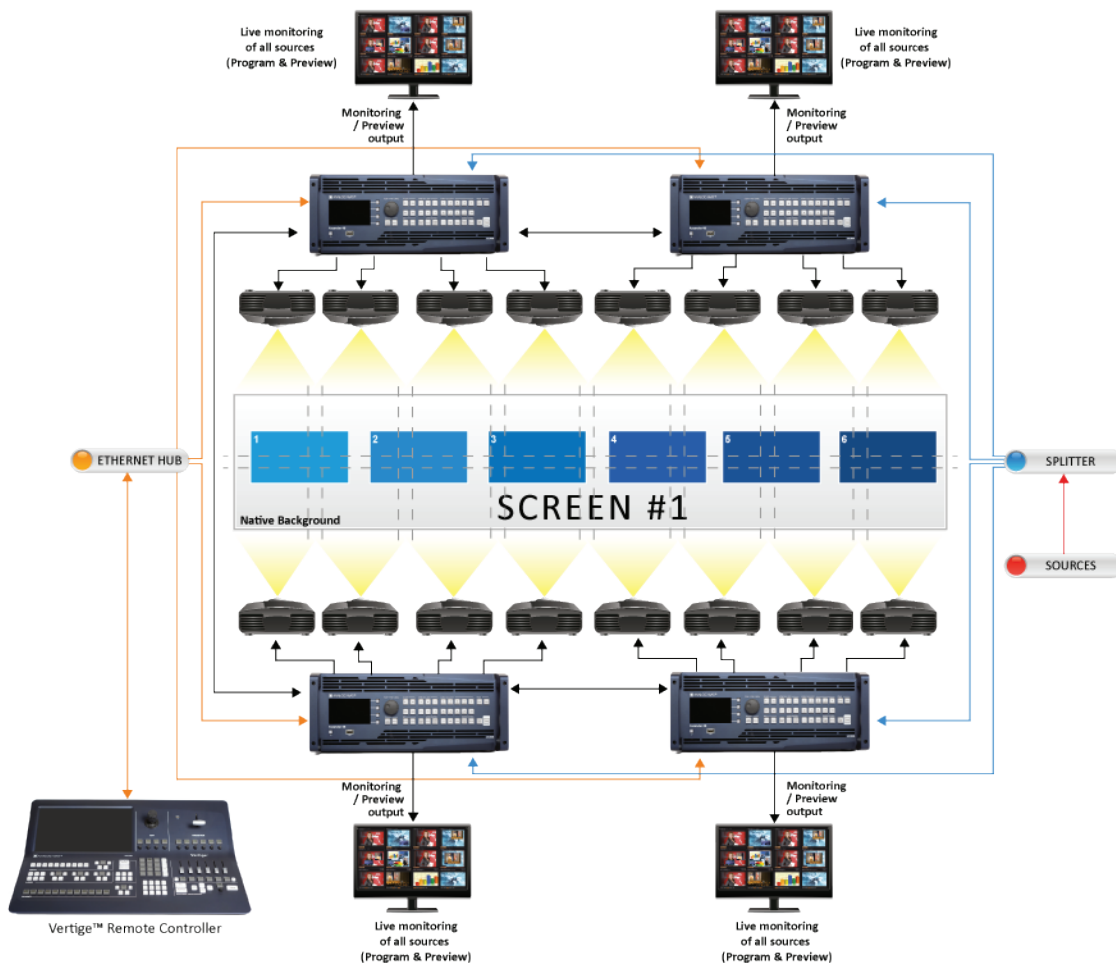
- Two **LiveCore™** devices linked together using the set of Link cables (additive modularity), for example:



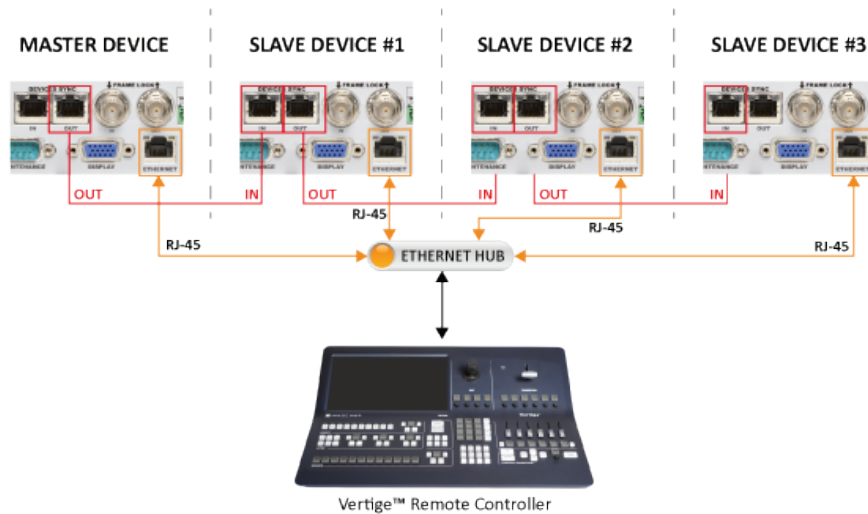
- One **LiveCore™** device linked to an optional **LiveCore™ Output Expander (LOE)** using the set of Link cables (additive modularity) , for example:



- Up to 4 identical **LiveCore™** devices synchronized together (associative modularity). In this configuration, all the devices must be connected to **Vertige™** and all the sources should be split for each device, for example :



In order to synchronize the **LiveCore™** devices, use Ethernet cables between the IN and OUT device sync. connectors.



The **Vertige™** can handle several device assemblies. To manage your assemblies, go to the **Assembly** page:

- **Creating a new assembly:**

Select the **CREATE** option in the left menu and then enter the name of the assembly. In the **Device Type** field, select the type of device that will be handled by this assembly.

In the **Device Extension** field, select the **Single** option if you have only one single device to control in this assembly.

Select the **Synchronized** option if two, three or four identical devices will be synchronized for achieving bigger screens (associative modularity).

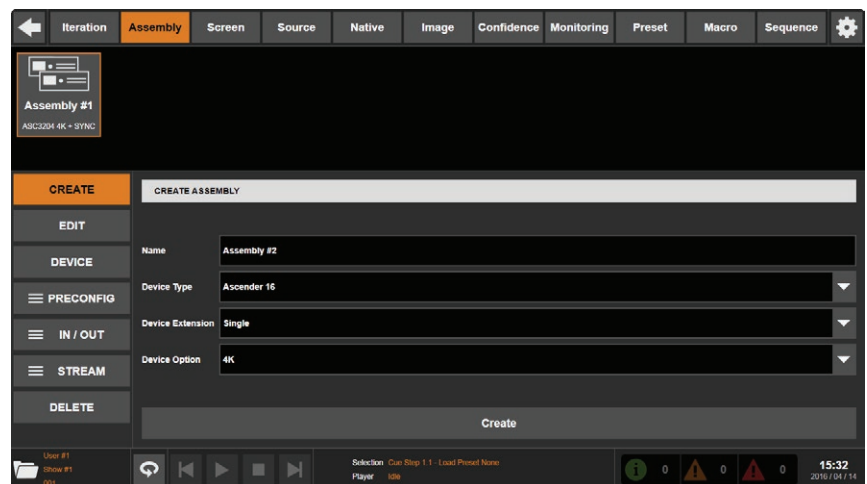
Select the **Linked with SLAVE** option, if the device is linked to another compliant device (additive modularity).

Select the **Linked with LOE** option, if the device is linked to a **LiveCore™ Output Expander** (additive modularity).

If your device(s) have an option (**4K** or **4K PL**), then make sure to select it in the **Device Option** field.

Note: All synchronized devices of an assembly must be identical (you can try to manually downgrade a device via the Web RCS to overcome this limitation).

Press the **Create** button to create an empty assembly.



• Configuring assembly devices:

In the left menu, select the **DEVICE** option then select the assembly for which you want to configure the device(s).

To add a new master device into the assembly, select the corresponding empty slot in the list (**Master**) and check the box.

If the assembly has been configured to handle synchronized devices, you can add up to three additional slave devices. For each slave device, select the corresponding empty slot in the list (**Slave#1**, **Slave#2** or **Slave#3**) and check the box.

To edit device connection settings, select a device in the list then, in the right part of the page, choose the communication protocol, adjust the LAN settings to match the device you are trying to connect to, and press the Apply button.

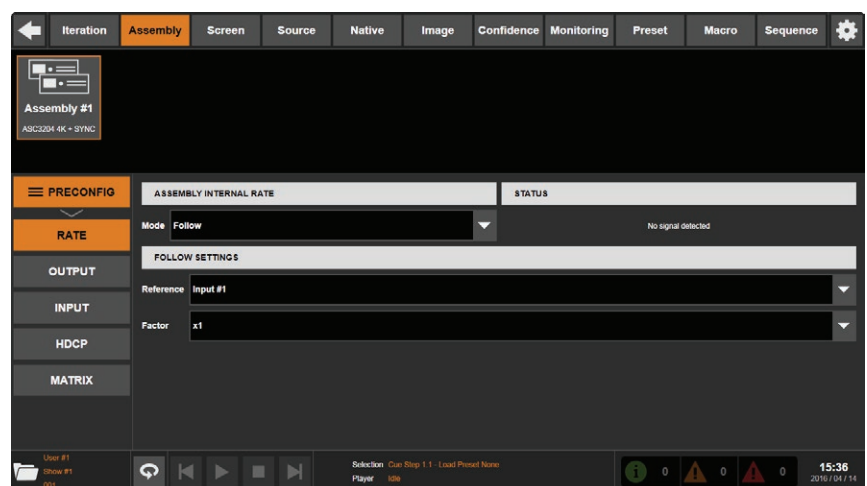
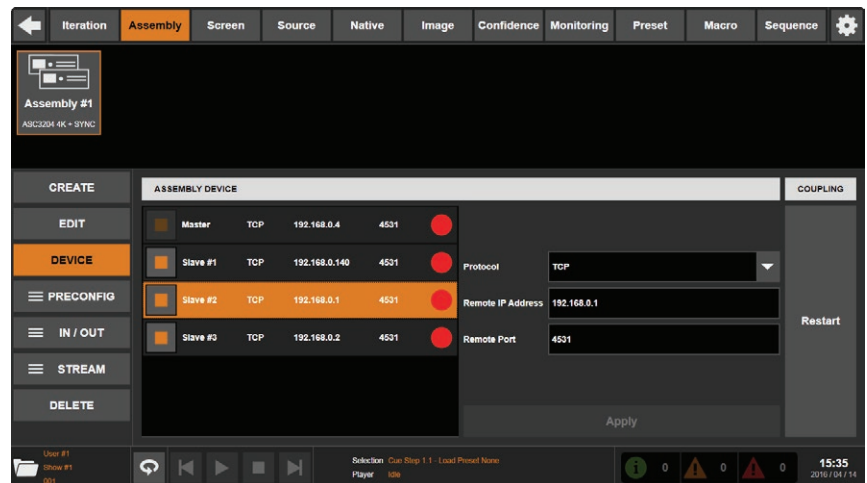
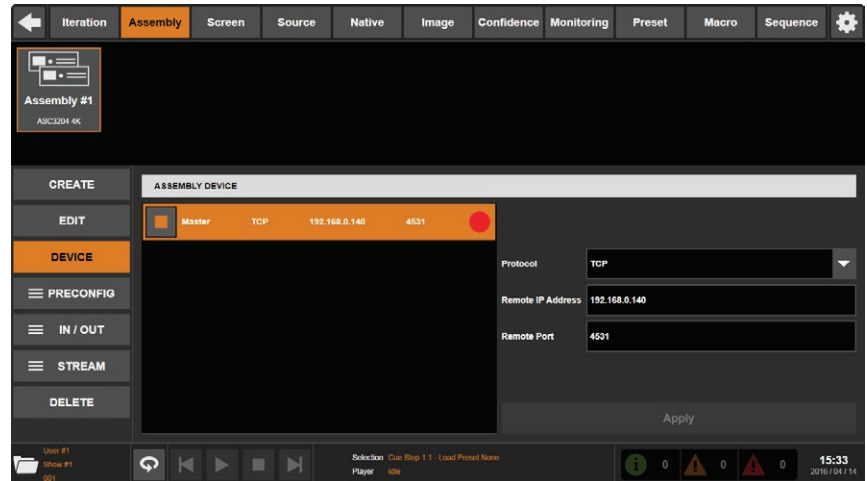
Note: The **Vertige™** will automatically try to connect to the device regularly. Once the device is successfully connected, the icon next to the device will turn green. If no connection status is available, a question mark will be displayed.

To remove a device, simply uncheck its corresponding box in the list.

• Configuring internal rate:

In the left menu, select the **PRECONFIG / RATE** option then select the assembly for which you want to configure the rate. Here you have to define the global internal rate of the device(s) which will be the rate of your Program output(s). This rate can be defined:

- **Internally from the devices:** Select the Internal option then select the desired internal rate (25Hz, 50 Hz, 60Hz ...).
- **By choosing to follow one of the inputs:** Select the Follow option then in the Reference list, select the input from where the output rate will be copied and adjust the other follow settings if necessary.
- **By choosing to follow a dedicated framelock input:** Select the Framelock option and adjust the other framelock settings if necessary.



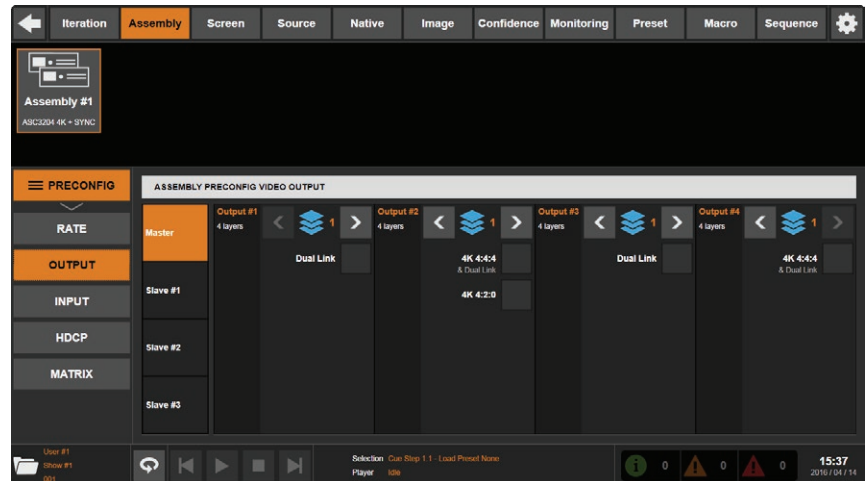


Configuring the rate to follow an input will lock the output frame rate to match the selected source. This is useful to eliminate the “strobing effect” which may be visible as an artifact of the framelocking process. However, be sure that your reference input is a reliable source, as any disruptions in the reference signal may cause visible glitches on your output, even if the selected reference input is not currently being displayed.

• Configuring output resources:

In the left menu, select the **PRECONFIG / OUTPUT** option and then select the assembly for which you want to configure output resources. If the assembly contains more than one device, select the required **Master/Slave** device. Then use the left/right arrows to allocate blocks of layer resources from one physical output to the adjacent one. Once there are enough layer resources on the output, the options **Dual Link, 4K 4:4:4 (30 Hz) and 4K 4:2:0 (60 Hz)** will also become available:

- Check the **Dual Link** or **4K 4:4:4 (30 Hz)** check-box to enable this option on the output (note that this will automatically disable the adjacent physical output on the device).
- Check the **4K 4:2:0 (60 Hz)** check-box to enable this option on the output (note that this will automatically disable the 3 other physical outputs on the device).

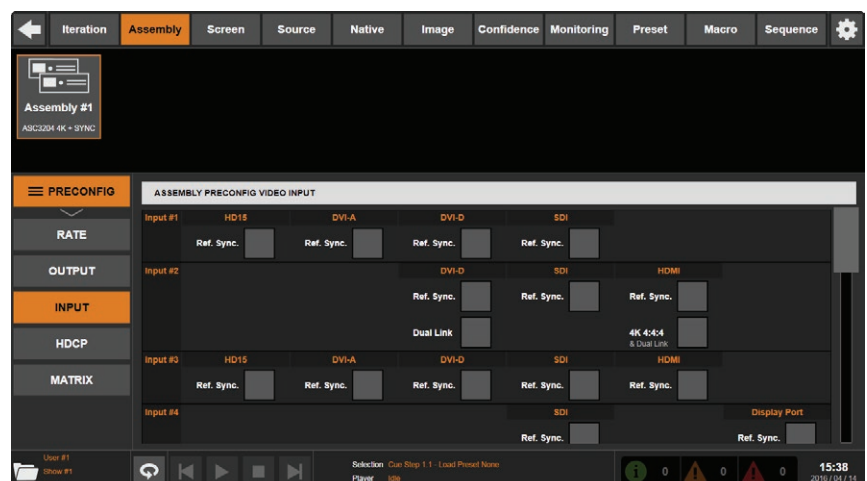


Please make sure that disabled outputs are not used in any screen (see **4.10 Screen configuration**)

• Configuring input resources:

In the left menu, select the **PRECONFIG / INPUT** option and then select the assembly for which you want to configure input resources:

- Check the **Ref. Sync** box of every framelocked input plug that shares the same framelock reference. This will reduce the frame delay by disabling the Frame Rate Conversion, using framelock as the default rate.
- Check the **Dual-Link** box of Dual-Link inputs (plugs DVI, Display Port and HDMI 4K). Please note that, for DVI plugs, inputs #2, #6 and #10 are linked to adjacent inputs #1, #5 and #9, respectively, and that the linked adjacent input will be automatically disabled if Dual-Link is active and used in a preset as the device needs its resource to handle Dual-Link. The same will happen with Display Port inputs #4, #8 and #12: enabling Dual-Link on the input will automatically disable the linked adjacent input #3, #7 or #11, respectively.
- Check the **4K 4:4:4** box of 4K inputs (plugs HDMI 4K). Please note that inputs #2, #6 and #10 are linked to adjacent inputs #1, #5 and #9, respectively, and that the linked adjacent input will be automatically disabled if 4K is active and used in a preset as the device needs its resource to handle 4K.



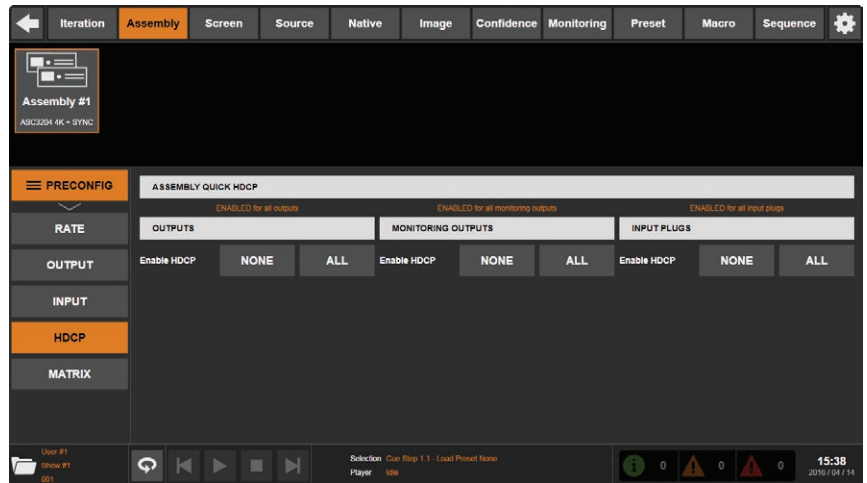
• **Configuring HDCP detection:**

In the left menu, select the **PRECONFIG / HDCP** option then select the assembly for which you want to quickly configure HDCP detection.

- **OUTPUTS** panel: Press the **NONE** button to disable HDCP detection on all the devices outputs. Press the **ALL** button to force HDCP detection on all the devices outputs.

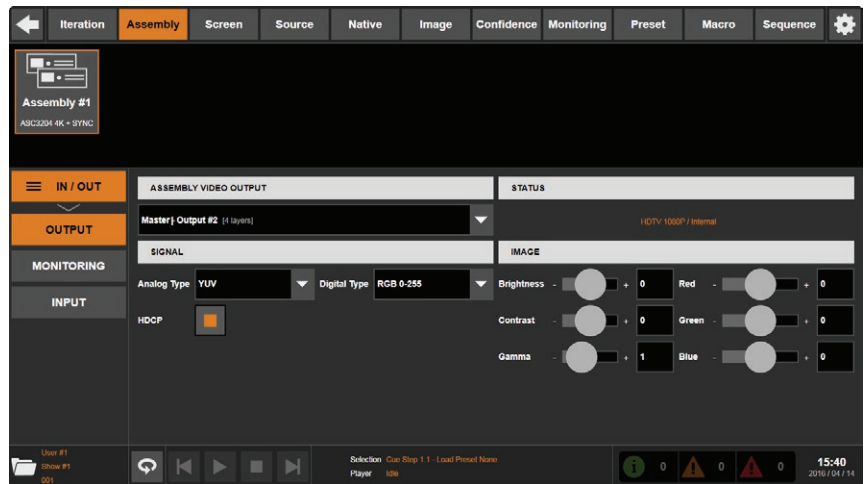
- **MONITORING OUTPUTS** panel: Press the **NONE** button to disable HDCP detection on all the devices monitoring outputs. Press the **ALL** button to force HDCP detection on all the devices monitoring outputs.

- **INPUTS** panel: Press the **NONE** button to disable HDCP detection on all the devices inputs. Press the **ALL** button to force HDCP detection on all the devices inputs.



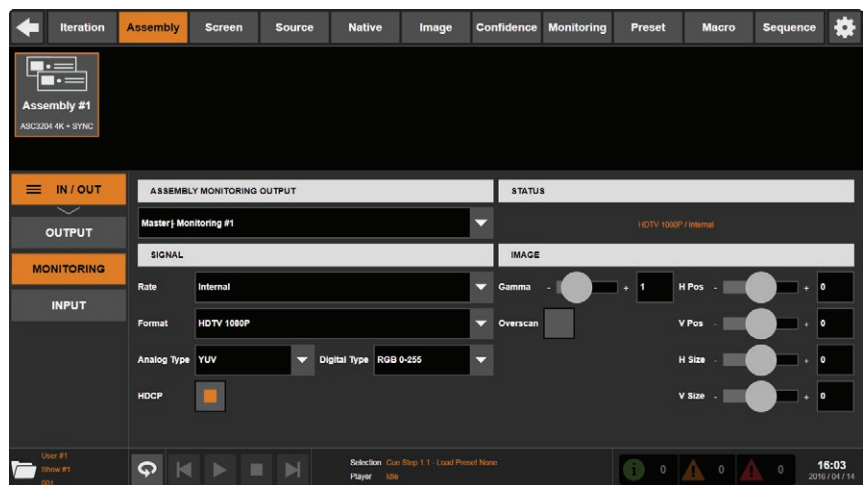
• **Configuring the device(s) outputs:**

In the left menu, select the **IN/OUT / OUTPUT** option then select the assembly for which you want to configure the outputs: Select one of the physical outputs in the list then adjust the settings accordingly (HDCP detection, Gamma, signal type...).



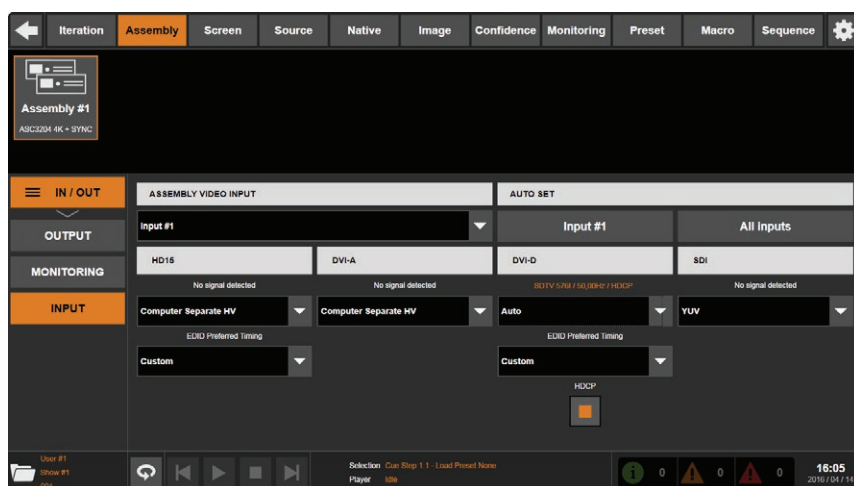
• **Configuring the device(s) monitoring outputs:**

In the left menu, select the **IN/OUT / MONITORING** option then select the assembly for which you want to configure the monitoring outputs: Select one of the physical monitoring outputs in the list then adjust the settings accordingly (Rate, Format, HDCP detection, Gamma, signal type...).



• Configuring the device(s) inputs:

In the left menu, select the **IN/OUT / INPUT** option then select the assembly for which you want to configure the inputs: To automatically configure all the inputs, simply press the **All inputs** button located in the **AUTO SET** panel. Or press the **Input #x** button to automatically configure the selected input only. If the input signal type has not been detected or set up properly, you can adjust it manually below. If necessary, you can also force the EDID preferred timing.

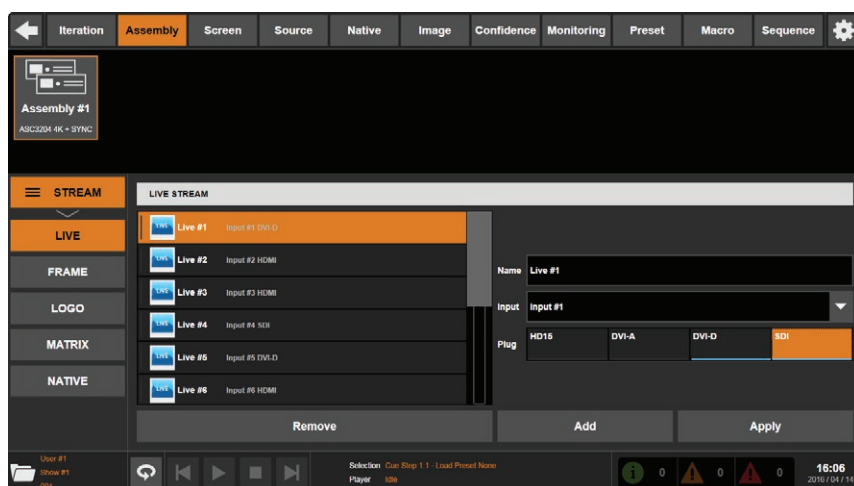


• Configuring Live streams:

A «Stream» can be Live (signal from an input plug) or still (Frame or Logo) and allows you to display content with various settings in a layer.

To configure Live streams, select the **STREAM / LIVE** option and then select the assembly for which you want to configure the Live streams.

To add a new Live stream, enter the name of this stream then select the desired input and plug. When ready, press the **Add** button. To edit existing Live stream properties, select a stream in the list and adjust the desired properties.

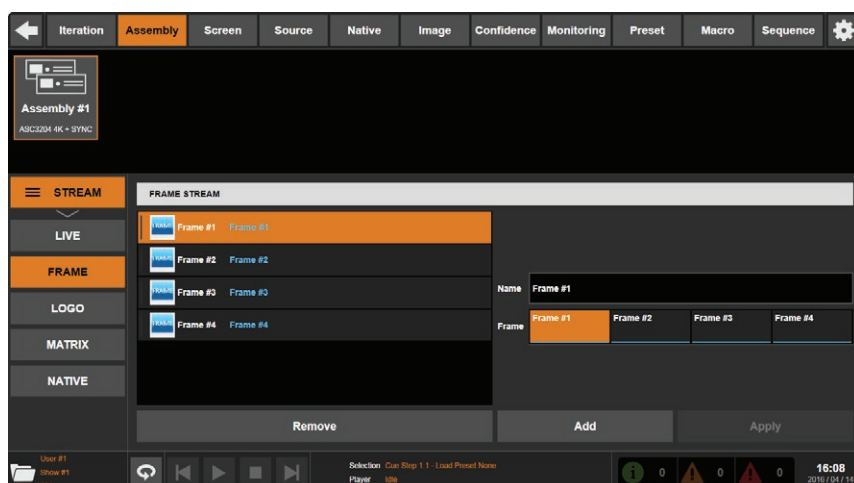


When a valid signal is being detected on an input plug, the plug will be underlined with a thin blue line.

When done, press the **Apply** button to save your changes. To delete a Live stream, simply select the corresponding item in the list and press the **Remove** button.

• Configuring Frame streams:

In the left menu, select the **STREAM / FRAME** option then select the assembly for which you want to configure the Frame streams: To add a new Frame stream, enter the name of this stream then select one of the frames available in the list. When ready, press the **Add** button. To edit existing Frame stream properties, select a stream in the list and adjust the desired properties.



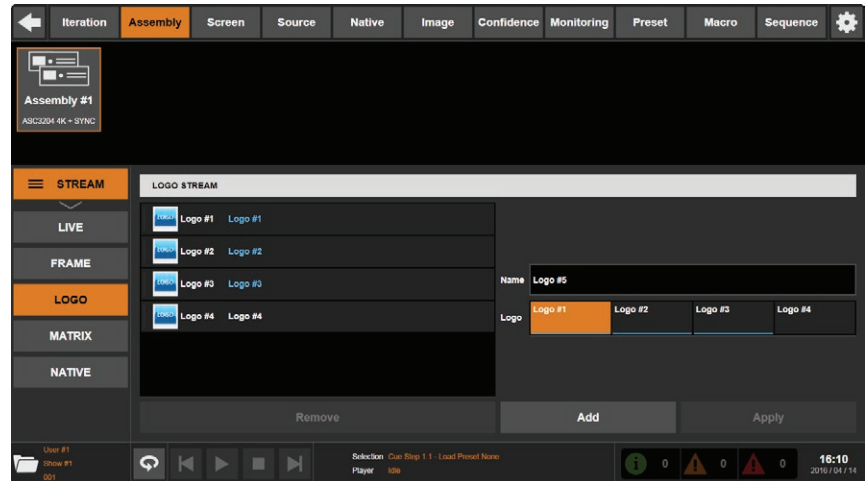


When a valid media is assigned to a frame, the corresponding item will be underlined with a thin blue line.

When done, press the **Apply** button to save your changes. To delete a Frame stream, simply select the corresponding item in the list and press the **Remove** button.

- **Configuring the LOGO streams:**

In the left menu, select the **STREAM / LOGO** option then select the assembly for which you want to configure the Logo streams: To add a new Logo stream, enter the name of this stream then select one of the logos available in the list. When ready, press the **Add** button. To edit existing Logo stream properties, select a stream in the list and adjust the desired properties.



When a valid media is assigned to a logo, the corresponding item will be underlined with a thin blue line.

When done, press the **Apply** button to save your changes. To delete a Logo stream, simply select the corresponding item in the list and press the **Remove** button.

- **Configuring the Matrix streams:** (see chapter 4.10 Matrix configuration)

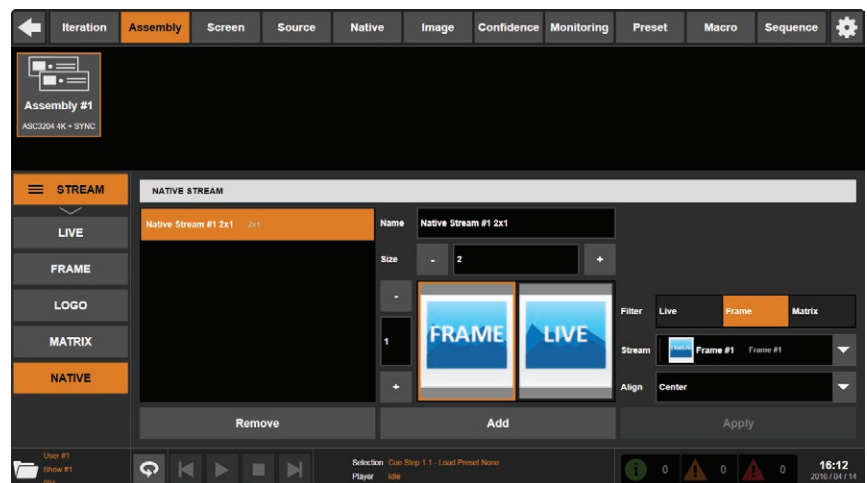
- **Configuring the native streams:**

«Native streams» are streams specifically designed for native layers.

To configure native streams, select the **STREAM / NATIVE** option in the left menu and then select the assembly for which you want to configure the native streams.

To add a new native stream, first enter a name for the stream. If the native stream is used to fill the background of a blend, adjust the native stream size accordingly. When ready, select a screen area, select a stream filter (**Live / Frame / Matrix**) and then select the stream to display in the selected screen area.

If necessary, adjust the alignment to suit your needs. When ready, press the **Add** button. To edit existing native stream properties, select a stream in the list and adjust the desired properties. When done, press the **Apply** button to save your changes. To delete a native stream, simply select the corresponding item in the list and press the **Remove** button.



4.10 Matrix configuration

Vertige™ can control one or more matrix routers and allows **dynamic** routing of the video signals to the **LiveCore™** devices inputs according to your screens content.

If your setup includes one or more upstream matrix routers, you need to:

- Create and configure the matrix routers properly (type, LAN settings ...)
- Map the matrix outputs to the **LiveCore™** devices inputs
- Create and configure at least one matrix stream for each matrix input signal you want to use

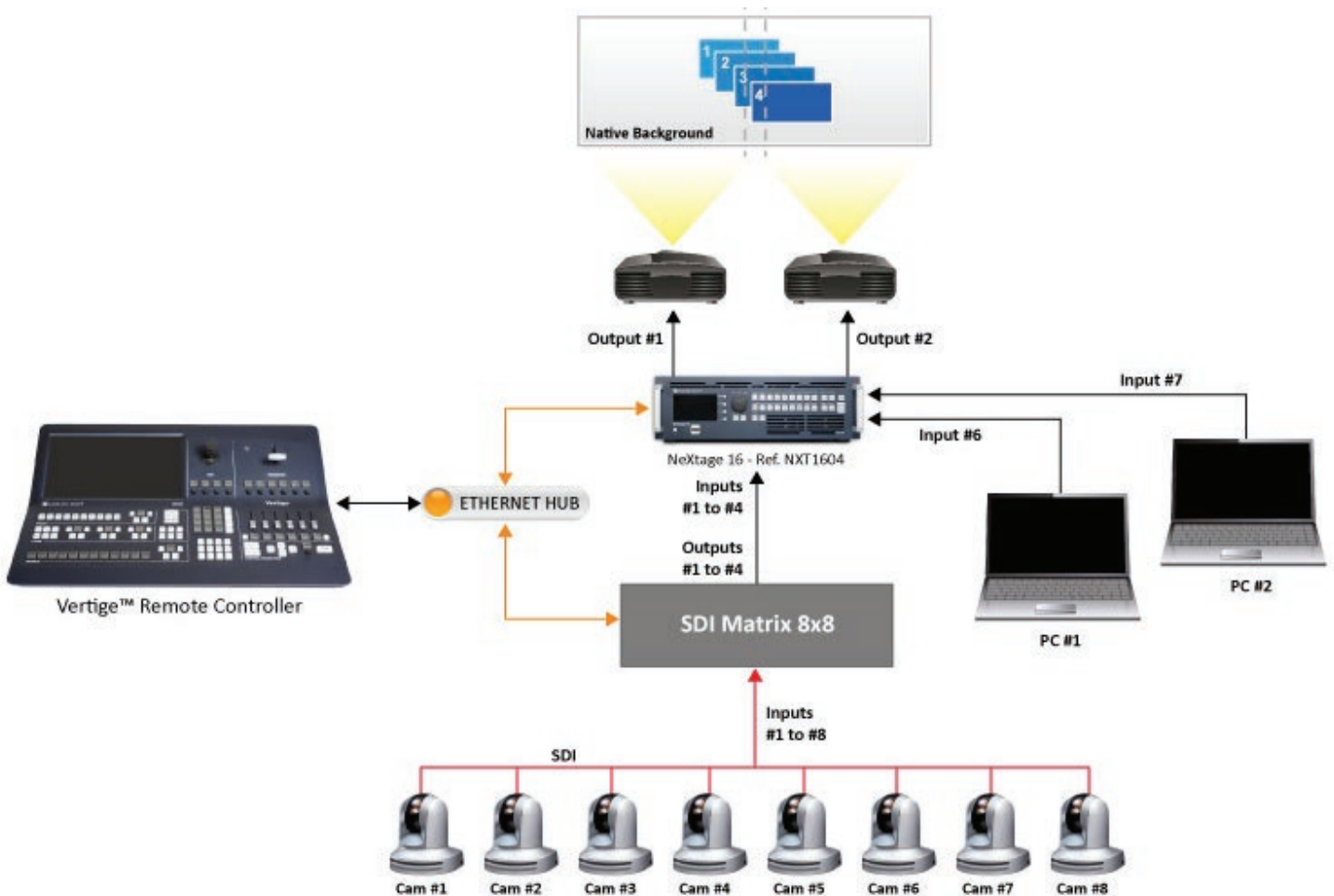
To ensure clean switching between matrix streams, **Vertige™** automatically 'freezes' the corresponding input on the **LiveCore™** devices during the routing. Note that the routing time may vary depending on a range of factors (type of the matrix, type of the signal, HDCP, ...). This routing time can be configured globally for a matrix or finely tuned for each matrix stream if necessary.



- If you want to preserve the ability to make seamless transitions while using an upstream matrix, then the total number of different matrix streams displayed on Preview AND Program should not exceed the total number of physical links between the matrix and the **LiveCore™** device.
- In any situation, the total number of different matrix streams displayed on Preview OR Program should not exceed the total number of physical links between the matrix and the **LiveCore™** device.

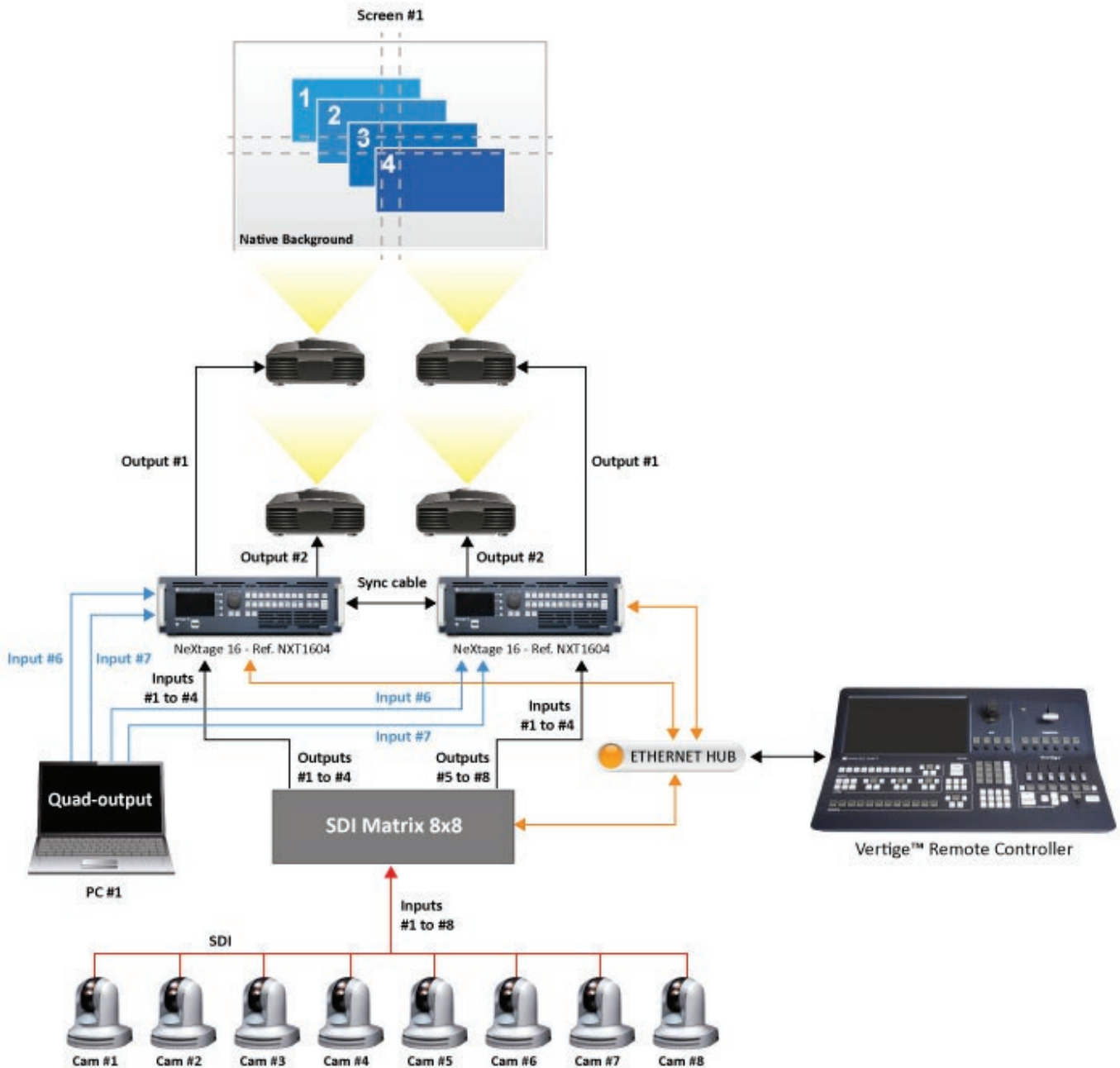
Example 1: One single device assembly (NeXtage 16).

In this setup, an 8x8 SDI matrix increases the number of SDI signals available on the **LiveCore™** device. With 4 links between the matrix and the **LiveCore™** device, up to 4 different matrix streams among the 8 can be displayed on Program. When more than 2 layers are transitioning between different matrix streams, the **Vertige™** will temporarily hide the layers.



Example 2: One assembly with two synced LiveCore™ devices (associative modularity).

In this setup, an 8x8 SDI matrix increases the number of SDI signals available and distributes them on each **LiveCore™** device. With 4 links between the matrix and each **LiveCore™** device, up to 4 different matrix streams among the 8 can be displayed on Program. When more than 2 layers are transitioning between different matrix streams, the **Vertige™** will temporarily hide the layers.

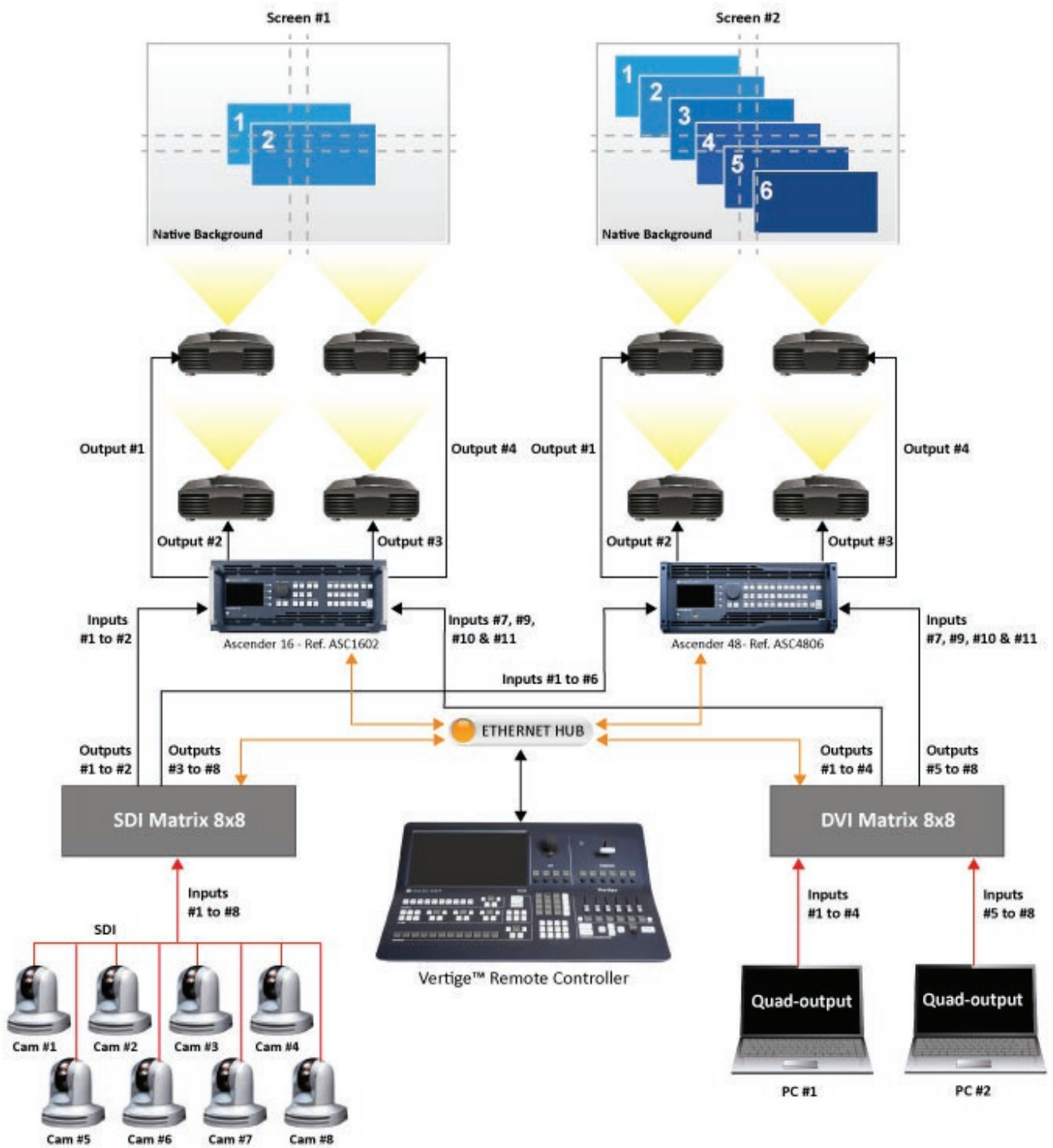


Example 3: One Ascender 16 assembly and one Ascender 48 assembly.

In this setup, an 8x8 SDI matrix increases the number of SDI signals available and distributes them on each **LiveCore™** device. With 2 links between the matrix and the **Ascender 16**, up to 2 different matrix streams among the 8 can be displayed on Program. When more than 1 layer is transitioning between different matrix streams, the **Vertige™** will temporarily hide the layers.

With 6 links between the matrix and the **Ascender 48**, up to 6 different matrix streams among the 8 can be displayed on Program. When more than 3 layers are transitioning between different matrix streams, the **Vertige™** will temporarily hide the layers.

Furthermore, an 8x8 DVI matrix router distributes the content for the native layer on each **LiveCore™** device, and allows to switch between 2 computers. Note that switching between the 2 native matrix streams will produce a non-synchronized “CleanCut” effect on each part of the native layer. Switching to a native frame stream first is recommended.

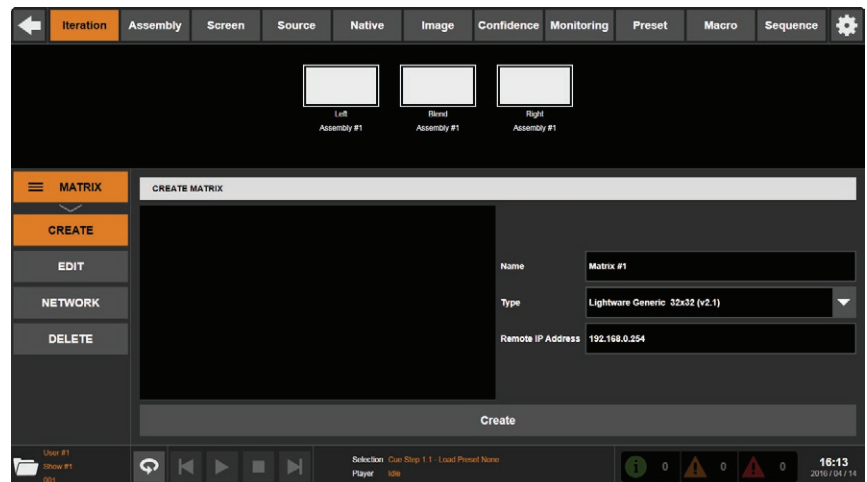


To display the Matrix configuration page, select the **Iteration** tab in the top menu bar and then select the **MATRIX** option on the left.

- **Creating a new matrix router:**

Select the **CREATE** option in the left menu and then enter the name of the matrix router. In the **Type** field, select the matrix descriptor from the matrix library corresponding to the matrix you want to create. Enter the matrix IP address. When ready, press the **Create** button.

Note: The **Vertige™** will automatically try to connect to the device regularly. Once the matrix router is successfully connected, the icon next to the device will turn green. If no connection status is available, a question mark will be displayed.

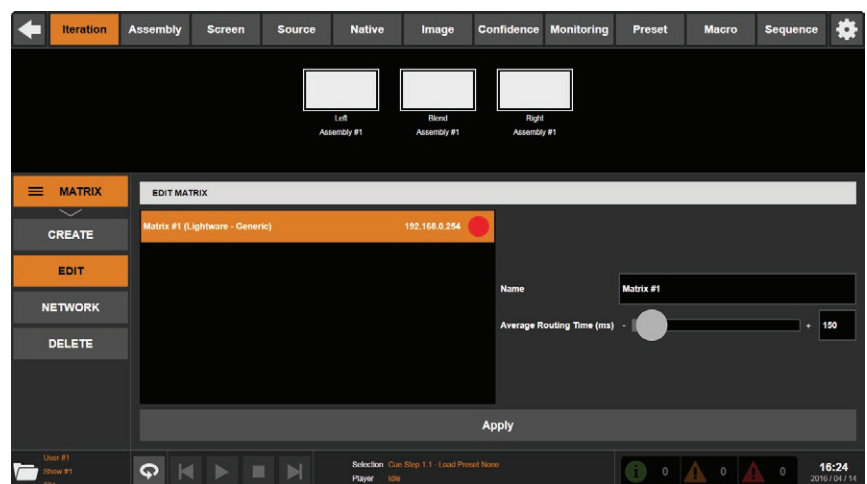


Please be sure your LAN settings correspond to those of your matrix router.

- **Configuring the average matrix routing time:**

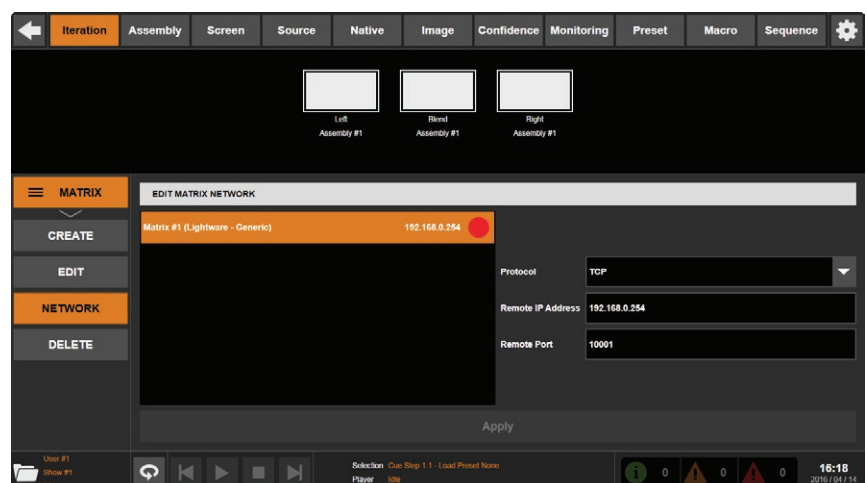
In the left menu, select the **EDIT** option then select the matrix router for which you want to configure the average routing time. Adjust the value (in milliseconds) and press the **Apply** button to save your changes.

Important: When the **Vertige™** dynamically routes a matrix stream, it freezes the corresponding **LiveCore™** input, then unfreezes it once that the estimated routing time has elapsed. Increase this value if some visual glitches are visible.



- **Configuring the LAN settings:**

In the left menu, select the **NETWORK** option then select the matrix router for which you want to configure the LAN settings. Select the connection protocol (TCP, UDP or HTTP) and then configure the LAN settings accordingly. When ready, press the **Apply** button.

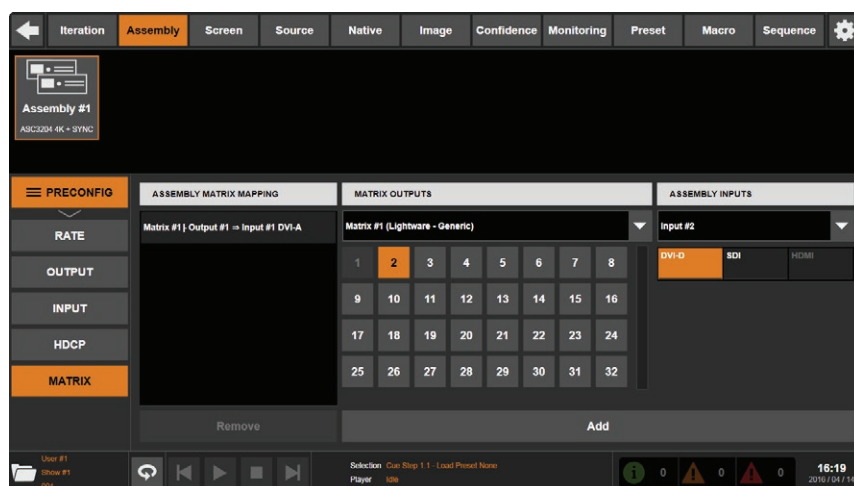


- **Mapping matrix outputs to the assembly inputs:**

Go to the **Assembly** page on the top bar. Select the **PRECONFIG / MATRIX** option and then select the assembly for which you want to configure the assembly matrix mapping.

To add a new link, select the matrix router and then select a **MATRIX OUTPUT(S)**. Select the assembly input (number and plug type) physically connected to this(ese) output(s). If the selected assembly has been configured to operate in associative modularity (up to four synchronized identical devices), please make sure that all the matrix outputs are physically connected to the same inputs on all the devices. When ready, press the **Add** button to create the link.

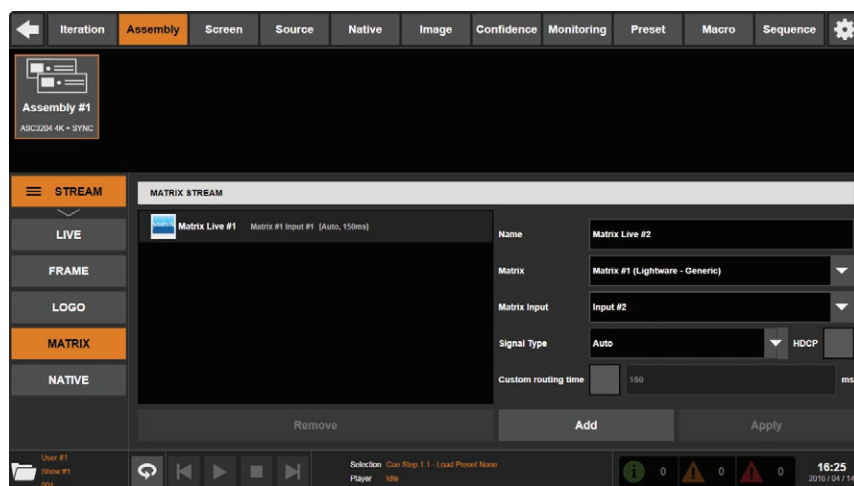
To delete a link, simply select the link from the **ASSEMBLY MATRIX MAPPING** list and then press the **Remove** button.



- **Configuring the Matrix streams:**

Go to the **Assembly** page on the top bar. Select the **STREAM / MATRIX** option and then select the assembly for which you want to configure the Matrix streams.

To add a new Matrix stream, enter the name of this stream then select the desired matrix router in the list. Select one of the inputs available then choose the appropriate signal type. If the signal is HDCP-protected, make sure to check the **HDCP** box (this will force HDCP protection on the **LiveCore™** device input as long as the signal is routed to this input). If the estimated routing time needs to be specifically adjusted for this stream, check the **Custom Routing Time** box and enter a value (in msec). When ready, press the **Add** button. To edit existing Matrix stream properties, select a stream in the list and adjust the desired properties. When done, press the **Apply** button to save your changes. To delete a Matrix stream, simply select the corresponding item in the list and press the **Remove** button.



If a Matrix stream is tagged 'unroutable', this means the **Vertige™** will not be able to route the corresponding signal to any of the **LiveCore™** device inputs. Please check that the matrix streams signal type and HDCP are compatible with the links you have defined between the matrix router outputs and the **LiveCore™** device input plugs.

4.11 External IP device configuration

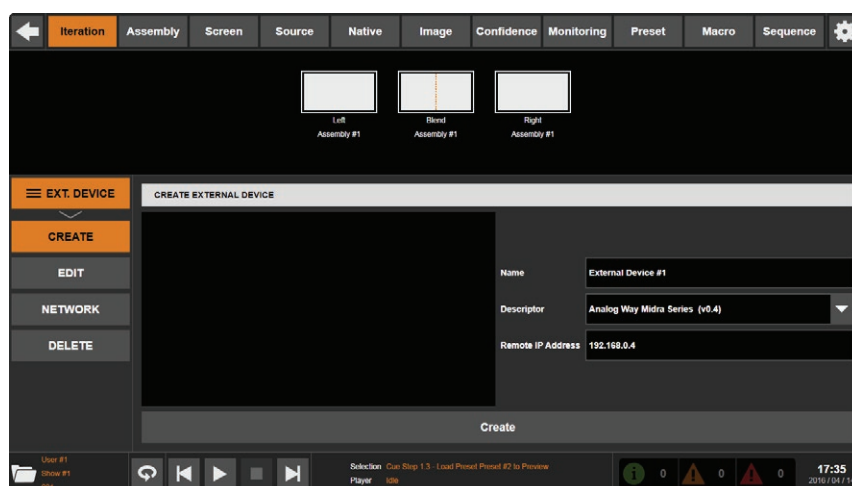
With the **Vertige™**, you can control one or more external devices over IP. Media players, PTZ cameras, and nearly any device that supports TCP, UDP or HTTP protocols can be this way controlled via the **Vertige™**.

If your setup includes an external IP device, you need to:

- Add the external IP device to your iteration (specify the device type, configure the LAN settings ...). This allows the **Vertige™** to access the device via IP in order to send commands.
- Create at least one macro containing the action(s) to be executed by the device (such as go to next cue and take, or pan and zoom). This way you can simply control the device by executing macros at runtime (*see 4.20 Macro management for more information*).

• Adding an external IP device to your iteration:

In the Iteration page, select the **EXT. DEVICE / CREATE** option and then click on the **Name** field to provide a name for the external device. In the **Descriptor** field, select the external device descriptor (available from the external device library) and enter the device IP address. When ready, press the **Create** button to add the external IP device to the iteration.



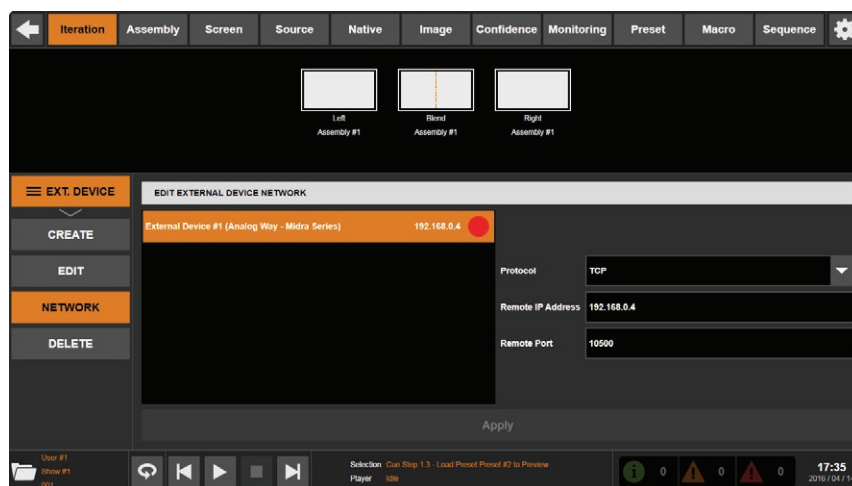
Note: The **Vertige™** will automatically try to connect to the device regularly. Once the external device is successfully connected, the icon next to the device will turn green. If no connection status is available, a question mark will be displayed.



Make sure your LAN settings match the device LAN settings.

• Configuring the LAN settings:

In the left menu, select the **NETWORK** option then select the external device for which you want to configure the LAN settings. Select the connection protocol then configure the LAN settings accordingly. When ready, press the **Apply** button.



• Controlling the external IP device:

To control your external IP device, please *refer to chapter 4.21 Macro management*.

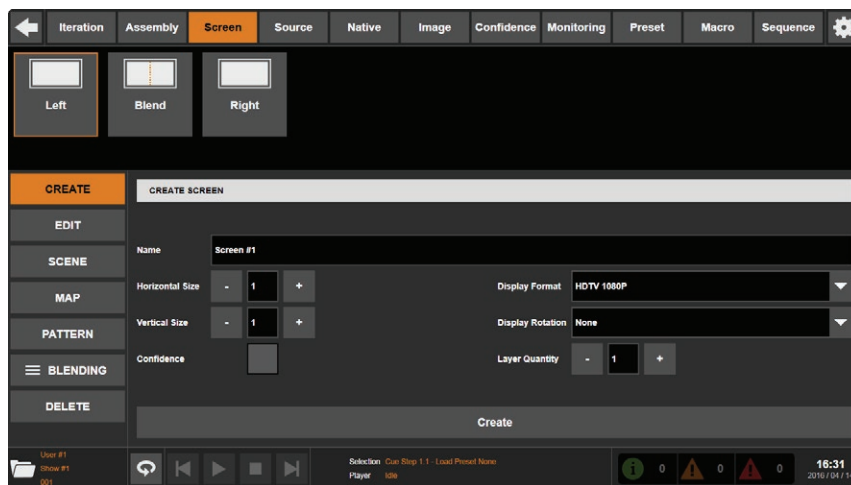
4.12 Screen configuration

A «Screen» is a destination where a picture can be displayed (a single display, a projection surface composed of several outputs ...), and it can use one or several layer resources.

The **Screen** page allows you to manage screens:

- **Creating a new screen:**

Select the **CREATE** option in the left menu and then enter the name of the screen. Please choose a name as short and explicit as possible as it will be displayed on LCD keys of the **Vertige™** front panel. Adjust the horizontal and vertical size (values > 1 to build Hard/Soft Edge) then select the screen format (default is HDTV 1080p). You can also indicate the rotation of your displays in increments of 90 degrees, and increase or decrease the number of layers used in the screen. If the screen is a Confidence screen then check the **Confidence** box. When ready, press the **Create** button.



An existing screen can't be turned into a Confidence screen and vice versa: You must delete it then re-create it with the proper option configured.

- **Deleting a screen:**

In the left menu, select the **DELETE** option. Select the screen you want to delete and then press the **Delete** button.



This action cannot be undone.

- **Configuring the scene:**

In the left menu, select the **SCENE** option. Select the screen you want to move in the scene then press **Move Left** or **Move Right** button.

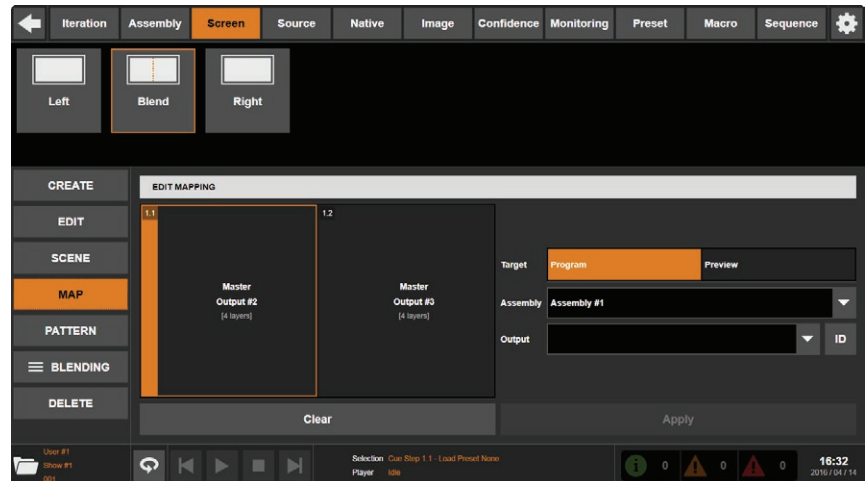


Scene configuration does not apply to Confidence screens.

• Configuring output screen mapping:

In the left menu, select the **MAP** option. Select the screen or the Confidence screen you want to edit the outputs mapping for. To map one of the physical outputs available to this screen or to a specific area of this screen (Hard/Soft Edge), select first the area of the screen then select the target (Program or Preview). Select the assembly containing the device that will process this screen then select the desired physical output (**Vertige™** automatically proposes an output amongst the remaining available resources in the selected assembly). When ready, press the **Apply** button. To remove an existing mapping, select an area then press the **Clear** button.

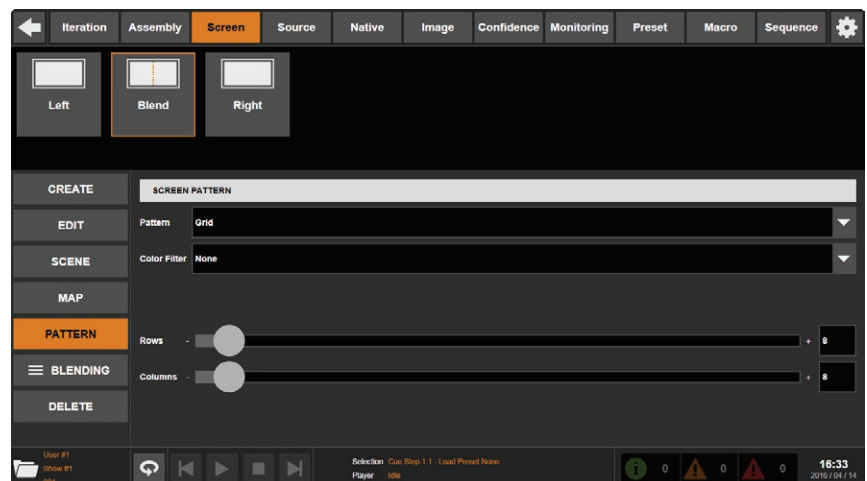
TIP: Press the **ID** button to define the mapping while displaying an ID pattern on the selected output.



• Configuring Multi-Projector Soft-Edge Blending:

In the left menu, select the **PATTERN** option then select the screen (with multiple areas) you want to configure. Select the **GRID** test pattern and adjust the number of rows and columns of the grid test pattern.

When ready, adjust your video projectors properly (alignment). Then select the **Soft Edge Centering** test pattern. In the left menu, select the **BLENDING / COVERING** option then choose the covering area you want to adjust.

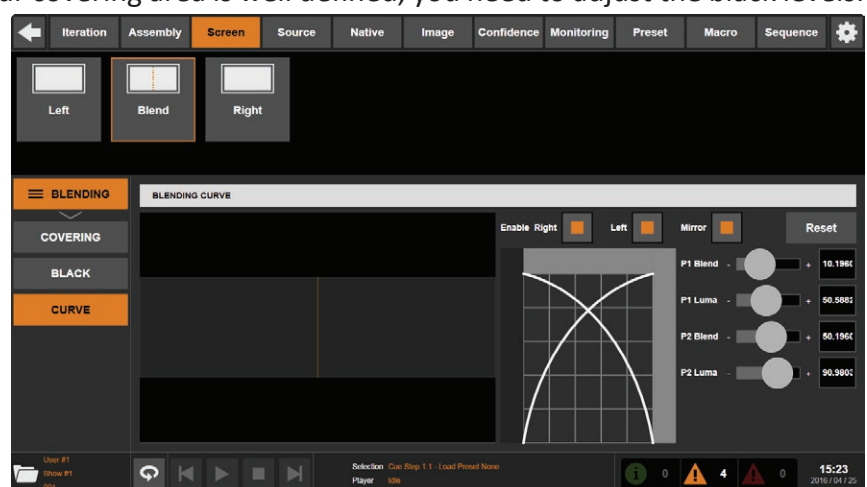


Now simply align the two dotted lines, by increasing the covering value. Once your covering area is well defined, you need to adjust the black levels:

select the **BLACK** option then select an area into the overview of your Soft Edge to display the corresponding settings on the right panel. Then adjust the black levels for each side using the **R,G,B** sliders. The goal here is to have the same black level on all areas of your screen.

Then you will adjust the black area, pixel by pixel. It will remove the last white band that can appear when you use DLP projectors. When done, select the **CURVE** option: Enable individual blending in order to activate the blending curves.

You can tweak the curve by moving the 2 points. Do the same for left and right or enable the blending curves symmetry.

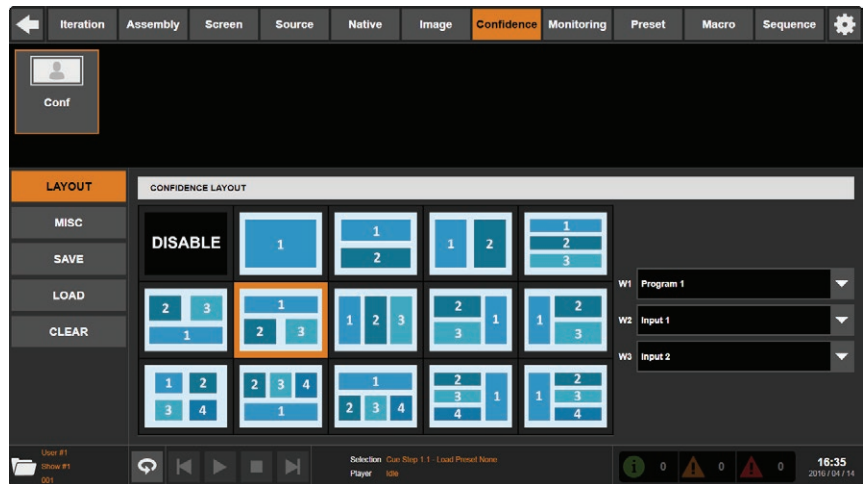


4.13 Confidence Screen configuration

The Confidence page allows you to manage Confidence screens:

- **Configuring the layout and widget(s) source:**

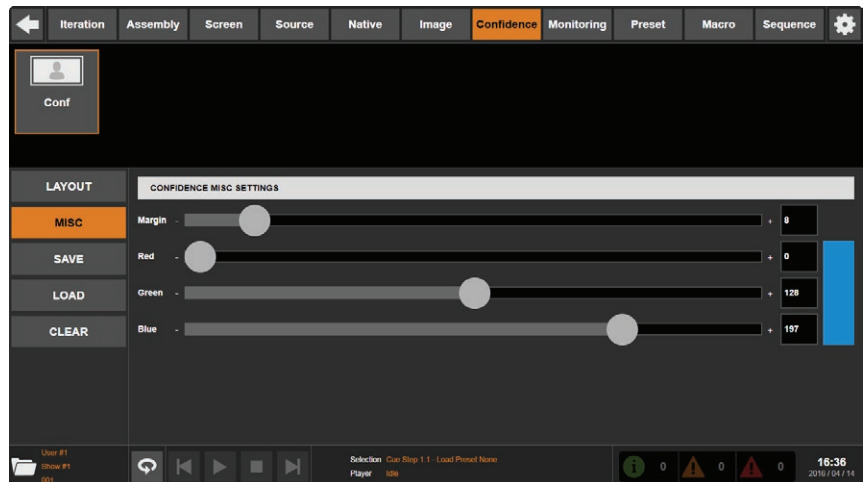
Select the **LAYOUT** option in the left menu then select the Confidence screen for which you want to configure the current layout. Select the predefined layout you want to apply. When done, select the content you would like to display inside each widget.



- **Configuring the widgets margin and background color:**

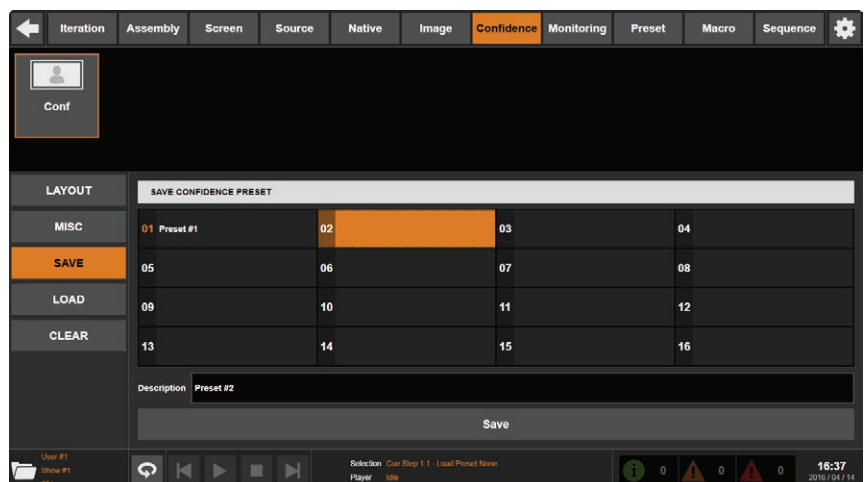
Select the **MISC** option in the left menu then select the Confidence screen you want to configure. Select the margin between each widget (gap in pixel) then adjust the background color if necessary (**Red, Green and Blue**).

Note: This will affect all Confidence Screens using the same assembly.



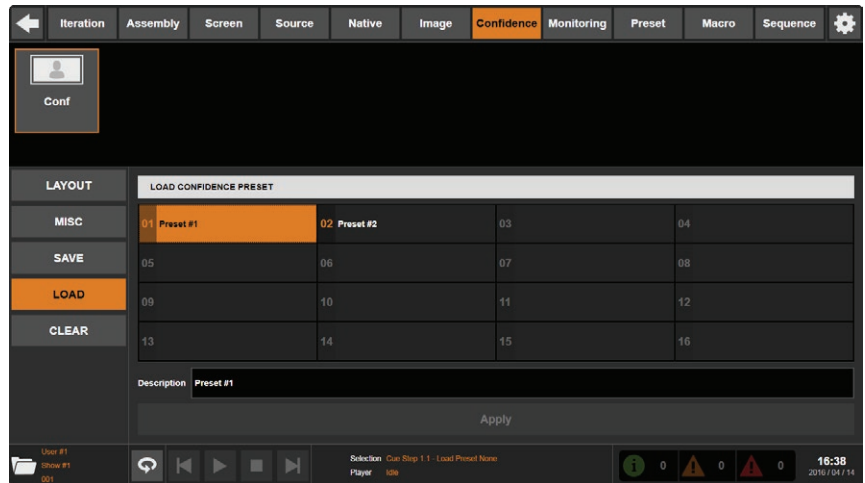
- **Saving a Confidence preset to memory:**

Select the **SAVE** option in the left menu then select the Confidence screen for which you want to save the current configuration to memory (16 memory slots available). Select the slot where the current configuration will be saved and optionally enter a description. When ready, press the **Save** button.



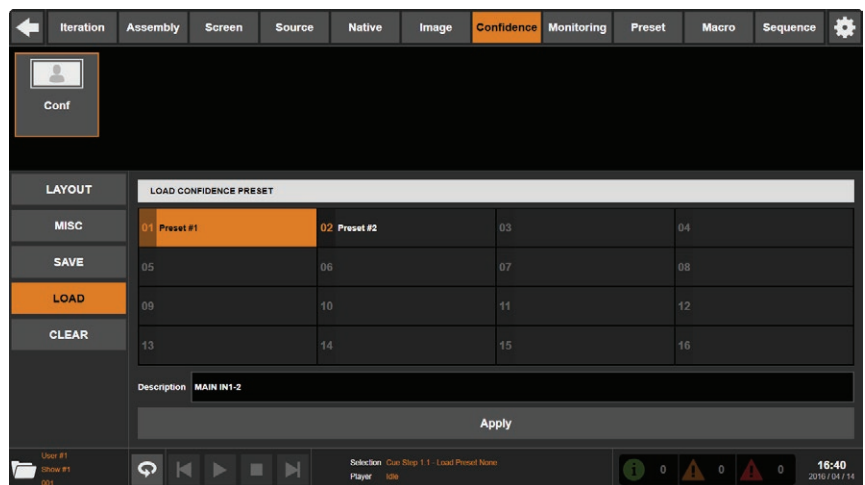
- **Loading a Confidence preset from memory:**

Select the **LOAD** option in the left menu then select the Confidence screen for which you want to load a preset from memory. Select one of the slots to automatically recall the corresponding preset from memory and update the Confidence screen.



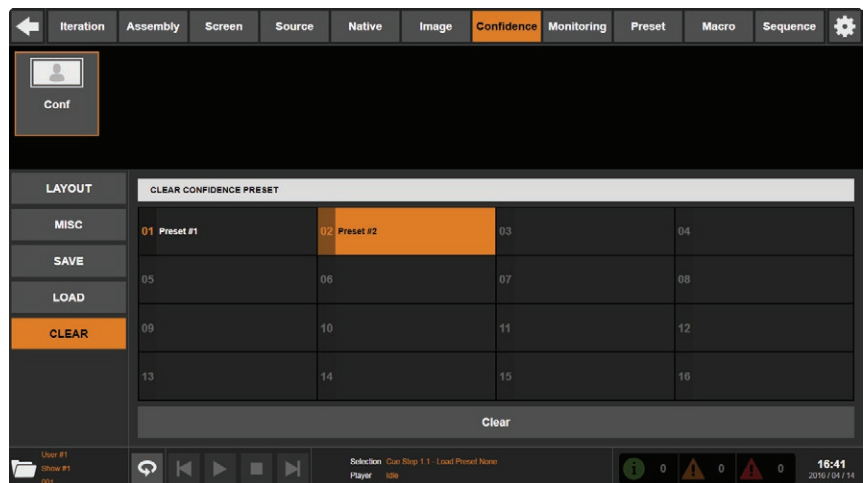
- **Renaming a Confidence preset:**

Select the **LOAD** option in the left menu then select one of the memory slots to automatically recall the corresponding Confidence preset from memory. Enter a description for this Confidence preset then press the **Apply** button.



- **Erasing a Confidence preset memory:**

Select the **CLEAR** option in the left menu then select the Confidence screen for which you want to clear a Confidence preset memory. Select the desired slot and press the **Clear** button.



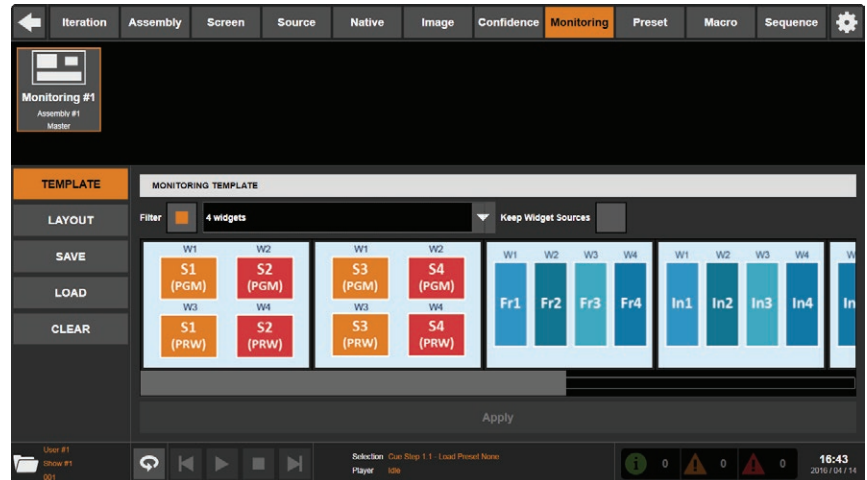
This action cannot be undone.

4.14 Monitoring configuration

The **Monitoring** page allows you to manage monitoring outputs:

- **Applying a mosaic template:**

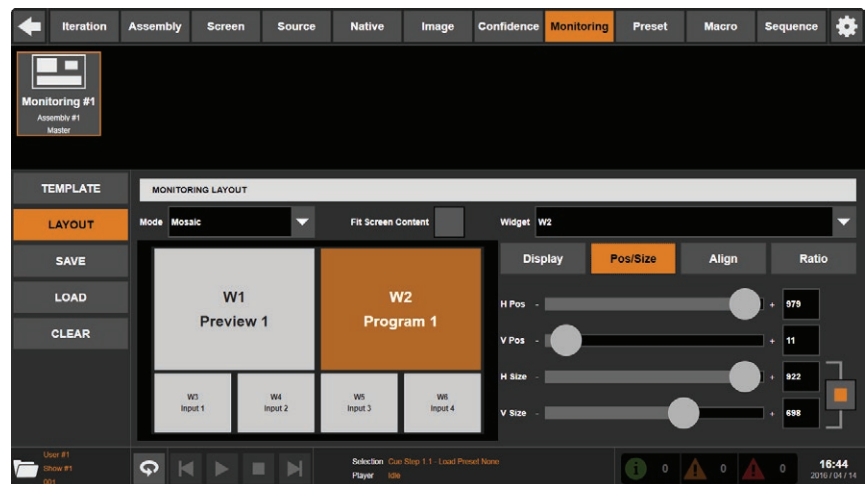
Select the **TEMPLATE** option in the left menu then select the monitoring output for which you want to apply a mosaic template. Browse the templates then select the one you want to apply. Check the **Keep Widget Sources** option if you want to preserve the current Mosaic widgets source. When ready, press the **Apply** button to overwrite the current configuration.



- **Configuring the display mode and widget(s) settings:**

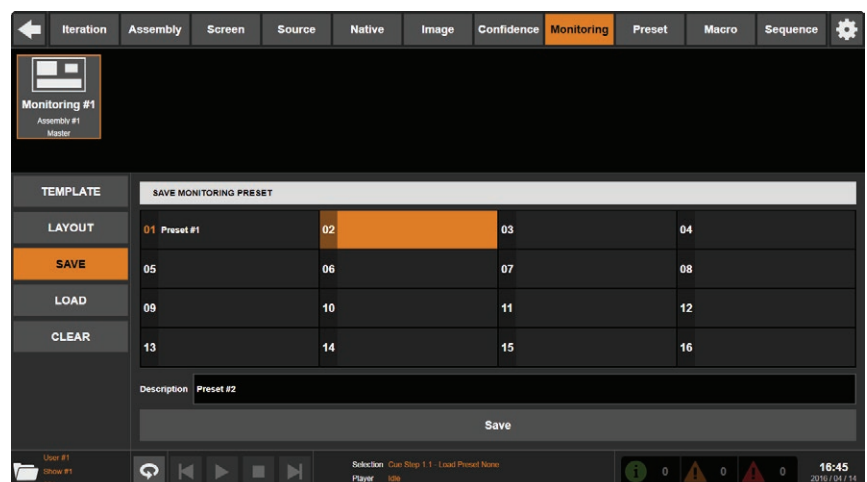
Select the **LAYOUT** option in the left menu then select the monitoring output you want to configure. Select a display mode (Mosaic with several widgets or Full Screen) then adjust the source(s) and OSD option(s).

If the Mosaic mode is enabled, you can additionally adjust the size and position of each widget (no overlap is allowed).



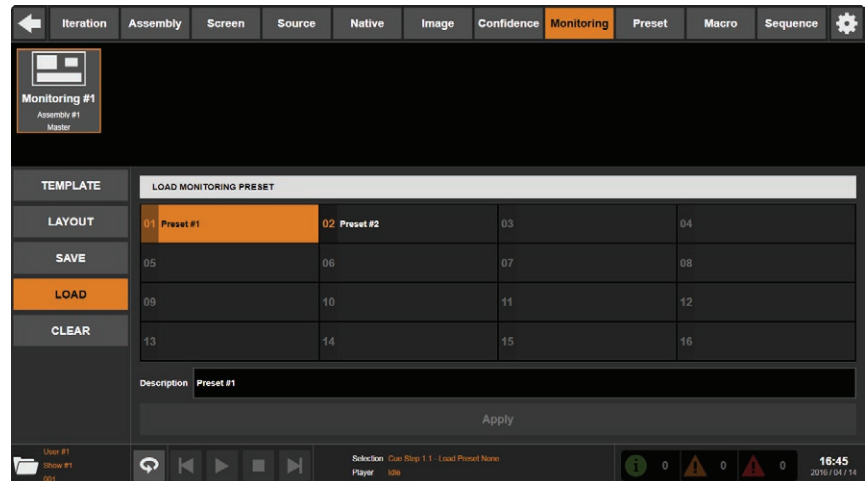
- **Saving a monitoring preset to memory:**

Select the **SAVE** option in the left menu then select the monitoring output for which you want to save the current configuration to memory (16 memory slots available). Select the slot where the current configuration will be saved and optionally enter a description. When ready, press the **Save** button.



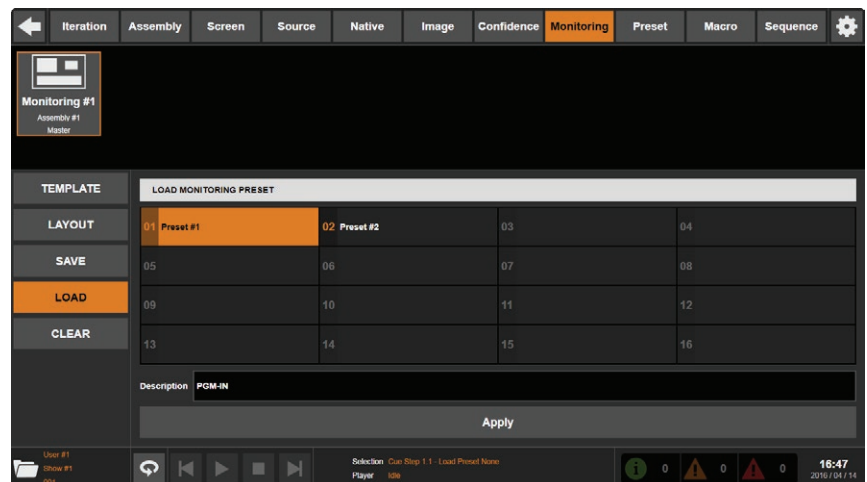
- **Loading a monitoring preset from memory:**

Select the **LOAD** option in the left menu then select the monitoring output for which you want to load a preset from memory. Select one of the slots to automatically recall the corresponding preset from memory and update the monitoring display.



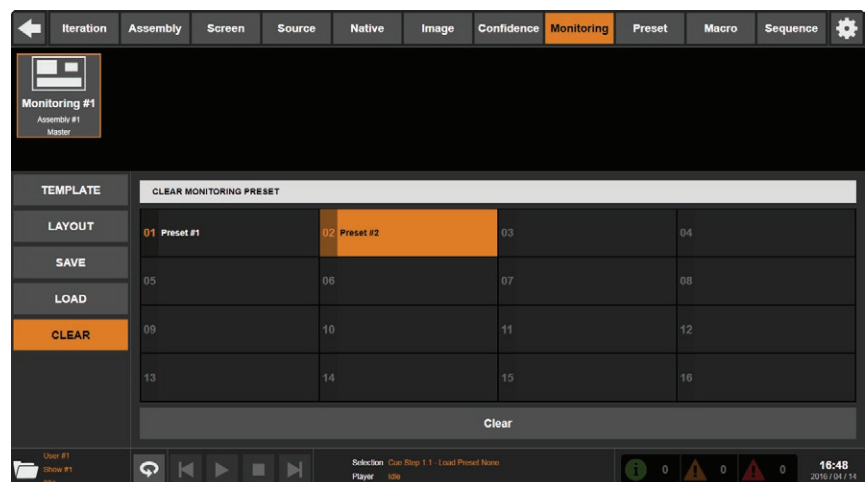
- **Renaming a preset:**

Select the **LOAD** option in the left menu then select one of the memory slots to automatically recall the corresponding monitoring preset from memory. Enter a description for this monitoring preset then press the **Apply** button.



- **Erasing a monitoring preset memory:**

Select the **CLEAR** option in the left menu then select the monitoring output for which you want to clear a monitoring preset memory. Select the desired slot and press the **Clear** button.



This action cannot be undone.

4.15 Source configuration

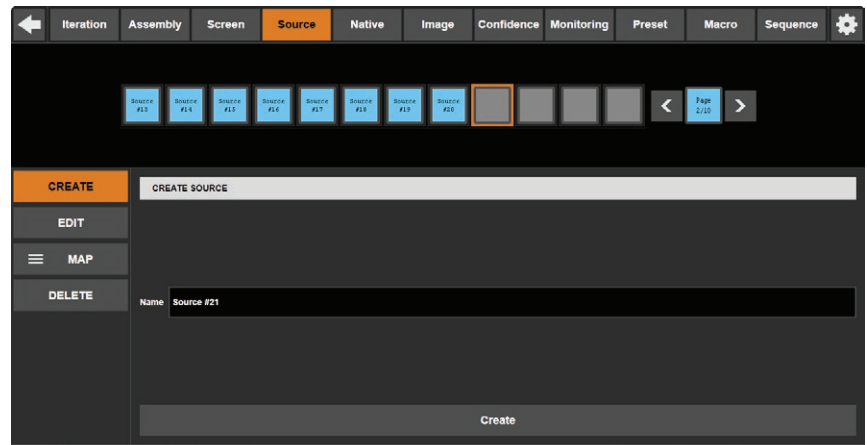
«Sources» are the keys you see on the **Vertige™** front panel (**SOURCES** section). They allow you to assign a stream per screen to a front panel key, so that you can later select the streams to display on layers via the front panel keys.

To manage your sources, go to the **Source** page on the top bar:

- **Creating a new source:**

Select the **CREATE** option in the left menu. Select an available source key and enter a name for the source. Please choose a name as short and explicit as possible as it will be displayed on the chosen LCD key (**SOURCE** section). When ready, press the **Create** button.

If required, you can later modify both the source name and its key binding via the **EDIT** option in the left menu.



- **Deleting a source:**

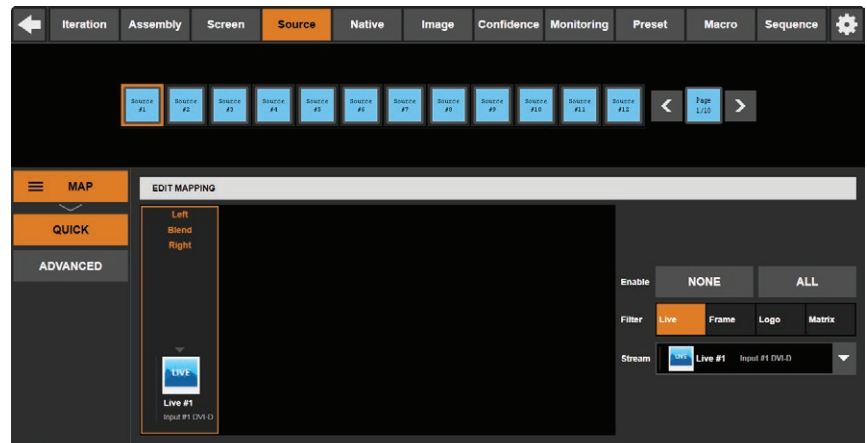
In the left menu, select the **DELETE** option. Select the source you want to delete and then press the **Delete** button.



This action cannot be undone.

- **Configuring the streams mapping (Quick mode):**

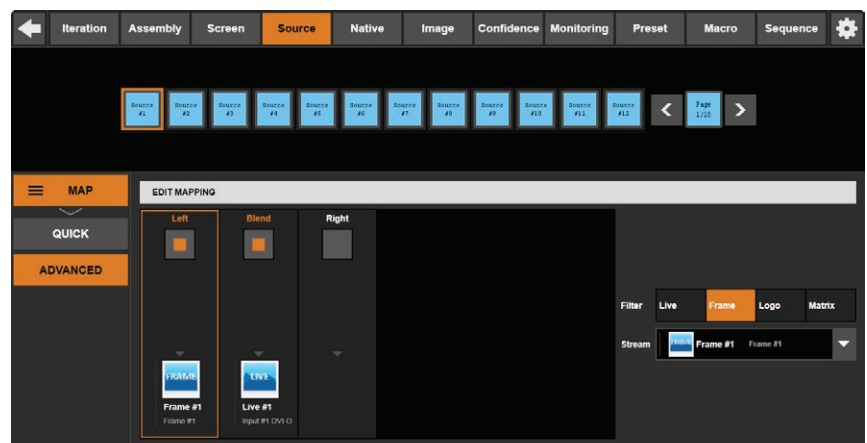
In the left menu, select the **MAP / QUICK** option then select the source for which you want to configure the streams mapping. The stream mapping allows you to configure which stream will be displayed in the selected layers when pressing a source key in the front panel of the **Vertige™**. In **Quick** mode, all the screens using the same assembly will have the same mapping.



- **Configuring the streams mapping (Advanced mode):**

In the left menu, select the **MAP / ADVANCED** option then select the source for which you want to configure the streams mapping. In **Advanced** mode, you will be able to configure the mapping for each screen individually.

Note: Setting a mapping to “None” for a screen will remove the stream displayed in its selected layers. If you do not want to affect the layers of this screen, disable the mapping for this screen.



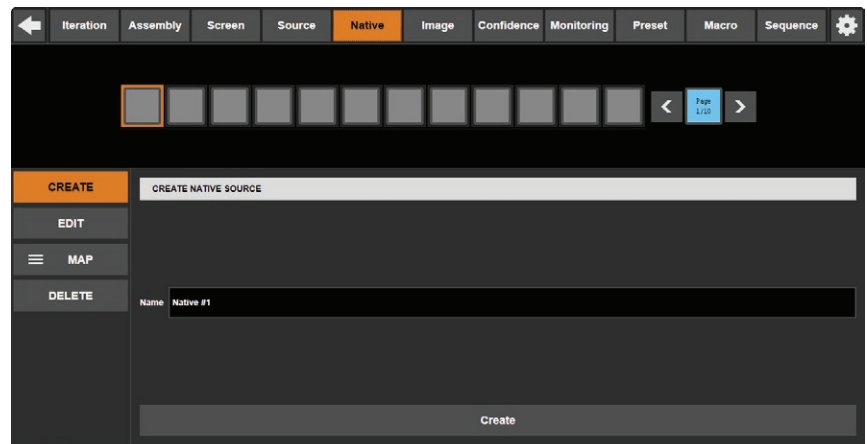
4.16 Native source configuration

Native sources are sources specific to native background layers. The **Native** page allows you to manage native sources:

- **Creating a new native source:**

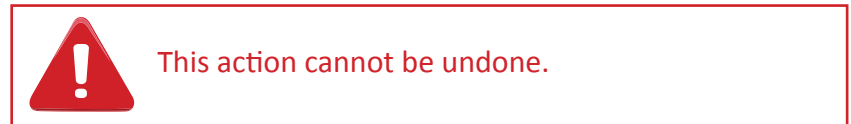
Select the **CREATE** option in the left menu. Select an available native source key and enter a name for the native source. Please choose a name as short and explicit as possible as it will be displayed on the chosen front panel LCD key (**SOURCE** section). When ready, press the **Create** button.

If required, you can later modify both the native source name and its key binding via the **EDIT** option in the left menu.



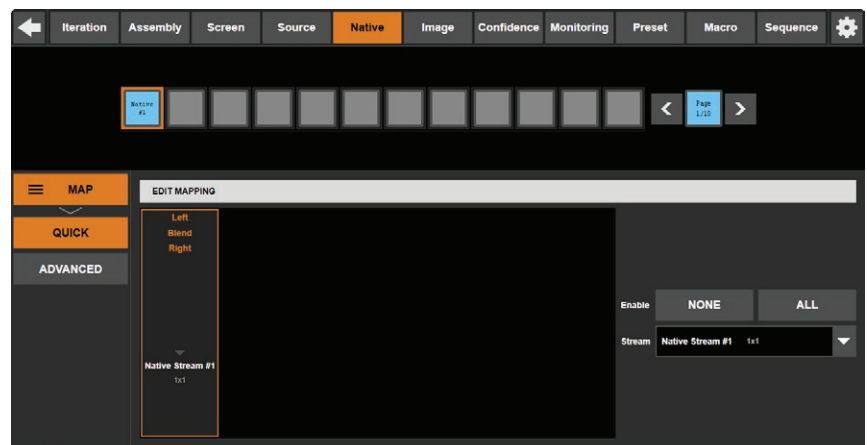
- **Deleting a native source:**

In the left menu, select the **DELETE** option. Select the source you want to delete and then press the **Delete** button.



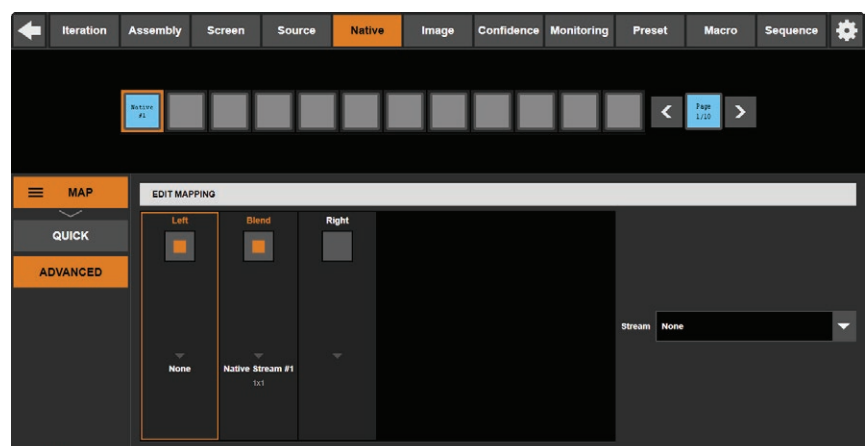
- **Configuring the native streams mapping (Quick mode):**

In the left menu, select the **MAP / QUICK** option then select the native source for which you want to configure the native streams mapping. The stream mapping allows you to configure which native stream will be displayed in the native layers when pressing a source key in the front panel of the **Vertige™**. In **Quick** mode, all the screens using the same assembly will have the same mapping.



- **Configuring the native streams mapping (Advanced mode):**

In the left menu, select the **MAP / ADVANCED** option then select the native source for which you want to configure the native streams mapping. In **Advanced** mode, you will be able to configure the mapping for each screen individually.



Note: Setting a mapping to “None” for a screen will remove the native stream displayed in its native layer. If you do not want to affect the native layer of this screen, disable the mapping for this screen.

4.17 Stream image configuration (before the event has started)

The **Image** page allows you to adjust stream image settings (aspect ratio, cropping, color corrections...) and configure keying effects.



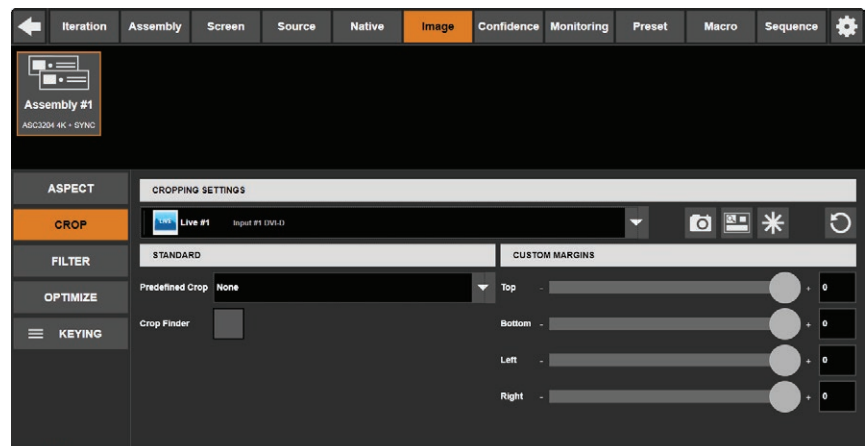
Configuring stream image settings or keying effects using the **Image** page is particularly well suited when several streams need to be reviewed and adjusted, typically after having added new streams to an assembly and before running a show.

Selecting a stream here will automatically overwrite the related screen presets (Preview and Program) with no possibility of restoring them after the configuration process: the selected stream will be automatically displayed full screen and all other layers will be hidden.

If you want to configure a stream image setting while preserving the screens presets, please read chapter **4.18 Stream image configuration (during the event)**.

• Configuring the stream image settings:

Select the assembly for which you want to adjust the image settings of a stream. Select the desired stream in the list then select the **ASPECT**, **CROP**, **FILTER** or **OPTIMIZE** option to adjust the corresponding image settings. Note that freezing the stream might help you to adjust the settings; also, you might want to grab a new snapshot once you're done editing the settings.



• Configuring keying effects:

Select the assembly for which you want to configure the keying effects and select the **KEYING / CONFIGURE** option. Select the desired stream in the list then select the keying mode:

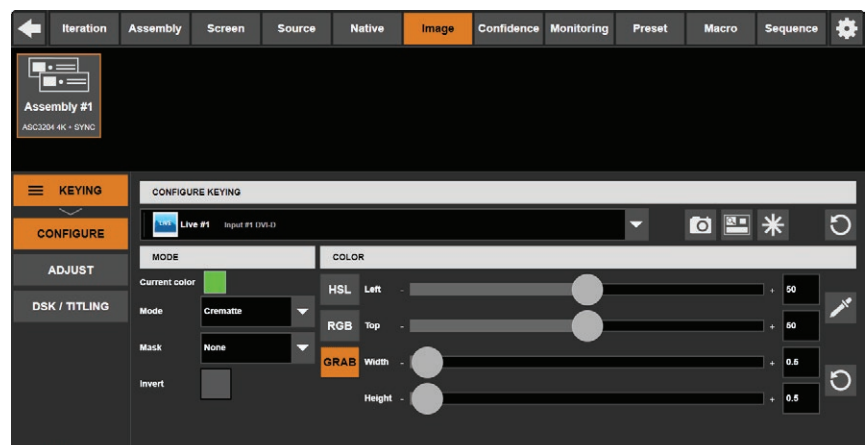
- **COLORKILLER**: classic color keyer deleting a specific color space defined by user.

- **LUMAKILLER**: Luma color keyer deleting a black & white range.

- **CREMATTE**[®]: The algorithm of color keying developed by Analog Way. This keying will perform advanced effects on transparent items, smooth edge and color correction.

Keying setup can be done either by setting directly color references and tolerances or by using an assistant (**GRAB** button). When using the assistant, select the color area you want to mask and click the **PICK** button.

Color areas are cumulative; if the results are not satisfactory, click the **RESET** button then grab another area.



For further information on keying effects configuration, please read the corresponding **LiveCore™** product user manual.

4.18 Stream image configuration (during the event)

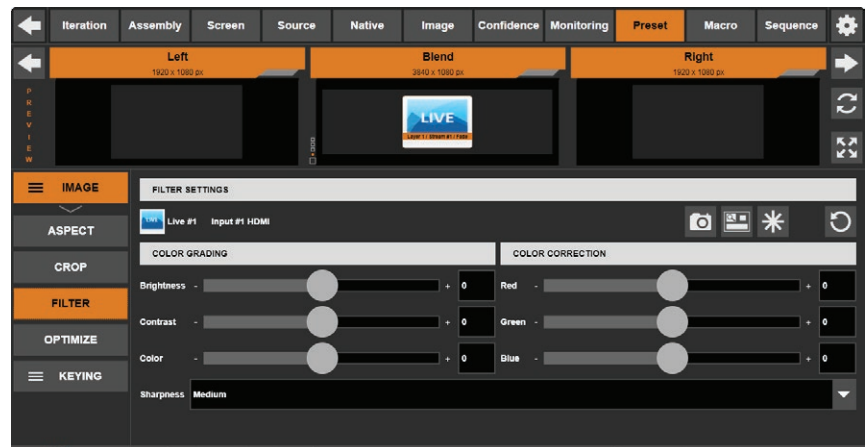
In the **Preset** page, press the **IMAGE SETTINGS** button to display the stream image settings menu while maintaining a minimal view on the Preview or Program preset.



Select the layer containing the stream for which you want to configure the image settings then select the **ASPECT**, **CROP**, **FILTER**, **OPTIMIZE** or **KEYING** option to adjust the corresponding settings.



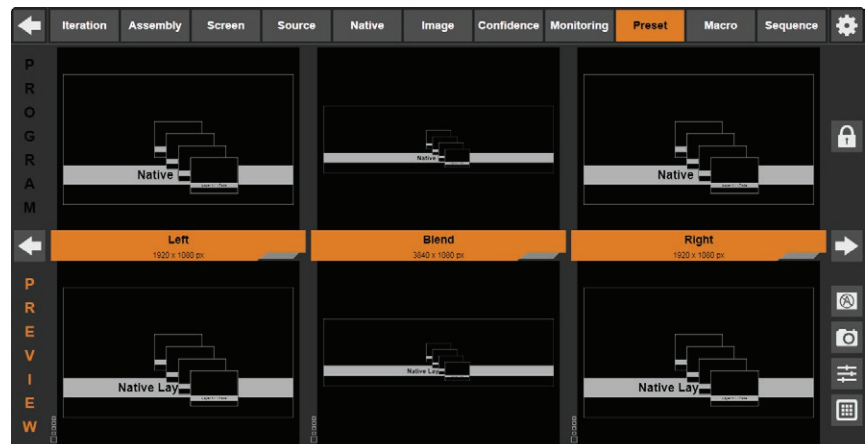
To restore the default **Preset** page view, simply press the **MAXIMIZE** button.



4.19 Preset Viewer

The **Preset** page allows you to view the content of your screens (Program and Preview).

This page can display up to 6 screens simultaneously. If your configuration contains more than 6 screens, press the left/right arrows on the touchscreen to navigate left or right and reveal hidden screens.



• Locking the Program

Press the **LOCK** button to prevent any direct changes on the Program. Press this button again to unlock the Program.



• Updating selected layer snapshot

Select the layer for which you want to update the stream snapshot. Press the **SNAPSHOT** button.



• Displaying/Hiding empty layers

Press the **HIDE EMPTY LAYERS** button to hide all empty layers (i.e. with no stream assigned). Press this button to display all layers again.



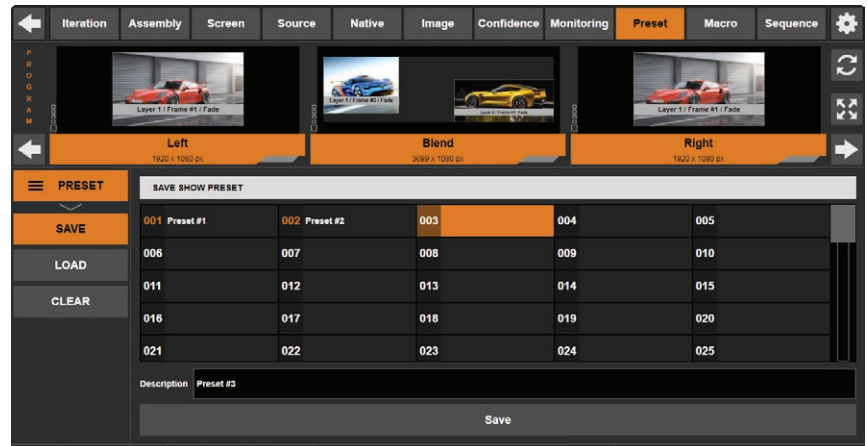
4.20 Preset management

In the **Preset** page, press the **PRESET GRID** button to display the preset menu while maintaining a minimal view on the Preview or Program preset.



• Saving a preset to memory:

To save a preset from Program, make sure that the **PROGRAM** button is selected. To save a preset from Preview, make sure that the **PREVIEW** button is selected. Select the **SAVE** option in the left menu then select the memory slot where the current preset will be saved and optionally enter a description. When ready, press the **Save** button.



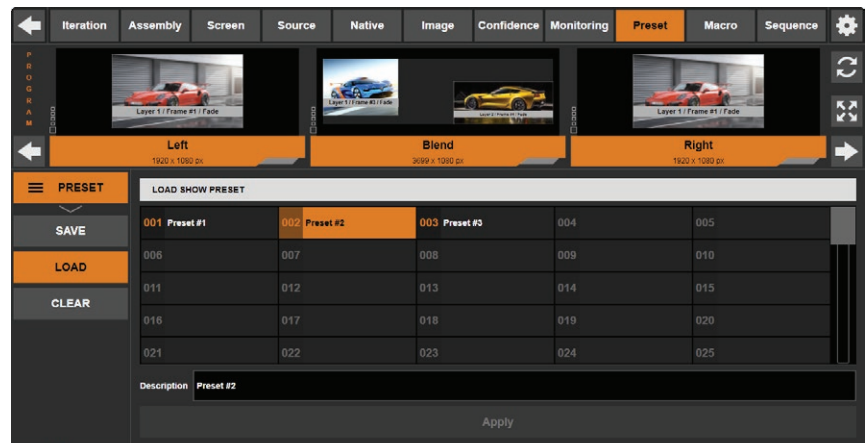
TIP: Another quick way to switch from Program to Preview (and vice versa) is to press the Program/Preview toggle button.



• Loading a preset from memory:

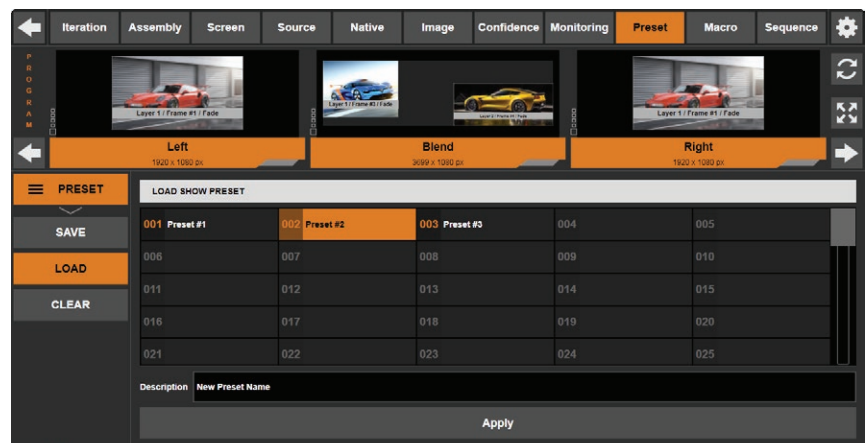
First be sure that the **PREVIEW** button is selected if you wish to load the preset to Preview, or that the **PROGRAM** button is selected if you wish to load the preset to Program.

Select the **LOAD** option in the left menu then select one of the memory slots to automatically recall the corresponding preset from memory and update the Preview or the Program content.



• Renaming a preset:

Select the **LOAD** option in the left menu then select one of the memory slots to automatically recall the corresponding preset from memory and update the Preview or the Program content. Enter a description for this preset then press the **Apply** button.

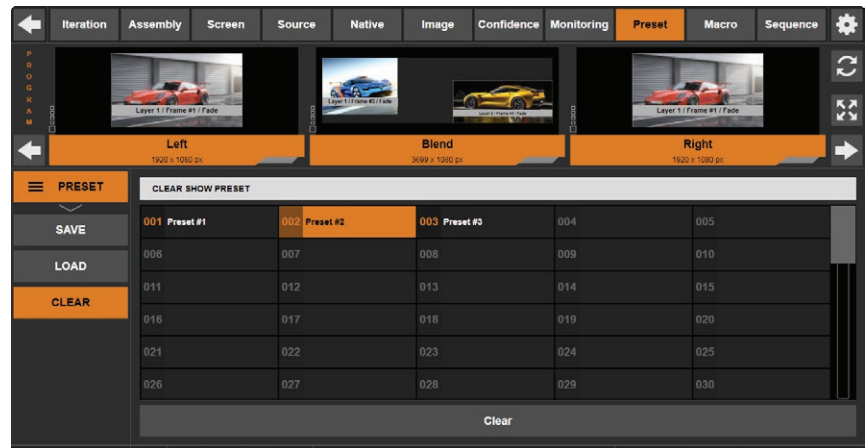


- **Erasing a preset memory:**

Select the **CLEAR** option in the left menu then select the desired memory slot. When ready press the **Clear** button to erase it.



To restore the default **Preset** page view, simply press the **MAXIMIZE** button.



This action cannot be undone.

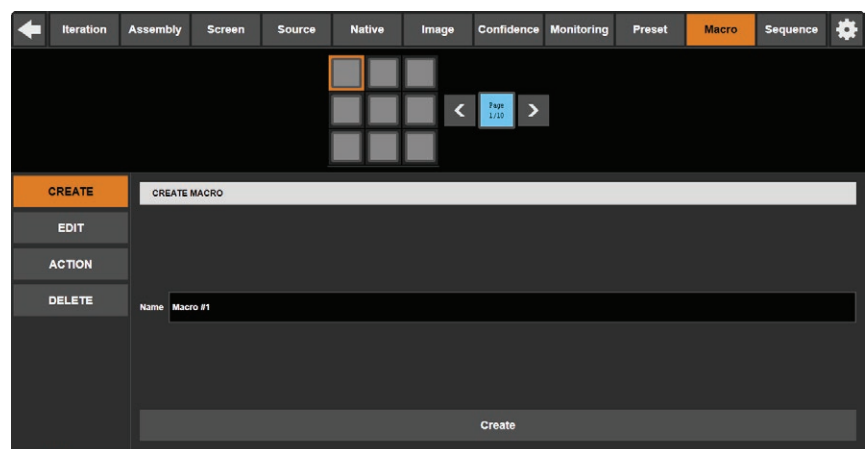
4.21 Macro management

A «Macro» consists of a series of actions executed sequentially. Macros can be used to control one or more external IP devices, or to trigger **Vertige™** internal actions such as load preset and take.

The **Macro** page allows you to create macros and add device actions to these macros. You can then run your macros at runtime, manually via the front panel macro keys (**EDIT** section) or automatically via the sequencer (**CONTROL TRANSITION** section), and thus control your devices by executing the actions defined in the macro.

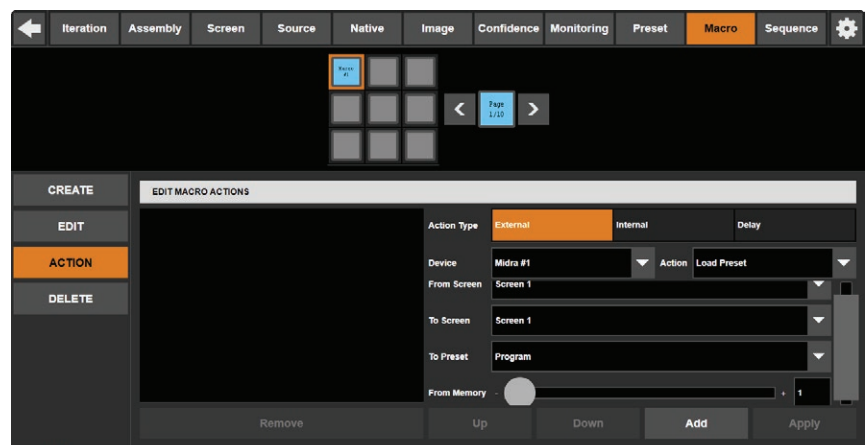
- **Creating a new macro:**

In the **Macro** page, select the **CREATE** option in the left menu. Select an empty macro key (10 pages of 9 keys available) and then enter a name for the macro. Please choose a name as short and explicit as possible as it will be displayed on the chosen front panel LCD key (**EDIT** section). When ready, press the **Create** button.



- **Adding actions to a macro:**

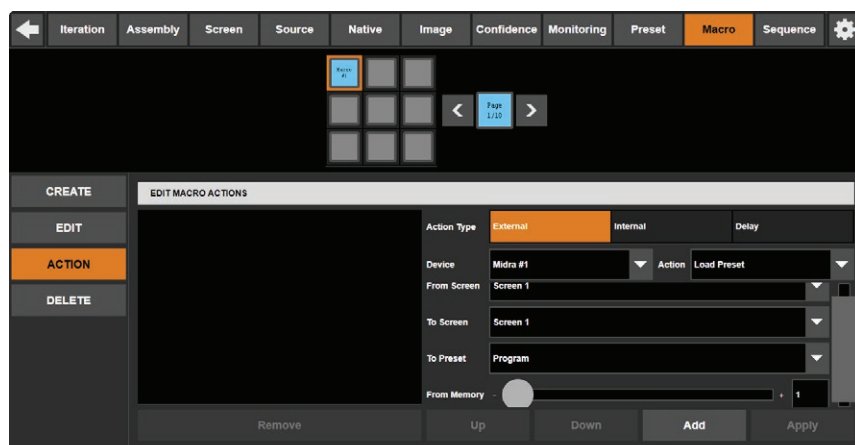
In the **Macro** page, select the macro for which you want to add some actions and then select the **ACTION** option to access the actions page.



You can then add different types of actions to the macro:

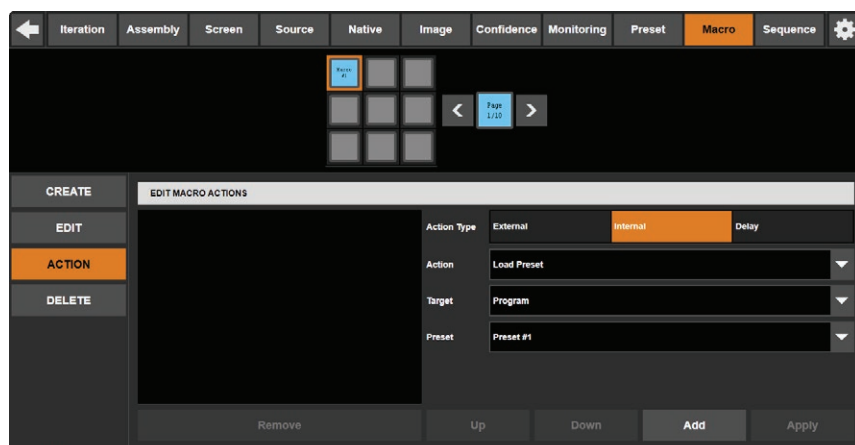
- External action

Choose **Action Type > External** to add an external device action. Select the device from the Device drop-down menu (note that for the device to be available it must have been added to the iteration beforehand - see External IP device configuration) then select the device Action you want to add to the macro. Configure the related parameters accordingly (please note that the actions are executed by the devices themselves, and the set of available actions, together with any additional action parameters, will thus depend on the device type itself). When ready, press the **Add** button to add the action to the macro.



- Internal action

Choose **Action Type > Internal** to add a Vertige internal action to the macro. Available internal actions include load preset (program, confidence or monitoring) and take (take, take screen, take all). Edit the action parameters accordingly and press **Add** to add the action to the macro.



- Delay

Choose **Action Type > Delay** to add some delay (in milliseconds) between two actions.

Repeat this step as many times as necessary, for one or different action types.

The actions you define in the macro will be executed sequentially. If you need to change the order of execution of an action, select the required action and use the **Up** and **Down** buttons to move the action earlier/later in the execution.

4.22 Sequence management

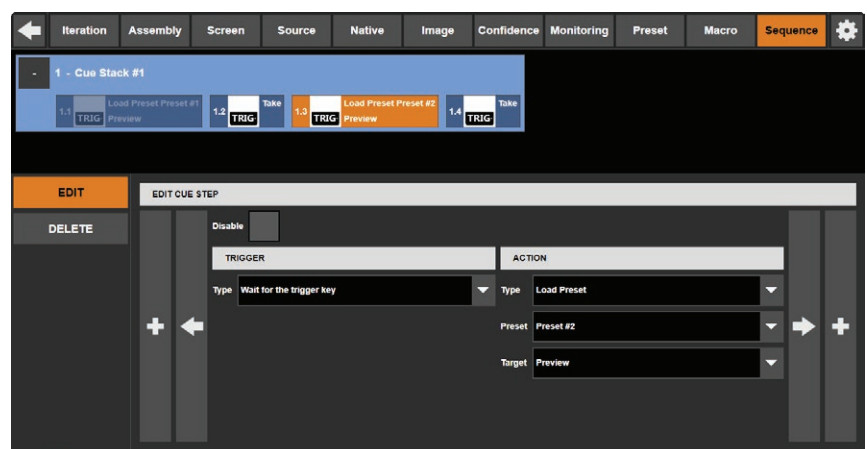
The **Sequence** page allows you to define a series of cue steps that can be played back sequentially via the Vertige front panel (**CONTROL TRANSITION** section).

Each cue step is defined by a trigger (hotkey, fixed duration ...) and an action (load preset, take ...), and it is stored in a cue stack that is itself organized within the sequence.

Every iteration within the Vertige then starts with a default sequence that contains one cue stack with one default cue step. You can then add new cue steps to this cue stack, or new cue stacks to this sequence, and thus build up a custom sequence for your iteration. You can also individually delete and reorder cue steps and cue stacks. Please note the sequence must contain at least one cue stack, and each cue stack must contain at least one cue step.

- **Adding a cue stack:**

Select an existing cue stack in the list then select the **EDIT** option. Press the **[+]** button located on the left side of the screen to insert a new cue stack before the selected cue stack, or press the **[+]** button located on the right side of the screen to add a new cue stack after the selected cue stack.



- **Configuring a cue stack:**

Select the cue stack you want to configure then select the **EDIT** option to display the corresponding properties. Adjust them if necessary:

Color: The cue stack can be given a background color to make it stand out in the cue sequence.

Name: The name of the cue stack.

- **Reordering a cue stack:**

Select the cue stack you want to move then select the **EDIT** option. Press the **[<]** button to move the selected cue stack item to the left, or press the **[>]** button to move the selected cue stack to the right.

- **Deleting a cue stack:**

Select an existing cue stack in the list then select the **DELETE** option. Press the **Delete** button.

Important: The last remaining cue stack cannot be deleted.



This action cannot be undone.

- **Adding a cue step:**

Select an existing cue step (the selection should be highlighted in orange) then select the **EDIT** option. Press the **[+]** button located on the left side of the screen to insert a new cue step before the selected cue step, or press the **[+]** button located on the right side of the screen to add a new cue step after the selected cue step.

- **Configuring a cue step:**

Select the cue step you want to configure (the selection should be highlighted in orange) then select the **EDIT** option to display the corresponding properties. Adjust them if necessary:

Disabled: Check this box to disable the cue step (it will be skipped during playback).

Trigger: The cue step will wait for a trigger before executing its action during playback.

Action: The action that will get executed in response to the trigger.

- **Reordering a cue step:**

Select the cue step you want to move then select the **EDIT** option. Press the **[<]** button to move the selected cue step item to the left, or press the **[>]** button to move the selected cue step item to the right.

- **Deleting a cue step:**

Select an existing cue in the list then select the **DELETE** option. Press the **Delete** button.

Important: The last remaining cue step in a cue stack cannot be deleted.



This action cannot be undone.

- **Playing a cue sequence:**

Select the cue where playback will start, then press the **PLAY** button to start continuous playback. Press the **STOP** button to stop playing the sequence.



- **Playing a cue sequence step-by-step:**

Press the **PLAY TO NEXT** button to execute the selected cue then move the selection to the following item in the list.

Press the **PLAY TO PREVIOUS** button to execute the selected cue then move the selection to the previous item in the list.



- **Enabling loop playback:**

Before starting cue sequence playback, press the **LOOP** button to enable loop playback.



Cue sequence playback may also be controlled from the **Vertige™** front panel. For more information, please read chapter **5.7.2 Controlling cue sequence playback**.

5. OPERATING THE VERTIGE™

5.1 Layer section

To be able to make a source selection using the **Vertige™** console, you must first select at least one layer. The **Vertige™** layer selection buttons are powerful tools for fast and efficient selection of layers for source selection and layer manipulation.

Selected layer are highlighted in orange on the touchscreen, and the first selected layer is further highlighted with a viewfinder. At any time, you may have zero, one, or many layers selected on either Program or Preview. To select a layer, there are several options:



Note: the small layer stack located on the bottom left hand corner of each screen might help you to visualize the layer selection.



5.1.1 Selecting layers from the touchscreen

At any time when the **Preset** Page is open, a layer may be selected by directly touching it on the touchscreen. Touching another layer will release your current selection and select the new layer.

Important: Selecting a **single** layer on the touchscreen synchronizes the front panel screen & depth filters (buttons turns YELLOW to indicate that the corresponding values match the current layer selection).

To select multiple layers, or remove a layer from your selection, you will need to use the selection modifier keys on the **Vertige™** keyboard. i.e. [+] and [-].

5.1.2 Selecting layers from the front panel

At any time, a layer or group of layers may be selected by directly pressing one of the layer selection buttons.



There are several blocks of buttons within the Layer section:

- **Select layers by Screen**

The first block of buttons is used to select/deselect all layers on a given Screen. After using the arrow keys to navigate to the desired screen, pressing the large LCD button at the center of this group will select all of the layers on the desired screen on Program or Preview (or its native layer when the Native mode is enabled). For example, if you press Screen 2, all of the layers on screen 2 will be selected.

- **Select layers by Layer depth**

The second block of buttons is used to select/deselect all layers at a specific depth. After using the arrow keys to navigate to the desired depth, pressing the large LCD button at the center of this group will select all of the layers at the desired depth on all screens on Program or Preview.

For example, if you press "layer 3", all layers with the depth 3 will be selected on all screens.



When the Native mode is enabled, all buttons used to select/deselect a specific depth are useless and turned off.

5.1.3 Selecting layers on Program vs Preview

At all times of operation, the focus of the preset editing will always be on either Program or Preview. If you are working on Program, the large **PROGRAM** button will be lit, and the Program section will be highlighted on the touchscreen. If you are working on Preview, the **PREVIEW** button will be lit, and the Preview section will be highlighted on the touchscreen.

Based on this selection, all operations such as preset loading, source selection, layer selection, etc will be directed to the Preview or Program.

5.1.4 Using the layer selection modifier keys

The Layer selection modifier keys allow you to quickly adjust your selection of layers:

- **NATIVE button:**

The **NATIVE** button allows you to toggle between a standard layer selection and a native layer selection. By default, the **Vertige™** is in a standard layer selection mode (button is lit green). If you press the button, the native mode becomes activated (button is lit yellow).

- **SINGLE button:**

The **SINGLE** button allows you to select only 1 layer. This layer to be selected is at the intersection of the **SCREEN** button and **DEPTH** button. For example, if the **SCREEN** button is 2 and the **LAYER** button is 3, pressing the **SINGLE** button will select the layer 3 on the screen 2. Using the left and right arrows, you can adjust the screen number or the depth number.

- **ALL button:**

Press the **ALL** button to select all standard layers on all screens. When the **Native** mode is active, pressing the **ALL** button will select all native layers on all screens.

- **NONE button:**

Press the **NONE** button to deselect all layers. When the **Native** mode is active, pressing the **NONE** button will deselect all native layers.

- **[+]:**

Press and hold the **[+]** key to add layers to the current selection. While holding the **[+]** key, any new layer selection from the touch screen or layer selection buttons will be added to the currently selected layers. For example, select your camera layer 1 then hold the + button and select all others camera layers.

- **[-]:**

Press and hold the **[-]** key to remove layers from the current selection. While holding the **[-]** key, any new layer selection from the touch screen or the layer selection buttons will be removed from the currently selected layers.

- **Examples:**

Select the main layer on Center screen

To select the main layer on the center screen (screen 2 in this example), there are several options, depending on your preferred work style:

Since you are selecting only one layer, you could quickly select it using the touch screen.

You could also navigate the **SCREEN** selection button to the center screen, navigate the **LAYER** selection button to the Layer 1, and then press the **SINGLE** button in the Layer selection area.

You could also select all of the Layer 1 layers, and use the [-] key to deselect the unneeded layers.

Select all PIP layers on side screen

To select the PIP layers (layers 2 and 3 in this example) on the side screens (screens 1 and 3 in this example), there are several options, depending on your preferred work style:

You could select the first layer using the touchscreen, then press and hold the [+] and select the additional layers using the touchscreen.

You could select Layer 2 [+] Layer 3, and then [-] screen 2, which would result in only layers 2 and 3 on screens 1 and 3 being selected.

5.2 Source section

The **Source** section allows you to:

- fill the selected standard layers with a source.
- fill the selected native layers with a native source.

All sources and native sources have to be defined before. (See [4.15 Source configuration](#) and [4.16 Native Source Configuration](#) chapters)



Use the left/right arrow to navigate into the source page. Then simply press the desired source in order to fill the layer(s).

Available sources will have a blue button and the selected source will be yellow. A source can be affected to several layers at the same time.

The **NONE** button clean the source from the layer(s), your layer(s) will be empty.

5.2.1 Making live switches directly to Program

In many cases, it is preferred to make all of your selections and edits on the Preview, and use the **TAKE** or T-bar to transition your Preview to Program. The **Vertige™** will allow you to work on Preview, or directly on Program.

To work directly on Program, select a layer on Program using the touchscreen, or press the **PROGRAM** button.

While working on Program, you can switch inputs in any selection of layers instantly with a cut. When switching cameras for live entertainment, you may wish to utilize the instant cut between sources by switching directly on Program.

You can also load presets or make any other layer parameter adjustments directly on Program.

5.2.2 Switching between plugs on the device inputs

The **Vertige™** will allow you to create streams and sources to select each of the different input plugs. These should be created in the Assembly setup, and assigned to the keys in the Source setup. However, use this with caution.

Please note that assembly streams using the same input cannot be used in the same preset.

5.3 Preset section



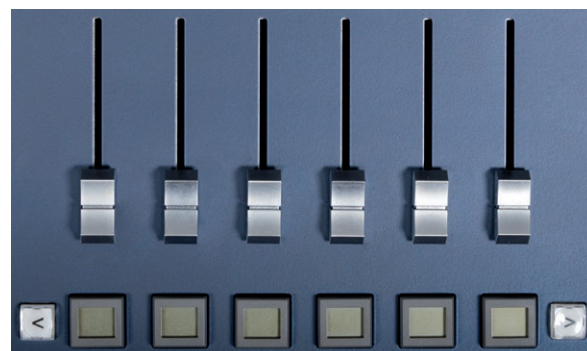
Presets can be saved, loaded and renamed directly from the **Preset** page on the touchscreen. For more information please read chapter **4.20 Preset management**.

5.3.1 How to save a preset

To save a preset, first create the content that you wish to save on either the Program or Preview screens. To save a preset from Program, make sure that the **Program** button is selected. To save a preset from Preview, make sure that the **Preview** button is selected. To save a preset, press the **SAVE** button next to the preset bank and page navigation buttons. Then navigate to the preset slot that you wish to save to, and press once on the desired preset button. The preset will turn yellow, indicating a successful save then the system will automatically switch back to **Load** mode.

Preset slots that already contain a saved preset will be indicated in yellow. Empty preset slots will be indicated in green. If you attempt to save over an existing preset, you will have to confirm the operation by pressing on the blinking preset button a second time.

If you would like to exclude some screens from the preset memory, you will need first to 'deactivate' them before saving the preset. Please read chapter **5.6 Transition section** to understand how to activate/deactivate a screen.



5.3.2 How to load a preset

First be sure that the **Preview** button is selected if you wish to load the preset to Preview, or that the **Program** button is selected if you wish to load the preset to Program.

To Load a preset, make sure that the **LOAD** button next to the preset bank and page navigation buttons is selected (default mode). Next, select the desired preset that you wish to load. The preset will be loaded to Program or Preview, depending on which button has been selected. Note that loading a preset will change the content of the relevant screens only, i.e. those that were active when the preset has been saved; other screens will be automatically 'deactivated' but their content will not change.

If you have loaded your preset to Preview, you will need to press **TAKE** to view it on the Program screens. If you load a preset directly to Program, the new attributes including sources, size, position, border, etc will cut into place.

5.4 Control section



Into the control section, you can choose to work on Program or Preview. Simply press the Program or Preview button to choose where to work. Remember that the Program/Preview control change when you press a layer on the touchscreen.

- **CLEAR button:**

Press the **CLEAR** button twice to clear all selected layers. It will remove the source and at the same time reset the selected layers.

- **UNIFY button:**

Press the **UNIFY** button twice to homogenize all selected layers settings from one destination (Program/Preview) to the other.

- **FREEZE button:**

Press the **FREEZE** button to freeze all inputs of the live streams displayed in the selected layers. Press the **FREEZE** button again to unfreeze them.

5.5 Edit section

Within the **EDIT** section you will find all the layers attributes (including position, size, border, transparency ...) and a block of 12 contextual LCD keys (the **EDITpad**) that provide access to a variety of edit tools such as pages of shortcuts, layer presets and macros.

Layer attributes

You can select layers on Program or on Preview, at any time, even during a take, and then use the layer attribute buttons (POS, SIZE, etc.) to edit the layer attributes. The new attributes will be applied to all your current layer selection.



For all numerical settings, you can choose to update them roughly via the Joystick, finely via the encoders, or directly via the numpad. To enter a specific value via the numpad, press the button above the encoder to activate the numpad on the **EDITpad** and then enter the desired value. When ready, press the **ENTER** button to apply the new value.

Remember that you do not need to operate layer by layer but that you can give the same attribute to several layers at the same time. You will save time and win productivity.

- **POS button:**

Pressing the **POS** button turns the contextual button into a layer position selection. Selecting **TOP LEFT** or **MIDDLE** will automatically give this position to the selected layers.

You can use the Joystick to manually move the PIP (X & Y axis) and resize it while preserving the aspect ratio (Z axis).

The encoder will help you to finely adjust the position to the right pixel. You can also enter the exact value by pressing on the desired attribute button to enable the numpad for direct numeric entry.

Note: pressing the **Size X&Y** button will apply the aspect ratio of the Stream to the layer.

- **SIZE button:**

Using the size attributes, you can adjust the size of your PIP using the X, Y or Z (keep the H&V ratio) axes of the joystick or giving to the PIPs the right aspect ratio thanks to the contextual menu.

You will also find four convenient shortcuts: **Screen Size** (full screen), **Quad Size** (1/4 of the screen), **Stream Ratio** (aspect ratio of the stream displayed) and **Stream Size** (1 :1).

If you are making fine adjustments, there is an H&V control to make size changes without changing the aspect ratio of your PIP.

- **ZOOM FACTOR button:**

The **ZOOM FACTOR** button allows you to give the layer a zoom factor in order to zoom into the image. The zoom factor can be adjusted manually or with shortcut thanks to the contextual button.

This feature should be used in conjunction with the Zoom Position feature.

- **ZOOM POS button:**

The **ZOOM POSITION** button should be used only after using the **ZOOM FACTOR** button. (The zoom position will have no effect until the zoom factor is different from x1) It will help you to choose where to zoom into the zoomed image. Simply use the joystick or the contextual button.

- **BG CUT button:**

The background cut feature is under the **ZOOM FACTOR** contextual button, it helps you to automatically calculate the right zoom position/factor in order to match all layers to do one image.

Remember that the background cut feature give to your layers a specific zoomposition/factor, you need to press it again each time you change their sizes or positions.

If you want to disable any zoom, please press **ZOOM FACTOR** then **ZOOM x1**.

- **BORDER button:**

The **BORDER** button allows you to edit the border layer property of all selected layers. Press the **BORDER** button once to choose the border type (edge, shadow, smooth shadow...) and then use the encoders to change the border width and height if required. You can also enable the rounded corners property for a rounded corner effect.

- **BORDER COLOR button:**

The **BORDER COLOR** feature is only available:

- after you have chosen a border type. You can give to the border the color displayed into the contextual menu, or manually adjust it with the joystick or the fine tuning buttons.

- after you have selected one or more native layers. You can give to the native layer background the color displayed into the contextual menu, or manually adjust it with the joystick or the fine tuning buttons.

- **IN / OUT button:**

The **IN** and **OUT** buttons helps you to configure the opening and the closing effect of your layers.

The opening effect is used when a layer is transitioning between “empty” and a source, and also between two sources.

The closing effect is used when a layer is transitioning between a source and “empty”.

As an example: First select some layers, then press the **IN** button. Various opening effects will be displayed on the contextual buttons (slide, wipe etc..).

Next, select the desired effect and then the desired direction (left/right/top etc..). The same settings can be done with the **OUT** button to configure the closing effect of your layers.

For the opening effects, three additional options are available (last row of contextual buttons in the EDIT section).

- **Smooth Effect:** Disable this option to deactivate the easing function of the effect during the transition

- **No Cross Effect:** Enable this option to prevent the switcher from doing a cross effect during the transition

- **No Cross Depth:** Enable this option to prevent the switcher from doing a cross depth effect during the transition (~Force Cross Transition).

You can also use the fine tuning buttons to modify the start and the end of the opening/closing. For example, select the desired effect and then set up the start of the opening at 40% and end at 80%. During the take, this layer will start its effect at 40% of the global take duration and finish at 80% of the global take duration. This relative timing will occur even if the TAKE is being controlled by the T-bar. The same timing operations can be configured on the closing effect.

Important: Selecting a **single** layer on the touchscreen synchronizes the front panel IN & OUT effects and BORDER type (button turns YELLOW to indicate that the corresponding values match the current layer selection).

- **CUT & FILL button:**

The **CUT & FILL** button provides access to the **Cut & Fill** feature.

The **Cut & Fill** feature allows keying the content of a layer using an input or a still picture (frame or logo) as the alpha channel. Usually, the Cut content (the mask), is a grey level content: the darker the grey level, the more transparent the Fill content. If a colored content is used as Cut content, the Luma level of the Cut content is used to key the Fill content. Please note that since the Cut & Fill feature requires 2 layers (one for the Cut and one for the Fill), only layers 1, 3, 5 ... can be used for the Cut & Fill feature.

To enable the Cut & Fill feature, select a layer (1, 3, 5 ...), press the **CUT & FILL** button and then press the **Activate** button on the **EDITpad**. Note that the adjacent layer becomes unavailable and that a small area appears on the upper right corner of the layer (**Preset** viewer page).

To select the source for the cut, press the **CUT & FILL** button and then press the **Cut Source** button on the **EDITpad**. Navigate the Cut source pages if required on the **EDITpad** and then press the key corresponding to the Cut source. Note that a snapshot of the Cut source, if any, is displayed over the layer (**Preset** viewer page).

You can also edit the other Cut & Fill parameters like invert, freeze, luma level thresholds, etc. (use the editpad and the encoders). Since the Cut & Fill feature belongs to the layer parameters that are included in the preset memory, these settings can be different from one preset to the other. For example, using a static frame as Cut content and playing with the thresholds will allow you to create dynamic transition effects.

Layer presets

All layer attributes (position, size, border, transparency ...) can be stored into a preset memory that you can then apply to any selection of layers (similar to a copy/paste layer attributes feature).

The **LAYER PRESET** and **SAVE** buttons, together with the 12 contextual **EDITpad** keys, will allow you to easily save and apply your layer preset memories.

To save a layer preset, first select the layer whose attributes are to be saved (if several layers are selected, only the attributes of the first selected layer will be used). Then press the **LAYER PRESET** button to display layer preset memories on the **EDITpad** (the 12 contextual LCD keys will be highlighted to display layer preset memories). Press the **SAVE** button to activate save mode and use the layer attribute buttons (**POS, SIZE, IN ...**) to filter the attributes to be saved in the memory. When ready, press a layer preset memory key to save the layer attributes into the corresponding layer preset memory. Note that empty memories are highlighted in green. Non-empty memories are highlighted in yellow and the grid in each memory reflects the type of filters saved in the memory. If you attempt to overwrite an existing memory, you will have to confirm the operation by pressing the blinking memory key again.

To apply a layer preset memory, first select the layer(s) for which you want to apply the layer preset memory. Then press the **LAYER PRESET** button and, on the **EDITpad**, press the memory key corresponding to the layer preset memory that you want to apply.

Macros

The **MACRO** button, located to the right of the **EDITpad**, provides access to macros and allows you to manually run macros via the front panel macro keys.

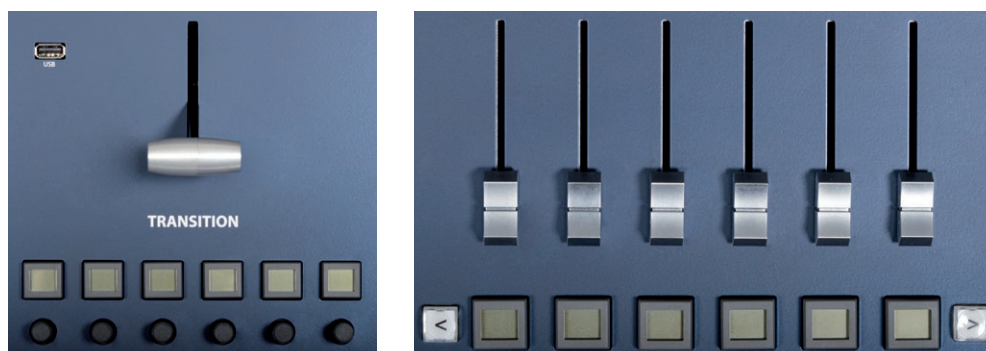
To run a macro, first enable the **MACRO** button to access the macro keys on the **EDITpad** (the 12 contextual LCD keys will be highlighted to display macros). Navigate the macro pages if required using the last row of keys. When ready, press the key corresponding to the macro to run.

5.6 Transition section

Within the transition section, you will find how to TAKE your configuration on the Program.

You have different options:

- The T-bar for a manual smooth transition
- The Take button for an automatic timed transition
- Independent faders for a manual transition per screen



Below each fader you will find a screen button, you can use the left/right arrow to move this screen list. Each fader will transition the screen which is written on the button.

You can stop a transition for a screen, and start transitioning another screen ; each screen is independent from the others.

You can lock/unlock a screen by pressing its corresponding LCD key:

- Yellow color means the screen is 'active' (unlocked) and is therefore allowed to make a transition.
- Blue color means the screen is 'inactive' (locked) and is not allowed anymore to make a transition or progress into one.

Note that this state is stored / recalled when saving / loading a preset.

Note that the preset page on the touch screen displays the same screens, and allows you to lock/unlock them as well by pressing the screen status area.

Below the T-bar, you will find a transition time for each screen. When you take with the automatic TAKE button, the preset will take giving the chosen transition time for each screen.

You can adjust the transition time at any moment, even after loading a preset.



The use of the Front Panel does not apply to Confidence screens.

5.7 Control transition section



Into the control transition section, you can choose either to control the transition (default section behavior) or to control the cue sequence playback.

5.7.1 Controlling the transition

- **FILTER SELECT button:**

The **FILTER SELECT** button allows you to quickly edit the transition filter based on current layer selection.

- **TOGGLE button:**

Enabling the **TOGGLE** button turns your device into the toggle preset mode. That means that after a take, your old Program becomes your new Preview.

- **STEP BACK button:**

The **STEP BACK** button allows you to restore on Preview the configuration of the Program before the last transition.

- **TAKE CUT button:**

Pressing the **TAKE CUT** button, you will take your Preview to Program but without all the programmed effects. They will be all replaced by the cut effect.

- **TRANSITION DURATION button:**

You can enable or not this button by pressing on it. The yellow color means this function is enabled. When enabled, this duration overrides all the specific screens durations.

- **TAKE button:**

The **TAKE** button allows you to send your selected Preview screens to Program.

5.7.2 Controlling the cue sequence playback

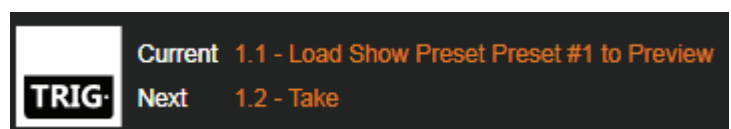
To control the cue sequence playback from the front panel, simply press the **CUE SEQUENCE** key to enable the cue Sequence playback control mode (key illuminated). To return to the Transition Control mode, press the **CUE SEQUENCE** key again (key backlight turned off).



Cue Sequence playback control mode is automatically enabled when user starts playback by pressing the **PLAY** button on the touchscreen.

- **PLAY button:**

Pressing the **PLAY** button starts the cue sequence continuous playback from the selected cue. The status bar displays the player status.



- **STOP button:**

Pressing the **STOP** button stops the cue sequence playback (the playhead remains at its current position).

- **PREV button:**

The **PREV** button allows you to play the selected cue and to move back to the previous cue (step-by-step playback).

- **NEXT button:**

The **NEXT** button allows you to play the selected cue and move forward to the next cue (step-by-step playback).

- **CUE button:**

The **CUE** button displays the selected cue item index. The corresponding encoder can be used to select the cue from which the playback will start. The blue color means the player is idle. The yellow color means the continuous playback has started. The **CUE** button blinks when step-by-step playback has started.

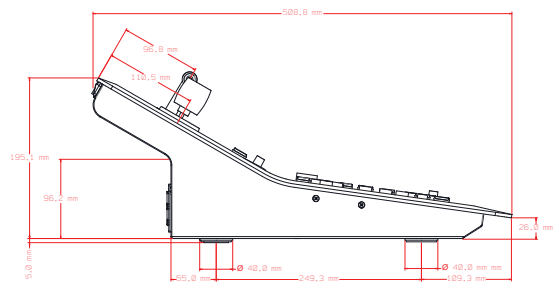
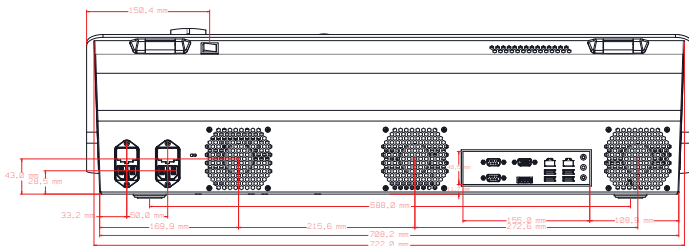
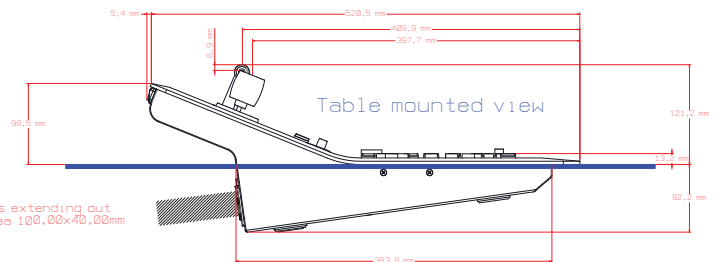
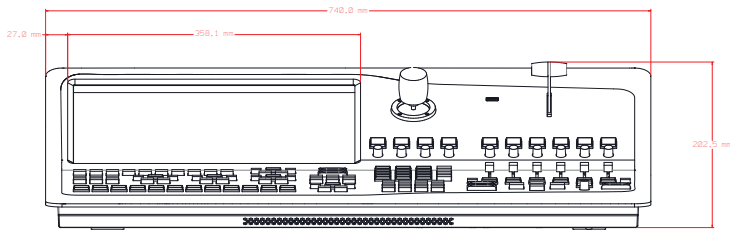
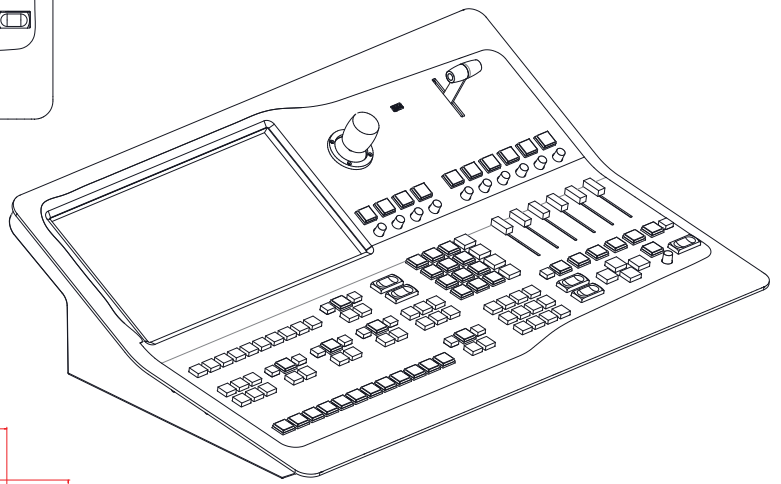
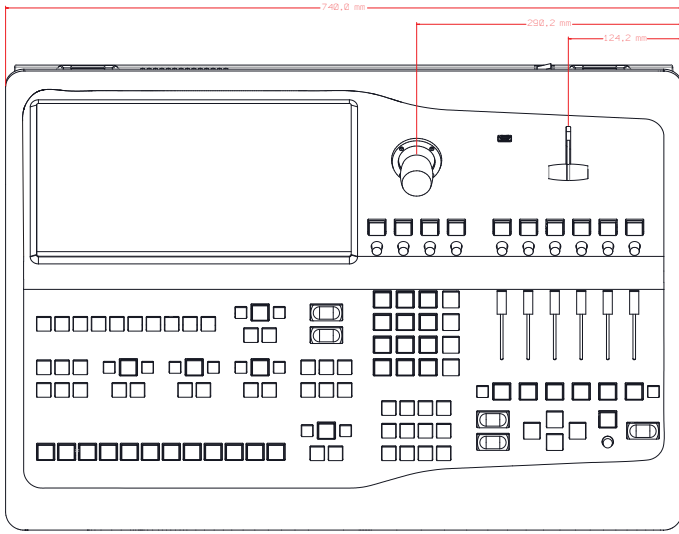
- **TRIGGER button:**

The **TRIGGER** button is the keyboard command to resume the cue sequence playback (the GO button), when a Hotkey trigger has been assigned to a given cue.



During step-by-step playback, the cue Sequencer does not wait for any trigger.

6. MECHANICAL DIAGRAM



 Do not block front and rear ventilation openings

7. WARRANTY

7.1 Warranty conditions

Analog Way warrants the product against any defects in materials and workmanship for a period of three (3) years from the date of purchase when used in accordance with the user's manual and standard industry practices.

- In the unlikely event of any malfunction from such defects during the warranty period, Analog Way will, at its discretion, repair or replace the defective units.
- The warranty does not apply if the product is determined to have been:
 - Improperly installed or abused,
 - Handled with improper care,
 - Used or stocked in abnormal conditions,
 - Modified, opened,
 - Damaged by fire, war, or Natural disasters (Acts of God)
- Analog Way's direct employees are solely authorized to make this determination.
- Analog Way reserves the right to refuse for repair and service a product for which the warranty is void.
- In no way shall Analog Way be responsible for direct or indirect loss of profit or consequential damages resulting from any defect in this product.

NOTE:

Analog way provides a warranty extension of 2 years, it includes parts, labor and return shipping. If you are interested, please get contact with your area sales representative.

7.2 Repair and return instructions

These Return Material Authorization (RMA) regulations determine the procedure to be followed when returning defective product. The aim is to ensure fast and simple handling of the returned product and bring the best satisfaction

In the unlikely event that a product is required to return for repair, please call the regional Maintenance center / Customer Service, and ask to receive a Return Material Authorization number (RMA). Three regional maintenance centers are available depending on your location. (*See chapter: 8. Contact information*)

- Before sending any device to Analog Way, please contact us to obtain a Return Material Authorization (RMA) number. Please have the model and serial number available and the reason for calling.
- RMAs are valid for 30 days, after which a new RMA must be requested.
- Package the unit securely in the original shipping materials or suitable equivalent. Analog Way is not responsible for damage which occurs due to improper packaging. The customer assumes responsibility until the unit arrives at our facility.
- Out-of-warranty products will be charged evaluation fee if no problems are found or if you choose not to proceed with the repair.
- Discontinued products are not admitted for return and repair.
- Be sure to include the RMA number clearly on the shipping label or on the exterior of the package.
- No unit will be accepted without a valid RMA clearly visible.

7.3 Return conditions

In the unlikely event that you want to return the product, please call the regional Maintenance center / Customer Service

- If you are unhappy with the performance of any product purchased from us, you can return it within 30 days of purchase.
- Returned equipment must be in original condition with all accessories and packaging materials.
- Returns may be subject to a refurbishment and/or restocking fee.

8. CONTACT INFORMATION



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