



Di-VentiX

MODEL: DVX8022

USER'S MANUAL

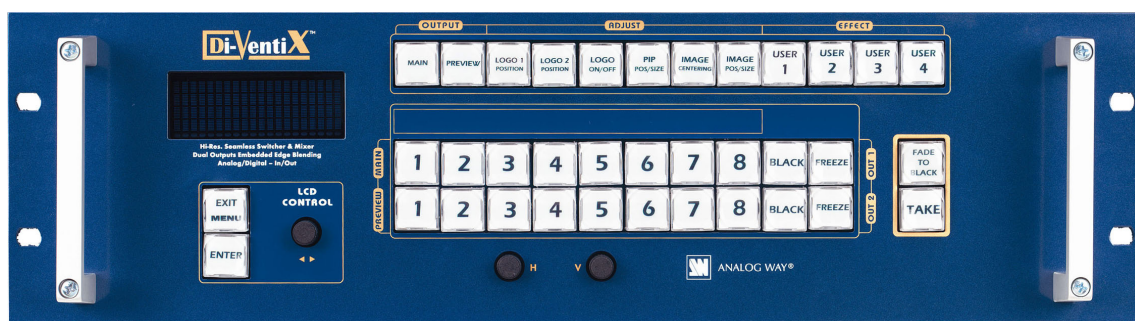


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SAFETY INSTRUCTIONS

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

CAUTION:

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 or direct sunlight). Slots and openings in the device are provided for ventilation and to avoid overheating. Make sure the device is never placed on or 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 or on 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.

POWER CORD: Use the On (I) / Off (O) switch to power On or Off devices equipped with that switch. All other devices should be plugged and unplugged from wall outlet. In both cases, please follow these instructions:

- The power cord of the device should be unplugged from the outlet when left unused for several days.
- To unplug the device, do not pull on the power cord but always on the plug itself.
- The outlet 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 upon or against them.

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

CONNECTIONS: All inputs and outputs (except for the power input) are TBTS defined under EN60950.

SERVICING: Do not attempt to service this product yourself by opening or removing covers and screws since it may expose you 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.

INSTRUCTIONS DE SÉCURITÉ

Afin de mieux comprendre le fonctionnement de cet appareil nous vous conseillons de bien lire toutes les consignes de sécurité et de fonctionnement de l'appareil avant utilisation. Conserver les instructions de sécurité et de fonctionnement afin de pouvoir les consulter ultérieurement. Respecter 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 et aux 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 proximité de 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 bouche 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 ou sur son bloc alimentation. Pour les appareils équipés d'une alimentation principale avec fil de terre, ils 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.

CORDON D'ALIMENTATION : Pour les appareils équipés d'un interrupteur général (Marche / Arrêt O), la mise sous tension et la mise hors tension se fait en actionnant cet interrupteur général. Pour les appareils sans interrupteur général, la mise sous tension et la mise hors tension se fait directement en connectant et déconnectant le cordon d'alimentation de la prise murale.

Dans les 2 cas ci-dessus appliquer les consignes suivantes :

- Débrancher le cordon d'alimentation de la prise murale si vous prévoyez de ne pas utiliser l'appareil pendant quelques jours ou plus.
- Pour débrancher le cordon, tirez le par la fiche. Ne tirez jamais sur le cordon proprement dit.
- La prise d'alimentation doit se trouver à proximité de l'appareil et être aisément accessible.
- Ne laissez pas tomber le cordon d'alimentation et ne posez pas d'objets lourds dessus.

Si le cordon d'alimentation est endommagé, débranchez le immédiatement de la prise murale. Il est dangereux de faire fonctionner cet appareil avec un cordon endommagé, un câble abîmé peut provoquer un risque d'incendie ou un choc électrique. Vérifier le câble d'alimentation de temps en temps. Contacter votre revendeur ou le service après vente pour un remplacement.

CONNEXIONS : Toutes les entrées et sorties (exceptée l'entrée secteur) sont de type TBTS (Très Basse Tension de Sécurité) définies selon EN 60950.

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, risque d'exposer l'utilisateur à des chocs électriques ou autres dangers. Contacter le service après vente ou votre revendeur ou s'adresser 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.

ISTRUZIONI DI SICUREZZA

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 errneo funzionamento e un incidente.

ALIMENTAZIONE : Far funzionare l'apparecchiatura solo con la sorgente d'alimentazione indicata sull'apparecchiatura o sul suo alimentatore. Per le apparecchiature fornite di un'alimentazione principale con cavo di terra, 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.

CAVO DI ALIMENTAZIONE : Per le apparecchiature fornite di interruttore generale (Acceso / Spento O), l'accensione e lo spegnimento dell'apparecchiatura si effettuano attraverso l'interruttore. Per le apparecchiature senza interruttore generale, l'accensione e lo spegnimento si effettuano direttamente inserendo o disinserendo la spina del cavo nella presa murale.

In entrambe i casi applicare i seguenti consigli :

- Disconnettere l'apparecchiatura dalla presa murale se si prevede di non utilizzarla per qualche giorno.
- Per disconnettere il cavo tirare facendo forza sul connettore.
- La presa d'alimentazione deve trovarsi in 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 un cavo di alimentazione danneggiato, un cavo graffiato può provocare un rischio di incendio o uno shock elettrico. Verificare il cavo di alimentazione spesso. Contattare il vostro rivenditore o il servizio assistenza per una sostituzione.

CONNESSIONE : Tutti gli ingressi e le uscite (eccetto l'alimentazione) sono di tipo TBTS definite secondo EN 60950.

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.

SICHERHEITSHINWEISE

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.

VORSICHT & WARNUNG

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 oder dem Netzteil angegebenen Netzspannung betreiben. Geräte mit geerdeter Hauptstromversorgung müssen an eine Stromquelle mit effizienter Erdung angeschlossen werden. Diese Erdung darf auf keinen Fall geändert, umgangen oder entfernt werden.

STROMKABEL : Für Geräte mit einem Hauptschalter (Ein/Aus) erfolgt die Stromversorgung und unterbrechung mittels dieses Hauptschalters. Geräte ohne Hauptschalter werden durch das Einstecken oder Herausziehen des Steckers in den Wandanschluß ein- oder ausgeschaltet. Für beide Fälle gelten folgende Richtlinien :

- Den Stecker aus dem Wandanschluß herausziehen wenn Sie das Gerät mehrere Tage oder länger nicht benutzen.
- Das Kabel mittels dem Stecker 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 auf es stellen.

Wenn das 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. Das Stromkabel regelmäßig untersuchen. Für den Ersatz, wenden Sie sich an Ihren Verkäufer oder Kundendienststelle.

ANSCHLÜSSE : Bei allen Ein- und Ausgängen (außer der Stromversorgung) handelt es sich, gemäß EN 60950, um Sicherheits Kleinspannungsanschlüsse.

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, Schlitz, 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.

INSTRUCCIONES DE SEGURIDAD

Para comprender mejor el funcionamiento de este aparato, le recomendamos que lea cuidadosamente 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.

PRECAUCIONES Y OBSERVACIONES

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 o en su bloque de alimentación. Los aparatos equipados con una alimentación principal con hilo de tierra 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.

CABLE DE ALIMENTACIÓN : Para los aparatos equipados con un interruptor general (Marcha I / Paro O), la puesta bajo tensión y la puesta fuera de tensión se hace accionando este interruptor general.. En los aparatos que no tienen interruptor general, la puesta bajo tensión y la puesta fuera de tensión se hace directamente conectando y desconectando el enchufe mural.

En ambos casos, se deberá respetar las siguientes consignas:

- Desconectar el aparato del enchufe mural si no piensa utilizarlo durante varios días.
- Para desconectar el cable, tire de la clavija. No tire nunca del cable propiamente dicho.
- El enchufe de alimentación debe estar cerca del aparato y ser de fácil acceso.
- No deje caer el cable de alimentación ni coloque objetos pesados encima de él.

Si el cable de alimentación sufre 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 del cable 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 (excepto la entrada del sector) son de tipo TBTS (Muy Baja Tensión de Seguridad) definidas según EN 60950

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.

DI-VENTIX™

Chapter 1 : INTRODUCTION

1-1. SUPPLIED EQUIPMENT

- 1 Di-VentiX™.
- 1 AC power supply cord.
- 1 CD-ROM (Remote Control Software).
- 1 User's Manual.

Supplied equipment with the OPT-iX-A option:

- 1 set of 11 MCO (5-pin) female connector (for audio connection).

1-2. GENERAL INFORMATION

Di-VentiX by Analog Way is a **Full Digital Computer and Video Up/Down Mixer Scaler Switcher**. In addition to numerous effects such as fade, wipes, moving PIP and a true **8x2 scaled Matrix**, **Di-VentiX** also includes a stand alone Soft Edge function on to 2 projectors.

STAND ALONE EDGE BLENDING MODE: In Edge Blending mode, **Di-VentiX** can drive 2 video-projectors for horizontal or vertical Soft Edge. Used as an 8 input switcher, **Di-VentiX** provides a double PIP image on a fixed background thanks to the 6 full frame images stored in its non volatile memory. The background image can be chosen among the 6 saved in the memory. The sources displayed in the PIPs can be switched.

MIXER MODE: **Di-VentiX** scales all sources and performs seamless switching transitions between any 2 inputs. The 2 Main outputs match the native resolution of any video-projector or hi-res. display device, and the Preview outputs allow to monitor the sequences before they are displayed on the main screens to avoid errors during a presentation.

- **PIP Effect:** high quality picture insertion from any input. The PIP can be sized and moved anywhere over the background image. Both background image and PIP can be fast & smoothly switched through a fade to black or customized color. Customizable borders are also available as well as different opening modes: cut, fade, sliding from one image Edge.

- **FADE Effect:** between any input, computer or video with adjustable cross-fading duration.

- **TITLE Effect:** over a Computer or a Video image. The title remains on the screen during the transition. The shadow title function, with settable vertical size and position as well as level of shadow, increases readability on bright images.

- **CUT & WIPES:** Seamless switching between any 2 inputs and numerous horizontal and vertical wipe transitions.

NATIVE MATRIX MODE: **Di-VentiX** switches any of the 8 inputs to 1 of the 2 or both outputs. Inputs are scaled and can be displayed with different resolutions on output 1 and 2.

COMMON FEATURES: Equipped with 2 SD/HD-SDI and 1 DVI input and DVI and HD-SDI outputs, **Di-VentiX** is a full digital In/Out signal processor providing enhanced image quality. **Di-VentiX** features 3:2 and 2:2 pull down circuitry, auto-adaptative pixel by pixel 3D motion compensation, time base corrector and frame rate converter & follower. Each input image control can be individually set and stored in a non-volatile memory.

LOGO INSERTION & FRAME STORES: Record 6 full screen images and 8 logos in 16 million colors in a non-volatile memory. Images and logo(s) can be flash captured from any video or computer source by keying or image cut-out. Up to 2 logos can be allocated per input and positioned anywhere on the screen.

AUDIO OPTION: This optional card features 8 balanced stereo inputs, 2 balanced stereo outputs (+mono), 1 auxiliary input mixed (not switched) with the 8 inputs with settable levels and master volume.

MULTIPLE SCREEN: **Di-VentiX** can be upgraded with **Cross Blender** for multiple edge blended screens.

Di-VentiX is specifically designed with a full control front panel for hi-res. A/V presentation displays, large events, and for the rental and installation markets. It offers a user-friendly interface and can be easily controlled & upgraded via its RS232, TCP/IP or by using the optional remote keypad.

1-3. REFERENCES

MODELS & OPTIONS	DESIGNATIONS
DVX8022	Di-VentiX.
OPT-iX-A	Optional AUDIO input/output.
CBD-UP	CROSS BLENDER™. Optional version for "Edge blending" application.

1-4. OPTIONAL ACCESSORIES

REFERENCES	DESIGNATIONS
RK8022	Remote keypad.
RK8022-T	Remote keypad with T-BAR.
TRC8022	Remote console. Allows to control up to 3 iX Range devices.
SWM-OE	Remote control Software. Allows to control up to 16 to iX Range devices.

1-5. Di-VentiX INSTALLATION

IMPORTANT: Please read all of the safety instructions (pages 4 to 6) before starting.

- **Table top mounting:** The device can be used directly on a table: the unit is equipped with 4 plastic feet.
- **Rack mounting:** The device is compatible with a 19" enclosure. Please follow the instructions below to install the device in a 19" rack.
 - ① Place the device in your rack.

NOTE: Your rack must be equipped with some braces.

 - ② Attach the device to the rack by using 4 screws in the front panel holes (screws are not included).
 - ③ Connect all of the cables of the device and attach them to the rack with some tie wraps.

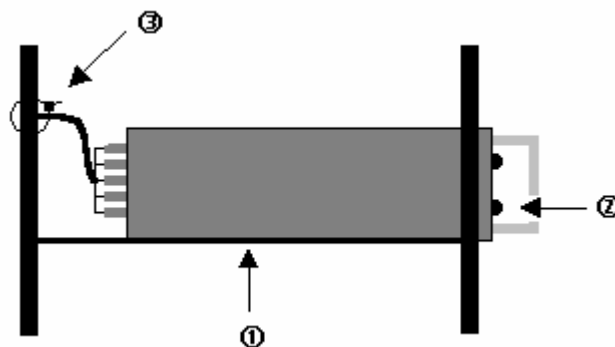
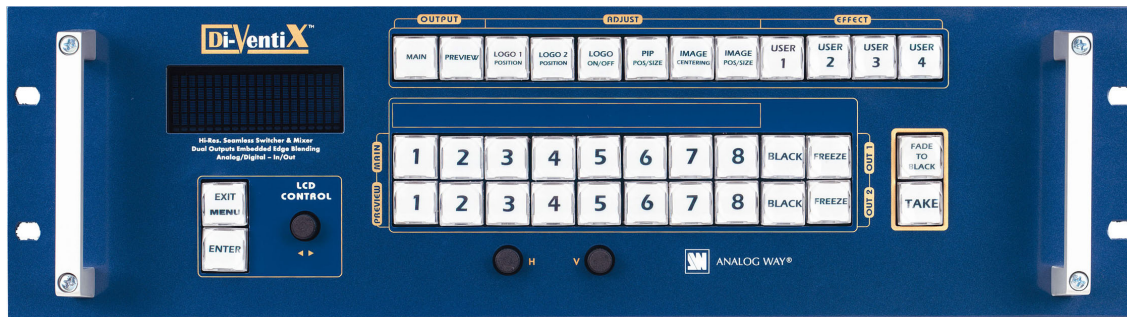


Figure 1

- IMPORTANT:**
- The openings in the side and in the rear panel are for cooling. Do not cover these openings.
 - Be sure that no weight in excess of 2 kg (4.4 Lbs.) is added onto the Di-VentiX.
 - The maximum ambient operating temperature must not exceed 40 °C (104 °F).
 - The rack and all mounted equipment in it must be reliably grounded to national and local electrical codes.

1-6. Di-VentiX FRONT PANEL DESCRIPTION**Figure 2****OUTPUT**

MAIN / OUT 1: MAIN / OUTPUT 1 selection for adjustments.
 PREVIEW / OUT 2: PREVIEW / OUTPUT 2 selection for adjustments.

ADJUST

LOGO 1 position: Horizontal & Vertical logo #1 position adjustment. Adjust with **H** & **V** knobs.
 LOGO 2 position: Horizontal & Vertical logo #2 position adjustment. Adjust with **H** & **V** knobs.
 LOGO ON/OFF: Display ON or OFF the assigned logos of the displayed input.
 PIP pos. / size: PIP position & size adjustment.
 • First push: position adjustment. Adjust with **H** & **V** knobs.
 • Second push: size adjustment. Adjust with **H** & **V** knobs.
 IMAGE centering: Automatically position the selected source in the centering pattern.
 IMAGE pos. / size: IMAGE position & size adjustment.
 • First push: position adjustment. Adjust with **H** & **V** knobs.
 • Second push: size adjustment. Adjust with **H** & **V** knobs.

EFFECT

USER 1: USER 1 effect selection.
 USER 2: USER 2 effect selection.
 USER 3: USER 3 effect selection.
 USER 4: USER 4 effect selection.

MAIN / OUT 1

1 to 8: Row of selection buttons for the MAIN output.
 Input source selection.
 BLACK: Black screen selection.
 FREEZE: Image freeze.

PREVIEW / OUT 2

1 to 8: Row of selection buttons for the PREVIEW output.
 Input source selection.
 BLACK: Black screen selection.
 FREEZE: Image freeze.

TAKE

Switch the pre-selected input on the MAIN output with the selected EFFECT.

FADE TO BLACK:

Switch the MAIN output to the BLACK with a fading.

H:

Horizontal adjustment.

V:

Vertical adjustment.

LCD CONTROL

EXIT / MENU: Switches between Status and Control mode.
 ENTER: Validates a selected item.
 ◀ ▶ : Allows scrolling thru the different menus.

1-7. REAR PANEL DESCRIPTION

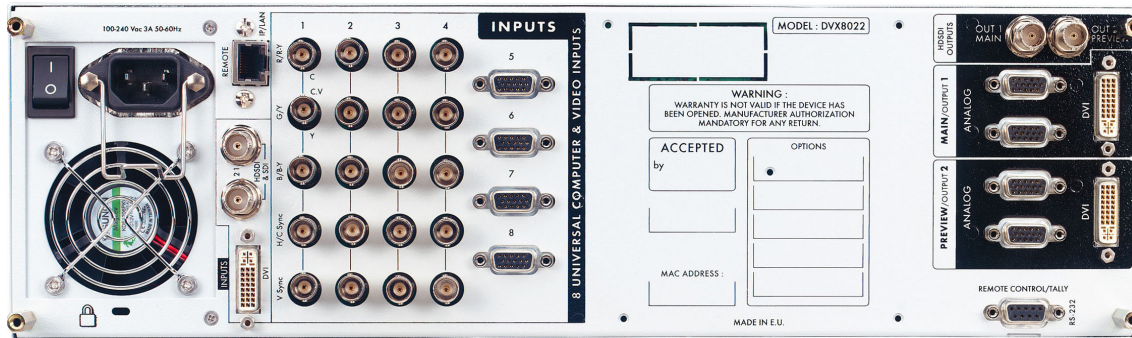


Figure 3

100-240 Vac 3A 50-60Hz:

IEC standard power connector.

O / I :

Power switch (O = OFF, I = ON)

INPUTS

1 to 8:

8 Universal analog Computer & Video Inputs. Each of the 8 inputs can accept both **COMPUTER sources** (RGBHV, RGBS, and RGsB (SOG) signals), **standard TV/VIDEO sources** (Composite video, S.VIDEO, Component (YUV), RGBS & RGsB (SOG)), and **HDTV sources**.

The inputs 1 to 4 are provided with 5 BNC female connectors, and the inputs 5 to 8 are provided with a HD15 female connector.

DVI INPUT:

DVI (digital visual interface) input on a DVI connector.

SDI / HDSDI:

2x SD/HD-SDI inputs on a BNC connector.

NOTE: The 2 SD/HD-SDI and the DVI inputs can be assigned to any of the 8 inputs.

REMOTE IP/LAN:

LAN communication port on a RJ45 connector.

HDSDI OUTPUTS:

MAIN & PREVIEW HD-SDI outputs on BNC connectors.

NOTE: The HD-SDI outputs can not be used simultaneously with the ANALOG and DVI outputs.

MAIN / OUTPUT 1

ANALOG:

2 MAIN analog outputs for the MAIN display devices on HD15 female connectors.

DVI:

Digital (DVI) MAIN output on DVI-I female connector.

PREVIEW / OUTPUT 2

ANALOG:

2 PREVIEW analog outputs for the PREVIEW display devices on HD15 female connectors.

DVI:

Digital (DVI) PREVIEW output on DVI-I female connector.

REMOTE CONTROL RS-232:

RS-232 communication port & 3 tally outputs on DB9 female connector.

AUDIO (OPT-iX-A option)

IN 1 to IN 8:

Optional audio inputs.

AUX:

Auxiliary input for mixing with the diffused source

MAIN / OUT 1:

MAIN audio output.

PRELIST / OUT 2:

PRELIST audio output.

Chapter 2 : CONNECTING

2-1. CONNECTING THE Di-VentiX

- ① Turn OFF all of your equipment before connecting.
- ② Connect your analog computers (PC, MAC...) and your analog video sources to the inputs (1 to 8) of the device.
- ③ Connect your digital computer source to the DVI input connector.
- ④ Connect your SD-SDI & HD-SDI sources to the SD/HD-SDI inputs connectors.
- ⑤ Connect your MAIN display device (data projector, plasma screen...) to the MAIN output (HD15 or DVI connectors).
- ⑥ Connect your control monitors to the PREVIEW & MAIN outputs (HD15 or DVI monitors).
- ⑦ Connect the AC power supply cord to the device and to a power outlet.
- ⑧ Turn ON the projector, the local monitors, the device (rear panel switch) and then all of your input sources.

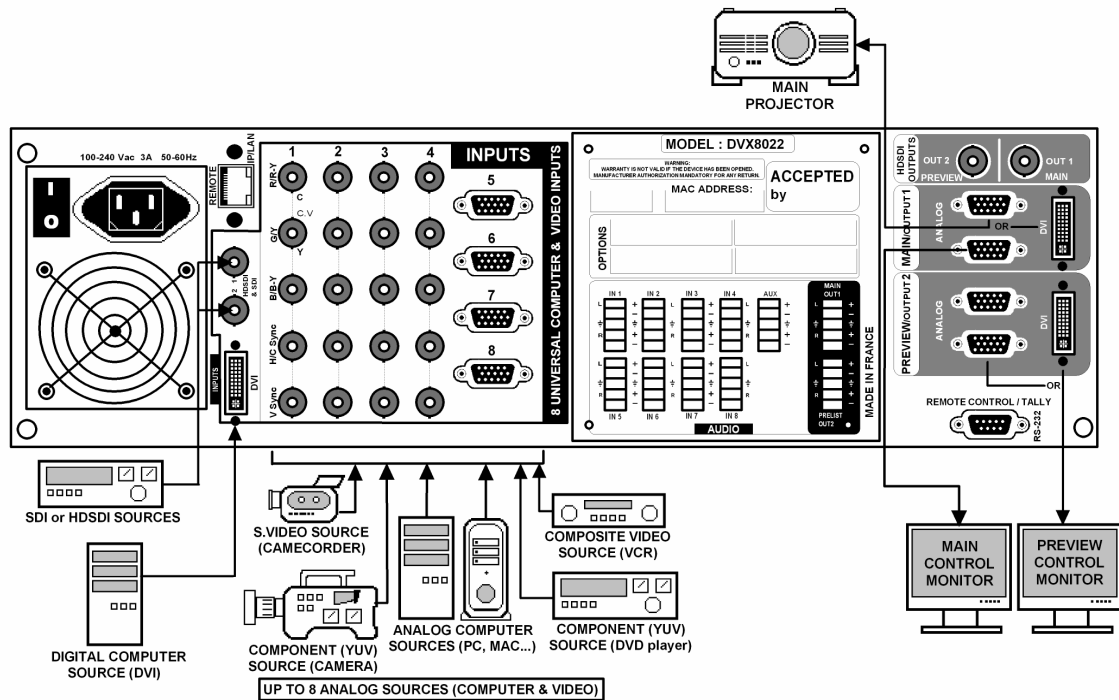


Figure 4

2-1-1. UNIVERSAL COMPUTER & VIDEO INPUTS

The UNIVERSAL INPUTS can accept both **COMPUTER** sources (RGBHV, RGBS, and RGsB (SOG) signals), **standard TV/VIDEO** sources (Composite video, S.VIDEO, Component (YUV), RGBS & RGsB (SOG)), and **HDTV** sources (480p, 720p & 1080i).

① COMPUTER SOURCES:

The device accepts COMPUTER signals (RGBHV, RGB/S, and RGsB) on its 8 inputs. The inputs #1 to #4 are provided with a 5x BNC female connectors. The inputs #5 to #8 are provided with a HD15 female connector.

NOTE: For RGBS signals connect the Sync cable to the **H/C sync** BNC connector.

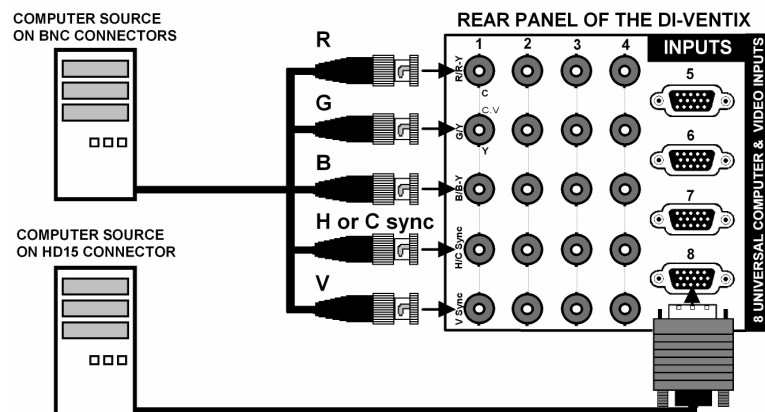


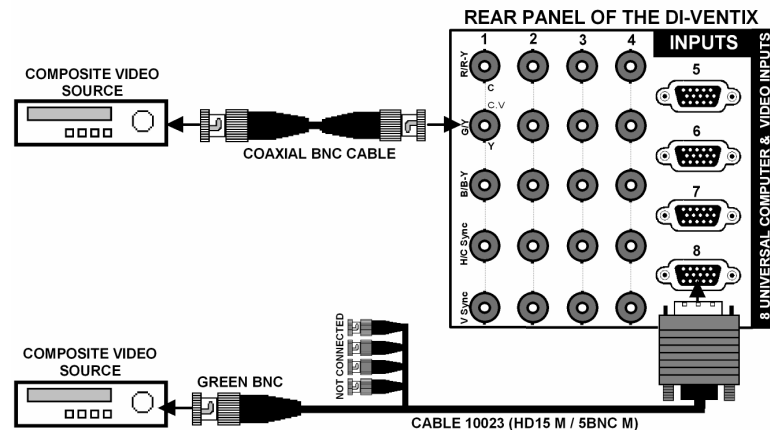
Figure 5

2-1. CONNECTING THE Di-VentiX (continued)**2-1-1. UNIVERSAL COMPUTER & VIDEO INPUTS (continued)****② COMPOSITE VIDEO SOURCES:**

The **Composite Video** signal, usually called COMPOSITE or VIDEO, is available on most video equipment (VCR, DVD, CAMCORDER...), but is also the lowest in picture quality. The video standard of this signal can be NTSC, PAL or SECAM. The signal is transmitted on a single coaxial cable, and is connected to the video equipment with a RCA or a BNC connector.

For the inputs #1 to #4: connect a BNC coaxial cable between your Composite video sources and the **C.V (G/Y)** BNC connector of the device.

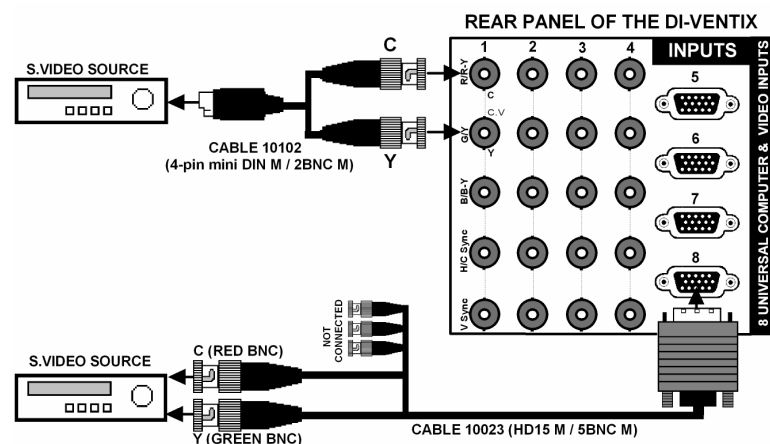
For the inputs #5 to #8: connect a HD15 to BNC cable between the HD15 connector of the device and your Composite source as follow:

**Figure 6****③ S.VIDEO SOURCES:**

The **S.VIDEO** signal, also called Y/C, HI-8™, or S.VHS™, is available on DVD players and high quality VCRs (S.VHS). The S.VIDEO signal in which the Luminance (Y) and Chrominance (C) information are separately transmitted (2 wires) gives a higher quality picture than the Composite video signal. The S.VIDEO connector is usually a 4 pin Mini-DIN connector also called Oshiden™ connector.

For the inputs #1 to #4: connect a BNC to 4-pin mini DIN cable between your S.VIDEO sources and the **Y (G/Y) & C (R/R-Y)** BNC connectors of the device.

For the inputs #5 to #8: connect a HD15 to BNC cable between the HD15 connector of the device and your S.VIDEO source as follow:

**Figure 7**

2-1. CONNECTING THE Di-VentiX (continued)

2-1-1. UNIVERSAL COMPUTER & VIDEO INPUTS (continued)

④ COMPONENT VIDEO SOURCES:

The Component Video signal, also called YUV (Y, R-Y, B-Y) or BETACAM™ is widely used in broadcasting and is available on high-quality DVD players. The COMPONENT signal is transmitted with 3 coaxial cables, and also has a better quality picture than COMPOSITE and S.VIDEO signals. The COMPONENT connectors are usually RCA (x3), or BNC (x3).

For the inputs #1 to #4: connect a 3 x BNC cable between your Component sources and the **Y, R-Y & B-Y** BNC connectors of the device.

For the inputs #5 to #8: connect a HD15 to BNC cable between the HD15 connector of the device and your Component source as follow:

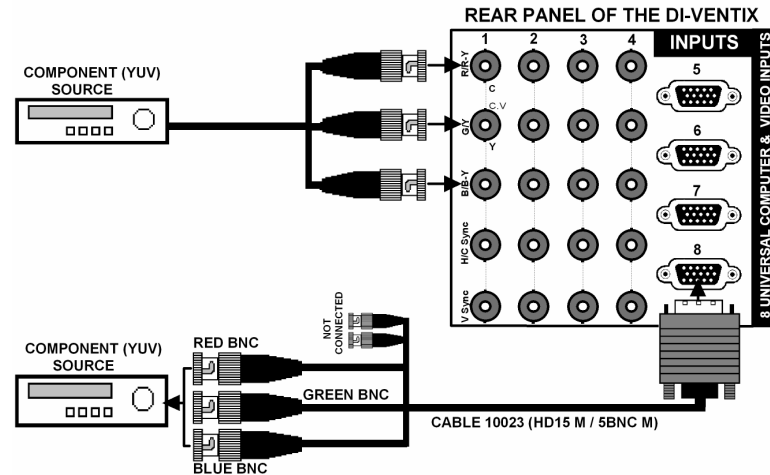


Figure 8

⑤ RGBS VIDEO SOURCES:

This signal is widely used in broadcasting and is available on European DVD player. The RGB/S signal is transmitted with 4 coaxial cables, and also has a better picture quality than COMPOSITE and S.VIDEO signals. The RGB/S connectors are usually BNC connectors for Broadcasting equipment, and SCART connector for DVD players.

For the inputs #1 to #4: connect a 3xBNC cable between your RGB/S sources and the **R, G, B & H/C sync** BNC connectors of the device.

For the inputs #5 to #8: connect a HD15 to BNC cable between the HD15 connector of the device and your RGB/S source as follow:

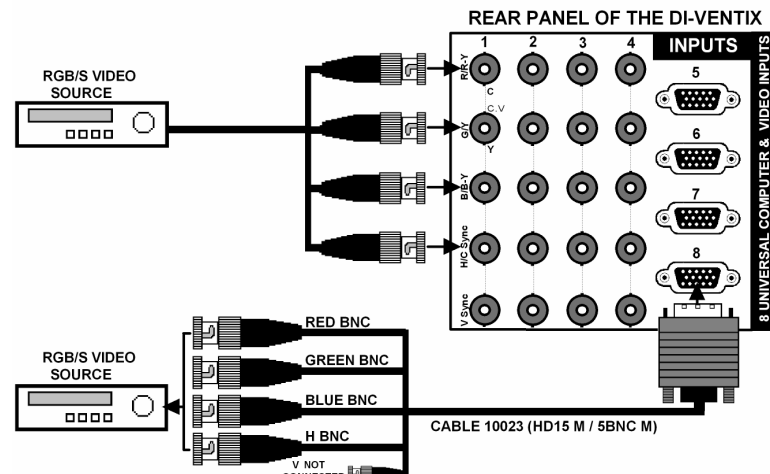


Figure 9

⑥ HDTV SOURCES:

HDTV SOURCES:
The device accepts the 480p, 720p & 1080i HDTV formats. Connect your HDTV signal as a Component source.

2-1. CONNECTING THE Di-VentiX (continued)**2-1-2. MAIN (OUTPUT 1) AND PREVIEW (OUTPUT 2) OUTPUTS**

The device is equipped with 2 MAIN outputs on HD15 female connector, and two PREVIEW outputs on HD15 female connector. Connect the MAIN display device onto the MAIN output. Connect the monitoring devices onto the MAIN & PREVIEW outputs.

2-1-3. OPTIONAL AUDIO INPUTS

The devices with the OPT-iX-A option are equipped with 8 audio inputs & 1 auxiliary input (on 5-pin MCO male connectors). This connector allows connecting BALANCED or UNBALANCED audio sources. Connect your audio sources as follow:



Figure 10

2-1-4. OPTIONAL AUDIO OUTPUTS

The devices with the OPT-iX-A option are equipped with 2 audio outputs (MAIN / OUT1 & PRELIST / OUT2 on 5-pin MCO male connectors). This connector allows connecting BALANCED or UNBALANCED audio systems. Connect your audio systems as follow:



Figure 11

2-2. CONNECTING A CONTROL DEVICE FOR USING THE REMOTE CONTROL SOFTWARE

Your Di-VentiX is shipped with a Windows compatible Remote Control Software (3.5" disk). This software allows you to control and do all adjustments by a simple mouse click.

NOTE: Preferably use Windows NT, 2000, or XP for LAN operation.

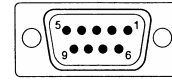
2-2-1. CONNECTING TO THE RS-232 PORT

- Connect the serial port of your control device to the **RS-232** port (DB9 Female connector) of the **Di-VentiX** with a **straight** cable (DB9 Female / DB9 Male).

- **Speed transmission:** 9600 bauds, 8 data bits, 1 stop bit, no parity bit, no flow control.

- **Pin-out:**

PIN #	FUNCTIONS
2	TRANSMIT DATA (Tx)
3	RECEIVE DATA (Rx)
5	GROUND (Gnd)



DB9 female (Rear panel of the DVX8022)

2-2-2. CONNECTING TO THE LAN PORT

- Connect the LAN port (RJ45 connector) of the **Di-VentiX** to your network according to your installation.

2-3. CONNECTING THE REMOTE KEYPAD

2-3-1. CONNECTING TO A Di-VentiX WITH THE RS-232 PORT

- ① Turn OFF your **Di-VentiX** (rear panel switch).
- ② Connect the RS-232 connector (DB9 female) of your **Di-VentiX** to the DB9 male connector of the REMOTE KEYPAD with the supplied DB9 M/F cable.
- ③ Turn ON your **Di-VentiX** (REAR panel switch).

NOTE: The REMOTE KEYPAD is powered by the **Di-VentiX** via its DB9 (RS-232) connector.

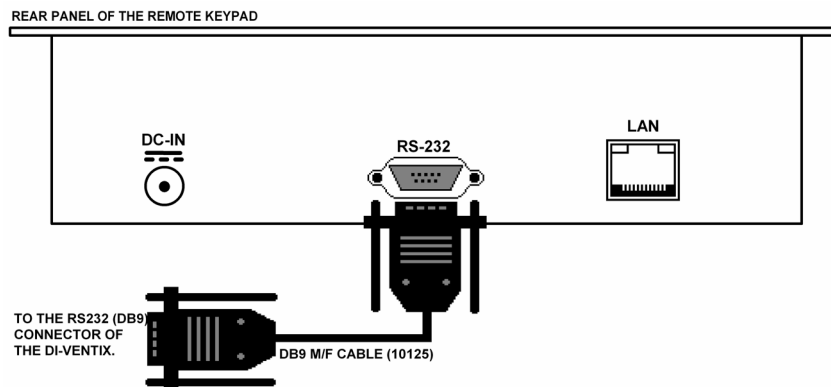


Figure 12

2-3-2. CONNECTING TO A NETWORK (LAN)

- ① Connect the power supply to a power outlet and to the DC-IN connector (rear panel).
- ② Connect the REMOTE KEYPAD to your network according to your installation.

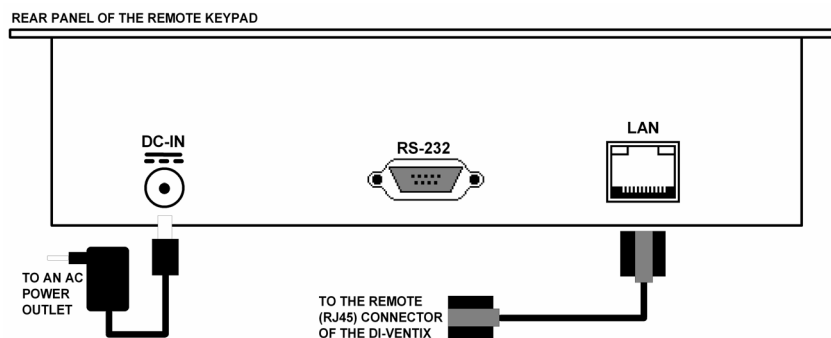


Figure 13

Chapter 3 : OPERATING MODE

3-1. OPERATING WITH THE REMOTE CONTROL SOFTWARE

Your **Di-VentiX** is shipped with a WINDOWS compatible software. This software allows you to control and do adjustments by a simple mouse click.

3-1-1. SOFTWARE INSTALLATION

- ① Turn your computer ON and wait for Windows to completely start.
- ② Insert the CD-ROM into your drive: the ANALOG WAY home window will open automatically.
- ③ Select the language of the CD-ROM menus, then click on "Install a Remote Control Software and select a name of your device.

IMPORTANT: If the autorun is not enabled: From the windows desktop, open My Computer and select the CD-ROM drive. Select the Autorun folder, and then select the autorun.exe file.

- ④ Follow the Windows installation instructions.

3-1-2. COMMUNICATION SETUP

• CASE OF RS-232 PORT:

- ① Connect the RS-232 cable between the **Di-VentiX** and the control device according to your installation, as indicating in the section 2-2-1.
- ② Then only power ON all of the devices.
- ③ Click on the program files **iX8022** in **Start > program > ANALOGWAY > iX8022** to run the software.
- ④ Click on **Controls** menu and select **RS232/LAN setup**, then:
 - With the **Controls** menu of the software, select **RS232/LAN setup**, then select the **COM** port number corresponding to the connection of the **Di-VentiX** device.

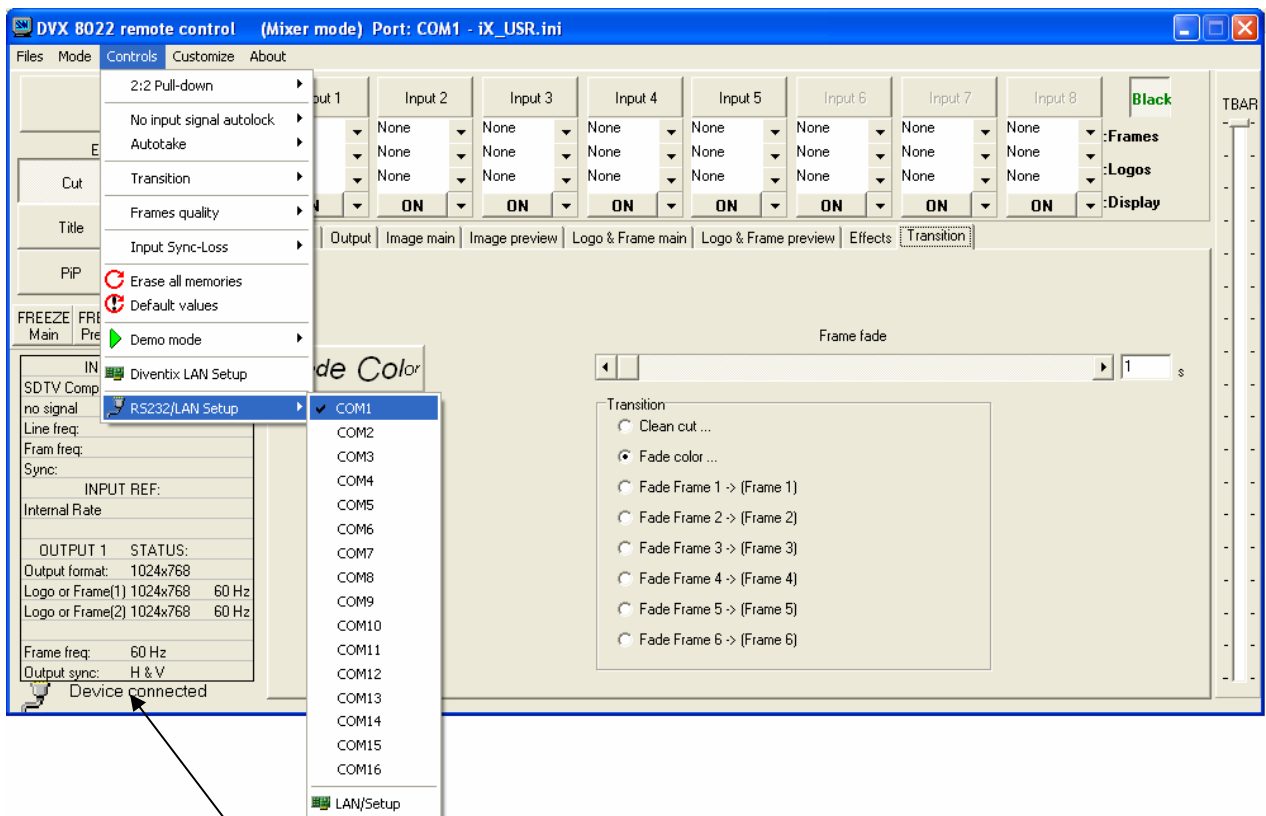


Figure 14

If the communication is OK, the message "**Device connected**" is displayed.

3-1. OPERATING WITH THE REMOTE CONTROL SOFTWARE (continued)

3-1-2. COMMUNICATION SETUP (continued)

• CASE OF LAN PORT:

- ① Connect the control device to the **Di-VentiX** with the RS-232 port as indicated in the previous page, then configure the LAN communication port (local address & port, remote address & port, netmask and gateway) of the device with the Remote Control Software (**CONTROL menu > LAN setup**).
- ② Connect the LAN port (RJ45 connector) of the device to your network according to your installation.
- ③ Select the LAN communication port of the device with the remote control software (**CONTROL menu > RS232/LAN setup > LAN setup**) and configure the control device (**Local port, Remote IP address & Remote Port**). Click on **Apply** to setup the new values. The software will also display **Device connected**. Then you can disconnect the RS232 cable.

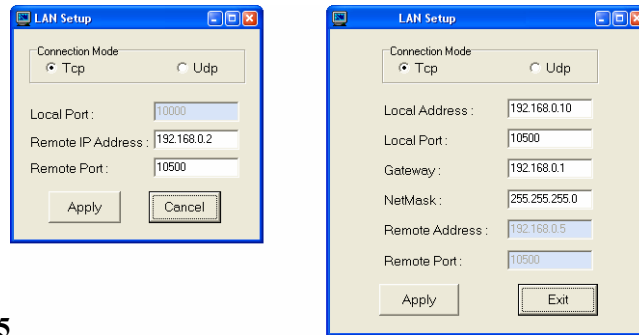


Figure 15

IMPORTANT: The **Di-VentiX** can be used in three different modes: the **MIXER MODE**, the **MATRIX MODE** and the **EMBEDDED EDGE BLENDING MODE**. The **MIXER MODE** allows switching seamlessly, fading and titling between all the inputs. The **MATRIX MODE** allows displaying the inputs onto two independents display devices. In **EDGE BLENDING MODE**, **Di-VentiX** can drive 2 video-projectors for horizontal or vertical Soft Edge. The default mode is the **MIXER MODE**.

3-1-3. OPERATING IN MIXER MODE

• SETTINGS

- ① We recommend resetting the device to its default values (**Controls menu > default value**) before proceeding.
- ② Verify the device is set in **MIXER MODE** (**Mode menu > Mixer**).
- ③ Click on the **Input** tab and select the **signal type** of each source connected to the inputs.
- ④ Click on the **Output** tab.
- ⑤ Select the **output rate** mode (Internal rate or follow input...). Then select the **frame freq.**
- ⑥ Select one of the **output formats**.

NOTE: For fixed pixels display device (DMD, LCD, PLASMA...), always select the output format corresponding to the native resolution of your display device. Thus, the display device will not have to scale the image and the result will be better.

- ⑦ Select the **output sync.** according to your display device.

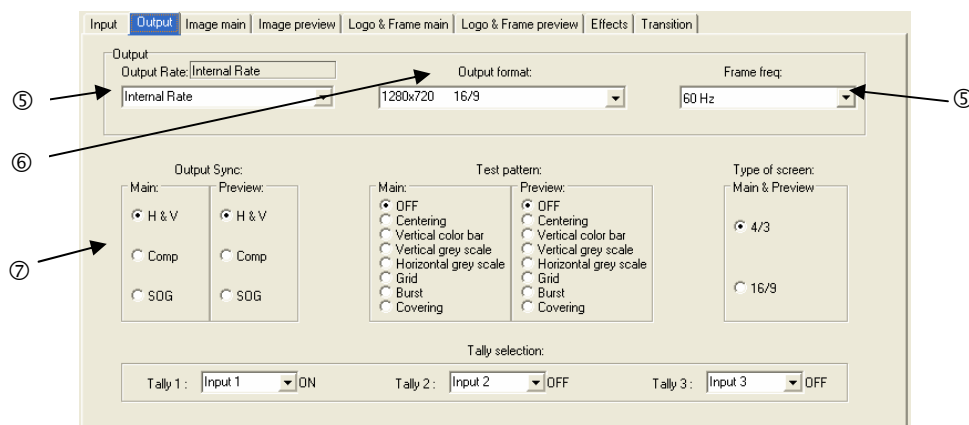


Figure 16

3-1. OPERATING WITH THE REMOTE CONTROL SOFTWARE (continued)

3-1-3. OPERATING IN MIXER MODE (continued)

• INPUT SELECTION

- ① Pre-select an input with the INPUT SELECT buttons. The button starts blinking.
- ② Select an effect with the EFFECT buttons.
- ③ Press on TAKE to do the transition.

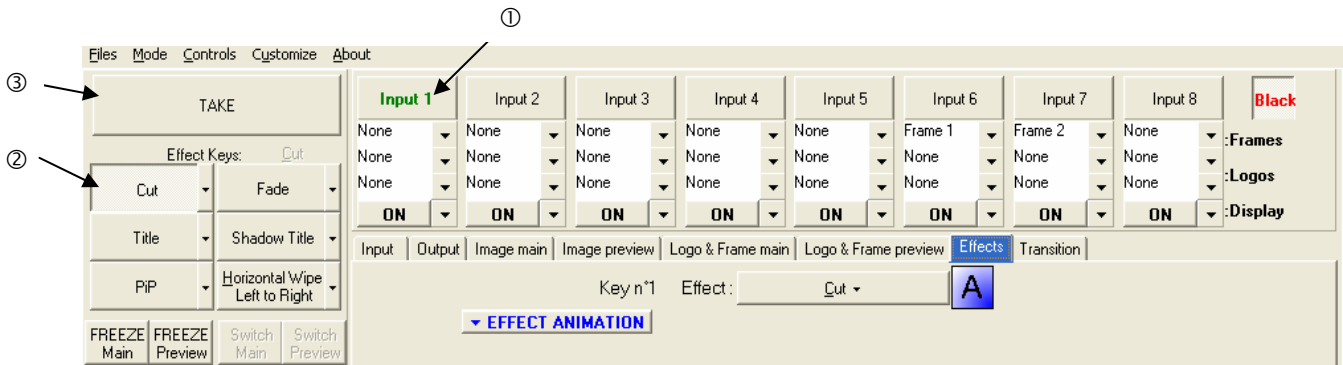


Figure 17

• DISPLAY DEVICES ADJUSTMENTS

- ① Click on the **Output** tab and select the **MAIN centering pattern**.
- ② Adjust directly the display device itself, using its controls, to fill the centering pattern in full screen.

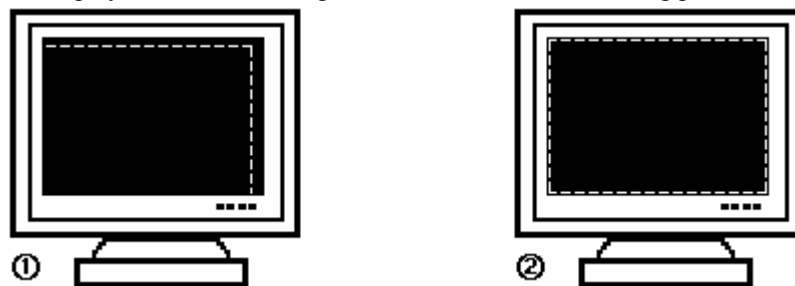


Figure 18: Centering pattern.

- ③ Renew the same process to adjust your **PREVIEW** display device.

NOTE: Now the display devices are identically adjusted, you can also do the image adjustments of each source on the display device of your choice. When you are in a live display, you can do corrections on the PREVIEW monitor only, without disturbing the MAIN display device.

• IMAGE ADJUSTMENTS

For each input source connected to the **Di-VentiX** do the following adjustments:

- ① Select the source you want to adjust.
- ② Click on the **Image main** or **Image preview** tab.
- ③ Use the **Centering** function to automatically position the image in the **Centering pattern**.

IMPORTANT: For best results, display a full size bright image (no black border) to perform a centering. As required, correct the adjustment with the position & size functions.

NOTE: The centering function is only available for computer sources.

NOTE: In case of same Input/Output resolution, the centering also achieves automatic pixel clock adjustments. It may be useful, to improve manually the pixel **clock** and **phase**.

- ④ As required, do the others adjustments, available in the **IMAGE** menu (color, brightness...).

NOTE: To set the image adjustments to the factory settings, use the **Preset** function.

NOTE: The adjustments are automatically stored in NON-volatile memories. The **Di-VentiX** is provided with 40 NON-volatile image memories. Each of these memories contains the input channel number, the input and output format parameters and all of the image adjustments (position, size, brightness...). When the 40 memories are used, each new memorization erases the oldest record.

3-1. OPERATING WITH THE REMOTE CONTROL SOFTWARE (continued)

3-1-3. OPERATING IN MIXER MODE (continued)

• EFFECT ADJUSTMENTS

- ① Click on the **Effects** tab, then click on the **Effect** button and select an Effect.
- ② Click on the **EFFECT ANIMATION** button, select an **Effect opening** and an **Effect closing**, and select the durations.

NOTE: The **Effect opening** and **Effect closing** available are write in black and depend of the selected **Effect**.

- ③ Then, do the effect adjustment available in the Effects windows.

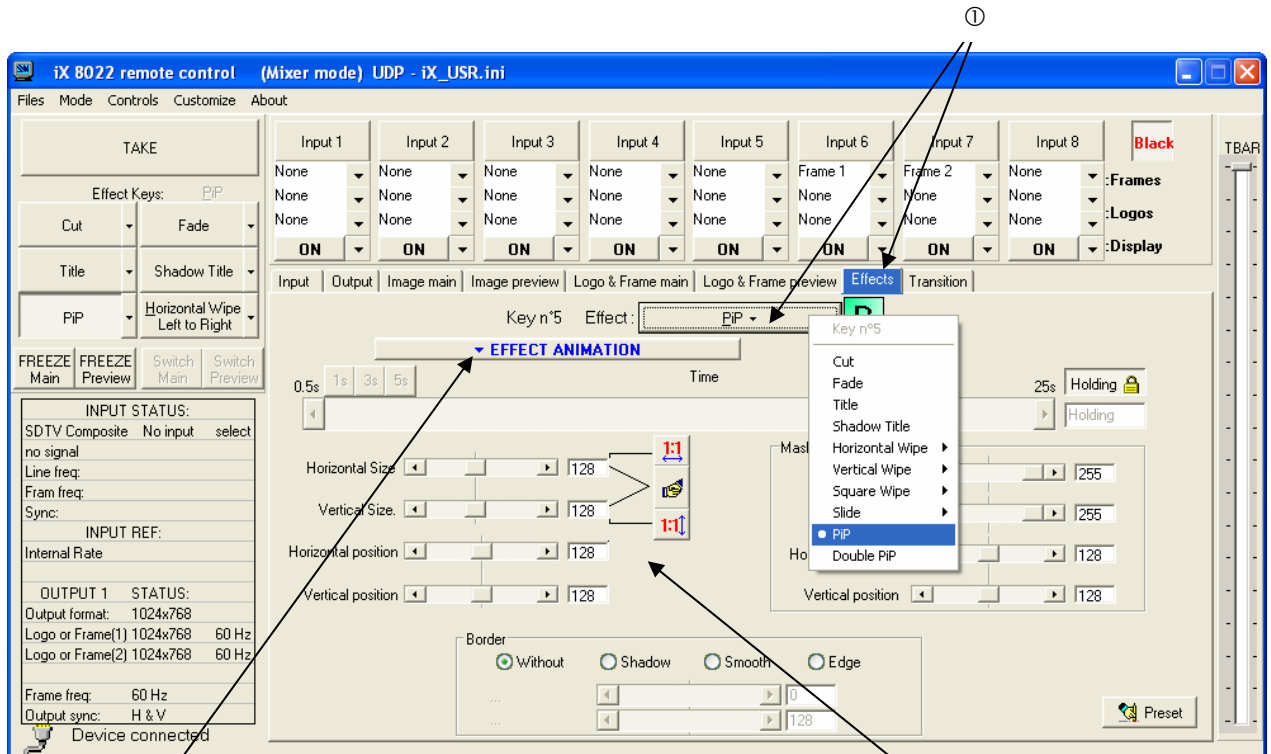


Figure 19

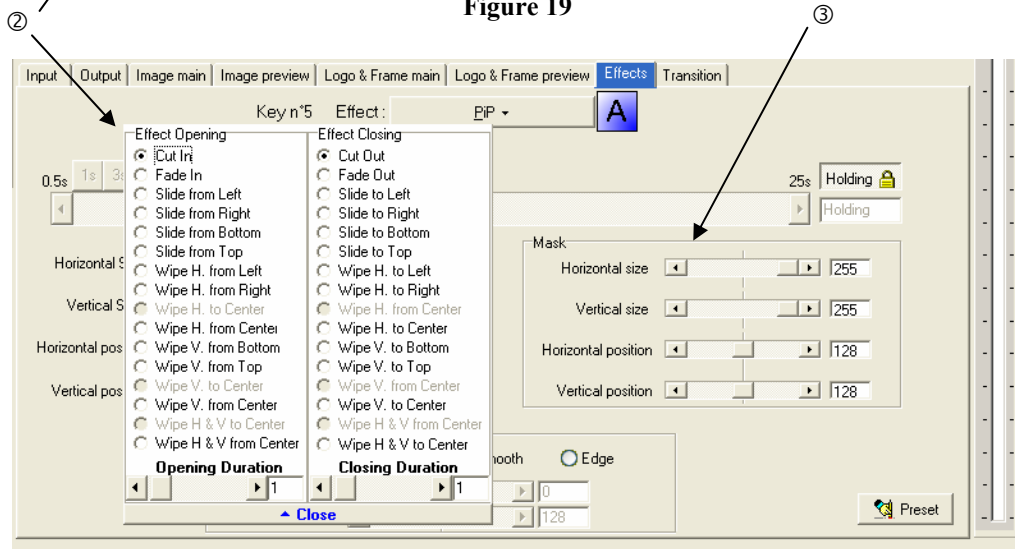


Figure 20

3-1. OPERATING WITH THE REMOTE CONTROL SOFTWARE (continued)**3-1-3. OPERATING IN MIXER MODE (continued)****• EXAMPLES OF TRANSITION****① PIP effect:**

The PIP effect allows to insert an image into another one.

- Click on the **Effects** tab.
- Assign a **PIP** to one of the EFFECT buttons: Click on the arrow of an **EFFECT** button and select **PIP** or **PIP FADE**, then do all the needed adjustments (duration, size, position...) in the **Effects** windows.
- Press the **TAKE** button to activate the effect (ACTION 1 in the example below): the PREVIEW image is now inserted into the MAIN image.

NOTE: • You can change the image in the PIP (PREVIEW image) by selecting another input of the PREVIEW output (ACTION 2): Press the **SWITCH PREVIEW** button and select the needed input. The transition can operates with a fading to black, a fade color or a fade frame according to the selected transition in the control menu.

- You can change the background image (MAIN image) by selecting another input of the MAIN output (ACTION 3): Press the **SWITCH MAIN** button and select the needed input. The transition can operates with a fading to black, a fade color or a fade frame according to the selected transition in the control menu.
- To remove the PIP effect, press the **TAKE** button.
- You can display the PIP source in is native resolution: click on the **1:1** buttons.

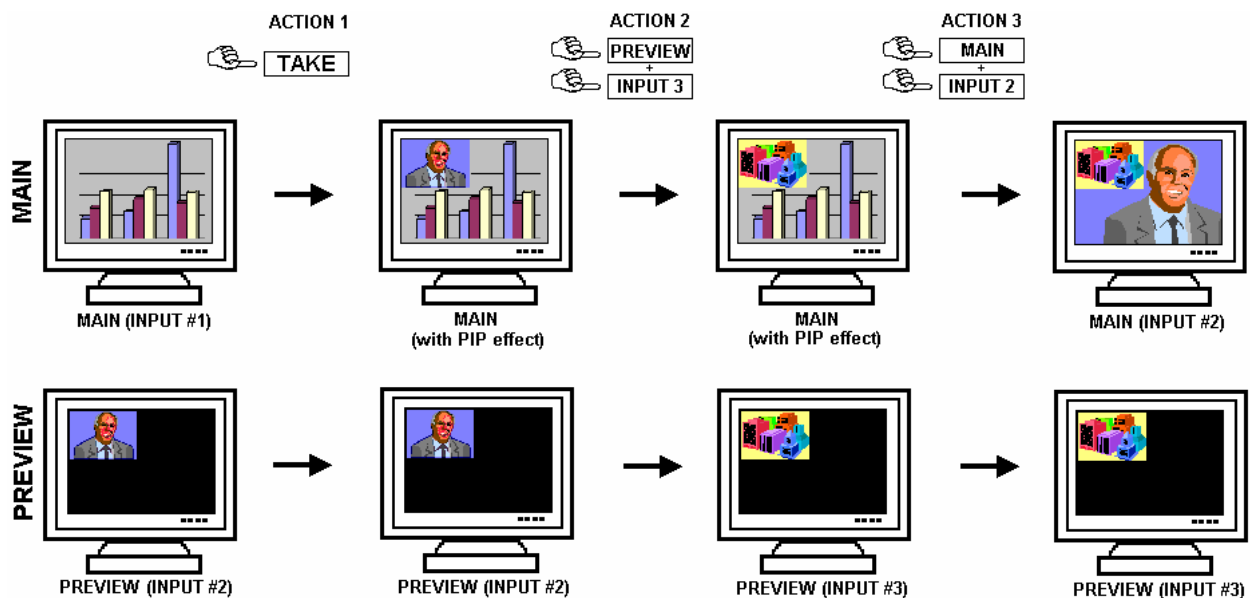


Figure 21: PIP effect.

3-1. OPERATING WITH THE REMOTE CONTROL SOFTWARE (continued)**3-1-3. OPERATING IN MIXER MODE (continued)****② Title effect (or shadow title):**

The TITLE effect allows displaying a text onto the MAIN image. For a better readability you also can display a shadow bar onto your text.

- Create the text to be displayed with a computer using software such as PowerPoint®: the text should be bright (yellow, white...) on a black background.
- Display on the MAIN output the source to titling (INPUT #2 in the example below), then pre-select the source used to display the text file create above: the image appears on the PREVIEW output (INPUT #1 in the example below).
- Click on the **Effects** tab.
- Assign the TITLE effect to one of the **EFFECT** buttons: Click on the arrow of an **EFFECT** button and select **title** or **shadow title**, then do all the needed adjustments (duration...) in the **Effects** windows.
- Press the **TAKE** button to activate the effect (ACTION 1): the text is now displayed onto the image of the MAIN output.

NOTE: You can change the background image (MAIN image) by selecting another input of the MAIN output (ACTION 2): Press the **SWITCH MAIN** button and select the needed input (the transition operates with a fading to black). To remove the TITLE effect, press the TAKE button (ACTION 3).

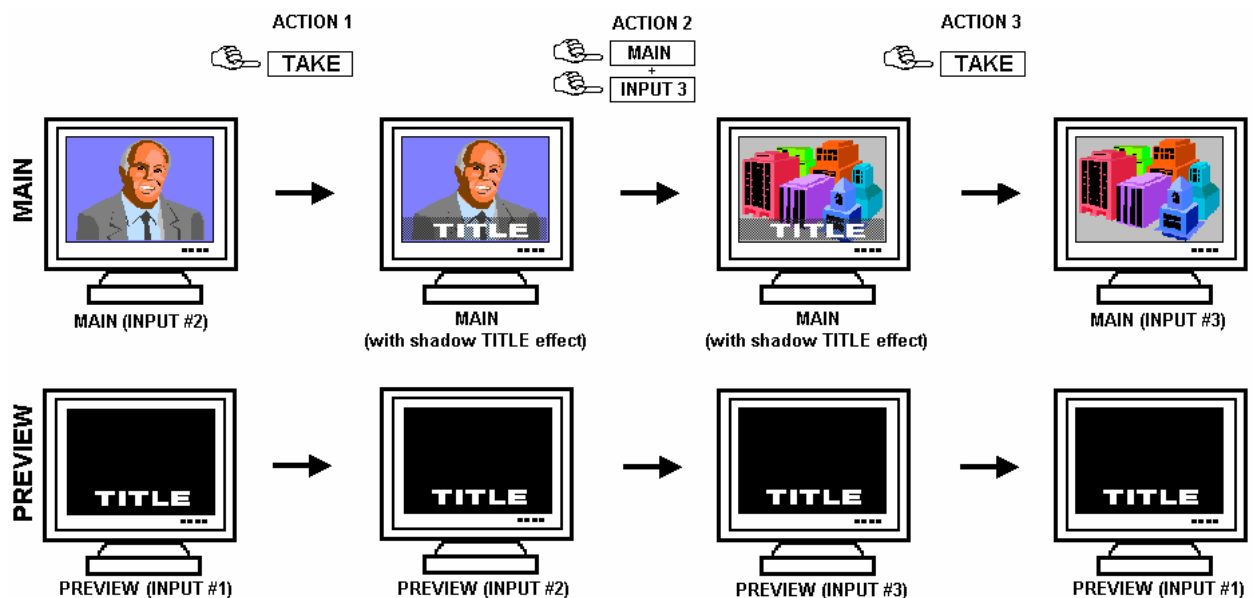


Figure 22: Title effect.

3-1. OPERATING WITH THE REMOTE CONTROL SOFTWARE (continued)**3-1-3. OPERATING IN MIXER MODE (continued)****③ Wipe transition:**

- Click on the **Effects** tab.
- Assign a WIPE to one of the **EFFECT** buttons: Click on the arrow of an **EFFECT** button and select a WIPE (for example: **hor wipe from left**). Select an **effect opening** and **closing** then select the duration in the Effects windows.
- Press the **TAKE** button to activate the transition: the PREVIEW image appears onto the MAIN display with a wipe transition.

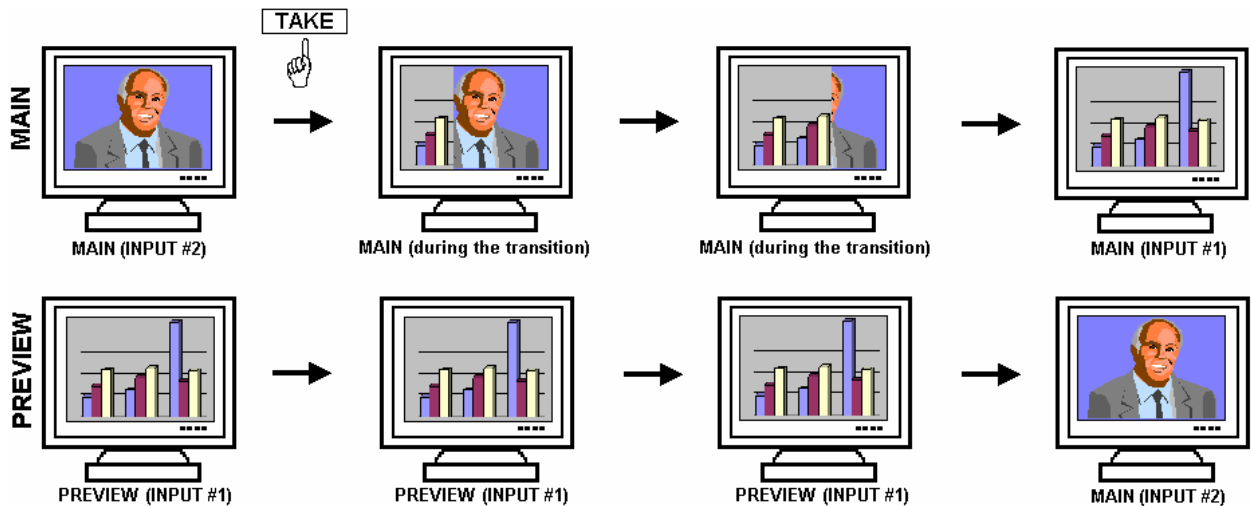


Figure 23: Wipe transition.

④ Slide transition:

- Click on the **Effects** tab.
- Assign a SLIDE to one of the **EFFECT** buttons: Click on the arrow of an **EFFECT** button and select a SLIDE (for example: **slide from left**). Select an **effect opening** and **closing** then select the duration in the Effects windows.
- Press the **TAKE** button to activate the transition: the PREVIEW image appears onto the MAIN display with a slide transition.

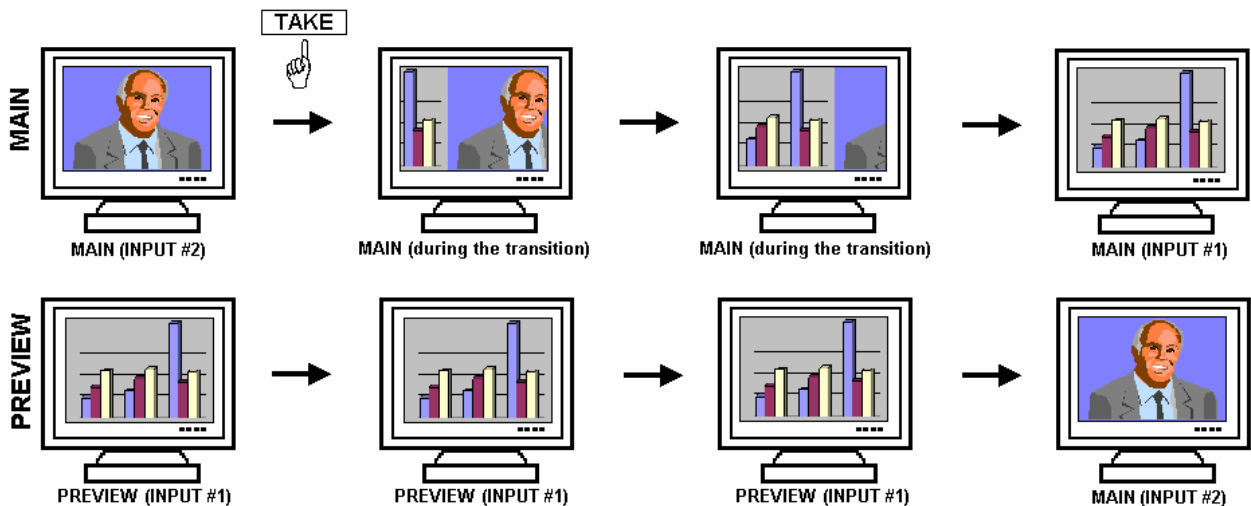


Figure 24: Slide transition.

3-1. OPERATING WITH THE REMOTE CONTROL SOFTWARE (continued)**3-1-3. OPERATING IN MIXER MODE (continued)****⑤ Double PIP transition:**

- Create a frame with 2 black areas with a standard drawing software. The 2 black areas will be receiving the PIP sources.
- Connect to the **Di-VentiX** the source providing the frame to be stored, and select the source.
- Click on the **Logo & Frame** tab, then click on the **record frame** tab: the device displays a white rectangle corresponding to the frame selection area. As required adjust the position and size of the frame selection area with the **position & size** functions.
- Adjust the **Luma Key** level to get to the desired Luma Keying.
- Click on **STORE** and select a frame memory (Up to 6). The memorization starts and will take about 2 minutes.
- Display onto the **MAIN & PREVIEW** outputs, the 2 sources to be used for the PIPs.
- Select an **EFFECT** key. Then click on the **Effect** tab and select **Double PIP** type. Then select the **holding** duration.
- Click on the **Background and Inlay** button and select a frame.
- Click on **TAKE**: the frame store is displayed onto the MAIN output together with the 2 PIP.
- Adjust the position & size of each PIP.
- Adjust the mask size & position of each PIP in such manner that the 2 PIP will not be superposed into the black areas.
- Click on the Background and Inlay button and select **inlay = yes** if you want to set the PIP in background.

NOTE: You can change the background frame during a double PIP.

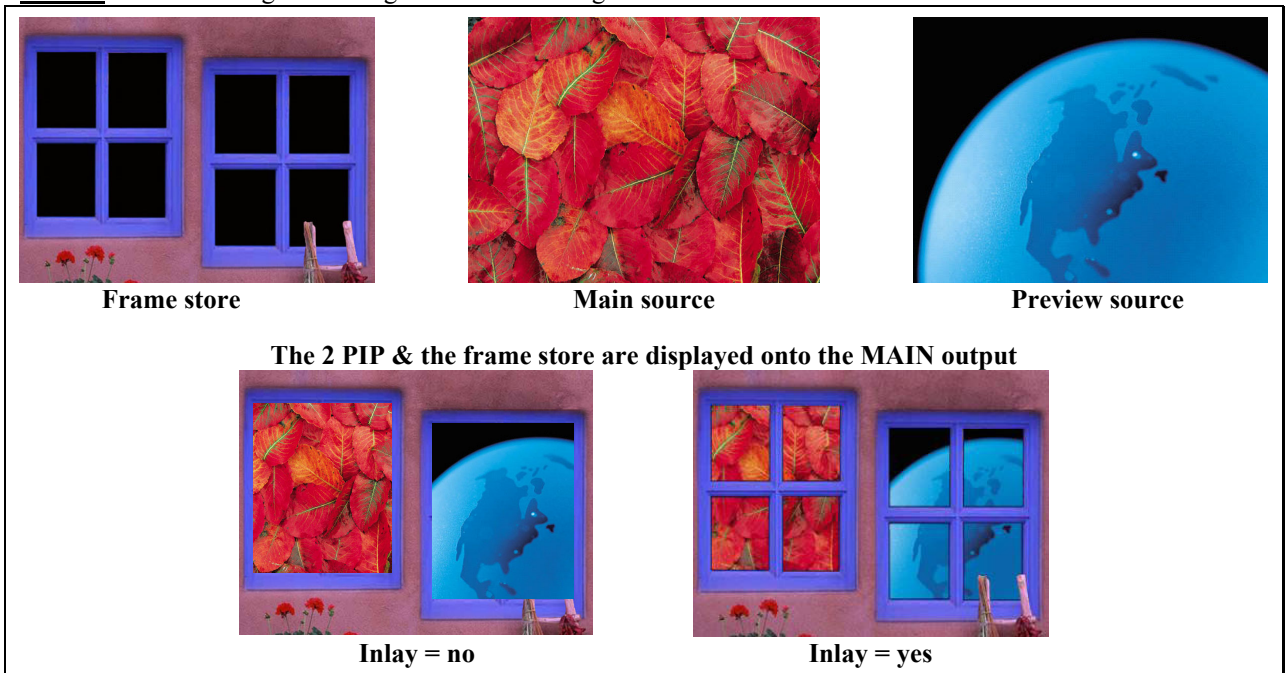


Figure 25: Double PIP.

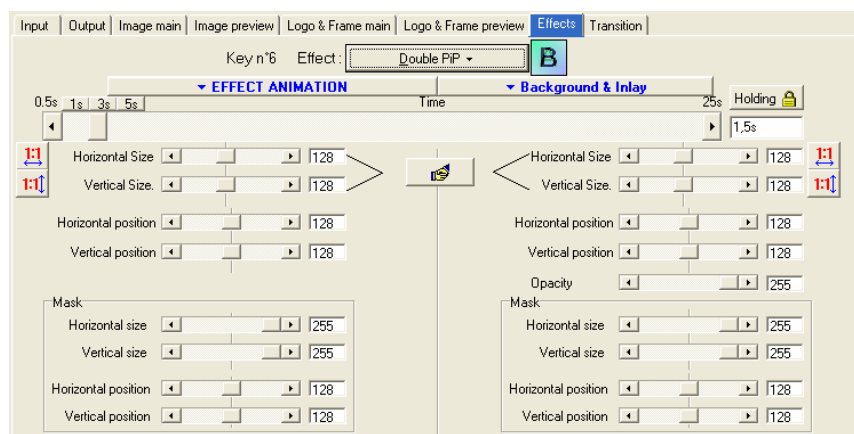


Figure 26: Double PIP effect window.

3-1. OPERATING WITH THE REMOTE CONTROL SOFTWARE (continued)**3-1-3. OPERATING IN MIXER MODE (continued)****Ⓢ Titling a PIP (Double PIP effect):**

- Store a frame: Connect to the **Di-VentiX** the source providing the frame to be stored, and select the source. Click on **STORE** and select a frame memory (Up to 6). The memorization starts and will take about 2 minutes.
- Create the text to be displayed with a computer, using software such as PowerPoint®: the text should be bright (yellow, white...) on a black background.
- Pre-select the source needed for the PIP and display it onto the **MAIN** output though a transition effect.
- Pre-select the source used to display the text file created above.
- Select an **EFFECT** key. Then click on the **Effect** tab and select **Double PIP** type. Then select the **holding** duration.
- Click on the **Background and Inlay** button and select a frame.
- Click on **TAKE**: the frame stored is displayed onto the MAIN output together with the 2 PIP.
- Adjust the position & size of the main PIP.
- Adjust the Opacity of the preview PIP: this will make the black part of the PIP more or less transparent to the image behind. The opacity can be adjusted from 0 to 100%.
- Adjust the position & size of the preview PIP to display the text onto the PIP and/or background frame.
- As required, adjust the position & size of the mask of the preview PIP. The mask adjustment allows limiting the text area of the preview source.

**Figure 27: Titling a PIP.****• AUDIO ADJUSTMENTS**

Click on the **Audio** tab, and do for each AUDIO output the following adjustment:

- ① Adjust the master volume.
- ② Select the mono or stereo audio mode.
- ③ Select an AUDIO input (**breakaway** mode) or automatic (**auto follow** mode):
 - **auto follow** = the audio switching follows automatically the video switching.
 - **breakaway** = the selected audio input is permanently diffused.
- ④ For each audio input, adjust the level (**audio level**) and the balance (**audio balance**).

IMPORTANT: If the auxiliary audio input (AUX) is used, don't forget to activate it (**AUX input = ON**).

3-1. OPERATING WITH THE REMOTE CONTROL SOFTWARE (continued)

3-1-4. OPERATING IN MATRIX MODE

• SETTINGS

- ① We recommend resetting the device to its default values (**Controls menu > default value**) before proceeding.
 - ② Set the **Di-VentiX** in **MATRIX MODE** (**Mode menu > matrix**).
 - ③ Click on **Settings** then click on the **INPUT** tab and select the **signal type** of each source connected to the inputs.
 - ④ Click on the **OUTPUT** tab.
 - ⑤ Select for each output the **Output Rate** mode (Internal rate or follow input...). Then select the **Frame Frequency**.
 - ⑥ Select for each output one of the **output formats**.
- NOTE:** For fixed pixels display device (DMD, LCD, PLASMA...), always select the output format corresponding to the native resolution of your display device. Thus, the display device will not have to scale the image and the result will be better.
- ⑦ Select for each output, the **Output Sync** type.

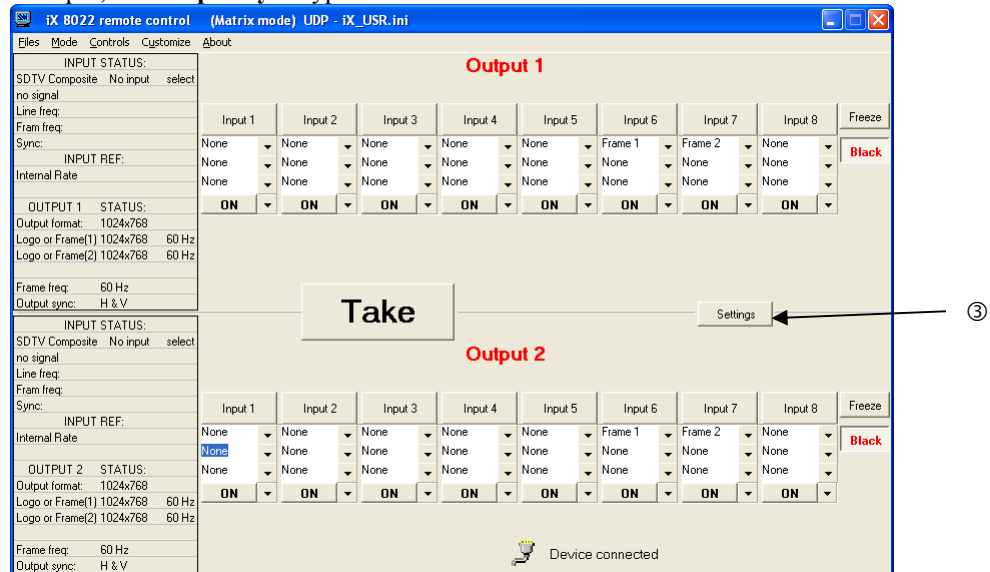


Figure 28

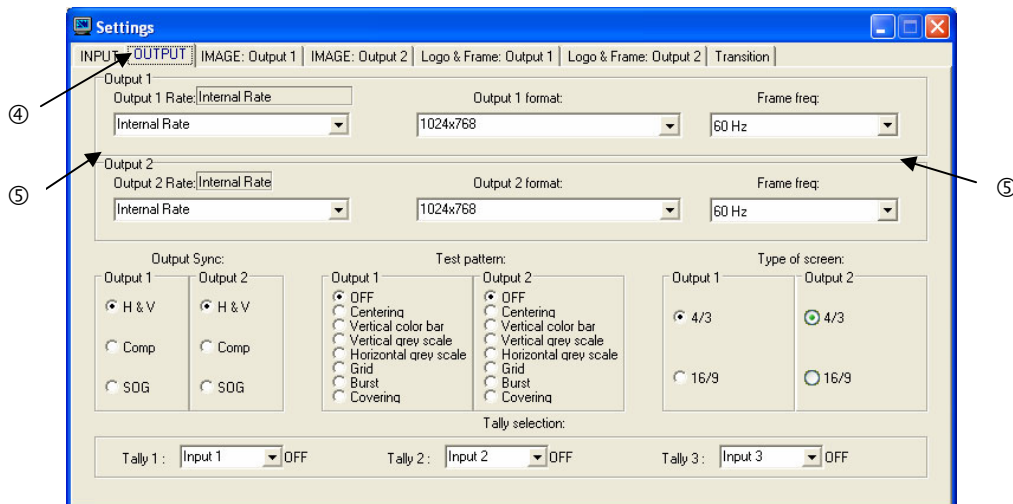


Figure 29

• INPUT SELECTION

- ① Pre-select an input with the INPUT SELECT buttons of the corresponding OUTPUT. The button starts blinking.
- ② Press on TAKE to display the pre-selected input onto the output. The transition can operate with a fading to black, a fade color or a fade frame according to the selected transition in the control menu.

NOTE: You can switch simultaneously on the **OUTPUT 1 & 2**: pre-select an input for the **OUTPUT 1**, then pre-select an input for the **OUTPUT 2**, finally press the TAKE button.

NOTE: To switch directly from the input select button (without pressing the TAKE button), you should activate the **auto TAKE** function (**Controls menu > auto TAKE: ON**).

3-1. OPERATING WITH THE REMOTE CONTROL SOFTWARE (continued)**3-1-4. OPERATING IN MATRIX MODE (continued)****• DISPLAY DEVICES ADJUSTMENTS**

For each OUTPUT:

- ① Click on the Output tab and select the centering pattern.
- ② Adjust directly the display device itself, using its controls, to fill the centering pattern in full screen.

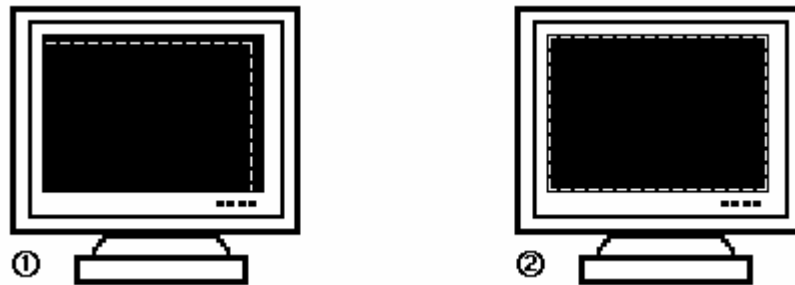


Figure 18: Centering pattern.

• IMAGE ADJUSTMENTS

For each input source connected to the device, do the following adjustments:

- ① Select the source you want to adjust.
- ② Click on the **Image: output 1** or **Image: output 2** tab.
- ③ Use the **Centering** function to automatically position the image in the **Centering pattern**.

IMPORTANT: For best results, display a full size bright image (no black border) to perform a centering. As required, correct the adjustment with the position & size functions.

NOTE: The centering function is only available for computer sources.

NOTE: In case of same Input/Output resolution, the centering also achieves automatic pixel clock adjustments. It may be useful, to improve manually the pixel **clock** and **phase**.

- ④ If needed, do the others adjustments, available in the **IMAGE** menu (color, brightness...).

NOTE: To set the image adjustments to the factory settings, use the **Preset** function.

NOTE: The adjustments are automatically stored in NON-volatile memories. The **Di-VentiX** is provided with 40 NON-volatile image memories. Each of these memories contains the input channel number, the input and output format parameters and all of the image adjustments (position, size, brightness...). When the 40 memories are used, each new memorization erases the oldest record.

• AUDIO ADJUSTMENTS

Click on the **Audio** tab, and do for each AUDIO output the following adjustment:

- ① Adjust the master volume.
- ② Select the mono or stereo audio mode.
- ③ Select an AUDIO input (**breakaway** mode) or automatic (**auto follow** mode):
 - **auto follow** = the audio switching follows automatically the video switching.
 - **breakaway** = the selected audio input is permanently diffused.
- ④ For each audio input, adjust the level (**audio level**) and the balance (**audio balance**).

IMPORTANT: If the auxiliary audio input (AUX) is used, don't forget to activate it with (**AUX input = ON**).

3-1. OPERATING WITH THE REMOTE CONTROL SOFTWARE (continued)

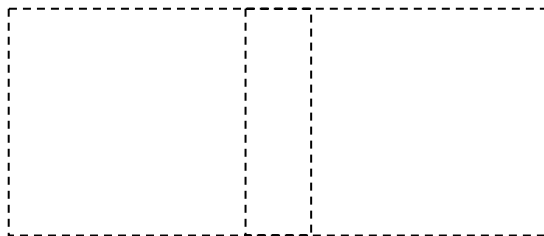
3-1-5. EMBEDDED EDGE BLENDING MODE

In Edge Blending mode, **Di-VentiX** can drive 2 video-projectors for horizontal or vertical Soft Edge. Used as an 8 input switcher, **Di-VentiX** provides a double PIP image on a fixed background thanks to the 3 full frame images stored in its non volatile memory. The background image can be chosen among the 3 saved in the memory. The sources displayed in the PIPs can be switched.

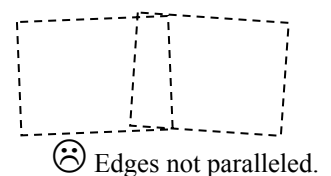
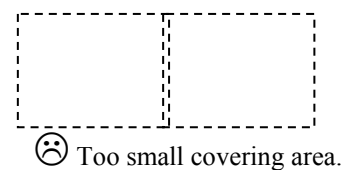
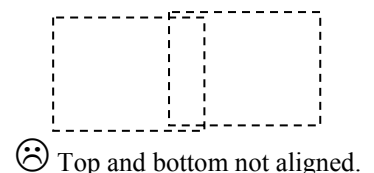
IMPORTANT: Before doing the following adjustments, make sure the 2 projectors are the same (mark, model, type) with same lenses. The projector matrices should be imperatively at the same resolution. The parameters of the 2 projectors should be homogenous (color, gamma, lamp lifetime...). The screen projection should be vertical and perpendicular to the projectors to avoid geometric distortion like bow or keystone. Use only mechanical lens shifts, and avoid using them in their maximal values. Don't use wide-angle lenses.

- 1) Connect your Computer & Video sources to the inputs of the Di-VentiX and connect the 2 projectors to the MAIN & PREVIEW outputs.
 -MAIN = Left projector in horizontal SEB configuration & Top projector in vertical SEB configuration.
 -PREVIEW = Right projector in horizontal SEB configuration & Bottom projector in vertical SEB configuration.
- 2) Select the Embedded Edge blending mode (**Mode menu > embedded SE**).
- 3) Select the input signal type and standard in the **Input tab**.
- 4) Select the output format corresponding to the native matrix of the projectors (**Output tab > output format**) and select all the needed output parameters.
- 5) Display the centering pattern (**Output tab > test pattern > centering**).
- 6) Adjust the test pattern in full screen (matrix) of each projector, with the Auto adjust, position or size adjustment of the projector. Then align mechanically the projectors to have a covering area between 10 and 20% (of each matrix) and to have the test pattern well aligned one on top of the other. As required, you can use the burst pattern available in the output tab to adjust your projector.

• **Example:** Test pattern in horizontal SE configuration.



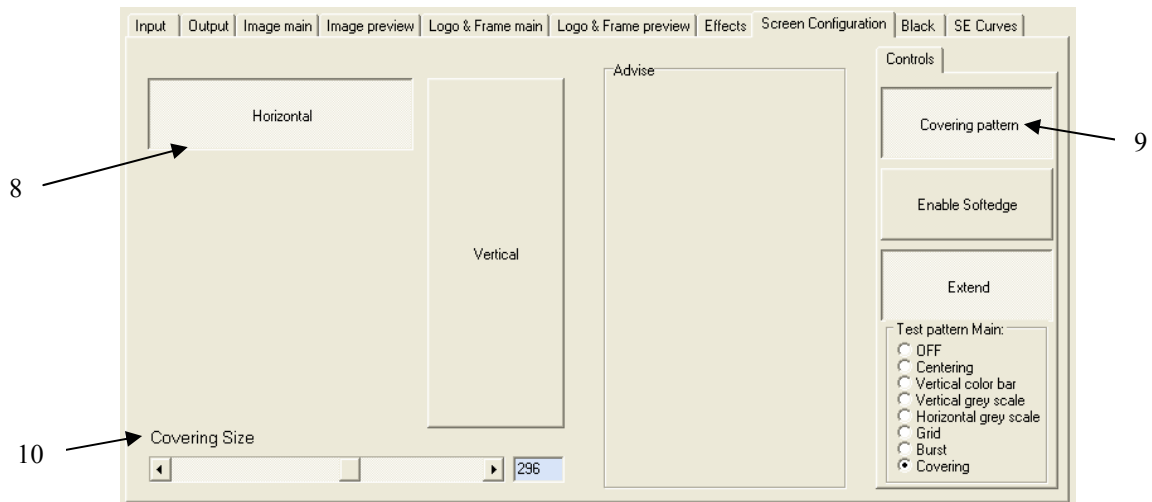
☺ Projectors well aligned. **Figure 30**



- 7) Verify that the **Extend** button is selected in the **Screen Configuration** tab. Then adjust and size each input so that they are full screen in the test pattern.
 -For computer sources: click on the **Centering** button in the **Image main** tab. As required, adjust the position with the H & V position adjustments.
 -For video sources: Select the **Image main** tab and adjust the position with the H & V position adjustments.

3-1. OPERATING WITH THE REMOTE CONTROL SOFTWARE (continued)**3-1-5. EMBEDDED EDGE BLENDING MODE (continued)**

- 8) Click on the **Screen configuration** tab. Select the **Horizontal** or **Vertical** edge blending mode by clicking on the horizontal or vertical button.

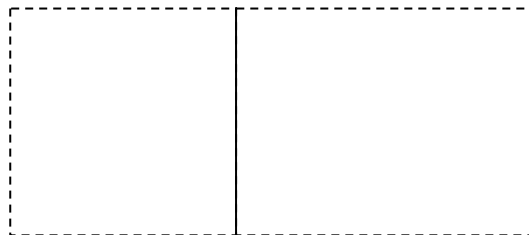
**Figure 31**

- 9) Display a **Black** screen (click on the BLACK button in the input selection row) and click on the **Covering** button to activate the **Covering Pattern**.

NOTE: Verify that the **Softedge** is not enable (Enable Softedge button not activates).

- 10) Adjust the **Covering size** so that the test pattern overlaps each other at the junctions of the projectors.

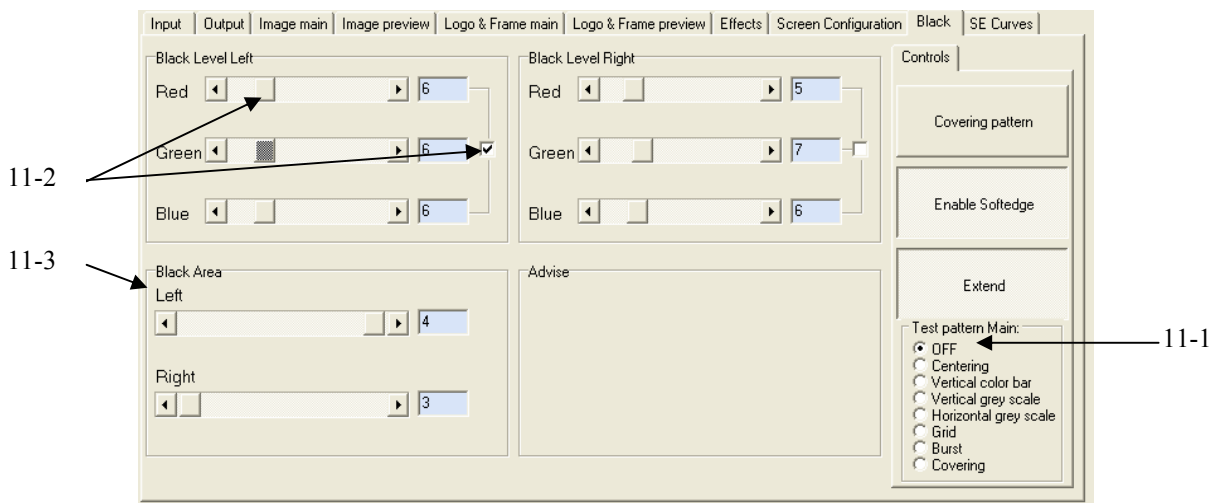
• **Example:** Test pattern in horizontal SE configuration.

**Figure 32**

This operation is to match physical covering with software covering value used for calibration of the source covering image area.

3-1. OPERATING WITH THE REMOTE CONTROL SOFTWARE (continued)**3-1-5. EMBEDDED EDGE BLENDING MODE (continued)**

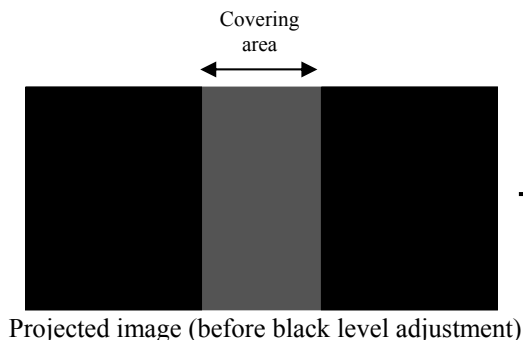
11) Select the **Black** tab to display the following windows:

**Figure 33**

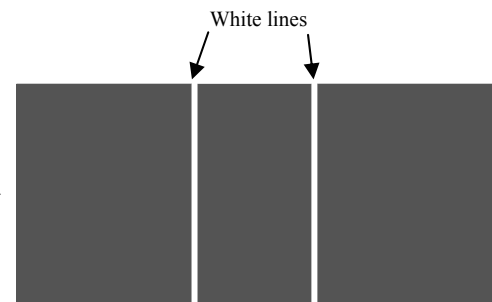
11-1) Turn OFF the test pattern (**Test pattern > off**).

11-2) The covering area will appear brighter than the non-covering areas. With the **Black level** function adjust the 2 non-covering areas (Left and right) to obtain a uniform dark grey on all the screen: Select the 3 colors and adjust the black level. As required, you can also separately adjust the colors of each projector with the **Red, Green & Bleu** adjustments.

NOTE: Two white lines may appear at the junctions of the covering areas.



Projected image (before black level adjustment)

Figure 34

Projected image (after black level adjustment)

Figure 35

11-3) Use the **Black Area** function to remove the 2 white lines: adjust the **Right & Left** function (**Top** or **Bottom** in vertical SE) to remove the white lines. A uniform dark grey image is then displayed.

Uniform projected image. **Figure 36**

3-1. OPERATING WITH THE REMOTE CONTROL SOFTWARE (continued)

3-1-5. EMBEDDED EDGE BLENDING MODE (continued)

12) Softedge curve explanations & adjustments:

• **EXPLANATIONS:**

-The operation consist of attenuate progressively the light diffused of one projector and in the same time increase symmetrically the light of the other one. Thus, at any point (X) of the covering area, the sum of light ($Y1+Y2$) provided by each projector must be equal to the light that would be provided by one projector alone.

The luminance curves of each projector are represented as follow:

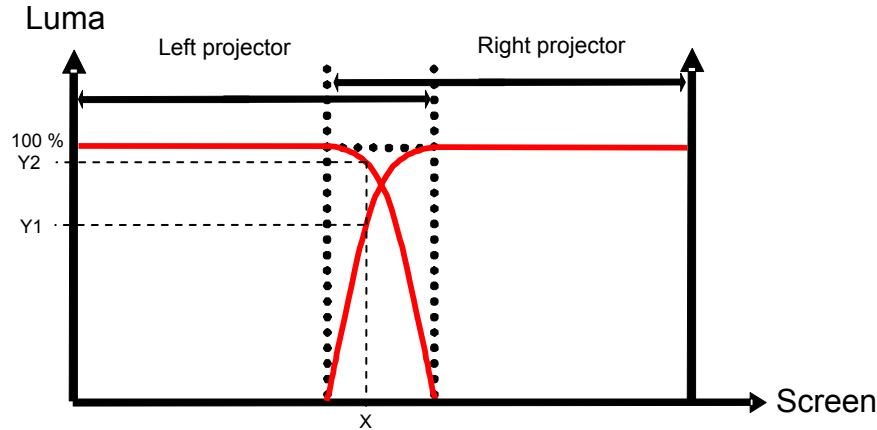


Figure 37

-In the software we represent the curve of one projector only: the device automatically calculate the inverted curve for the other projector of the covering area.

• **ADJUSTMENTS:**

12-1) Display your background source or display the grey scale pattern (horizontal grey scale pattern for horizontal softedge and vertical grey scale pattern for vertical softedge) available in the output tab.

12-2) Click on the **SE Curves** tab and click on the **Enable Softedge** button to activate the attenuation. The default value of the softedge curves is also applied. The covering area may appear brighter or darker than the other areas of the screen.

12-3) Adjust the Softedge Curve in order to have a uniform image:

Move the 2 points of a curve by clicking on the arrows in the **Bezier** tab or directly by clicking-hold on a point and drag. Then click on the **Send** button to display the adjustments.

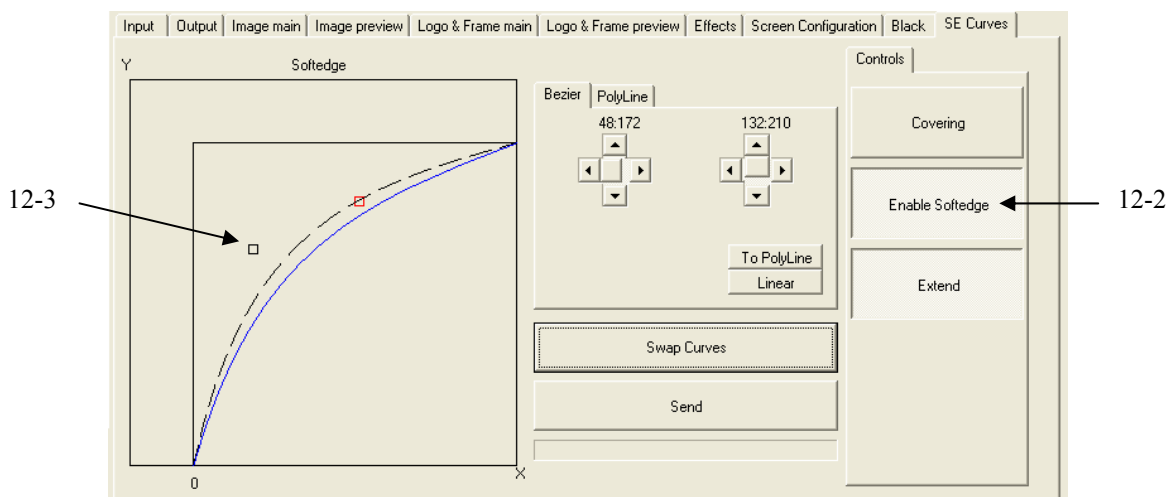


Figure 38

NOTE: • To ease the adjustment, two softedge curves are available. Click on the **Swap Curves** button to commute instantly between the curves. Then according to your observation, keep the best curve.

• Most of the time, Bezier curves gives a good and easy to get adjustment. Nevertheless experienced user can try Polyline adjustments. Click on the **PolyLine** tab to have access to more curve points.

• You can store your Softedge curve in a file (.se): click on **Save SE Curves** in **Files** menu, enter a name and store.

3-1. OPERATING WITH THE REMOTE CONTROL SOFTWARE (continued)**3-1-5. EMBEDDED EDGE BLENDING MODE (continued)**

13) Using the PIP & double PIP effects in edge blending mode:

- 13-1) Store the frames (up to 3). The sources used for storing the frame should be Extend (use the freeze for motion picture). For more details about storing a frame: see section 5-2.
- 13-2) Select a User effect button (PIP or double PIP).
- 13-3) Presses TAKE: the frame 1 is displayed, and the 2 BLACK buttons are switch ON. To change the frame: click on the effect tab then click on the Background & inlay button, and select the needed frame.
- 13-4) To display PIPs: pre-select a source on the main and/or preview input rows and press TAKE: the sources are displayed into PIPs onto the frame displayed in background. Do the PIP adjustments (size, position...) in the **Effects** tab.

NOTE: To change a source into a PIP: pre-select a source on the corresponding row and press TAKE.

To switch off a PIP: pre-select the black button of the corresponding row and press TAKE.

- 13-5) Press TAKE to stop the effect: the device displays the last source which was displayed before doing this effect.

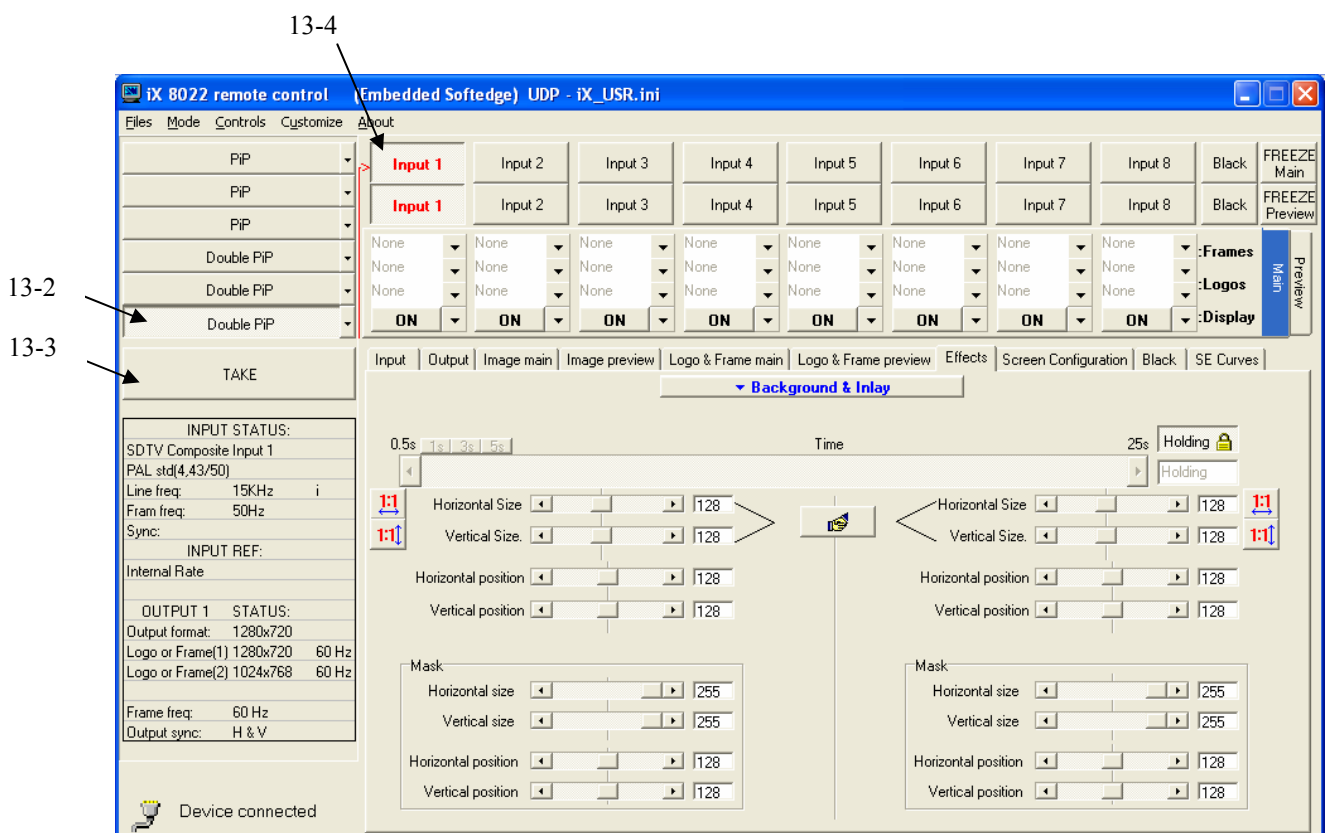


Figure 39

3-2. OPERATING WITH THE FRONT PANEL OF THE Di-VentiX

IMPORTANT: The **Di-VentiX** can be used in two different modes: the **MIXER MODE** and the **MATRIX MODE**. The **MIXER MODE** allows switching seamlessly, fading and titling between all the inputs. The **MATRIX MODE** allows to display the inputs onto two independent display devices. The default mode is the **MIXER MODE**. To set the **Di-VentiX** in **MATRIX MODE**, please refer to the section: 3-2-2.

3-2-1. OPERATING IN MIXER MODE

• SETTINGS

- ① We recommend resetting the **Di-VentiX** device to its default values, with the screen menu (**CONTROL** > **default value** > **yes**) before proceeding.
- ② Verify the **Di-VentiX** is set in **MIXER MODE** with the screen menu (**MODE** > **mixer mode**).
- ③ Select the **input type** connected to the inputs with the screen menu (**INPUT** > **input type**).
- ④ Select the **output sync** according to your display device with the screen menu (**OUTPUT** > **output sync**).
- ⑤ Select the **output rate** mode with the screen menu (**OUTPUT** > **output rate**).
- ⑥ Select one of the **output formats** with the screen menu (**OUTPUT** > **output format**).

NOTE: For fixed pixels display device (DMD, LCD, PLASMA...), always select the output format corresponding to the native resolution of your display device. Thus, the display device will not have to scale the image and the result will be better.

- ⑦ Select the **type of screen** (4/3 or 16/9) with the screen menu (**OUTPUT** > **type of screen** > **4/3** or **16/9**), according to your wall mounted projection screen shape.

• INPUT SELECTION

- ① Select an input with the **PREVIEW** row buttons.
- ② Select an effect with the **EFFECT** buttons.
- ③ Press on **TAKE** to do the transition.

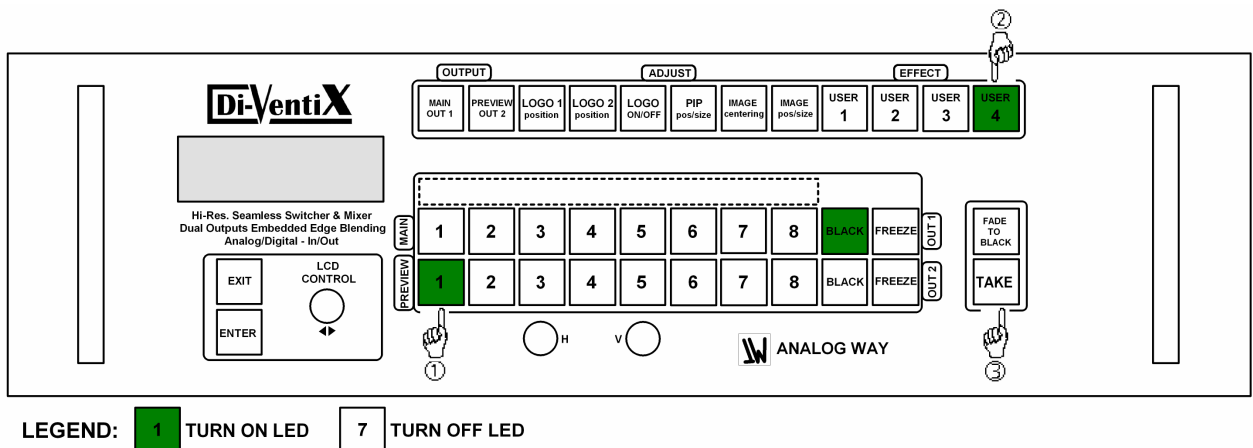
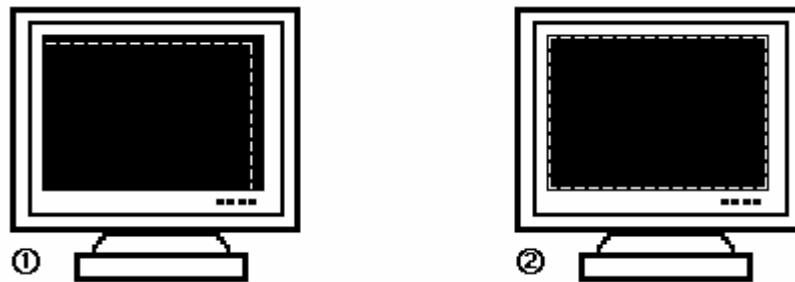


Figure 40

NOTE: According to the selected effect the **TAKE** button may turn ON or blink during the transition. When the **TAKE** button is turned ON you should wait for the end of the transition before doing another selection. When it is blinking, you should press the **TAKE** button to stop the transition.

3-2. OPERATING WITH THE FRONT PANEL OF THE Di-VentiX (continued)**3-2-1. OPERATING IN MIXER MODE (continued)****• DISPLAY DEVICES ADJUSTMENTS**

- ① Select the MAIN centering pattern with the screen menu (**OUTPUT > test pattern > main > centering pattern**).
- ② Adjust directly the display device itself, using its controls, to fill the centering pattern in full screen.

**Figure 18: Centering pattern.**

- ③ Renew the same process to adjust your PREVIEW display device.

NOTE: Now the display devices are identically adjusted, you can also do the image adjustments on the display device of your choice. When you are in a live display, you can do corrections on the PREVIEW monitor only, without disturbing the MAIN display device.

• IMAGE ADJUSTMENTS

For each input source connected to the **Di-VentiX**, do the following adjustments:

- ① Select the source you want to adjust.
- ② Select the aspect ratio of your input source with the screen menu (**IMAGE > aspect ratio**).
- ③ Use the **Centering** function with the screen menu (**IMAGE > centering**) or with the front panel **IMAGE centering** button, to automatically position the image in the **Centering pattern**.

IMPORTANT: For best results, display a full size bright image (no black border) to perform a centering. As required, correct the position & size with the **IMAGE POS. SIZE** button or with the screen menu (**IMAGE > pos settings**).

NOTE: The centering function is only available for computer sources.

NOTE: In case of same Input/Output resolution, the centering also achieves automatic pixel clock adjustments. It may be useful, to improve manually the pixel **clock** and **phase** using the screen menu (**IMAGE > optimize > clock or phase**).

- ④ If needed, do the others adjustments, available in the screen **IMAGE** menu (color, brightness...).

NOTE: To set the image adjustments to the factory settings, use the **Preset** function (**IMAGE > preset > yes**).

NOTE: The adjustments are automatically stored in NON-volatile memories. The **Di-VentiX** is provided with 40 NON-volatile image memories. Each of these memories contains the input channel number, the input and output format parameters and all of the image adjustments (position, size, brightness...). When the 40 memories are used, each new memorization erases the oldest record.

3-2. OPERATING WITH THE FRONT PANEL OF THE Di-VentiX (continued)**3-2-1. OPERATING IN MIXER MODE (continued)****• EXAMPLES OF TRANSITION****① PIP effect:**

The PIP effect allows to insert an image into another one.

- Press the **PIP** button, then do all the needed adjustments (duration, size, position...) with ◀ ▶ and validate with **ENTER**.

- Press the **TAKE** button to activate the effect (ACTION 1): the PREVIEW image is inserted into the MAIN image.

NOTE: • You can change the image in the PIP (PREVIEW image) by selecting another input of the PREVIEW output (ACTION 2): Press the **PREVIEW (OUTPUT SELECT)** button and select the needed input (the transition operates with a fading to black).

- You can change the background image (MAIN image) by selecting another input of the MAIN output (ACTION 3): Press the **MAIN (OUTPUT SELECT)** button and select the needed input (the transition operates with a fading to black).

- To remove the PIP effect, press the **TAKE** button.

- You can display the PIP source in its native resolution: set the horizontal & vertical size to **1:1** positions.

See Figure 21: PIP effect. Page 20.

② Title effect (or shadow title):

The TITLE effect allows to display a text onto the MAIN image. For a better readability you also can display a shadow bar onto your text.

- Create the text to be displayed with a computer using software such as PowerPoint®: the text should be bright (yellow, white...) on a black background.

- Display on the MAIN output the source to titling, then pre-select the source used to display the text file create above: the image appears on the PREVIEW output.

- Assign the TITLE effect to one of the **USER** buttons: Press one **USER** button, select **title** or **shadow title** with ◀ ▶ and validate with **ENTER**, then select the duration with ◀ ▶ and validate with **ENTER**.

- Press the **TAKE** button to activate the effect (ACTION 1): the text is now displayed onto the image of the MAIN output.

NOTE: You can change the background image (MAIN image) by selecting another input of the MAIN output (ACTION 2): Press the **MAIN** output select button and select the needed input (the transition operates with a fading to black). To remove the TITLE effect, press the **TAKE** button (ACTION 3).

See Figure 22: Title effect. Page 21.

③ Wipe transition:

- Press a **USER** button, then assign a type of WIPE with the knob ◀ ▶ and validate with **ENTER** (for example: **WIPE > hor wipe > from left**), then select the duration with ◀ ▶ and validate with **ENTER**.

- Press the **TAKE** button to activate the transition: the PREVIEW image appears onto the MAIN display with a wipe transition.

See Figure 23: Wipe transition. Page 22.

④ Slide transition:

- Press a **USER** button, then assign a type of SLIDE with the knob ◀ ▶ and validate with **ENTER** (for example: **Slide > from left**), then select the duration with ◀ ▶ and validate with **ENTER**.

- Press the **TAKE** button to activate the transition: the PREVIEW image appears onto the MAIN display with a slide transition.

See Figure 24: Slide transition. Page 22.

3-2. OPERATING WITH THE FRONT PANEL OF THE Di-VentiX (continued)**3-2-1. OPERATING IN MIXER MODE (continued)****⑤ Double PIP transition:**

- Create a frame with 2 black areas with a standard drawing software. The 2 black areas will be receiving the PIP source.
- Connect to the Di-VentiX the source providing the frame to be stored, and select the source.
- Select the **record frame** mode (**LOGOS/FRAME > record frame > MAIN or PREVIEW**): the device displays a white rectangle corresponding to the frame selection area. As required adjust the position and size of the frame selection area (**LOGOS/FRAME > record frame > MAIN or PREVIEW > size or position**).
- Adjust the **Luma Key** level to get to the desired Luma Keying (**LOGOS/FRAME > record frame > MAIN or PREVIEW > Luma Key**).
- Store the frame (**LOGOS/FRAME > record frame > MAIN or PREVIEW > store > frame _**). The memorization starts and will take about 2 minutes.
- Display onto the **MAIN & PREVIEW** outputs, the 2 sources to be used for the PIPs.
- Select a **USER** effect button or the **PIP** effect button. Then with the screen menu select the holding duration (**double PIP > duration > holding**), and select a frame (**double PIP > bkgd frame _**).
- Press on **TAKE**: the frame store is displayed onto the **MAIN** output together with the 2 PIP.
- Adjust with the position & size of each PIP (**double PIP > position or size**).
- Adjust the mask size & position of each PIP in such manner that the 2 PIP will not be superposed into the black areas (**double PIP > mask position or size**).
- Select **inlay = yes**, if you want to set the PIP in background (**double PIP > inlay**).

NOTE: You can change the background frame during a double PIP.

See Figure 25: Double PIP. Page 23.

⑥ Titling a PIP (Double PIP effect):

- Connect to the **Di-VentiX** the source providing the frame to be stored, and select the source.
- Store the frame (**LOGOS/FRAME > record frame > MAIN or PREVIEW > store > frame _**). The memorization starts and will take about 2 minutes.
- Create the text to be displayed with a computer, using software such as PowerPoint®: the text should be bright (yellow, white...) on a black background.
- Pre-select the source needed for the PIP and display it onto the **MAIN** output.
- Pre-select the source used to displayed the text file created above.
- Select a **USER** effect button or the **PIP** effect button. Then with the screen menu select the holding duration (**double PIP > duration > holding**), and select a frame (**double PIP > bkgd frame _**).
- Click on **TAKE**: the frame store is displayed onto the **MAIN** output together with the 2 PIP.
- Adjust the position & size of the main PIP (**double PIP > position or size> Main**)
- Adjust the Opacity of the preview PIP (**double PIP > Prew. Opacity**): this will make the black part of the PIP more or less transparent to the image behind. The opacity can be adjusted from 0 to 100%.
- Adjust the position & size of the preview PIP (**double PIP > position or size>Preview**) to display the text onto the PIP and/or background frame.
- As required, adjust the position & size of the mask of the preview PIP (**double PIP > mask position or mask size>Preview**). The mask adjustment allows limiting the text area of the preview source.

See Figure 27: Titling a PIP. Page 24.

• AUDIO ADJUSTMENTS

For each **AUDIO** output, do the following adjustment.

- ① Adjust the master volume (**AUDIO xxxx > master volume**).
- ② Select the mono or stereo audio mode (**AUDIO xxxx > audio mode > mono or stereo**)
- ③ Select the **auto follow** or **breakaway** audio mode (**AUDIO > audio source > auto follow or input # x**):
 - **auto follow** = the audio switching follows automatically the video switching.
 - **breakaway** = the selected audio input is permanently diffused.
- ④ For each audio input, adjust the level (**AUDIO xxxx > audio level**) and the balance (**AUDIO xxxx > audio balance**).

IMPORTANT: If the auxiliary audio input (**AUX**) is used, don't forget to activate it with the screen menu (**AUDIO xxxx > AUX input > ON**).

3-2. OPERATING WITH THE FRONT PANEL OF THE Di-VentiX (continued)**3-2-2. OPERATING IN MATRIX MODE****• SETTINGS**

- ① We recommend resetting the **Di-VentiX** device to its default values, with the screen menu (**CONTROL > default value > yes**) before proceeding.
- ② Set the **Di-VentiX** in MATRIX MODE with the screen menu (**MODE > matrix mode**).
- ③ Select the **input type** connected to the inputs with the screen menu (**INPUT > input type**).
- ④ Do the following adjustments for the display device connected to the OUTPUT 1:
 - Select the **output sync** according to your display device with the screen menu (**OUTPUT X > output sync**).
 - Select the **output rate** mode with the screen menu (**OUTPUT X > output rate**).
 - Select one of the **output formats** with the screen menu (**OUTPUT X > output format**).

NOTE: For fixed pixels display device (DMD, LCD, PLASMA...), always select the output format corresponding to the native resolution of your display device. Thus, the display device will not have to scale the image and the result will be better.

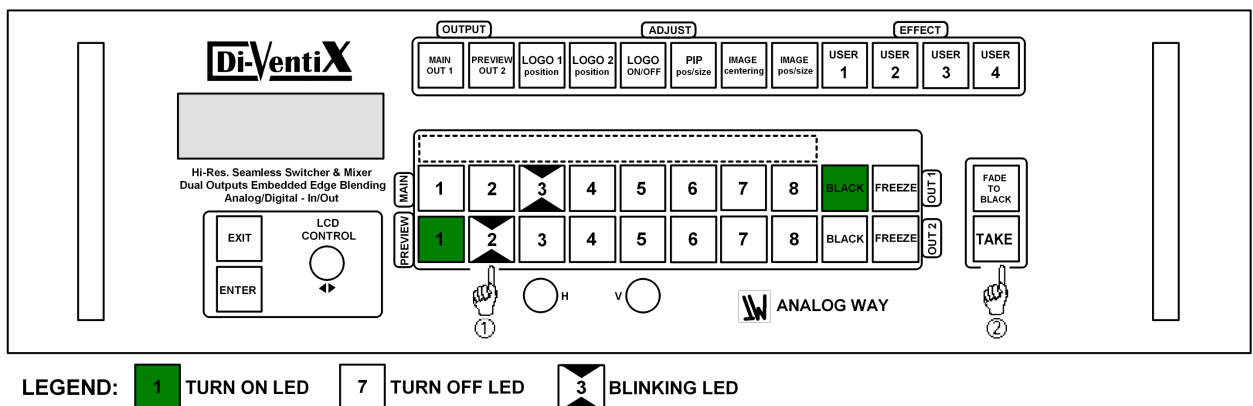
 - Select the **type of screen** (4/3 or 16/9) with the screen menu (**OUTPUT X > type of screen > 4/3 or 16/9**), according to your wall mounted projection screen shape.
- ⑤ Then renew the adjustments of the step ④ for the display device connected to the OUTPUT 2.

• INPUT SELECTION

- ① Pre-select an input on the **OUT 1** or **OUT 2** row. The button starts blinking.
- ② Press on TAKE to display the pre-selected input onto the corresponding output. The transition operates with a fading to black.

NOTE: You can switch simultaneously on the **OUTPUT 1 & 2**: do the operations ① for the **OUTPUT 1**, then do the operations ① for the **OUTPUT 2**, finally press the TAKE button.

NOTE: To switch directly from the input select button (without pressing the TAKE button), you should activate the auto TAKE function (**CONTROL > auto TAKE: ON**).

**Figure 41**

3-2. OPERATING WITH THE FRONT PANEL OF THE Di-VentiX (continued)

3-2-2. OPERATING IN MATRIX MODE (continued)

• DISPLAY DEVICES ADJUSTMENTS

For each OUTPUT:

- ① Select the centering pattern with the screen menu (**OUTPUT X > test pattern > centering pattern**).
- ② Adjust directly the display device itself, using its controls, to fill the centering pattern in full screen.

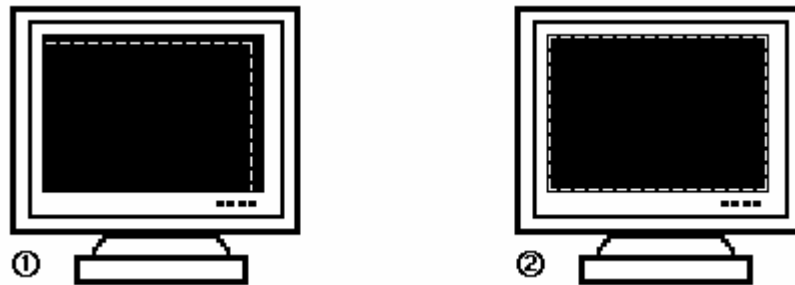


Figure 18: Centering pattern.

• IMAGE ADJUSTMENTS

For each input source connected to the **Di-VentiX**, do the following adjustments:

- ① Select the source you want to adjust.
- ② Select the aspect ratio of your input source with the screen menu (**IMAGE > aspect ratio**).
- ③ Use the **Centering** function (**IMAGE > centering**) to automatically position the image in the **Centering pattern**.

IMPORTANT: For best results, display a full size bright image (no black border) to perform a centering. As required, correct the position & size with the **IMAGE POS. SIZE** button or with the screen menu (**IMAGE > pos settings**).

NOTE: The centering function is only available for computer sources.

NOTE: In case of same Input/Output resolution, the centering also achieves automatic pixel clock adjustments. It may be useful, to improve manually the pixel **clock** and **phase** using the screen menu (**IMAGE > optimize > clock or phase**).

- ④ If needed, do the others adjustments, available in the screen **IMAGE** menu (color, brightness...).

NOTE: To set the image adjustments to the factory settings, use the **Preset** function (**IMAGE > preset > yes**).

NOTE: The adjustments are automatically stored in NON-volatile memories. The **Di-VentiX™** is provided with 40 NON-volatile image memories. Each of these memories contains the input channel number, the input and output format parameters and all of the image adjustments (position, size, brightness...). When the 40 memories are used, each new memorization erases the oldest record.

• AUDIO ADJUSTMENTS

For each AUDIO output, do the following adjustment.

- ① Adjust the master volume (**AUDIO xxxx > master volume**).
- ② Select the mono or stereo audio mode (**AUDIO xxxx > audio mode > mono or stereo**)
- ③ Select the **auto follow** or **breakaway** audio mode (**AUDIO > audio source > auto follow** or **input # x**):
 - **auto follow** = the audio switching follows automatically the video switching.
 - **breakaway** = the selected audio input is permanently diffused.
- ④ For each audio input, adjust the level (**AUDIO xxxx > audio level**) and the balance (**AUDIO xxxx > audio balance**).

IMPORTANT: If the auxiliary audio input (AUX) is used, don't forget to activate it with the screen menu (**AUDIO xxxx > AUX input > ON**).

3-3. OPERATING WITH THE REMOTE KEYPAD

IMPORTANT: The **Di-VentiX** can be used in two different modes: the **MIXER MODE** and the **MATRIX MODE**. The **MIXER MODE** allows switching seamlessly, fading and titling between all the inputs. The **MATRIX MODE** allows to display the inputs onto two independents display devices. The default mode is the **MIXER MODE**. To set the device in **MATRIX MODE**, please refer to the section: 3-3-3.

3-3-1. COMMUNICATION SETUP

• CASE OF RS-232 PORT

- ① Connect the REMOTE KEYPAD to the **Di-VentiX** according to your installation (see section 2-3-1.)
- ② Then only power ON all the devices.
- ③ Activate the REMOTE KEYPAD RS232 communication port with the screen of the REMOTE KEYPAD (**CONSOLE > RS232/LAN port > RS232**).

• CASE OF LAN PORT

- ① Connect the REMOTE KEYPAD to the **Di-VentiX** with the RS-232 port as indicated above, then configure the LAN communication port of the **Di-VentiX** with the REMOTE KEYPAD screen menu (**CONTROL > LAN setup**).
- ② Select the LAN communication port of the **Di-VentiX** with the screen menu (**CONSOLE > RS232/LAN port > LAN**).
- ③ Connect the LAN port (RJ45 connector) of the **Di-VentiX** to your network according to your installation.
- ④ Connect the LAN port (RJ45 connector) of the REMOTE KEYPAD to your network according to your installation.
- ⑤ Then configure the REMOTE KEYPAD LAN communication port with the screen menu (**CONSOLE > LAN setup**).
- ⑥ Activate the REMOTE KEYPAD LAN communication port with the screen menu (**CONSOLE > RS232/LAN port > LAN**).

3-3-2. OPERATING IN MIXER MODE

• SETTINGS

- ① We recommend resetting the **Di-VentiX** device to its default values, with the screen menu (**CONTROL > default value > yes**) before proceeding.
- ② Verify the **Di-VentiX** is set in **MIXER MODE** with the screen menu (**MODE > mixer mode**).
- ③ Select the **input type** connected to the inputs with the screen menu (**INPUT > input type**).
- ④ Select the **output sync.** type which corresponds to your display device with the screen menu (**OUTPUT > output sync**).
- ⑤ Select the **output rate** mode with the screen menu (**OUTPUT > output rate**).
- ⑥ Select one of the **output formats** with the screen menu (**OUTPUT > output format**).

NOTE: For fixed pixels display device (DMD, LCD, PLASMA...), always select the output format corresponding to the native resolution of your display device. Thus, the display device will not have to scale the image and the result will be better.

- ⑦ Select the **type of screen** (4/3 or 16/9) with the screen menu (**OUTPUT > type of screen > 4/3 or 16/9**), according to your wall mounted projection screen shape.

3-3. OPERATING WITH THE REMOTE KEYPAD (continued)

3-3-2. OPERATING IN MIXER MODE (continued)

• INPUT SELECTION

- ① Pre-select an input with the **INPUT SELECT** buttons. The button starts blinking.
- ② Select an effect with the **EFFECT** buttons.
- ③ Press on **TAKE** or move manually the T-BAR to do the transition.

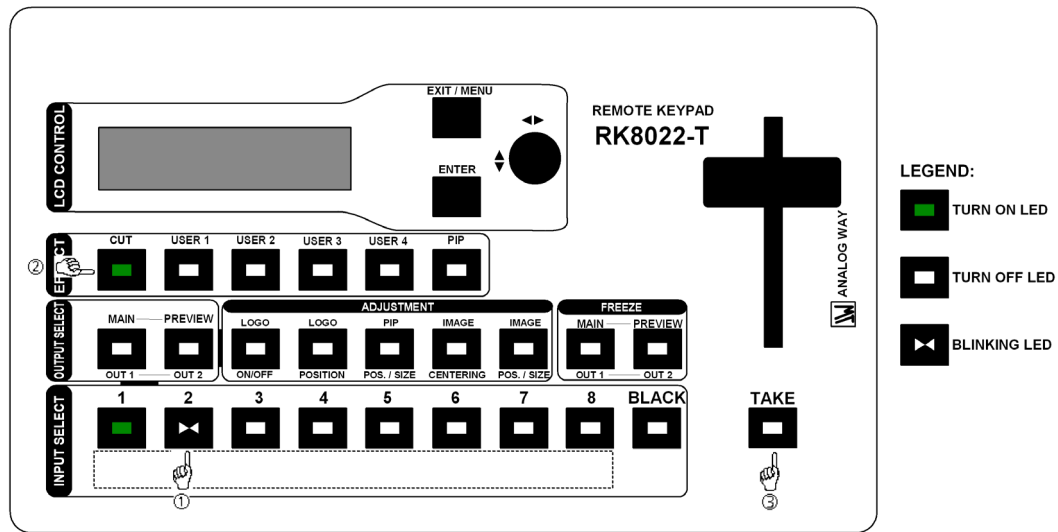


Figure 42

NOTE: According to the selected effect the **TAKE** button may turn ON or blink during the transition. When the **TAKE** button is turned ON you should wait for the end of the transition before doing another selection. When it is blinking, you should press the **TAKE** button to stop the transition.

• DISPLAY DEVICES ADJUSTMENTS

- ① Select the MAIN centering pattern with the screen menu (**OUTPUT > test pattern > main > centering pattern**).
- ② Adjust directly the display device itself, using its controls, to fill the centering pattern in full screen.

See Figure 18: Centering pattern. Page 18.

- ③ Renew the same process to adjust your PREVIEW display device.

NOTE: Now the display devices are identically adjusted, you can also do the image adjustments on the display device of your choice. When you are in a live display, you can do corrections on the PREVIEW monitor only, without disturbing the MAIN display device.

• IMAGE ADJUSTMENTS

For each input source connected to the **Di-VentiX**, do the following adjustments:

- ① Select the source you want to adjust.
- ② Select the aspect ratio of your input source with the screen menu (**IMAGE > aspect ratio**).
- ③ Use the **Centering** function with the screen menu (**IMAGE > centering**) or with the front panel **IMAGE centering** button to automatically position the image in the **Centering pattern**.

IMPORTANT: For best results, display a full size bright image (no black border) to perform a centering. As required, correct the adjustment the position & size with the **IMAGE POS/SIZE** button or with the screen menu (**IMAGE > pos settings**).

NOTE: The centering function is only available for computer sources.

NOTE: In case of same Input/Output resolution, the centering also achieves automatic pixel clock adjustments. It may be useful, to improve manually the pixel **clock** and **phase** using the screen menu (**IMAGE > optimize > clock or phase**).

- ④ If needed, do the others adjustments, available in the screen **IMAGE** menu (color, brightness...).

NOTE: To set the image adjustments to the factory settings, use the **Preset** function (**IMAGE > preset > yes**).

NOTE: The adjustments are automatically stored in NON-volatile memories. The **Di-VentiX** is provided with 40 NON-volatile image memories. Each of these memories contains the input channel number, the input and output format parameters and all of the image adjustments (position, size, brightness...). When the 40 memories are used, each new memorization erases the oldest record.

3-3. OPERATING WITH THE REMOTE KEYPAD (continued)**3-3-2. OPERATING IN MIXER MODE (continued)****• EXAMPLES OF TRANSITION****① PIP effect:**

The PIP effect allows to insert an image into another one.

- Press the **PIP** button, then do all the needed adjustments (duration, size...) with ◀ ▶ and validate with **ENTER**.
- Press the **TAKE** button to activate the effect (ACTION 1): the PREVIEW image is inserted into the MAIN image.

NOTE: • You can change the image in the PIP (PREVIEW image) by selecting another input of the PREVIEW output (ACTION 2): Press the **PREVIEW (OUTPUT SELECT)** button and select the needed input (the transition operates with a fading to black)

- You can change the background image (MAIN image) by selecting another input of the MAIN output (ACTION 3): Press the **MAIN (OUTPUT SELECT)** button and select the needed input (the transition operates with a fading to black).
- To remove the PIP effect, press the **TAKE** button.
- You can display the PIP source in its native resolution: set the horizontal & vertical size to **1:1** positions.

See Figure 21: PIP effect. Page 20.

② Title effect (or shadow title):

The TITLE effect allows to display a text onto the MAIN image. For a better readability you also can display a shadow bar onto your text.

- Create the text to be displayed with a computer using software such as PowerPoint®: the text should be bright (yellow, white...) on a black background.
- Display on the MAIN output the source to titling, then pre-select the source used to display the text file created above: the image appears on the PREVIEW output.
- Assign the TITLE effect to one of the **USER** buttons: Press one **USER** button, select **title** or **shadow title** with ◀ ▶ and validate with **ENTER**, then select the duration with ◀ ▶ and validate with **ENTER**.
- Press the **TAKE** button to activate the effect (ACTION 1): the text is now displayed onto the image of the MAIN output.

NOTE: You can change the background image (MAIN image) by selecting another input of the MAIN output (ACTION 2): Press the **MAIN** output select button and select the needed input (the transition operates with a fading to black). To remove the TITLE effect, press the TAKE button (ACTION 3).

See Figure 22: Title effect. Page 21.

③ Wipe transition:

- Assign a WIPE to one of the **USER** buttons: Press one **USER** button, select a WIPE with the knob ◀ ▶ and validate with **ENTER** (for example: **hor wipe > from left**), then select the duration with ◀ ▶ and validate with **ENTER**.
- Press the **TAKE** button to activate the transition: the PREVIEW image appears onto the MAIN display with a wipe transition.

See Figure 23: Wipe transition. Page 22.

④ Wipe transition:

- Assign a WIPE to one of the **USER** buttons: Press one **USER** button, select a SLIDE with ◀ ▶ and validate with **ENTER** (for example: **hor wipe > from left**), then select the duration with ◀ ▶ and validate with **ENTER**.
- Press the **TAKE** button to activate the transition: the PREVIEW image appears onto the MAIN display with a slide transition.

See Figure 24: Slide transition. Page 22.

• AUDIO ADJUSTMENTS

For each AUDIO output, do the following adjustment.

- ① Adjust the master volume (**AUDIO xxxx > master volume**).
- ② Select the mono or stereo audio mode (**AUDIO xxxx > audio mode > mono or stereo**)
- ③ Select the **auto follow** or **breakaway** audio mode (**AUDIO > audio source > auto follow** or **input # x**):
 - **auto follow** = the audio switching follows automatically the video switching.
 - **breakaway** = the selected audio input is permanently diffused.
- ④ For each audio input, adjust the level (**AUDIO xxxx > audio level**) and the balance (**AUDIO xxxx > audio balance**).

IMPORTANT: If the auxiliary audio input (AUX) is used, don't forget to activate it with the screen menu (**AUDIO xxxx > AUX input > ON**).

3-3. OPERATING WITH THE REMOTE KEYPAD (continued)

3-3-3. OPERATING IN MATRIX MODE

• SETTINGS

- ① We recommend resetting the **Di-VentiX** device to its default values, with the screen menu (**CONTROL > default value > yes**) before proceeding.
- ② Set the **Di-VentiX** in **MATRIX MODE** with the screen menu (**MODE > matrix mode**).
- ③ Select the **input type** connected to the **INPUTS** (# 1 to # 8) with the screen menu (**INPUT > input type**).
- ④ Do the following adjustments for the display device connected to the **OUTPUT 1**:
 - Select the **output sync.** type which corresponds to the display device with the screen menu (**OUTPUT X > output sync**).
 - Select the **output rate** mode with the screen menu (**OUTPUT X > output rate**).
 - Select one of the **output formats** with the screen menu (**OUTPUT X > output format**).

NOTE: For fixed pixels display device (DMD, LCD, PLASMA...), always select the output format corresponding to the native resolution of your display device. Thus, the display device will not have to scale the image and the result will be better.

 - Select the **type of screen** (4/3 or 16/9) with the screen menu (**OUTPUT X > type of screen > 4/3 or 16/9**), according to your wall mounted projection screen shape.
- ⑤ Then renew the adjustments of the step ④ for the display device connected to the **OUTPUT 2**.

• INPUT SELECTION

- ① Select an output (**OUT 1** or **OUT 2**) with the **OUTPUT SELECT** buttons.
- ② Pre-select an input with the **INPUT SELECT** buttons. The button starts blinking.
- ③ Press on **TAKE** or move manually the **T-BAR** to display the pre-selected input onto the selected output. The transition operates with a fading to black.

NOTE: You can switch simultaneously on the **OUTPUT 1 & 2**: do the operations ① and ② for the **OUTPUT 1**, then do the operations ① and ② for the **OUTPUT 2**, finally press the **TAKE** button.

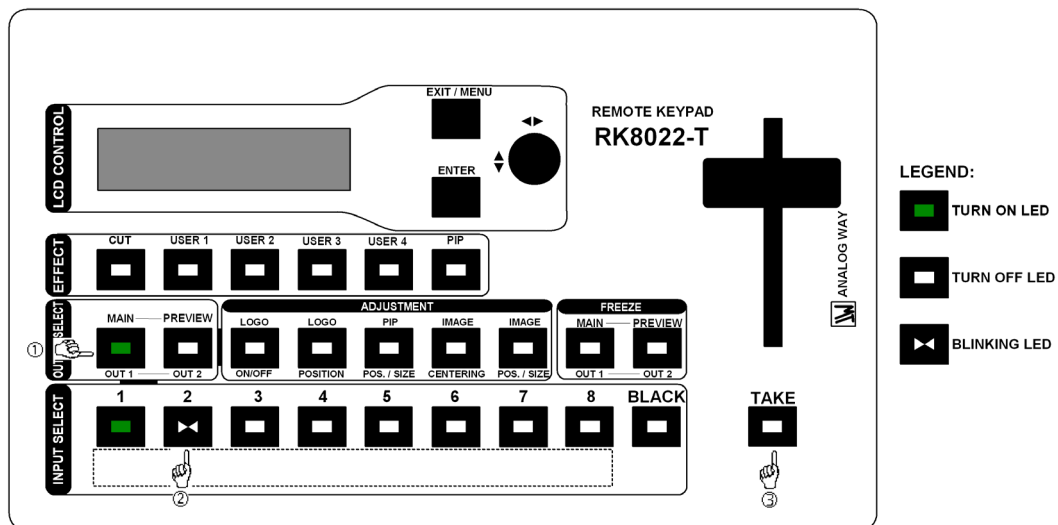


Figure 43

• DISPLAY DEVICES ADJUSTMENTS

For each **OUTPUT**:

- ① Select the centering pattern (**OUTPUT X > test pattern > centering pattern**).
- ② Adjust directly the display device itself, using its controls, to fill the centering pattern in full screen.

See Figure 18: Centering pattern. Page 18.

3-3. OPERATING WITH THE REMOTE KEYPAD (continued)**3-3-3. OPERATING IN MATRIX MODE (continued)****• IMAGE ADJUSTMENTS**

For each input source connected to the **Di-VentiX** do the following adjustments:

- ① Select the source you want to adjust.
- ② Select the aspect ratio of your input source with the screen menu (**IMAGE > aspect ratio**).
- ③ Use the **Centering** function (**IMAGE > centering**) to automatically position the image in the **Centering pattern**.

IMPORTANT: For best results, display a full size bright image (no black border) to perform a centering. As required, correct the adjustment the position & size with the **IMAGE POS/SIZE** button or with the screen menu (**IMAGE > pos settings**).

NOTE: The centering function is only available for computer sources.

NOTE: In case of same Input/Output resolution, the centering also achieves automatic pixel clock adjustments. It may be useful, to improve manually the pixel **clock** and **phase** using the screen menu (**IMAGE > optimize > clock or phase**).

- ④ If needed, do the others adjustments, available in the screen **IMAGE** menu (color, brightness...).

NOTE: To set the image adjustments to the factory settings, use the **Preset** function (**IMAGE > preset > yes**).

NOTE: The adjustments are automatically stored in NON-volatile memories. The **Di-VentiX** is provided with 40 NON-volatile image memories. Each of these memories contains the input channel number, the input and output format parameters and all of the image adjustments (position, size, brightness...). When the 40 memories are used, each new memorization erases the oldest record.

• AUDIO ADJUSTMENTS

For each AUDIO output, do the following adjustment.

- ① Adjust the master volume (**AUDIO xxxx > master volume**).
- ② Select the mono or stereo audio mode (**AUDIO xxxx > audio mode > mono or stereo**)
- ③ Select the **auto follow** or **breakaway** audio mode (**AUDIO > audio source > auto follow** or **input # x**):
 - **auto follow** = the audio switching follows automatically the video switching.
 - **breakaway** = the selected audio input is permanently diffused.
- ④ For each audio input, adjust the level (**AUDIO xxxx > audio level**) and the balance (**AUDIO xxxx > audio balance**).

IMPORTANT: If the auxiliary audio input (AUX) is used, don't forget to activate it with the screen menu (**AUDIO xxxx > AUX input > ON**).

Chapter 4 : UPDATING

The **Di-VentiX** can be update thanks a COMPUTER (PC) via its REMOTE (RS-232) connector.

4-1. CONNECTIONS

- ① Connect the "REMOTE CONTROL RS-232" connector of the device to the SERIAL port of your COMPUTER with a DB9 M/F straight cable.
- ② Connect the device to an AC power outlet.
- ③ Switch OFF the device (rear panel switch = O).

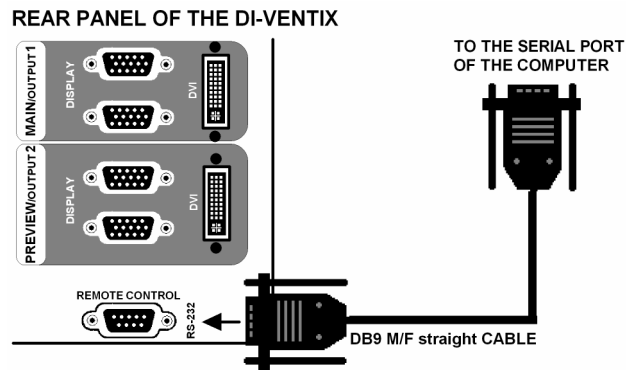


Figure 44: Updating.

4-2. UPDATE INSTRUCTIONS

- ① Open the file "iX updater" (in start/Program/ANALOG WAY/iX8022).
- ② Click on "START" on the SOFTWARE.
- ③ Switch ON the device. The POWER LED blinking slowly and the update will start.
- ④ When the software displays "Program operation completed", SWITCH OFF and ON the device with the rear panel switch.
- ⑤ Click on the "QUIT" button to close the update software.

NOTE: Your **Di-VentiX** is now ready to work.

NOTE: The updater files are available on our web site: <http://www.analogway.com>

Chapter 5 : USING FRAME STORE AND LOGO INSERTION

5-1. USING LOGO INSERTION WITH THE REMOTE CONTROL SOFTWARE

This function allows storing up to 8 logos in order to incrust them into the displayed image (up to 2 logos at a same time).

IMPORTANT: The output format used when displaying logo should be the same that the output format used during the logo storing.

5-1-1. HOW TO STORE A LOGO

- ① Click on the **Logo & Frame main** tab to record the logo from the MAIN output or click on the **Logo & Frame preview** tab to record the logo from the PREVIEW output.
 - ② Then click on the **Record logo** tab: the device displays a white rectangle corresponding to the logo selection area onto the output. Then adjust the position and size of the logo area with the position functions.
- NOTE:** The logo area is limited to an eighth (1/8) of the displayed area.
- ③ As required, adjust the **luma key** level. This function allows to "erasing" the darkest portions of the logo selection area in order to make special logo contour. Otherwise set the **luma key** level to zero.
 - NOTE:** You can change the color of the "erased portions" of the logo with the **background color** function.
 - ④ Click on **STORE** to store the logo into a memory. The memorization of the logo starts and will take about few seconds.

NOTE: Renew the steps ① to ④ to store another logo (up to 8).

5-1-2. HOW TO ASSIGN A LOGO

NOTE: You can assign the stored logos to one or many of the 8 inputs (up to 2 logos by inputs).

- ⑤ In the **assignment** table, assign for each input the needed logos.

NOTE: To remove a logo of an input, select **none** in the corresponding window.

5-1-3. HOW TO DISPLAY OFF or ON A LOGO

- ⑥ To display OFF or ON the assigned logos of an input, click on the **display** button of the corresponding input to change the status (ON or OFF).

NOTE: When displaying ON or OFF a logo, this one appears/disappears with a fade effect. You can adjust the duration of the fade effect with the **Frame fade duration** function of the **Control** menu.

5-1-4. HOW TO ADJUST THE LOGO POSITION

- ⑦ Select the input of the logo to adjust (with the INPUT SELECTION buttons).
- ⑧ Click on the logo to adjust, and then click on the **use** tab of the **Logo & frame** window. Then adjust the logo position with the **H & V position** functions.

NOTE: When you are using 2 logos by input, make sure to not superpose a logo onto an other one. In case of superposition, the logo areas will appear colored.

5-1-5. HOW TO ADJUST THE LOGO TRANSPARENCY

- ⑨ To adjust the logo transparency: click on the arrow in assignment table and move the scroll bar.

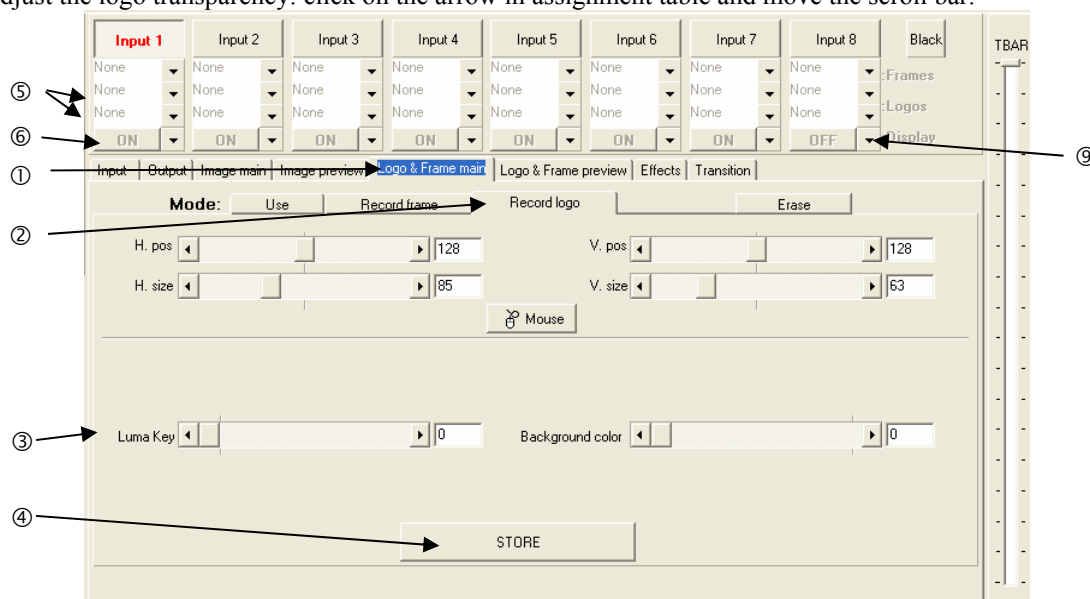


Figure 45

5-1. USING LOGO INSERTION WITH THE REMOTE CONTROL SOFTWARE (continued)**5-1-6. EXAMPLE OF LOGO INSERTION****Figure 46****5-2. USING FRAME STORE WITH THE REMOTE CONTROL SOFTWARE**

This function allows memorizing up to 6 frames (up to 3 in embedded SEB mode) in order to display it at any time during the show.

IMPORTANT: The output format used when displaying the frame should be the same that the output format used during the frame storing.

5-2-1. HOW TO STORE A FRAME

- ① Click on the **Logo & Frame main** tab to record the frame from the MAIN output or click on the **Logo & Frame preview** tab to record the frame from the PREVIEW output.
- ② Then click on the **Record frame** tab: the device displays a white rectangle corresponding to the frame selection area onto the output. As required adjust the position and size of the frame area with the **position & size** functions.
- ③ Adjust the **Luma Key** level to get to the desired Luma Keying.
- ④ Click on **STORE** to store the frame into a memory. The memorization starts and will take about 2 minutes.

NOTE: For motion picture, you can use the FREEZE function, before doing the memorization.

5-2-2. HOW TO ASSIGN A FRAME

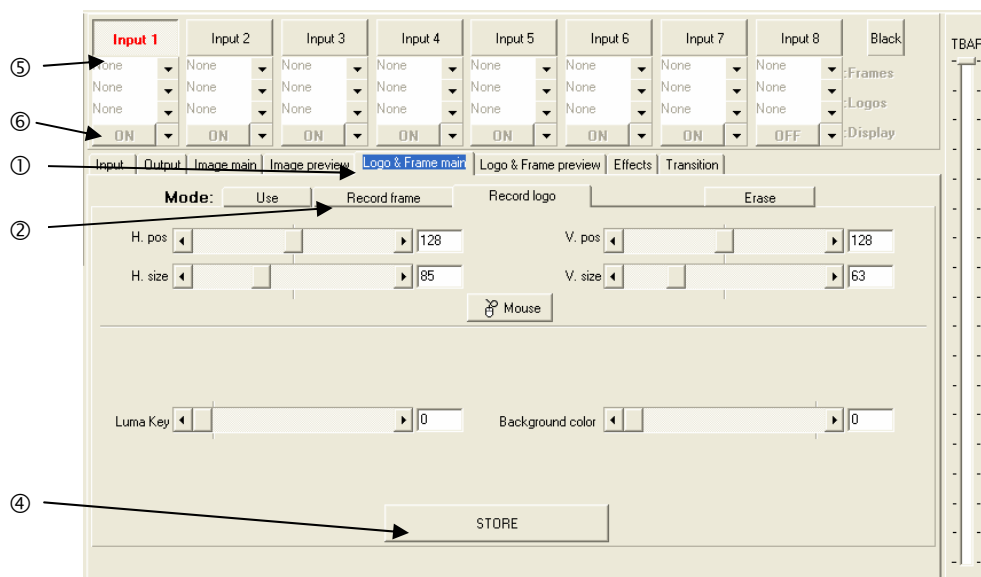
- ⑤ In the assignment table, assign a frame to the needed inputs.

NOTE: To remove the frame of an input, select **none** in the corresponding window.

5-2-3. HOW TO DISPLAY ON or OFF the FRAME

- ⑥ To display ON or OFF the assigned frame of an input, click on the **display** button of the corresponding input to change the status (ON or OFF). The frame appears onto the output, instead of the source connected to this input.

NOTE: When displaying ON or OFF a frame, this one appears/disappears with a fade effect. You can adjust the duration of the fade effect with the **Frame fade duration** function of the **Control** menu.

**Figure 47**

5-3. USING LOGO INSERTION WITH THE REMOTE KEYPAD OR THE Di-VentiX

This function allows storing up to 8 logos in order to incrust them into the displayed image (up to 2 logos at a same time).

IMPORTANT: The output format used when displaying logo should be the same that the output format used during the logo storing.

5-3-1. HOW TO STORE A LOGO

- ① Select the source of the logo to be stored (with the INPUT SELECTION buttons).
- ② Select the **MAIN** or **PREVIEW record logo** mode (**LOGOS/FRAME > record logo > MAIN or PREVIEW**): the device displays a white rectangle corresponding to the logo selection area onto the output. Then adjust the position and size of the logo selection area with the screen **record logo** menu functions.
NOTE: The logo area is limited to an eighth (1/8) of the displayed area.
- ③ As required, adjust the **luma key** level (**LOGOS/FRAME > record logo > MAIN or PREVIEW > luma key level**). This function allows to "erasing" the darkest portions of the logo selection area in order to make special logo contour. Otherwise set the **luma key** level to zero.
NOTE: You can change the color of the "erased portions" of the logo (**LOGOS/FRAME > record logo > back. color**).
- ④ Store the logo into a memory (**LOGOS/FRAME > record logo > MAIN or PREVIEW > store > empty or logo x**). The memorization of the logo starts and will take about few seconds.
NOTE: Renew the steps ① to ④ to store another logo (up to 8).

5-3-2. HOW TO ASSIGN A LOGO

NOTE: You can assign the stored logos to one or many of the 8 inputs (up to 2 logos by inputs).

- ⑤ In the **assignment** menu (**LOGOS/FRAME > use logo/frame > assignment**), select the displayed input (**MAIN** or **PREVIEW**) that you want to assign a logo, then select an index (**1** or **2**) and finally select the needed logo.
NOTE: To remove a logo from an input, select the corresponding input & index and select **none**.
NOTE: To assign the same logo to all inputs select **ALL** (instead **MAIN** or **PREVIEW**).
- ⑥ With the **INPUT SELECTION** buttons, display successively all your inputs to verify your logo assignment. If no logo appears on an input: verify that the screen **display** function of the corresponding input is not set to the **OFF** position. In this case press **ENTER** to set it to the **ON** position (See how to display OFF or ON a logo).

5-3-3. HOW TO DISPLAY OFF or ON A LOGO

- ⑦ To display OFF or ON the assigned logos of an input, select the **MAIN** or **PREVIEW** displayed input in the **display** menu (**LOGOS/FRAME > use logo/frame > display > MAIN or PREVIEW**) and press **ENTER** to change the status (ON or OFF).
NOTE: When displaying ON or OFF a logo, this one appears/disappears with a fade effect. You can adjust the duration of this fade effect (**LOGOS/FRAME > use logo/frame > fade duration**).

5-3-4. HOW TO ADJUST THE LOGO POSITION

- ⑧ Press the **MAIN / OUTPUT 1** button or the **PREVIEW / OUTPUT 2** button.
- ⑨ Press the **LOGO position** button. Then adjust the logo position with the **H & V** position functions.
NOTE: When you are using 2 logos by input, make sure to not superpose a logo onto an other one. In case of superposition, the logo areas will appear colored.

5-3-5. EXAMPLE OF LOGO INSERTION



Figure 48

5-4. USING FRAME STORE WITH THE REMOTE KEYPAD OR THE Di-VentiX

This function allows memorizing up to 6 frames (images) in order to display it at any time during the show.

IMPORTANT: The output format used when displaying the frame should be the same that the output format used during the frame storing.

5-4-1. HOW TO STORE A FRAME

- ① Select the source of the frame to be stored (with the INPUT SELECTION buttons).
- ② Select the **MAIN or PREVIEW record frame** mode (**LOGOS/FRAME > record frame > MAIN or PREVIEW**): the device displays a white rectangle corresponding to the frame selection area. As required adjust the position and size of the frame selection area (**LOGOS/FRAME > record frame > MAIN or PREVIEW > size or position**).
- ③ Adjust the **Luma Key** level to get to the desired Luma Keying (**LOGOS/FRAME > record frame > MAIN or PREVIEW > Luma Key**).
- ④ Store the frame (**LOGOS/FRAME > record frame > MAIN or PREVIEW > store**). The memorization starts and will take about 2 minutes.

NOTE: For motion picture, you can use the FREEZE function, before doing the memorization.

5-4-2. HOW TO ASSIGN A FRAME

- ⑤ In the **assignment** menu (**LOGOS/FRAME > use logo/frame > assignment**), select the displayed input (MAIN or PREVIEW) that you want to assign the frame, then select **frame index** select a **frame**.

NOTE: To remove the frame from an input, select the corresponding input & index and select **none**.

5-4-3. HOW TO DISPLAY ON or OFF the FRAME

- ⑥ To display ON the frame, select the input corresponding to the frame with the INPUT SELECTION buttons. The FRAME appears onto the output, instead of the source connected to this input.

NOTE: If the frame doesn't appear: verify that the **display** function of the displayed input is not set in the **OFF** position (**LOGOS/FRAME > use logo/frame > display**). In this case, presses **ENTER** to set it in the **ON** position.

- ⑦ To display OFF the frame, set the **display** function in OFF position (**LOGOS/FRAME > use logo/frame > display > MAIN or PREVIEW > OFF**).

Chapter 6 : Di-VentiX & REMOTE KEYPAD SCREEN DESCRIPTION

6-1. INTRODUCTION

The front panel screen is composed of 2 modes: the STATUS MODE and the CONTROL MODE.

- The STATUS MODE indicates the input and the output status.
- The CONTROL MODE allows selecting and adjusting the parameters.

6-2. CONTROL BUTTONS

The front panel screen is controlled by 3 buttons:

◀ ▶ knob: To scroll thru the different menus.

EXIT MENU button:

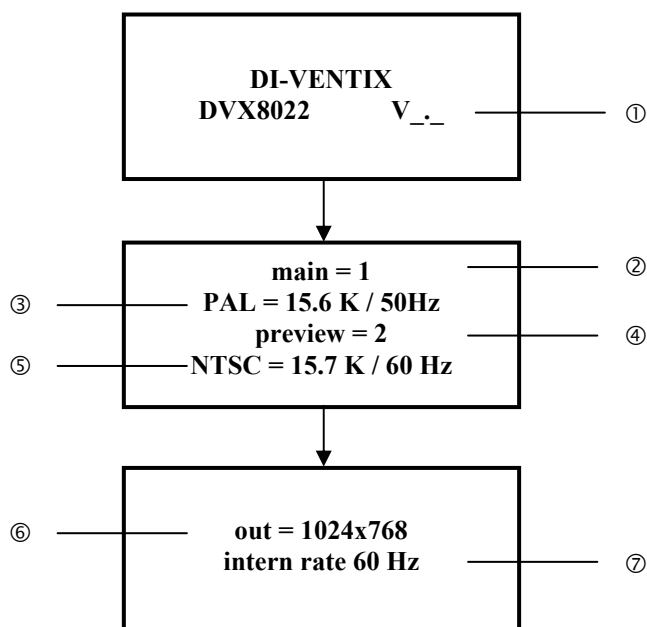
- From the STATUS MODE, press on this button to display the CONTROL MODE.
- From the CONTROL MODE, press on this button to:
 - return to the previous menu without safeguarding the item.
 - return to the STATUS MODE (press several times).

ENTER button:

- From the STATUS MODE, press on this button to display the CONTROL MODE.
- From the CONTROL MODE, press on this button to confirm a selected item.

6-3. STATUS MODE

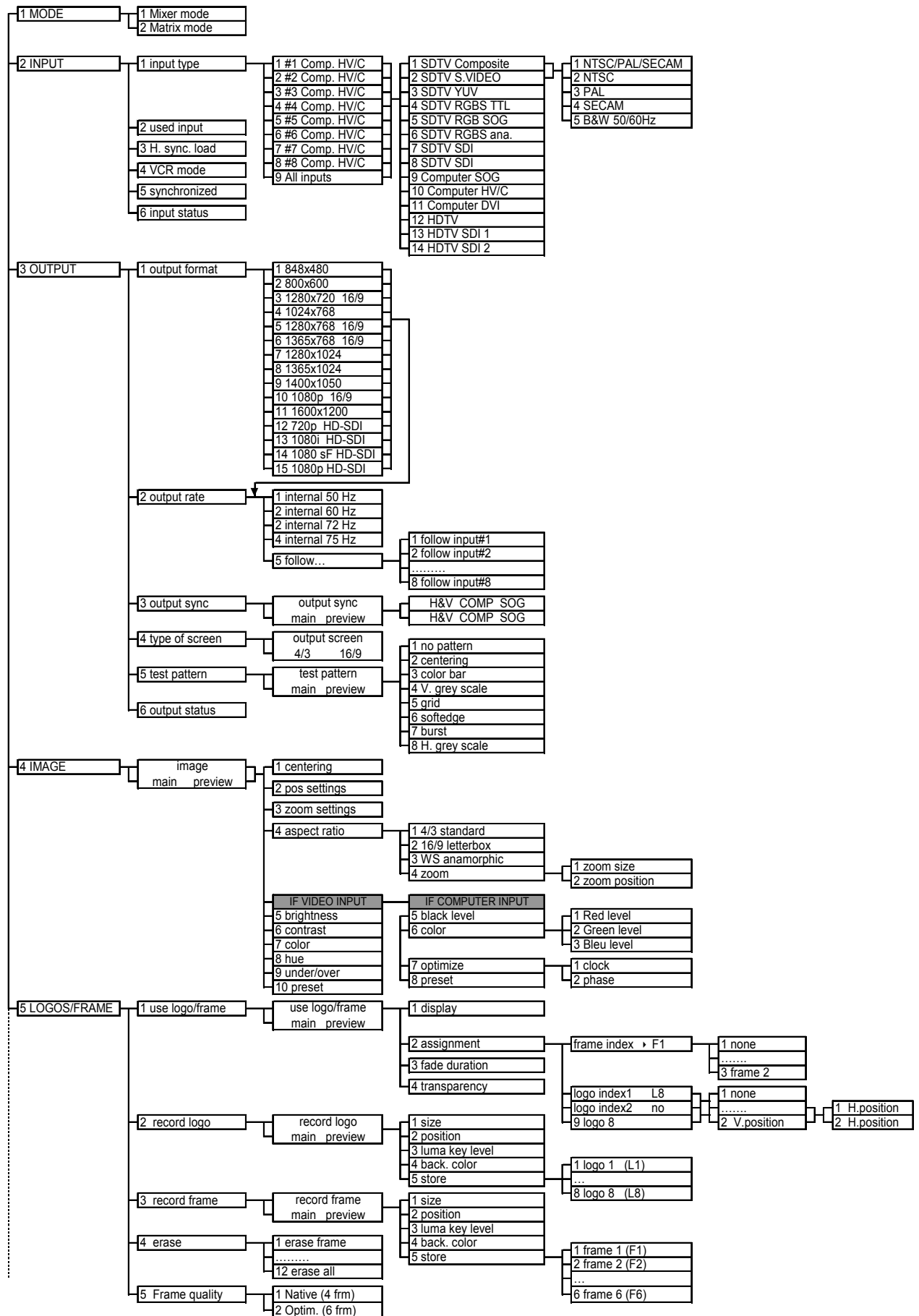
When switching ON the device, the front panel screen shows the product's name and status as follows:

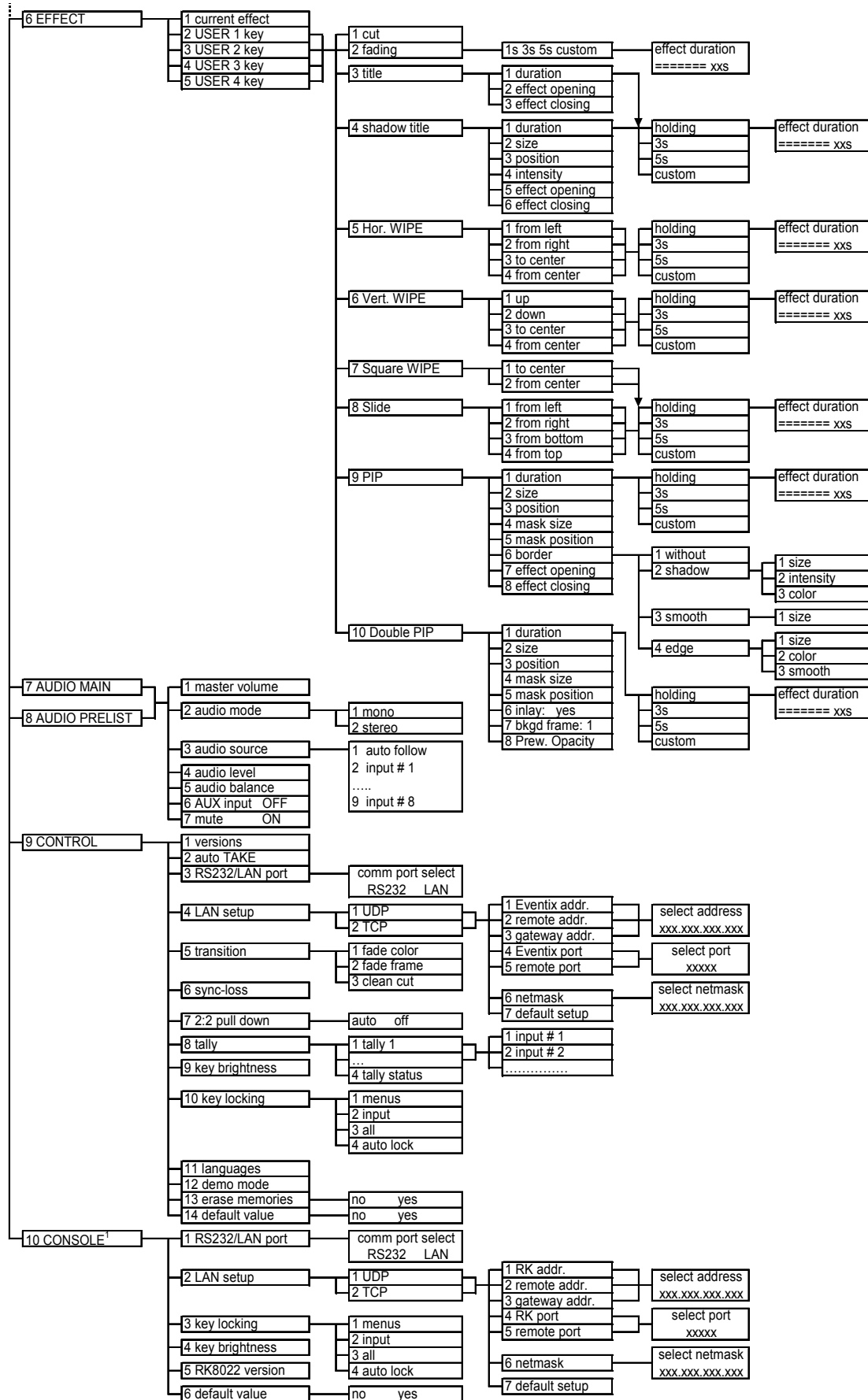


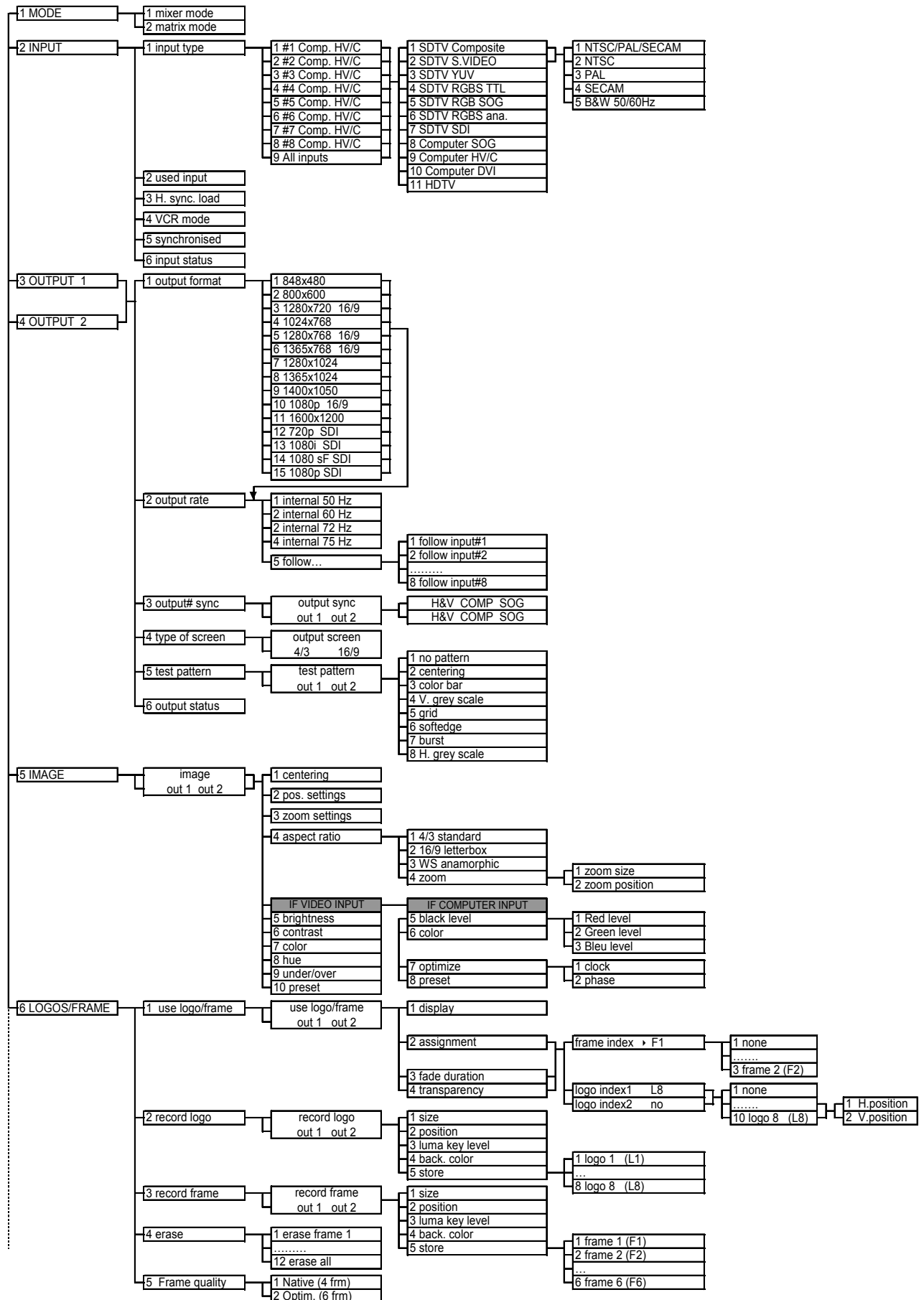
- ① Device version.
- ② Input number displayed on MAIN.
- ③ Format/standard of the input displayed on MAIN.
- ④ Input number displayed on PREVIEW.
- ⑤ Format/standard of the input displayed on PREVIEW.
- ⑥ Output format/resolution.
- ⑦ Output rate mode/output rate frequency.

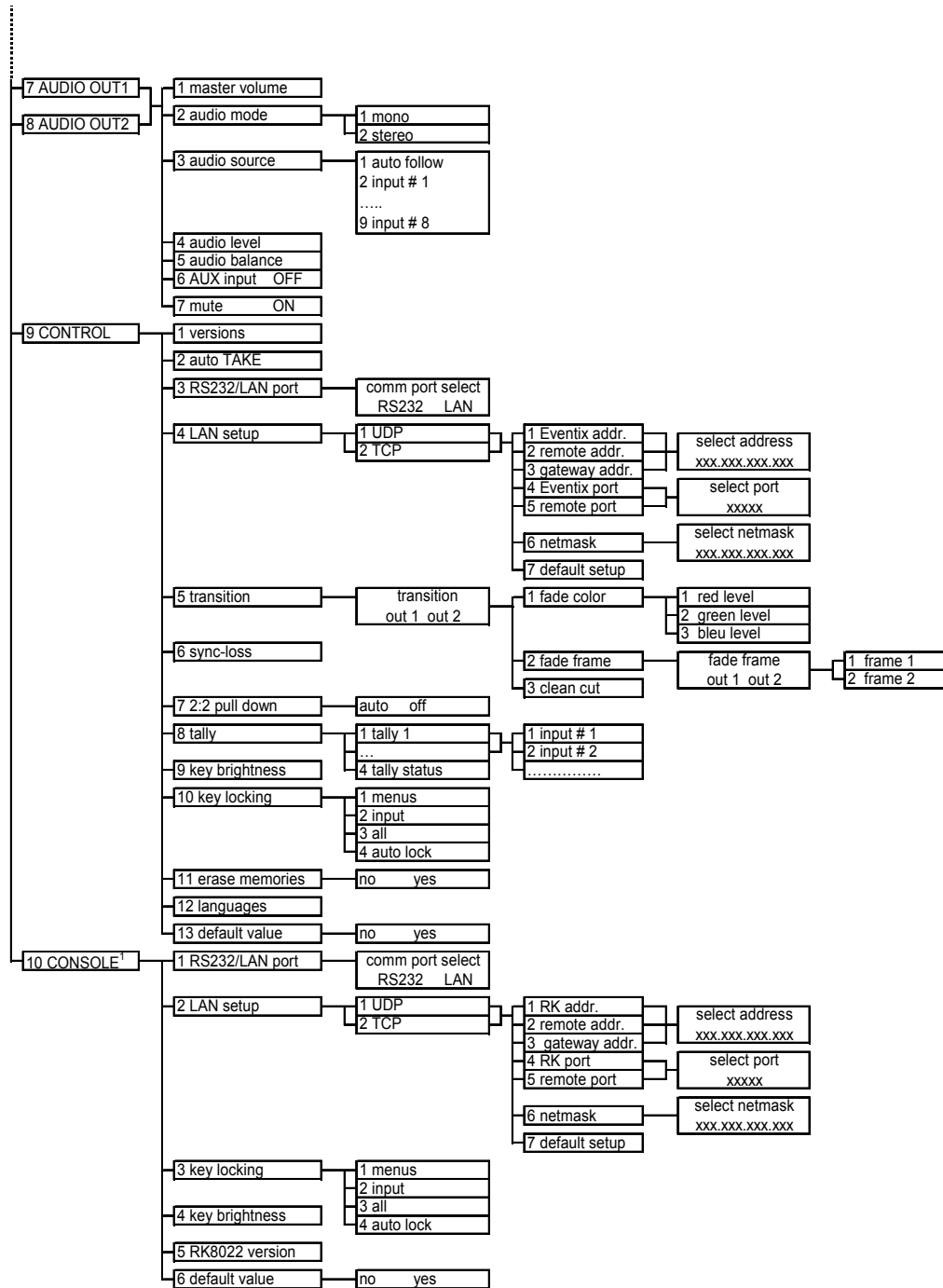
6-4. CONTROL MODE

6-4-1. CONFIGURATION IN MIXER MODE



6-4. CONTROL MODE (continued)**6-4-1. CONFIGURATION IN MIXER MODE (continued)**¹ this menu is available on the REMOTE KEYPAD only.

6-4. CONTROL MODE (continued)**6-4-2. CONFIGURATION IN MATRIX MODE**

6-4. CONTROL MODE (continued)**6-4-2. CONFIGURATION IN MATRIX MODE (continued)**

¹ this menu is available on the REMOTE KEYPAD only.

6-5. FRONT PANEL SCREEN FUNCTIONS DESCRIPTION

1 ▶ [MODE] + ENTER.

Select a switcher mode between:

- **[mixer mode]**: Set the device in MIXER mode.
- **[matrix mode]**: Set the device in MATRIX mode.

2 ▶ [INPUT] + ENTER.

2-1 [input type] + ENTER.

① Select an input with ◀ ▶ + **ENTER**.

② Select the input signal type with ◀ ▶ + **ENTER** between:

- | | |
|---------------------------|--------------------------|
| • [SDTV Composite] | • [SDTV SDI 2] |
| • [SDTV S.VIDEO] | • [Computer SOG] |
| • [SDTV YUV] | • [Computer HV/C] |
| • [SDTV RGBS TTL] | • [Computer DVI] |
| • [SDTV RGB SOG] | • [HDTV] |
| • [SDTV RGBS ana.] | • [HDSDI 1] |
| • [SDTV SDI 1] | • [HDSDI 2] |

③ Then for **[SDTV Composite]**, and **[SDTV S.VIDEO]**, select the video standard with ◀ ▶ + **ENTER** between:

- | | |
|--|---|
| • [NTSC / PAL / SECAM] : automatic NTSC, PAL, and SECAM standard detection. | |
| • [NTSC] : NTSC standard only. | • [PAL] : PAL standard only. |
| • [SECAM] : SECAM standard only. | • [B & W 50/60 Hz] : Black and White standard. |

2-2 [used input] + ENTER.

Select an input and then select an item with ◀ ▶ + **ENTER** between:

- **[used]**: A signal is connected to the input.
- **[unused]**: No signal is connected to the input. The input is unused.

2-3 [H sync load] + ENTER.

Select for each input the load of the H Sync. with ◀ ▶ + **ENTER**.

2-4 [VCR mode] + ENTER.

This function allows improving the image contour of low quality VHS tapes. Select **[on]** with **ENTER**.

2-5 [synchronized] + ENTER.

This function allows defining the sources which are synchronized together (external genlock). The synchronized sources can be seamless switched between themselves during an effect (into a PIP for example). This switching mode is called VIS (Vertical Interval Switching).

2-6 [input status] + ENTER.

Indicates the status of the selected input.

6-5. FRONT PANEL SCREEN FUNCTIONS DESCRIPTION (continued)**3 ▶ [OUTPUT] + ENTER.****3-1 [output format] + ENTER.**

Select one of the following output formats with ◀ ▶ + **ENTER**.

- | | |
|-------------------|-------------------|
| • [848x480] | • [1400x1050] |
| • [800x600] | • [1080p 16/9] |
| • [1280x720 16/9] | • [1600x1200] |
| • [1024x768] | • [720p HDS DI] |
| • [1280x768 16/9] | • [1080i HDS DI] |
| • [1365x768] | • [1080sf HDS DI] |
| • [1280x1024] | • [1080p HDS DI] |
| • [1365x1024] | |

NOTE: For fixed pixels display devices (DMD, LCD, PLASMA...), always select the output format corresponding to the native resolution of the display device. Thus, the display device will not have to scale the image and the result will be better.

3-2 [output rate] + ENTER.

Select an output rate between:

- [internal 50Hz]: The output frame is generated at 50 Hz by the device.
- [internal 60Hz]: The output frame is generated at 60 Hz by the device.
- [internal 72Hz]: The output frame is generated at 72 Hz by the device.
- [internal 75Hz]: The output frame is generated at 75 Hz by the device.
- [follow]: The output frame is synchronized onto one input signal. Select the needed input with ◀ ▶ and validate with **ENTER**.

3-3 [output sync] + ENTER.

① Select an output between MAIN & PREVIEW with ◀ ▶ + **ENTER**.

② Select the Output Sync. type with ◀ ▶ + **ENTER**.

- [H&V]: H & V Sync.
- [COMP]: Composite Sync.
- [SOG]: Sync On Green.

3-4 [type of screen] + ENTER.

Select an item with ◀ ▶ + **ENTER**.

- [4/3]: If your image is displayed on a 4/3 wall mounted projection screen shape.
- [16/9]: If your image is displayed on a 16/9 wall mounted projection screen shape.

NOTE: Available only in case of 4/3 output format.

3-5 [test pattern] + ENTER.

① Select an output between MAIN & PREVIEW with ◀ ▶ + **ENTER**.

② Select an item with ◀ ▶ + **ENTER**.

- [no pattern]: No test pattern is displayed.
- [centering]: Displays onto the output a centering pattern (for position and size adjustments).
- [color bar]: Displays onto the output a color bar pattern.
- [grid]: Displays onto the output a grid pattern.
- [H grey scale]: Displays onto the output a horizontal grey scale pattern.
- [burst]: Displays onto the output a multi-burst pattern.
- [softedge]: Displays onto the output a softedge pattern.
- [V grey scale]: Displays onto the output a vertical grey scale pattern.

6-5. FRONT PANEL SCREEN FUNCTIONS DESCRIPTION (continued)**4 ▶ [IMAGE] + ENTER.**

Select an output between MAIN & PREVIEW with ◀ ▶ + **ENTER**.

NOTE: The image menu contents will be different in case of computer or video on the input selected.

4-1 [centering] + ENTER.

Adjust automatically the image in the centering pattern.

4-2 [pos settings] + ENTER.

Adjust the image position with **H** and **V** knobs and validate with **ENTER**.

4-3 [size settings] + ENTER.

Adjust the image size with **H** and **V** knobs and validate with **ENTER**.

4-4 [aspect ratio] + ENTER.

Select the Aspect Ratio of your input source or the zoom mode with ◀ ▶ + **ENTER**.

- **[4/3 standard]:** 4/3 input format.
- **[16/9 letterbox]:** Letterbox input format.
- **[WS anamorphic]:** Widescreen anamorphic input format (video) or 16/9 input format (computer).
- **[zoom]:** Allows zooming in the image.

• If the selected input is a VIDEO signal the IMAGE MENU displays the following items:

4-5 [brightness] + ENTER.

Adjust the Brightness with ◀ ▶ + **ENTER**.

4-6 [contrast] + ENTER.

Adjust the Contrast with ◀ ▶ + **ENTER**.

4-7 [color] + ENTER.

Adjust the Color with ◀ ▶ + **ENTER**.

4-8 [hue] + ENTER.

Adjust the Tint of the picture (NTSC only) with ◀ ▶ + **ENTER**.

4-9 [under / over] + ENTER.

- **[underscan]:** Underscan mode. The entire image is visible on the screen. Computer mode is underscan.
- **[overscan]:** Overscan mode. The image is displayed about 8 % bigger than in underscan mode, to avoid seeing the corners and the borders. Standard TV display mode is overscan.

4-10 [preset] + ENTER.

This function allows setting all the image parameters to the factory settings. Select **[YES]** and validate with **ENTER**.

• If the selected input is a COMPUTER signal the IMAGE MENU displays:

4-5 [black level] + ENTER.

Adjust the black level with ◀ ▶ + **ENTER**.

4-6 [color] + ENTER.

Select a color (Red, Green, or Bleu) with ◀ ▶ + **ENTER** and adjust the level with ◀ ▶ + **ENTER**.

4-7 [optimize] + ENTER.

- **[clock]:** Manual adjustment of the pixel clock.
- **[phase]:** Manual adjustment of the pixel phase.

4-8 [preset] + ENTER.

This function allows setting all the image parameters to the factory settings. Select **[YES]** and validate with **ENTER**.

6-5. FRONT PANEL SCREEN FUNCTIONS DESCRIPTION (continued)**5 ▶ [LOGOS/FRAME] + ENTER****5-1 [use logo/frame] + ENTER.**

Select an item with ◀ ▶ + **ENTER**.

5-1-1 [display] + ENTER.

This function allows to display ON or OFF the assigned logos of the displayed input. Select an input and press **ENTER** to display ON or OFF.

NOTE: To display a logo or a frame, the output format should be the same that the output format used during the storing.

5-1-2 [assignment] + ENTER.

This function allows assigning the stored frame and the logos to the inputs of the device (up to 2 logos at the same time).

① Select MAIN or PREVIEW displayed input with ◀ ▶ + **ENTER**.

② Select the **frame index** or the **logo index 1** or the **logo index 2** with ◀ ▶ + **ENTER**.

③ Then select a logo, a frame or none with ◀ ▶ + **ENTER**.

④ Adjust the logo position with **H & V position** functions.

NOTE: To assign the same logo to all inputs, select ALL in the step ①.

5-1-3 [fade duration] + ENTER.

This function allows adjusting the fade duration of the logo when you display ON or OFF a logo. Adjust the duration with ◀ ▶ and validate with **ENTER**.

5-1-4 [transparency] + ENTER.

This function allows adjusting the transparency of the logo. Select a logo, adjust with ◀ ▶ and validate with **ENTER**.

5-2 [record logo] + ENTER.

This mode allows storing up to 8 logos in order to incrust them into the displayed image (up to 2 logos at a same time). Select an item with ◀ ▶ + **ENTER**.

5-2-1 [H position] + ENTER.

Adjust the Horizontal position of the logo area with ◀ ▶ + **ENTER**.

5-2-2 [V position] + ENTER.

Adjust the Vertical position of the logo area with ◀ ▶ + **ENTER**.

5-2-3 [H size] + ENTER.

Adjust the Horizontal size of the logo area with ◀ ▶ + **ENTER**.

5-2-4 [V size] + ENTER.

Adjust the Vertical size of the logo area with ◀ ▶ + **ENTER**.

NOTE: The logo area is limited at an eighth (1/8) of the displayed area.

5-2-5 [luma key level] + ENTER.

This function allows to "erasing" the darkest portions of your logo area in order to make special logo contour. Adjust the luma key level with ◀ ▶ + **ENTER**.

5-2-6 [back. color] + ENTER.

This function allows coloring the "erased portions" of the logo when using the luma key. Select a level with ◀ ▶ + **ENTER**.

5-2-7 [store] + ENTER.

This function allows storing the logo into one of the 8 logo memories. Select a logo memory with ◀ ▶ + **ENTER**. The memorization will take few seconds.

6-5. FRONT PANEL SCREEN FUNCTIONS DESCRIPTION (continued)**5-3 [record frame] + ENTER.**

This mode allows storing a frame in order to display them at any time during the show.

5-3-1 [H position] + ENTER.

Adjust the Horizontal position of the frame area with ◀ ▶ + **ENTER**.

5-3-2 [V position] + ENTER.

Adjust the Vertical position of the frame area with ◀ ▶ + **ENTER**.

5-3-3 [H size] + ENTER.

Adjust the Horizontal size of the frame area with ◀ ▶ + **ENTER**.

5-3-4 [V size] + ENTER.

Adjust the Vertical size of the frame area with ◀ ▶ + **ENTER**.

5-3-5 [luma key level] + ENTER.

This function allows to "erasing" the darkest portions of your frame area in order to make special logo contour. Adjust the luma key level with ◀ ▶ + **ENTER**.

5-3-6 [back. color] + ENTER.

This function allows coloring the "erased portions" of the frame when using the luma key. Select a level with ◀ ▶ + **ENTER**.

5-3-7 [store]

This function allows storing the frame into one of the 6 frame memories. Select a frame memory with ◀ ▶ + **ENTER**. The memorization will take about 2 minutes.

5-4 [erase mode] + ENTER.

This function allows erasing the memorized frame and/or the logos. Select an item with ◀ ▶ + **ENTER**.

6 ▶ [EFFECT]

This menu allows to store an effect in each of the effect buttons (USER buttons).

6-1 [current effect]

The front panel screen displays the current effect.

① First select an effect button with ◀ ▶ + **ENTER** between:

6-2 [USER 1 key]

6-3 [USER 2 key]

6-4 [USER 3 key]

6-5 [USER 4 key]

② Then select one of the following effects:

6-x-1 [cut]: allows to switch seamlessly the pre-selected input onto the MAIN output.

NOTE: The opening & closing animation available with this effect is: CUT.

6-x-2 [fading]: allows to fade the pre-selected input to the MAIN output. You can select the duration of the transition as indicated below:

- **[1s]:** 1 second transition.
- **[3s]:** 3 seconds transition.
- **[5s]:** 5 seconds transition.
- **[custom]:** Select a duration from 0.5 second up to 25 seconds by 0.5 second steps.

NOTE: The opening & closing animation available with this effect is: FADE.

6-x-3 [title]: Allows to overlay a title on the MAIN output. The title should be done with drawn standard software (Paint, PowerPoint...) in white color on a black background. You can select the duration of this effect between:

- **[holding]:** The text appears after pushing on the TAKE button, and will be removed only by a second push on the TAKE button.
- **[3s]:** 3 seconds transition.
- **[5s]:** 5 seconds transition.
- **[custom]:** Select a duration from 0.5 second up to 25 seconds by 0.5 second steps.

NOTE: The opening & closing animations available with this effect are: CUT, FADE, Horizontal slides.

6-5. FRONT PANEL SCREEN FUNCTIONS DESCRIPTION (continued)

6-x-4 [shadow title]: Same function as [title] but a shadow bar appears at the bottom of the image. This function allows increasing the readability of the text on bright images.

- ① Select the **[duration]** of the transition with ◀ ▶ + **ENTER** between:
 - **[holding]:** The text appears after pushing on the TAKE button, and will be removed only by a second push on the TAKE button.
 - **[3s]:** 3 seconds transition.
 - **[5s]:** 5 seconds transition.
 - **[custom]:** Select a duration from 0.5 second up to 25 seconds by 0.5 second steps.
- ② Select the **[size]** of the shadow bar with ◀ ▶ + **ENTER**.
- ③ Select the vertical **[position]** of the shadow bar with ◀ ▶ + **ENTER**.
- ④ Select the **[intensity]** of the shadow with ◀ ▶ + **ENTER**.

NOTE: The opening & closing animations available with this effect are: CUT, FADE, Horizontal slides.

6-x-5 [hor. wipe]: Allows to switch the pre-selected input onto the MAIN output with a horizontal wipe effect.

- ① First select a horizontal wipe effect with ◀ ▶ + **ENTER** between:
 - **[From left]:** From left to right.
 - **[From right]:** From right to left.
 - **[to center]:** From sides to center.
 - **[from center]:** From center to sides.
- ② Then select the duration of the transition.
 - **[1s]:** 1 second transition.
 - **[3s]:** 3 seconds transition.
 - **[5s]:** 5 seconds transition.
 - **[custom]:** Allows selecting a duration from 0.5 second up to 25 seconds by 0.5 second step.

6-x-6 [vert wipe]: Allows to switch the pre-selected input onto the MAIN output with a vertical wipe effect.

- ① First select a vertical wipe effect with ◀ ▶ + **ENTER** between:
 - **[up]:** From bottom to top.
 - **[down]:** From top to bottom.
 - **[to center]:** From sides to center.
 - **[from center]:** From center to sides.
- ② Then select the duration of the transition.
 - **[1s]:** 1 second transition.
 - **[3s]:** 3 seconds transition.
 - **[5s]:** 5 seconds transition.
 - **[custom]:** Allows selecting a duration from 0.5 second up to 25 seconds by 0.5 second step.

6-x-7 [Square wipe]: Allows to switch the pre-selected input onto the MAIN output with a horizontal & vertical square wipe.

- ① First select a horizontal wipe effect with ◀ ▶ + **ENTER** between:
 - **[to center]**
 - **[from center]**
- ② Then select the duration of the transition.
 - **[1s]:** 1 second transition.
 - **[3s]:** 3 seconds transition.
 - **[5s]:** 5 seconds transition.
 - **[custom]:** Allows selecting a duration from 0.5 second up to 25 seconds by 0.5 second step.

6-5. FRONT PANEL SCREEN FUNCTIONS DESCRIPTION (continued)

6-x-8 [Slide]: Allows to switch the pre-selected input onto the MAIN output with a horizontal slide effect.

- ① First select a horizontal wipe effect with ◀ ▶ + **ENTER** between:
 - **[from left]:** From left to right.
 - **[from right]:** From right to left.
 - **[from top]:** From top to bottom.
 - **[from bottom]:** From bottom to top.
- ② Then select the duration of the transition.
 - **[1s]:** 1 second transition.
 - **[3s]:** 3 seconds transition.
 - **[5s]:** 5 seconds transition.
 - **[custom]:** Allows selecting a duration from 0.5 second up to 25 seconds by 0.5 second step.

6-x-9 [PIP]: Allows to display a picture into another picture. The PREVIEW image is reduced and displayed onto the MAIN image.

- ① Select the **[duration]** of the transition, and validate with **ENTER**.
 - **[holding]:** The PREVIEW image appears after pushing on the TAKE button, and will be removed only by a second push on the TAKE button.
 - **[3s]:** 3 seconds transition.
 - **[5s]:** 5 seconds transition.
 - **[custom]:** Select a duration from 0.5 second up to 25 seconds by 0.5 second steps.
- ② Adjust the **[size]** of the PIP (between 15 and 100%) with **H** and **V**, and validate with **ENTER**.
NOTE: You can display the PIP source in its native resolution: set the horizontal & vertical size on **1:1**.
- ③ Set the horizontal and vertical **[position]** of the PIP windows with the H and V knobs, and validate with **ENTER**.
- ④ Adjust the **[mask size]** with the H and V knobs, and validate with **ENTER**. This function allows, for example, cutting the black bars of a letterbox source.
- ⑤ Adjust the **[mask position]** with the H and V knobs, and validate with **ENTER**.
- ⑥ Select a type of **[border]** between "without", "shadow", "smooth", and "edge".

NOTE: The opening & closing animations available with this effect are: CUT, FADE, Horizontal & Vertical slides, Horizontal & Vertical wipes.

6-x-10 [double PIP]: Allows to display the MAIN & PREVIEW sources as 2 PIP onto/under a background image (frame).

- ① Select the **[duration]** of the transition, and validate with **ENTER**.
- ② Select a **[background frame]** and validate or not the **[inlay]**.
- ③ For each MAIN & PREVIEW sources, adjust the **[size]**, **[position]**, **[mask size]** & **[mask position]**.
- ④ As required, adjust the **Prev. opacity** (This function allows to insert title in the main PIP, see Figure 27: Titling a PIP.).

NOTE: You can display the PIP sources in their native resolution: set the horizontal & vertical size on **1:1**.

NOTE: The opening & closing animation available with this effect is: FADE.

6-5. FRONT PANEL SCREEN FUNCTIONS DESCRIPTION (continued)**7 ► [AUDIO MAIN] + ENTER. This menu is available with the OPT-iX-A option only.**

The following commands allow controlling the MAIN AUDIO output (OUT 1).

7-1 [master volume] + ENTER.

Adjust the audio output level with ◀ ▶ + **ENTER**.

7-2 [audio mode] + ENTER.

Select the output audio mode with ◀ ▶ + **ENTER**.

- **[mono]**: Set the output in mono mode.
- **[stereo]**: Set the output in stereo mode.

7-3 [audio source] + ENTER.

Select an item with ◀ ▶ + **ENTER**:

- **[auto follow]**: The audio follows the video image.
- **[input --]**: The selected audio input (is permanently diffused).

7-4 [audio level] + ENTER.

This function allows to separately adjusting the level of each audio input. Adjust the level with ◀ ▶ + **ENTER**.

NOTE: This function acts on the selected (diffused) audio input.

7-5 [audio balance] + ENTER.

This function allows adjusting for each input the audio balance. Adjust the level with ◀ ▶ + **ENTER**.

NOTE: This function acts on the selected (diffused) audio input.

7-6 [AUX input] + ENTER.

Auxiliary input for mixing with the diffused source.

7-7 [mute off] + ENTER.

Switch ON or OFF the audio output. Validate with **ENTER**.

8 ► [AUDIO PRELIST] + ENTER. This menu is available with the OPT-iX-A option only.

The following commands allow controlling the PRELIST AUDIO output (OUT 2).

8-1 [master volume] + ENTER.

Adjust the audio output level with ◀ ▶ + **ENTER**.

8-2 [audio mode] + ENTER.

Select the output audio mode with ◀ ▶ + **ENTER**.

- **[mono]**: Set the output in mono mode.
- **[stereo]**: Set the output in stereo mode.

8-3 [audio source] + ENTER.

Select an item with ◀ ▶ + **ENTER**:

- **[auto follow]**: The audio follows the video image.
- **[input --]**: The selected audio input (is permanently diffused).

8-4 [audio level] + ENTER.

This function allows to separately adjusting the level of each audio input. Adjust the level with ◀ ▶ + **ENTER**.

NOTE: This function acts on the selected (diffused) audio input.

8-5 [audio balance] + ENTER.

This function allows adjusting for each input the audio balance. Adjust the level with ◀ ▶ + **ENTER**.

NOTE: This function acts on the selected (diffused) audio input.

8-6 [AUX input] + ENTER.

Auxiliary input for mixing with the diffused source.

8-7 [mute off] + ENTER.

Switch ON or OFF the audio output. Validate with **ENTER**.

6-5. FRONT PANEL SCREEN FUNCTIONS DESCRIPTION (continued)**9 ▶ [CONTROL]****9-1 [versions] + ENTER.**

Display the status of the internal firmware.

- A = xxxx • B = xxxx • X = xxxx • Y = xxxx • S = xxxx
- D = xxxx • K = xxxx • V = xxxx (optional) • I = Identification number.

9-2 [auto TAKE]

This function allows switching directly from the input select button (without pressing the TAKE button).

9-3 [RS232/LAN port] + ENTER.

Select the needed communication port with ◀ ▶ + **ENTER**.

- **[RS232]:** Enables the RS-232 communication port. (Default setting).
- **[LAN]:** Enables the LAN communication port.

IMPORTANT: To avoid addresses conflict, configure the LAN communication port (with the **LAN setup** menu) before activates it.

NOTE: The RS-232 & the LAN communication ports can not be used simultaneously.

9-4 [LAN setup] + ENTER.

Allows configuring the LAN communication port. Select items with ◀ ▶ + **ENTER**.

- **[local addr.]:** Every device connected to an IP network must have a unique IP address. This address is used to reference the specific unit. IP addresses are specified as **x.x.x.x** where each **x** is a number from 1 to 254. Assign the device to a unique IP address with ◀ ▶ + **ENTER**. (Default value: 192.168.0.2).
- **[remote addr.]:** This is the destination IP address used with an outgoing connection. Select the destination IP address with ◀ ▶ + **ENTER**. (Default value: 192.168.0.1).
- **[gateway addr.]:** The gateway address, or router, allows communication to other LAN segments. The gateway address should be the IP address of the router connected to the same LAN segment as the unit. Select the gateway address with ◀ ▶ + **ENTER**. (Default value: 192.168.0.1).
- **[local port]:** Every TCP connection and every UDP datagram is defined by a destination IP address and a port number. Select a local port number with ◀ ▶ + **ENTER** between 10000 and 10999. (Default value: 10500).
- **[remote port]:** You must set the remote TCP port number for the unit to make outgoing connections. This parameter defines the port number on the target host to which a connection is attempted. Select a remote port number with ◀ ▶ + **ENTER** between 00000 and 655000. (Default value: 10500).
- **[netmask]:** A netmask defines the number of bits taken from the IP address that are assigned for the host section. The device prompts for the number of host bits to be entered, then calculates the netmask, which displays in standard decimal-dot notation when the saved parameters are displayed. Select the netmask with ◀ ▶ + **ENTER**. (Default value: 255.255.255.0).
- **[default setup]:** Set all the LAN settings to the default value. Select **[YES]** and validate with **ENTER**.

MAC ADDRESS: The MAC address, also referred to hardware address, is a unique number assigned to each device. The MAC address is available on the rear panel device label.

9-5 [transition] + ENTER. This menu is available in MATRIX mode only.

Select a type of transition between:

9-5-1 [fade color] + ENTER.

This function allows selecting the color of the fade during the transition. Select a color (red, green and bleu) with ◀ ▶ + **ENTER** and adjust the level with ◀ ▶ + **ENTER**. During the adjustment the color is displayed onto the output. To obtain the black color, set the 3 levels to the minimum. To obtain the white color, set the 3 levels to maximum. To obtain the grey color, set the 3 levels in the middle.

9-5-2 [fade frame] + ENTER.

This function allows switching by a fading image (instead of a color). Then adjust the duration of the transition.

9-5-3 [clean cut] + ENTER.

This function allows a clean switching thanks to a fast freeze of the displayed source.

6-5. FRONT PANEL SCREEN FUNCTIONS DESCRIPTION (continued)**9-6 [sync-loss] + ENTER.**

Allows to display a frame or a source in case of sync-loss of the selected input.

9-7 [2:2 pull down] + ENTER.

Select an item and validate with **ENTER**.

- **[auto]**: Automatic recognition and correction of the 2:2 pull down.
- **[off]**: Disable the 2:2 pull down correction.

9-8 [tally] + ENTER.

① First select a tally output with ◀ ▶ + **ENTER**.

② Then select an input for this tally output with ◀ ▶ + **ENTER**.

9-9 [key brightness] + ENTER.

Allows adjusting the key brightness.

9-10 [key locking] + ENTER.

Select an item with ◀ ▶ and change the mode with **ENTER**.

- **[menus]**: Locks/unlocks the **LCD CONTROL** switches.
- **[input]**: Locks/unlocks the **INPUT SELECTION** and **FREEZE** switches.
- **[all]**: Locks/unlocks all the front panel switches.

NOTE: To unlock presses simultaneously on **ENTER** and **EXIT**.

- **[autolock]**: Allows selecting an input only if a signal is connected.

9-11 [languages] + ENTER.**9-12 [demo mode] + ENTER.**

This function allows playing a sequence of effect. Select **[YES]** and validate with **ENTER**.

9-13 [erase all mem] + ENTER.

This function allows erasing all the NON-volatile image memories. Select **[YES]** and validate with **ENTER**.

9-14 [default value] + ENTER.

This function allows setting all the image parameters to the factory settings. Select **[YES]** and validate with **ENTER**. Then switch OFF and ON the device.

FUNCTION	POSITION	FUNCTION	POSITION
1 MODE	mixer mode	6-1 USER 1 key	Fading (2s).
2-1 input type	computer HV/C	6-2 USER 2 key	Title (holding).
2-2 used Inputs	used	6-3 USER 3 key	Shadow title (holding).
2-3 H Sync Load	Hi-Z	6-4 USER 4 key	H. WIPE: From left (2).
2-4 VCR mode	OFF	7-1 master volume	191
3-1 output format	1024x768	7-2 audio mode	stereo
3-2 output rate	internal 60Hz	7-3 audio source	auto follow
3-3 output sync	H & V	7-4 audio level.	48
3-4 type of screen	4/3	7-5 audio balance.	32
3-5 test pattern	no pattern	8-1 master volume	191
4-2-1 horizontal position	128	8-2 audio mode	stereo
4-2-2 vertical position	128	8-3 audio source	auto follow
4-2-3 horizontal size	128	8-4 audio level.	48
4-2-4 vertical size	128	8-5 audio balance.	32
4-3 aspect ratio	4/3	9-5 2:2 pull down	auto
4-4 brightness (video)	128	9-6 transition	fade color
4-4 black level (computer)	128	9-9 key locking	all off
4-5 contrast (video)	128	9-12 demo mode	no
4-5 color (computer)	R = 128, G = 128, B= 128		
4-6 color (video)	128		
4-6-1 clock (computer)	0		
4-6-2 phase (computer)	0		
4-7 hue	128		
4-8 u/overscan	overscan		
4-9 sharpness	0		

6-5. FRONT PANEL SCREEN FUNCTIONS DESCRIPTION (continued)**10 ▶ [CONSOLE]****10-1 [RS232/LAN port] + ENTER.**

Select the needed communication port with ◀ ▶ + **ENTER**.

- **[RS232]**: Enables the RS-232 communication port. (Default setting).
- **[LAN]**: Enables the LAN communication port.

IMPORTANT: To avoid addresses conflict, configure the LAN communication port (with the **LAN setup** menu) before activates it.

NOTE: The RS-232 & the LAN communication ports can not be used simultaneously.

10-2 [key locking] + ENTER.

Select an item with ◀ ▶ and change the mode with **ENTER**.

- **[menus]**: Locks/unlocks the **LCD CONTROL** switches.
- **[input]**: Locks/unlocks the **INPUT SELECTION** and **FREEZE** switches.
- **[all]**: Locks/unlocks all the front panel switches.

NOTE: To unlock presses simultaneously on **ENTER** and **EXIT**.

- **[autolock]**: Allows selecting an input only if a signal is connected.

10-3 [LAN setup] + ENTER.

Allows configuring the LAN communication port. Select the UDP or TCP protocol with ◀ ▶ + **ENTER** then select items with ◀ ▶ + **ENTER**.

- **[local addr.]**: Every device connected to an IP network must have a unique IP address. This address is used to reference the specific unit. IP addresses are specified as **x.x.x.x** where each **x** is a number from 1 to 254. Assign the device to a unique IP address with ◀ ▶ + **ENTER**. (Default value: 192.168.0.2).
- **[remote addr.]**: This is the destination IP address used with an outgoing connection. Select the destination IP address with ◀ ▶ + **ENTER**. (Default value: 192.168.0.1).
- **[gateway addr.]**: The gateway address, or router, allows communication to other LAN segments. The gateway address should be the IP address of the router connected to the same LAN segment as the unit. Select the gateway address with ◀ ▶ + **ENTER**. (Default value: 192.168.0.1).
- **[local port]**: Every TCP connection and every UDP datagram is defined by a destination IP address and a port number. Select a local port number with ◀ ▶ + **ENTER** between 10000 and 10999. (Default value: 10500).
- **[remote port]**: You must set the remote TCP port number for the unit to make outgoing connections. This parameter defines the port number on the target host to which a connection is attempted. Select a remote port number with ◀ ▶ + **ENTER** between 00000 and 655000. (Default value: 10500).
- **[netmask]**: A netmask defines the number of bits taken from the IP address that are assigned for the host section. The device prompts for the number of host bits to be entered, then calculates the netmask, which displays in standard decimal-dot notation when the saved parameters are displayed. Select the netmask with ◀ ▶ + **ENTER**. (Default value: 255.255.255.0).
- **[default setup]**: Set all the LAN settings to the default value. Select **[YES]** and validate with **ENTER**.

MAC ADDRESS: The MAC address, also referred to hardware address, is a unique number assigned to each device. The MAC address is available on the rear panel device label.

10-4 [key brightness] + ENTER.

Allows adjusting the key brightness.

10-5 [RK8022 version] + ENTER.

Display the status of the internal firmware.

10-6 [default value] + ENTER.

This function allows setting all the parameters to the factory settings. Select **[YES]** and validate with **ENTER**. Then switch OFF and ON the device.

Chapter 7 : TECHNICAL SPECIFICATIONS

7-1. COMPUTER & VIDEO INPUTS

• ANALOG COMPUTER:

<i>Connectors:</i>	BNC female (inputs #1 to #4) or HD15 female (inputs #5 to #8).
<i>Line frequency:</i>	Up to 130 kHz.
<i>Frame frequency:</i>	Up to 130 Hz.
<i>Resolution:</i>	Up to 1600x1200 @ 60 Hz.
<i>Sync. types:</i>	RGBHV, RGB/S, RGsB (Sync On Green).
<i>Levels:</i>	R, G, B = 0.7 Vp/p. H & V Sync = TTL Composite Sync = TTL and 0.3 V. SOG (Sync On Green) = 0.3 V.
<i>Impedance:</i>	R, G, B = 75 ohms. H = 75 ohms or Hi-Z. V = Hi-Z.

• RGB/S VIDEO:

<i>Connectors:</i>	BNC female (inputs #1 to #4) or HD15 female (inputs #5 to #8).
<i>Frequency:</i>	15.625 kHz - 50 Hz (625 lines). 15.734 kHz - 60 Hz (525 lines).
<i>Levels:</i>	R, G, B = 0.7 Vp/p. SYNC. = 0.3 Vp/p or TTL.
<i>Impedance:</i>	RGB = 75 ohms. SYNC. = 75 ohms or Hi-Z.

• COMPONENT:

<i>Connectors:</i>	BNC female (inputs #1 to #4) or HD15 female (inputs #5 to #8).
<i>Frequency:</i>	15.625 kHz - 50 Hz (625 lines). 15.734 kHz - 60 Hz (525 lines).
<i>Levels:</i>	Y = 1 Vp/p (0.7 V Luma + 0.3 V Sync.). Cr / Pr & Cb / Pb = 0.7 Vp/p.
<i>Impedance:</i>	75 ohms.

• HDTV:

<i>Connectors:</i>	BNC female (inputs #1 to #4) or HD15 female (inputs #5 to #8).
<i>Formats:</i>	720p/480p (60Hz), 1080i (50/60Hz).
<i>Levels:</i>	Y = 1 Vp/p (0.7 V + sync.). Cr / Pr & Cb / Pb = 1 Vp/p (0.7 V + sync.).
<i>Sync.:</i>	Tri-level: $\pm 0.3V$ (positive/negative). Bi-level: 0.3V (negative).
<i>Impedance:</i>	75 ohms.

• S.VIDEO:

<i>Connectors:</i>	BNC female (inputs #1 to #4) or HD15 female (inputs #5 to #8).
<i>Standard:</i>	PAL / SECAM: 15.625 kHz - 50 Hz - 625 lines. NTSC (3.58 MHz / 4.43 MHz): 15.734 kHz - 60 Hz - 525 lines.
<i>Levels:</i>	Y = 1 Vp/p (0.7 V Luma + 0.3 V Sync.). C = 0.3 Vp/p (Chroma Burst).
<i>Impedance:</i>	75 ohms.

7-1. COMPUTER & VIDEO INPUTS (continued)**• COMPOSITE VIDEO:**

Connectors: BNC female (inputs #1 to #4) or HD15 female (inputs #5 to #8).

Standard: PAL / SECAM: 15.625 kHz - 50 Hz - 625 lines.
NTSC (3.58 MHz / 4.43 MHz): 15.734 kHz - 60 Hz - 525 lines.

Level: 1 Vp/p (0.7 V Luma + 0.3 V Sync.).

Impedance: 75 ohms.

• DIGITAL COMPUTER (DVI) INPUT:

Connector: DVI-I female.

Format: Digital Visual Interface (DVI)-TMDS single link.

Resolution: Up to 1600 x 1200 @ 60Hz BR (reduced blanking).

• SD-SDI:

Connector: BNC female.

Data rate: 270 Mbps serial digital.

Impedance: 75 ohms.

• HD-SDI:

Connector: BNC female.

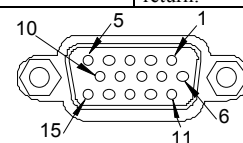
Formats: 720p @ 50 & 59.94 Hz
1080i @ 50 & 59.94 Hz
1080p @ 23.97; 25 & 29.97 Hz.
1080sF @ 23.97 & 25 Hz.

Data rate: 1.5 Gbps serial digital.

Impedance: 75 ohms.

• HD15 PIN ASSIGNMENT

SIGNAL	COMPUTER (analog)	RGB/S VIDEO	SD-YUV & HD-YUV	S.VIDEO (Y/C)	COMPOSITE VIDEO
PIN 1	RED.	RED.	Cr / Pr.	C (chrominance).	
PIN 2	GREEN.	GREEN.	Y.	Y (luminance).	VIDEO (NTSC, PAL...)
PIN 3	BLUE.	BLUE.	Cb / Pb.		
PIN 6	RED return.	RED return.	Cr / Pr return.	C return.	
PIN 7	GREEN return.	GREEN return.	Y return.	Y return.	return.
PIN 8	BLUE return.	BLUE return.	Cb / Pb return.		
PIN 10	GND.	GND.			
PIN 13	H sync or C sync (S).	C sync (S).			
PIN 14	V sync.				



HD15 female connector of the device.

7-2. MAIN & PREVIEW OUTPUTS

• HD-SDI OUTPUTS

Connector: BNC female.

Formats: 720p @ 50 & 59.94 Hz
1080i @ 50 & 59.94 Hz
1080p @ 23.97; 25 & 29.97 Hz.
1080sF @ 23.97 & 25 Hz.

Data rate: 1.5 Gbps serial digital.

Impedance: 75 ohms.

• ANALOG OUTPUTS

Connector: HD15 female.

Signals: RGBHV, RGBS and RGsB.

Resolutions: 4/3: SVGA (800x600), XGA (1024x768), SXGA (1280x1024), D-ILA (1365x1024), SXGA+ (1400x1050) and UXGA (1600x1200).
16/9: 848x480, 1280x720, 1280x768, 1365x768, 1920x1080.

Frame rates: 50, 60, 72 and 75 Hz (72 & 75 Hz frame rates are not available for all resolutions. Please see the table below).

Levels: R, G, B = 0.7 Vp/p.
Sync.: Separate H & V = TTL.
Composite = TTL.
SOG = 0.3 Vp/p.

Impedance: R, G, B = 75 ohms.

• DIGITAL COMPUTER (DVI) OUTPUTS

Connector: DVI-I female.

Signal: Digital Visual Interface (DVI)-TMDS single link.

Resolutions: 4/3: SVGA (800x600), XGA (1024x768), SXGA (1280x1024), D-ILA (1365x1024), SXGA+ (1400x1050) and UXGA (1600x1200).
16/9: 848x480, 1280x720, 1280x768, 1365x768, 1920x1080.

Frame rates: 50, 60, 72 and 75 Hz (72 & 75 Hz frame rates are not available for all resolutions. Please see the table below).

• OUTPUT FORMATS TABLE

Outputs formats		Outputs connectors		
Resolution	Frame rate	HD15	DVI-D	BNC
848x480	50,60,72,75,F	✓	✓	
800x600	50,60,72,75,F	✓	✓	
1280x720	50,60,F	✓	✓	
1024x768	50,60,72,75,F	✓	✓	
1280x768	50,60,72,75,F	✓	✓	
1365x768	50,60,72,75,F	✓	✓	
1280x1024	50,60,72,75,F	✓	✓	
1365x1024	50,60,72,75,F	✓	✓	
1400x1050	50,60,72*,75*,F	✓	✓	
1920x1080	50,59	✓	✓	
1600x1200	50, 60*	✓	✓	
720p HD-SDI	50,59			✓
1080i HD-SDI	50,59			✓
1080sf HD-SDI	24,25			✓
1080p HD-SDI	24,25,29			✓

F = follow mode

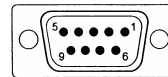
* = Reduced blanking

7-3. COMMUNICATION PORTS & TALLY OUTPUTS

- **REMOTE RS-232 (on DB 9 female connector)**

Level: RS-232.

Data Rate: 9600 Bauds, 8 data bits, 1 stop bit, no parity bit, no flow control.



DB9 Female connector

PIN #	FUNCTION
1	tally # 1
2	Tx (transmit data)
3	Rx (receive data)
4	reserved for manufacturer
5	Ground
6	tally # 2
7	NC
8	reserved for manufacturer
9	tally # 3

- **TALLY OUT (on DB 9 female connector)**

Rating: 20 Vdc MAX, 50 mA MAX (open collector).

- **LAN (on RJ45 connector)**

Protocol: UDP (User Datagram Protocol) or TCP (Transmission Control Protocol).

Data Rate: 10 / 100 Mbps.

LED functions (on RJ45 connector):

Top LED	Bottom LED	Meaning
OFF	OFF	No link
OFF	ON	100 BASE-T link.
ON	OFF	10 BASE-T link.

7-4. OPTIONAL AUDIO INPUTS (OPT-iX-A)

- 9 Balanced and unbalanced stereo inputs (on 5-pin MCO male connector).
- $V_i = +18$ dBu (max).
- $Z_i = 20$ k Ω unbalanced.
- $Z_i = 40$ k Ω balanced.

7-5. OPTIONAL AUDIO OUTPUT (OPT-iX-A)

- 2 Balanced and unbalanced mono/stereo outputs (on 5-pin MCO male connector).
- V_o max: Unbalanced = +18 dBu (+12 dBu with 300 Ω load).
Balanced = +24 dBu (+18 dBu with 600 Ω load).
- $Z_o = 600$ Ω balanced.
- $Z_o = 300$ Ω unbalanced.
- $G = 0$ dB nominal.
- $G = +6$ dB / $-\infty$ adjustable with Master volume.

7-6. ENVIRONMENTAL

<i>Power:</i>	100 VAC to 240 VAC ; 50-60 Hz ; 130 watts, internal, auto-switchable.
<i>Storage Temperature:</i>	-25 °C to +85 °C (-13 °F to +185 °F).
<i>Operating temperature:</i>	0 °C to 50 °C (32 °F to 122 °F).
<i>Maximum ambient operating temperature:</i>	< 40 °C (< 104 °F).
<i>Hygrometry:</i>	10% to 80% (without condensation).
<i>Dimension:</i>	W 480 x D 420 x H 133 mm / 19"W x 16.5"D x 5.25"H. (Compatible with a Standard 19" rack, Height = 3 U).
<i>Weight:</i>	DVX8022: 8 kg / 17.6 lbs. OPT-iX-A: + 0.5 kg / 1.1 lbs.

APPENDIX A: PROGRAMMER'S GUIDE

A-1: INTRODUCTION

If you need to use your own Software Control program from a PC or WORKSTATION with an RS-232 port, the device allows communication through an ASCII code protocol.

The device treats any character that it receives on the RS-232 as a possible command but only accepts legal commands. There is no starting/ending code needed in a command string.

A command can be a single character typed on a keyboard and does not require any special character before or after it. (It is not necessary to press "ENTER" on the keyboard). A command can be preceded by a value (See chapter A-2: COMMANDS STRUCTURE).

When the device receives a valid command, it will execute the command. Then it will send back the status of the parameters that have changed due to this command.

If the command cannot be executed (value out of range, no signal on the selected input), the device will just send back the current status of the corresponding parameters.

If the command is invalid, an error response will be returned to the control device. All responses returned to the control device end with a carriage return <CR> and a line feed <LF> signaling the end of the response character string (see chapter A-3: RÉPONSES D'ERREUR).

A-2: COMMANDS STRUCTURE

Commands are usually composed of a numerical value followed by the command character. The characters used without any numerical value return the current setting of the command.

Command = Value (optional) + Character.

Examples / Exemples:

Command / Commande		Response Réponse	Description
Value/ Valeur	Character / Caractère		
none aucune	FY	OSYN	Read the output sync type. <i>Lit le type de synchro.</i>
10	V	VP10	Set Vertical position to 10. <i>Règle la position horizontale à 10.</i>

A-3: ERROR RESPONSES

When the device receives from the control device an invalid command or value, it returns an error response:

Command / Commande		Response Réponse	Description
Value/ Valeur	Character / Caractère		
none aucune	Z	E10	Invalid command. / <i>Commande invalide.</i>
70260	H	E13	Invalid value. / <i>Valeur invalide.</i>

ANNEXE A: GUIDE DE PROGRAMMATION

A-1: INTRODUCTION

Si vous souhaitez utiliser votre propre logiciel de contrôle avec votre PC, MAC ou Station de Travail par un port RS-232, l'appareil peut communiquer par simple émission / réception de caractères ASCII.

L'appareil traite tous les caractères reçus sur son port RS-232 comme des commandes possibles; seules certaines commandes sont reconnues et acceptées.

Une commande est constituée d'un ou deux caractères sans code de contrôle ni avant, ni après. Il n'est pas nécessaire d'appuyer sur "ENTER" du clavier. Une commande peut être précédée d'une valeur (voir chapitre A-2: STRUCTURE D'UNE COMMANDE).

Lorsque l'appareil reçoit une commande valide, il exécute cette commande puis renvoie à l'appareil de contrôle l'état de tous les paramètres qui ont été modifiés suite à l'envoi de cette commande.

Si la commande n'est pas reconnue (valeur en dehors de la plage, pas de signal sur l'entrée sélectionnée), l'appareil renvoie uniquement les états des paramètres correspondants.

Si la commande est invalide, une réponse d'erreur sera retournée à l'appareil de contrôle. Toute réponse faite à l'unité de contrôle se termine par un retour à la ligne et par un saut de ligne (CR / LF) signalant la fin de la commande de réponse. (Voir chapitre: A-3: RÉPONSES D'ERREUR).

A-2: STRUCTURE D'UNE COMMANDE

Les commandes sont généralement constituées d'une valeur numérique suivie par 1 ou 2 lettres de commande. Une lettre utilisée sans valeur numérique renvoie l'état de la commande.

Commande = Valeur (optionnelle) + Caractère

A-3: RÉPONSES D'ERREUR

Lorsque l'appareil reçoit de l'appareil de contrôle une valeur ou une commande invalide, il retourne les messages d'erreur suivants:

A-4: COMMANDS AND RESPONSES TABLE**A-4: TABLE DES COMMANDES ET RÉPONSES**

COMMAND	RESPONSE	COMMAND DESCRIPTION	TYPE	VALUE / VALEUR		
COMMANDE	RÉPONSE	DESCRIPTION DE LA COMMANDE		MIN	MAX	DESCRIPTION
SELECTION COMMANDS / COMMANDES DE SÉLECTION						
MM	MTRX	Switching mode selection.	Rd/Wr	0	1	0 = mixer mode 1 = matrix mode
CC	CH	MAIN selected input.	Rd	0	8	0 = black 1 = input #1 2 = input #2 3 = input #3 4 = input #4 5 = input #5 6 = input #6 7 = input #7 8 = input #8
CN	CHN	• Background switching during a PIP (in MIXER mode). • Input pre-selection for OUTPUT 1 (in MATRIX mode).	Rd/Wr	0	8	
cc	ch	PREVIEW selected input (read only).	Rd	0	8	
cn	chn	• Input pre-selection & PIP switching (in MIXER mode). • Input pre-selection for OUTPUT 2 (in MATRIX mode).	Rd/Wr	0	8	
G	TAKE	TAKE (transition).	Rd/Wr	0	1	1 = start the transition (automatic reset at the end of the effect duration). 0 = stop the transition (for holding effect).
ut	TKEV	Transition availability.	Rd	0	1	1 = New input ready to commute.
Z	FRZ	FREEZE MAIN.	Rd/Wr	0	1	0 = inactive 1 = active.
z	frz	FREEZE PREVIEW.	Rd/Wr	0	1	0 = inactive 1 = active.
INPUT COMMANDS / COMMANDES D'ENTRÉE						
PC	PCH	Input selection for adjustment.	Rd/Wr	0	8	0 = all inputs. 1 = input #1.... 8 = input #8
PE	PEN	Input disabling (works with PC)	Rd/Wr	0	1	0 = disable 1 = enable.
PL	PLD	H sync load selection (works with PC).	Rd/Wr	0	1	0 = Hi-Z load 1 = 75Ω load.
PR	PRGB	RGB input type selection (works with PC command).	Rd/Wr	0	13	0 = composite 1 = S.VIDEO 2 = YUV 3 = RGBS (TTL) 4 = RGsB (SOG) 5 = RGBS (ana) 6 = SDTV SDI 1 7 = computer (SOG) 8 = comp (HV or C.) 9 = comp DVI 10 = HDTV 11 = HDSDI 1 12 = HDSDI 2 13 = SDTV SDI 2
PI	PSTD	Input standard selection (works with PC command).	Rd/Wr	0	4	0 = NTSC/PAL/SECAM. 1 = NTSC. 2 = PAL. 3 = SECAM 4 = Black & White.
PP	PPRC	VCR mode	Rd/Wr	0	1	0 = OFF 1 = ON.
NOTE:	(M) = MAIN output (sortie MAIN). (P) = PREVIEW output (sortie PREVIEW).		Rd/Wr = Read and write command / Commande de lecture et d'écriture. Rd = Read only command / Commande de lecture uniquement.			

COMMAND	RESPONSE	COMMAND DESCRIPTION	TYPE	VALUE / VALEUR		
COMMANDE	RÉPONSE	DESCRIPTION DE LA COMMANDE		MIN	MAX	DESCRIPTION
OUTPUT COMMANDS / COMMANDES DE SORTIE						
FM	OFTM	Output formats selection (M).	Rd/Wr	0	46	0 = 800x600 @50 1 = 800x600 @60 2 = 800x600 @72 3 = 800x600 @75 4 = 1024x768 @50 5 = 1024x768 @60 6 = 1024x768 @72 7 = 1024x768 @75 8 = 1280x768 @50 9 = 1280x768 @60 10 = 1280x768 @72 11 = 1280x768 @75 12 = 1400x1050 @50 13 = 1400x1050 @60 14 = 1400x1050 @72 15 = 1400x1050 @75 16 = 1365x1024 @75 17 = 1365x768 @75 18 = 848x480 @60 19 = 1280x720 @50 20 = 1280x720 @60 21 = 1365x1024 @50 22 = 1365x1024 @60 23 = 1365x1024 @72
fp	oftp	Output formats selection (P).	Rd/Wr	0	46	24 = 1365x768 @50 25 = 1365x768 @60 26 = 1365x768 @72 27 = 848x480 @50 28 = 848x480 @72 29 = 848x480 @75 30 = 1280x768 @50 31 = 1280x768 @60 32 = 1280x768 @72 33 = 1280x768 @75 34 = 1600x1200 @50 35 = 1600x1200@60RB 36 = 1920x1080 @50 37 = 1920x1080 @59 38 = HDSOI 720p50 39 = HDSOI 720p59 40 = HDSOI 1080i50 41 = HDSOI 1080i59 42 = HDSOI 1080p24 43 = HDSOI 1080p25 44 = HDSOI 1080p29 45 = HDSOI 1080sf24 46 = HDSOI 1080sf25
FY	OSYN	Output sync selection (M).	Rd/Wr	0	2	0 = H & V sync. 1 = Composite sync.
fy	osyn	Output sync selection (P).	Rd/Wr	0	2	2 = SOG
FS	SCRM	Type of screen selection (M)	Rd/Wr	0	1	0 = 4/3 screen 1 = 16/9 screen
fs	scrp	Type of screen selection (P)	Rd/Wr	0	1	0 = 4/3 screen 1 = 16/9 screen
pm	PAT	Test pattern selection (M).	Rd/Wr	0	7	0 = no pattern 1 = centering 2 = color
pp	pat	Test pattern selection (P).	Rd/Wr	0	7	3 = grey scale 4 = grid. 5 = softedge 6 = multi-burst. 7 = H grey scale
XR	REFR	Output rate selection (Mixer mode). Output 1 rate selection (Matrix mode)	Rd/Wr	0	8	0 = internal rate 1 = follow input #1
xr	refr	Output 2 rate selection (Matrix mode).	Rd/Wr	0	8	2 = follow input #2... 8 = follow input #8
NOTE: (M) = MAIN output (sortie MAIN). (P) = PREVIEW output (sortie PREVIEW). Rd/Wr = Read and write command / Commande de lecture et d'écriture. Rd = Read only command / Commande de lecture uniquement.						

COMMAND	RESPONSE	COMMAND DESCRIPTION	TYPE	VALUE /VALEUR		
COMMANDE	RÉPONSE	DESCRIPTION DE LA COMMANDE		MIN	MAX	DESCRIPTION
IMAGE COMMANDS / COMMANDES DU MENU IMAGE						
yC	ACAD	Automatic centering (M).	Rd/Wr	0	1	1 = centering action (automatic reset).
H	HP	Horizontal position (M).	Rd/Wr	0	255	
V	VP	Vertical position (M).	Rd/Wr	0	255	
W	HW	Horizontal size (M).	Rd/Wr	0	255	
S	VS	Vertical size (M).	Rd/Wr	0	255	
B	BRG	Brightness adjustment (M).	Rd/Wr	0	255	
D	CON	Contrast adjustment (M).	Rd/Wr	0	255	
O	COL	Color adjustment (M).	Rd/Wr	0	255	
T	HUE	Hue adjustment (M).	Rd/Wr	0	255	
QP	PRO	Sharpness adjustment (M).	Rd/Wr	0	7	0 = level 1..... 7 = level 8.
QO	OVR	Underscan / overscan (M)	Rd/Wr	0	1	0 = underscan 1 = overscan
A	ASP	Input aspect ratio selection (M)	Rd/Wr	0	3	0 = 4/3 1 = letterbox 2 = 16/9 anamorphic 3 = zoom.
yW	ZHSZ	Zoom horizontal size (M).	Rd/Wr	0	255	0 = 100 % 255 = 200%
yZ	ZVSZ	Zoom vertical size (M).	Rd/Wr	0	255	0 = 100 % 255 = 200%
yH	ZHPO	Zoom horizontal position (M).	Rd/Wr	0	255	
yV	ZVPO	Zoom vertical position (M).	Rd/Wr	0	255	
QR	RLV	Red level adjustment (M)	Rd/Wr	0	255	
QG	GLV	Green level adjustment (M)	Rd/Wr	0	255	
QB	BLV	Bleu level adjustment (M)	Rd/Wr	0	255	
MC	CLK	Number of pixels per line (M)	Rd/Wr	0	65535	
MP	PHA	Pixels phase adjustment (M)	Rd/Wr	0	31	
yP	PRES	PRESET (M).	Rd/Wr	0	1	1 = PRESET action (automatic reset).
yc	acad	Automatic centering (P).	Rd/Wr	0	1	1 = centering action (automatic reset).
h	hp	Horizontal position (P).	Rd/Wr	0	255	
v	vp	Vertical position (P).	Rd/Wr	0	255	
w	hw	Horizontal size (P).	Rd/Wr	0	255	
s	vs	Vertical size (P).	Rd/Wr	0	255	
b	brg	Brightness adjustment (P).	Rd/Wr	0	255	
d	con	Contrast adjustment (P).	Rd/Wr	0	255	
o	col	Color adjustment (P).	Rd/Wr	0	255	
t	hue	Hue adjustment (P).	Rd/Wr	0	255	
qp	pro	Image process adjustment (P)	Rd/Wr	0	7	0 = level 1..... 7 = level 8.
qo	ovr	Underscan / overscan (P)	Rd/Wr	0	1	0 = underscan 1 = overscan
a	asp	Input aspect ratio selection (P)	Rd/Wr	0	3	0 = 4/3 1 = letterbox 2 = anamorphic 3 = zoom.
yw	zhsz	Zoom horizontal size (P).	Rd/Wr	0	255	0 = 100 % 255 = 200%
yz	zvsz	Zoom vertical size (P).	Rd/Wr	0	255	0 = 100 % 255 = 200%
yh	zhpo	Zoom horizontal position (P).	Rd/Wr	0	255	
yv	zvpo	Zoom vertical position (P).	Rd/Wr	0	255	
qr	rlv	Red level adjustment (P)	Rd/Wr	0	255	
qg	glv	Green level adjustment (P)	Rd/Wr	0	255	
qb	blv	Bleu level adjustment (P)	Rd/Wr	0	255	
mc	clk	Number of pixels per line (P)	Rd/Wr	0	65535	
mp	pha	Pixels phase adjustment (P)	Rd/Wr	0	31	
yp	pres	PRESET (P).	Rd/Wr	0	1	1 = PRESET action (automatic reset).
yS	STO	STORE.	Rd/Wr	0	1	1 = STORE action (automatic reset).
NOTE: (M) = MAIN output (sortie MAIN). Rd/Wr = Read and write command / Commande de lecture et d'écriture. (P) = PREVIEW output (sortie PREVIEW). Rd = Read only command / Commande de lecture uniquement.						

COMMAND	RESPONSE	COMMAND DESCRIPTION	TYPE	VALUE / VALEUR			
COMMANDE	RÉPONSE	DESCRIPTION DE LA COMMANDE		MIN	MAX	DESCRIPTION	
EFFECTS COMMANDS / COMMANDES D'EFFET							
E	EFF	Effect selection.	Rd/Wr	0	14	0 = CUT. 2 = TITLE. 4 = PIP. 6 = from left. 8 = to center H. 10 = Up. 12 = to center V. 14 = Double PIP.	1 = FADING. 3 = shadow TITLE 5 = PIP fade. 7 = from right. 9 = from center H. 11 = Down. 13 = from center V.
eD	EFD	Effect duration selection.	Rd/Wr	5	255	5 = 0.5 second 244 = 24.5 seconds 255 = holding	
ea	EFPA	Horizontal position of the effect.	Rd/Wr	0	255		
eb	EFPB	Vertical position of the effect (PIP...)	Rd/Wr	0	255		
ec	EFPC	Horizontal size of the effect (PIP...)	Rd/Wr	0	255	0 = PIP 1:1 5 = size mini 255 = size maxi	
ed	EFPD	Vertical size of the effect (PIP).	Rd/Wr	0	255	0 = PIP 1:1 5 = size mini 255 = size maxi	
ee	EFPE	Hor. shape position (PIP).	Rd/Wr	0	255		
ef	EFPF	Vertical shape position (PIP).	Rd/Wr	0	255		
eg	EFPG	Horizontal shape size (PIP).	Rd/Wr	0	255		
eh	EFPH	Vertical shape size (PIP).	Rd/Wr	0	255		
eO	EFO	Effect options	Rd/Wr	0	5	0 = without 2 = smooth 1 = shadow 3 = edge 4 = active Inlay when double PIP. 5 = smooth edge	
ei	EFPI	Border size or frame selection for double PIP.	Rd/Wr	0	255	• If double PIP: 0 = frame 1..... 5 = frame 6 • If PIP: 0 = size mini 255 = size maxi.	
ej	EFPJ	-Intensity of the shadow borders (if EFF = 4 & EFO = 1). -Color of the edge & smooth edge borders (if EFF = 4 & EFO = 3 or 5). - Preview Opacity in double PIP (if EFF = 14).	Rd/Wr	0	255		
us	EFPS	Color of the shadow borders.	Rd/Wr	0	255		
eu	EFOP	Effect opening type.	Rd/Wr	0	15	0 = Cut 1 = fade 2 = slide Left-Right 3 = slide Right-Left 4 = slide Bottom-Up 5 = slide Up-Bottom 6 = wipe Left-Right 7 = wipe Right-Left 8 = wipe H to center 9 = wipe V to center 10 = wipe Bottom-Up 11 = wipe Up-Bottom 12 = wipe V to center 13 = wipe V from center 14 = wipe H&V to center 15 = wipe H&V from center	
ev	EFCL	Effect closing type.	Rd/Wr	0	15		
es	EFPT	Effect opening duration (0.1 sec step)	Rd/Wr	0	255		
et	EFCT	Effect closing duration (0.1 sec step)	Rd/Wr	0	255		
uk	EFPK	Horizontal position of the main PIP.	Rd/Wr	0	255		
ul	EFPL	Vertical position of the main PIP.	Rd/Wr	0	255		
um	EFPM	Horizontal size of the main PIP.	Rd/Wr	0	255	0 = PIP 1:1 5 = size mini 255 = size maxi	
un	EFPN	Vertical size of the main PIP.	Rd/Wr	0	255	0 = PIP 1:1 5 = size mini 255 = size maxi	
uo	EFPO	Horizontal mask position of the main PIP.	Rd/Wr	0	255		
up	EFPP	Vertical mask position of the main PIP.	Rd/Wr	0	255		
uq	EFPQ	Horizontal mask size of the main PIP.	Rd/Wr	0	255		
ur	EFPR	Vertical mask size of the main PIP.	Rd/Wr	0	255		
g	EON	Effect in progress.	Rd	0	1	0 = no effect in progress. 1 = effect in progress.	
NOTE:		(M) = MAIN output (sortie MAIN). (P) = PREVIEW output (sortie PREVIEW).					Rd/Wr = Read and write command / Commande de lecture et d'écriture. Rd = Read only command / Commande de lecture uniquement.

Double PIP effect

COMMAND <i>COMMANDE</i>	RESPONSE <i>RÉPONSE</i>	COMMAND DESCRIPTION <i>DESCRIPTION DE LA COMMANDE</i>	TYPE	VALUE / <i>VALEUR</i>			
				MIN	MAX	DESCRIPTION	
FRAME & LOGOS COMMANDS / <i>COMMANDES DU MENU LOGO & FRAME</i>							
MAIN / OUTPUT 1	LM	LMOD	Frame/logo mode.	Rd/Wr	0	3	0 = use & assignment mode. 1 = logo recording mode. 2 = frame recording mode. 3 = erasing mode.
	LX	LSTA	Status of the logo programmer	Rd	0	4	0 = free. 1 = logo/frame in recalling process. 2 = logo/frame in storing process. 3 = output format incompatible with the logo. 4 = logo/frame in erasing process.
	LA	LPGA	Logo 1 & frame assignment.	Rd/Wr	0	14	0 = no logo 1 = frame 1 2 = frame 2 3 = logo 1..... 10 = logo 8 11 = frame 3 12 = frame 4 13 = frame 5 14 = frame 6
	LB	LPGB	Logo 2 & frame assignment.	Rd/Wr	0	14	
	LC	LCUR	• In logo recording mode: Number of the logo to be store (3 to 10). • In frame recording mode: Number of the frame to be store. • In erase mode: number of the logo to be erase (0 = erase all).	Rd/Wr	0	14	
	LD	LDYS	Display logo (according to PCH)	Rd/Wr	0	1	0 = Display OFF 1 = Display ON
	LU	LHCP	Horiz. position of the logo storing area.	Rd/Wr	0	255	
	Lu	LVCP	Vert. position of the logo storing area.	Rd/Wr	0	255	
	LW	LHSA	Horizontal size of the logo storing area.	Rd/Wr	5	255	5 = 3% 255 = 100%
	LS	LVSA	Vertical size of the logo storing area.	Rd/Wr	5	255	5 = 3% 255 = 100%
	LH	LHPA	Horizontal position of the logo 1.	Rd/Wr	0	255	
	Lh	LHPB	Horizontal position of the logo 2.	Rd/Wr	0	255	
	LV	LVPA	Vertical position of the logo 1.	Rd/Wr	0	255	
	Lv	LVPB	Vertical position of the logo 2.	Rd/Wr	0	255	
	LP	LPXA	Pixels number in a line of the logo 1.	Rd	0	65535	These 2 commands allow calculating the duration of the storing.
	LL	LLNA	Lines number in a logo 1.	Rd	0	65535	
	Lp	LPXB	Pixels number in a line of the logo 2.	Rd	0	65535	These 2 commands allow calculating the duration of the storing.
	Li	LLNB	Lines number in a logo 2.	Rd	0	65535	
	LT	LTYA	Logo 1 type.	Rd/Wr	0	1	0 = frame 1 = logo
	Lt	LTYB	Logo 2 type.	Rd/Wr	0	1	0 = frame 1 = logo
	LO	LOFA	Output format during the logo1 storing.	Rd	0	11	Identical as FM command.
	Lo	LOFB	Output format during the logo2 storing.	Rd	0	11	
	LR	LSTO	-In recording mode: frame/logo storing. -In erase mode: frame/logo erasing.	Rd	0	1	1 = STORE (automatic reset). 1 = ERASE (automatic reset).
	Lr	LABT	Stop the frame storing.	Rd/Wr	0	1	1 = stop the frame storing (automatic reset).
	LZ	LPTM	Logo transparency	Rd/Wr	0	15	0 = mini 15 = maxi
	LE	LLEV	Luma key level.	Rd/Wr	0	255	
IE	LEMP	Status of the frame/logo memories. (according to LCUR)	Rd	0	1	0 = logo/frame memorized. 1 = empty memory.	
Lb	LBKC	Background color.	Rd/Wr	0	7		
Ld	LLD	Fade logo duration (0.01 second step).	Rd/Wr	15	255	15 = 0.15 second 255 = 2.5 seconds	
Lf	LFD	Fade frame duration (0.1 second step).	Rd/Wr	5	50	5 = 0.1 second 50 = 5 seconds	
LQ	LQTY	Frame quality	Rd/Wr	0	1	0 = native (4 frm) 1 = optimized (6 frm)	
NOTE: To store a logo from the MAIN display you should: ① Select the logo recording mode with the LM command (1LM). ② Adjust the position and size of the logo storing area with the LU, Lu, LW and LS commands. ③ Adjust the luma key level (with LE command) and the background color (with Lb command). ④ Select a logo memory with the LC command and do a store with LR command (1LR). To store a frame from the MAIN display you should: ① Select the frame recording mode with the LM command (2LM), and do a store with the LR command (1LR).							
NOTE: To assign a logo/frame to an input on the MAIN display you should: ① Select the assignment mode with the LM command (0LM). ② Select the input with the PC command. ③ Select a stored logo/frame with LA or LB commands. ④ Adjust the horizontal & vertical position of the logo with the LH, Lh, LV & Lv commands.							

PREVIEW / OUTPUT 2

COMMAND	RESPONSE	COMMAND DESCRIPTION	TYPE	VALUE /VALEUR		
COMMANDE	RÉPONSE	DESCRIPTION DE LA COMMANDE		MIN	MAX	DESCRIPTION
FRAME & LOGOS COMMANDS (continued) / COMMANDES DU MENU LOGOS & FRAME (suite)						
IM	lmod	Frame/logo mode.	Rd/Wr	0	3	0 = use & assignment mode. 1 = logo recording mode. 2 = frame recording mode. 3 = erasing mode.
IX	lsta	Status of the logo programmer	Rd	0	4	0 = free. 1 = logo/frame in recalling process. 2 = logo/frame in storing process. 3 = output format incompatible with the logo. 4 = logo/frame in erasing process.
IA	lpga	Logo 1 & frame assignment.	Rd/Wr	0	14	0 = no logo 1 = frame 1 2 = frame 2 3 = logo 1..... 10 = logo 8 11 = frame 3 12 = frame 4 13 = frame 5 14 = frame 6
IB	lpgb	Logo 2 & frame assignment.	Rd/Wr	0	14	
IC	lcur	• In logo recording mode: Number of the logo to be store (3 to 10). • In frame recording mode: Number of the frame to be store (1 or 2). • In erase mode: number of the logo to be erase (0 = erase all).	Rd/Wr	0	14	
ID	ldys	Display logo (according to PCH)	Rd/Wr	0	1	0 = Display OFF 1 = Display ON
IU	lhcp	Horiz. position of the logo storing area.	Rd/Wr	0	255	
IU	lvcp	Vert. position of the logo storing area.	Rd/Wr	0	255	
IW	lhsc	Horizontal size of the logo storing area.	Rd/Wr	5	255	5 = 3% 255 = 100%
IS	lvsc	Vertical size of the logo storing area.	Rd/Wr	5	255	5 = 3% 255 = 100%
IH	lhpa	Horizontal position of the logo 1.	Rd/Wr	0	255	
Ih	lhpb	Horizontal position of the logo 2.	Rd/Wr	0	255	
IV	lvpa	Vertical position of the logo 1.	Rd/Wr	0	255	
Iv	lvpb	Vertical position of the logo 2.	Rd/Wr	0	255	
IP	lpxa	Pixels number in a line of the logo 1.	Rd	0	65535	These 2 commands allow to calculate the duration of the storing.
IL	llna	Lines number in a logo 1.	Rd	0	65535	
lp	lpxb	Pixels number in a line of the logo 2.	Rd	0	65535	These 2 commands allow to calculate the duration of the storing.
ll	llnb	Lines number in a logo 2.	Rd	0	65535	
IT	ltya	Logo 1 type.	Rd/Wr	0	1	0 = frame 1 = logo.
lt	ltyb	Logo 2 type.	Rd/Wr	0	1	
IO	lofa	Output format during the logo1 storing.	Rd	0	11	Identical as F command.
lo	lofb	Output format during the logo2 storing.	Rd	0	11	
IR	lsto	• In recording mode: frame/logo storing. • In erase mode: frame/logo erasing.	Rd	0	1	1 = STORE or ERASE (automatic reset).
lr	labt	Stop the frame storing.	Rd/Wr	0	1	1 = stop the frame storing (automatic reset).
IZ	LPTP	Logo transparency	Rd/Wr	0	15	0 = mini 15 = maxi
LE	LLEV	Luma key level.	Rd/Wr	0	255	
IE	LEMP	Status of the frame/logo memories. (according to lcur)	Rd	0	1	0 = logo/frame memorized. 1 = empty memory.
Lb	LBKC	Background color.	Rd/Wr	0	7	
Ld	LLD	Fade logo duration (0.01 second step).	Rd/Wr	15	255	15 = 0.15 second 255 = 2.5 seconds
Lf	LFD	Fade frame duration (0.1 second step).	Rd/Wr	5	50	5 = 0.1 second 50 = 5 seconds
LQ	LQTY	Frame quality	Rd/Wr	0	1	0 = native (4 frm) 1 = optimized (6 frm)
NOTE: To store a logo from the PREVIEW display you should: ① Select the logo recording mode with the IM command (1IM). ② Adjust the position and size of the logo storing area with the IU, lu, IH and lh commands. ③ Adjust the luma key level (with LE command) and the background color (with Lb command). ④ Select a logo memory with the IC command and do a store with IR command (1IR). To store a frame from the PREVIEW display you should: ① Select the frame recording mode with the IM command (2IM), and do a store with the IR command (1IR).						
NOTE: To assign a logo/frame to an input on the PREVIEW display you should: ① Select the assignment mode with the IM command (0IM). ② Select the input with the PC command. ③ Select a stored logo/frame with IA, or IB commands. ④ Adjust the horizontal & vertical position of the logo with the IH, lh, IV & lv commands.						

COMMAND	RESPONSE	COMMAND DESCRIPTION	TYPE	VALUE /VALEUR		
COMMANDE	RÉPONSE	DESCRIPTION DE LA COMMANDE		MIN	MAX	DESCRIPTION
CONTROLS COMMANDS / COMMANDES DU MENU CONTRÔLE						
ja	TALA	Input number for TALLY1	Rd/Wr	1	8	1 = input #1.
jb	TALB	Input number for TALLY2.	Rd/Wr	1	8	
jc	TALC	Input number for TALLY3.	Rd/Wr	1	8	8 = input #8.
JA	TAON	TALLY1 status.	Rd	0	1	0 = TALLY1 inactive 1 = TALLY1 active.
JB	TBON	TALLY2 status.	Rd	0	1	0 = TALLY2 inactive 1 = TALLY2 active.
JC	TCON	TALLY3 status.	Rd	0	1	0 = TALLY3 inactive 1 = TALLY3 active.
QE	EPD	2:2 pull down correction.	Rd/Wr	0	1	0 = off 1 = auto.
ye	EPOS	Erase all memories.	Rd/Wr	0	1	1 = erase all memories (automatic reset).
yd	DEMO	Demo mode.	Rd/Wr	0	1	0 = demo mode inactive. 1 = demo mode active.
yi	EISP	Auto-lock	Rd/Wr	0	1	0 = off 1 = on.
fr	BFCR	Red adjustment of the FADE (M).	Rd/Wr	0	255	
fb	BFCB	Blue adjustment of the FADE (M).	Rd/Wr	0	255	
fg	BFCG	Green adjustment of the FADE (M).	Rd/Wr	0	255	
LF	LFAD	Transition (M).	Rd/Wr	0	3	0 = fade color 1 = frame 1 2 = frame 2 3 = clean cut
lF	lfad	Transition (P).	Rd/Wr	0	3	4= frame 3..... 7 = frame 6
fR	bfcR	Red adjustment of the FADE (P).	Rd/Wr	0	255	
fB	bfcB	Blue adjustment of the FADE (P).	Rd/Wr	0	255	
fG	bfcG	Green adjustment of the FADE (P).	Rd/Wr	0	255	
yF	FRAL	FRAME ALERT	Rd/Wr	0	15	0 = no frame 1 = frame 1 2 = frame 2 3 = black 4 = input 1..... 11 = input 8 12 = frame 3..... 15 = frame 6
xI	I_	Identification number.	Rd	0	65535	Values displayed in hexadecimal in the device.
xU	VERU	Update version.	Rd	0	65535	Example: VERU104 = version 1.4
Y	FRES	DEFAULT VALUE.	Rd/Wr	0	1	1 = Default value action (automatic reset).
COMMUNICATION COMMANDS / COMMANDES DE COMMUNICATION						
ne	LANE	Communication port selection	Rd/Wr	0	1	0 = RS232 1 = LAN
nr	LANR	Reset of the LAN parameters.	Rd/Wr	0	1	1 = reset.
ns	LANS	Store the LAN parameters.	Rd/Wr	0	1	1 = store.
na	ADIP	IP address and port selection (for modification)	Rd/Wr	0	3	0 = all IP address / ports 1 = IP local address / local port 2 = IP remote address / remote port 3 = IP gateway address.
nw	IPA_	First byte of the address selected by the na command.	Rd/Wr	0	255	
nx	IPB_	Second byte of the address selected by the na command.	Rd/Wr	0	255	
ny	IPC_	Third byte of the address selected by the na command.	Rd/Wr	0	255	
nz	IPD_	Forth byte of the address selected by the na command.	Rd/Wr	0	255	
np	PORT	Number of the port (local or remote) selected by the na command.	Rd/Wr	0	65500	local port: 10000 to 10999. remote port: 0 to 65500.
nk	NTMK	netmask.	Rd/Wr	0	24	Value = number of bit to 0 (from right). example: 2 ▶ 255.255.255.252 3 ▶ 255.255.255.248 8 ▶ 255.255.255.0..... 24 ▶ 255.0.0.0
nt	TCP	protocol selection.	Rd/Wr	0	1	0 = UDP 1 = TCP
NOTE:	(M) = MAIN output (sortie MAIN). (P) = PREVIEW output (sortie PREVIEW).		Rd/Wr = Read and write command / Commande de lecture et d'écriture. Rd = Read only command / Commande de lecture uniquement.			

COMMAND	RESPONSE	COMMAND DESCRIPTION	TYPE	VALUE / VALEUR		
COMMANDE	RÉPONSE	DESCRIPTION DE LA COMMANDE		MIN	MAX	DESCRIPTION
STATUS COMMANDS / COMMANDES D'ÉTAT						
U	UNIT	Measures unity in tens of kHz.	Rd	0	65535	ex: 14500 = 145 MHz
IL	ILD	Horizontal period of input signal (M)	Rd	0	65535	Line frequency (in kHz) = (UNIT VALUE)x10 ÷ (ILD VALUE).
il	ild	Horizontal period of input signal (P)	Rd	0	65535	Line frequency (in kHz) = (UNIT VALUE)x10 ÷ (ild VALUE).
ID	IFD	Vertical period of input signal (M)	Rd	0	65535	Frame frequency (in Hz) = (Line frequency in Hz) ÷ (IFD VALUE).
id	ifd	Vertical period of input signal (P)	Rd	0	65535	Frame frequency (in Hz) = (Line frequency in Hz) ÷ (ifd VALUE).
IP	IPS	Input Sync. detection (M).	Rd	0	1	0 = no Sync. detected 1 = Sync. detected.
ip	ips	Input Sync. detection (P).	Rd	0	1	0 = no Sync. detected 1 = Sync. detected.
IH	IHP	Sign of the horizontal input Sync. (M)	Rd	0	1	0 = negative 1 = positive.
ih	ihp	Sign of the horizontal input Sync. (P)	Rd	0	1	0 = negative 1 = positive.
IV	IVP	Sign of the vertical input Sync. (M)	Rd	0	1	0 = negative 1 = positive.
iv	ivp	Sign of the vertical input Sync. (P)	Rd	0	1	0 = negative 1 = positive.
IK	IST	Input Sync type detection (M).	Rd	0	3	0 = Separate H & V sync. 1 = Composite sync. (TTL).
ik	ist	Input Sync type detection (P).	Rd	0	3	2 = SOG (Sync. On Green). 3 = Composite sync. (analog).
II	IIN	Interlaced signal detection (M).	Rd	0	1	0 = not interlaced 1 = interlaced.
ii	iin	Interlaced signal detection (P).	Rd	0	1	0 = not interlaced 1 = interlaced.
IO	IOO	"Out of range" signal detection (M).	Rd	0	1	0 = In range 1 = Out of range.
io	ioo	"Out of range" signal detection (P).	Rd	0	1	0 = In range 1 = Out of range.
IF	IFA	Standard input signal detection (M).	Rd	0	40	0 = no signal 1 = wrong signal 2 = NTSC std (3.58/60) 3 = PAL std (4.43/50) 4 = SECAM (50Hz) 5 = B&W (50Hz) 6 = B&W (60Hz) 7 = YUV 50Hz 8 = YUV 60Hz 9 = RGB 50Hz 10 = RGB 60Hz 11 = VGA1 350L 12 = VGA2 400L 13 = VGA3 480L 14 = PLASMA 42" 15 = SVGA 16 = MAC 17 = XGA 18 = PLASMA 50' 19 = MAC 21' 20 = SXGA 21 = UXGA
if	ifa	Standard input signal detection (P).	Rd	0	40	22 = SXGA+ 23 = DILA 4/3 24 = DILA16/9 25 = 1080i 50Hz 26 = 1080i 60Hz 27 = 480p 60Hz 28 = 720p 50Hz 29 = 720p 60Hz 30 = 1080sf24 31 = 480p 50Hz 32 = 480p 72Hz 33 = 480p 75Hz 34 = WSXGA 35 =1080p 50Hz 36 = 1080p 60Hz 37 = 1080p 24Hz 38 = 1080p 25Hz 39 = 1080p 30Hz 40 = 1080sf 25Hz
XA	REFA	Synchronized input (M).	Rd	0	8	Identical as XR command.
xa	refa	Synchronized input (P).	Rd	0	8	
XF	REFF	Synchronized input standard (M).	Rd	0	29	Identical as IF command.
xf	reff	Synchronized input standard (P).	Rd	0	29	
XT	REFT	Frame frequency of the synchronized input (M).	Rd	0	65535	Value in hundredth of Hz.
xt	reft	Frame frequency of the synchronized input (P).	Rd	0	65535	Value in hundredth of Hz.
NOTE:	(M) = MAIN output (sortie MAIN). (P) = PREVIEW output (sortie PREVIEW).		Rd/Wr = Read and write command / Commande de lecture et d'écriture. Rd = Read only command / Commande de lecture uniquement.			

COMMAND <i>COMMANDE</i>	RESPONSE <i>RÉPONSE</i>	COMMAND DESCRIPTION <i>DESCRIPTION DE LA COMMANDE</i>	TYPE	VALUE / <i>VALEUR</i>		
				MIN	MAX	DESCRIPTION
OTHERS COMMANDS / <i>COMMANDES DIVERSES</i>						
N	TBP	T-BAR position.	Rd/Wr	0	255	
ub	TBA	Executed percentage of the effect.	Rd	0	16383	0 = 0% 16383 = 100%
uv	TBAV	T-BAR availability.	Rd	0	1	0 = T-BAR unavailable. 1 = T-BAR available.
?	DEV	Device type.	Rd	0	65535	36 = DVX8022.
#	#1,...#0	Send all device parameters.	Rd			
EMBEDDED SOFT-EDGE COMMANDS / <i>COMMANDES DU MODE SOFT-EDGE INTÉGRÉ</i>						
eB	EDSB	Activate the embedded soft-edge mode	Rd/Wr	0	1	0 = not activate 1 = activate
eS	EDGS	Covering size.	Rd/Wr	0	255	
eC	PEDG	Extended input selection (works with PC command).	Rd/Wr	0	1	0 = not extended 1 = extended.
eT	EDGT	Softedge type.	Rd/Wr	0	1	0 = horizontal 1 = vertical.
eV	EDGV	Softedge activation.	Rd/Wr	0	1	0 = inactive 1 = active.
LK	LUTC	LUT loading control.	Rd/Wr	0	10	1 = reset the LUT. 3 = LUT loading (softedge curve). 5 = linear softedge. 9 = softedge writing LUT selection. 10 = softedge displayed LUT selection.
K	L	-Values to set in the LUT (if LUTC=3) -Softedge curve selection (if LUTC=9 or 10).	Rd/Wr	0	255	if LUTC = 3: 0 to 255. if LUTC = 9 or 10: 0 or 1.
eJ	EDGR	Black level: red adjustment.	Rd/Wr	0	31	
eK	EDGG	Black level: green adjustment.	Rd/Wr	0	31	
eL	EDGB	Black level: bleu adjustment.	Rd/Wr	0	31	
eH	EDGH	Black area: right adjustment	Rd/Wr	0	2047	
eI	EDGI	Black area: left adjustment	Rd/Wr	0	2047	
eo	edgr	Black level: red adjustment.	Rd/Wr	0	31	
ep	edgg	Black level: green adjustment.	Rd/Wr	0	31	
eq	edgb	Black level: bleu adjustment.	Rd/Wr	0	31	
em	edgh	Black area: right adjustment	Rd/Wr	0	2047	
en	edgi	Black area: left adjustment	Rd/Wr	0	2047	
ex	EDCH	Input number before the activation of a PIP/double PIP effect.	Rd/Wr	0	8	0 = black 1 = input #1 2 = input #2..... 8 = input #8
NOTE:	(M) = MAIN output (<i>sortie MAIN</i>). (P) = PREVIEW output (<i>sortie PREVIEW</i>).		Rd/Wr = Read and write command / <i>Commande de lecture et d'écriture.</i> Rd = Read only command / <i>Commande de lecture uniquement.</i>			

COMMAND	RESPONSE	COMMAND DESCRIPTION	TYPE	VALUE /VALEUR		
COMMANDE	RÉPONSE	DESCRIPTION DE LA COMMANDE		MIN	MAX	DESCRIPTION
SOFT-EDGE BLENDING COMMANDS (CBD-UP option) / COMMANDES DE SOFT-EDGE BLENDING (option CBD-UP)						
eS	EDGS	Covering size.	Rd/Wr	0	255	
eA	EDGA	Device position in the screen.	Rd/Wr	1	255	bits 0 to 3: device position. bits 4 to 7: number of devices.
eP	EFA	Effect position in the screen.	Rd/Wr	0	255	bits 0 to 3: device position. bits 4 to 7: number of devices.
eC	PEDG	Extended input selection (works with PC command).	Rd/Wr	0	1	0 = not extended 1 = extended.
eT	EDGT	Softedge type.	Rd/Wr	0	1	0 = horizontal 1 = vertical.
eV	EDGV	Softedge activation.	Rd/Wr	0	1	0 = inactive 1 = active.
LK	LUTC	LUT loading control.	Rd/Wr	0	10	1 = reset the LUT. 3 = LUT loading (softedge curve). 5 = linear softedge. 9 = softedge writing LUT selection. 10 = softedge displayed LUT selection.
K	L	-Values to set in the LUT (if LUTC=3) -Softedge curve selection (if LUTC=9 or 10).				Rd/Wr
eJ	EDGR	Black level: red adjustment.	Rd/Wr	0	31	
eK	EDGG	Black level: green adjustment.	Rd/Wr	0	31	
eL	EDGB	Black level: bleu adjustment.	Rd/Wr	0	31	
eH	EDGH	Black area: right adjustment	Rd/Wr	0	2047	
el	EDGI	Black area: left adjustment	Rd/Wr	0	2047	
AUDIO COMMANDS (OPT-iX-A option) / COMMANDES AUDIO (option OPT-iX-A)						
RC	ACH	Audio source selection of the MAIN.	Rd/Wr	1	8	1 = audio source #1.... 8 = audio source #8.
rc	ach	Audio source selection of the PRELIST output.	Rd/Wr	1	8	1 = audio source #1.... 8 = audio source #8.
RO	AMOD	Audio mode of the MAIN output.	Rd/Wr	0	1	0 = auto follow 1 = breakaway
ro	amod	Audio mode of the PRELIST output.	Rd/Wr	0	1	0 = auto follow 1 = breakaway
RV	AVOL	Mater volume of the MAIN output.	Rd/Wr	0	255	
rv	avol	Mater volume of the PRELIST output.	Rd/Wr	0	255	
RM	AMUT	Mute of the MAIN output.	Rd/Wr	0	1	0 = mute OFF 1 = mute ON
rm	amut	Mute of the PRELIST output	Rd/Wr	0	1	0 = mute OFF 1 = mute ON
RS	AMNO	Mono/stereo mode of the MAIN output.	Rd/Wr	0	1	0 = stereo 1 = mono
rs	amno	Mono/stereo mode of the PRELIST.	Rd/Wr	0	1	0 = stereo 1 = mono
RL	ALVL	Audio level (works with PC command)	Rd/Wr	0	64	0 = minimum 1 = maximum
RB	ABAL	Audio balance (works with PC)	Rd/Wr	0	64	0 = left to maximum 64 = right to maximum
RX	AXMU	Auxiliary source to MAIN.	Rd/Wr	0	1	0 = used 1= unused.
rx	axmu	Auxiliary source to PRELIST.	Rd/Wr	0	1	0 = used 1= unused.
NOTE:	(M) = MAIN output (sortie MAIN). (P) = PREVIEW output (sortie PREVIEW).		Rd/Wr = Read and write command / Commande de lecture et d'écriture. Rd = Read only command / Commande de lecture uniquement.			

A-5: ASCII / HEX / DEC TABLE**A-5: TABLE ASCII / HEX / DEC**

ASCII	HEX	DEC	ASCII	HEX	DEC	ASCII	HEX	DEC
space	20	32	@	40	64	`	60	96
!	21	33	A	41	65	a	61	97
"	22	34	B	42	66	b	62	98
#	23	35	C	43	67	c	63	99
\$	24	36	D	44	68	d	64	100
%	25	37	E	45	69	e	65	101
&	26	38	F	46	70	f	66	102
'	27	39	G	47	71	g	67	103
(	28	40	H	48	72	h	68	104
)	29	41	I	49	73	i	69	105
*	2A	42	J	4A	74	j	6A	106
+	2B	43	K	4B	75	k	6B	107
,	2C	44	L	4C	76	l	6C	108
-	2D	45	M	4D	77	m	6D	109
.	2E	46	N	4E	78	n	6E	110
/	2F	47	O	4F	79	o	6F	111
0	30	48	P	50	80	p	70	112
1	31	49	Q	51	81	q	71	113
2	32	50	R	52	82	r	72	114
3	33	51	S	53	83	s	73	115
4	34	52	T	54	84	t	74	116
5	35	53	U	55	85	u	75	117
6	36	54	V	56	86	v	76	118
7	37	55	W	57	87	w	77	119
8	38	56	X	58	88	x	78	120
9	39	57	Y	59	89	y	79	121
:	3A	58	Z	5A	90	z	7A	122
;	3B	59	[	5B	91	{	7B	123
<	3C	60	\	5C	92		7C	124
=	3D	61	]	5D	93	}	7D	125
>	3E	62	^	5E	94	~	7E	126
?	3F	63	_	5F	95	DEL	7F	127

WARRANTY

Analog Way warrants the product against any defects in materials and workmanship for a period of three years from the date of purchase (back to the factory).

In the event of any malfunction during the warranty period, Analog Way will, at its discretion, repair or replace the defective units, including free materials and labor.

This warranty does not apply if the product has 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).

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.

In case of any problem, get the serial number of the unit, a description of the problem, and then call your authorized dealer.