GRAPHIC SWITCHER ™
GSW 611R

User's Manual

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SAFETY INSTRUCTIONS : ENGLISH

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 radiators 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 theproduct, have a qualified technician check it before re-using it.

INSTRUCTIONS DE SÉCURITÉ : FRANÇAIS

INSTRUCTION : 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.

PRÉCAUTION & AVERTISSEMENT :
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 intenses.
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 et à 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 I / 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 la prise murale.
Dans les 2 cas ci-dessus appliquer les consignes suivantes :
- Débrancher l'appareil de la prise murale si vous prévoyez de ne pas l'utiliser 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, mettez immédiatement l'appareil hors tension. 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.

CONNECTIONS : 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 l'appareil et faites le contrôler par un personnel qualifié avant de le remettre en service.

SICHERHEITSHINWEISE : DEUTSCH

HINWEIS : 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 Kleinspannunganschlüsse.

REPARATUE UND WARTUNG : Der Benutzer darf keinesfalls versuchen das Gerät selbst zu reparieren, die Öffnung des Geräts durch Abnahme der Abdeckhaube oder jeglichen anderen Teils des Gehäuses sowie die Entfernung von außen sichtbaren Schrauben zu Stromschlägen oder anderen Gefahren für den Benutzer führen kann. Wenden Sie sich an Ihren Verkäufer, Ihre Kundendienststelle oder an qualifizierte Fachkräfte.

ÖFFNUNGEN UND MUNDUNGEN : Die Geräte können über Öffnungen verfügen (Belüftung, Schlitze, usw.). Niemals Gegenstände in die Öffnungen einführen oder die Öffnungen verschließen. Wenn eine Flüssigkeit oder ein Gegenstand in das Gerät gelangt, den Stecker herausziehen und es vor einer neuen Inbetriebnahme von qualifiziertem Fachpersonal überprüfen lassen.

INSTRUCCIONES DE SEGURIDAD: ESPAÑOL

INSTRUCCIONES : 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 sufriera algún daño, ponga el aparato inmediatamente fuera de tensión. Es peligroso hacer funcionar este aparato con un cable averiado, ya que un cable dañado puede provocar un incendio o un choque eléctrico. Verifique el estado 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 dirigirse 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.

GRAPHIC SWITCHER™ GSW 611R

1) GENERAL INFORMATION

The seamless **GRAPHIC SWITCHER™** cuts, fades and mixes instantaneously (no glitch) between **6 high-resolution** sources from 31.5KHz to 130KHz (up to 1600 x 1280), with no synchronization "dropouts".
The GRAPHIC SWITCHER™ scales each of the 6 inputs to one user-programmable output format, matching the native resolution of any projector (LCD, DLP or CRT), plasma display, video wall or multisync monitor. Adding a **progressive** Line Multiplier or Scaler to any input, will enable the mixing of video sources with computer sources.

The GRAPHIC SWITCHER™ outputs are :

- 1 MAIN output for PROGRAM display (staging)
- 1 PREVIEW output for PRESET visualization and adjustment before switching on MAIN

The output format can be selected in SXGA, XGA_2, SVGA, VGA and will remain constant no matter which input is selected. This allows a "one time" adjustment for your program display resolution.
The GRAPHIC SWITCHER™ takes "user friendly" to a new level. Seamless fading and effects combined with direct access auto-recognition inputs, makes "live" High-End presentations painless. Optimizing a last minute input "on the fly" will be easier than before!

2) SUPPLIED EQUIPMENT

- 1 **GRAPHIC SWITCHER (GSW 611R)**
- 1 AC power supply cord
- 1 user's manual with 3.5" disk (remote control software)

3) INSTALLING THE GSW 611R

- Rack mounting Compatible with a 19" enclosure (CEI 297), you can install the GSW 611R in a 19" cabinet, by using 4 screws on the front panel holes (*screws not provided*).

-Your cabinet must be equipped by corners.

- The openings in the front and in the rear panels are for cooling.
Do not cover these openings.

- Be sure that no weight is added to the GRAPHIC SWITCHER ™ in excess of 2 kg (4.4 Lbs.).

- The maximum ambient operating temperature must not exceed 40°C.

- The cabinet (RACK) and all mounted equipment in it must be reliably grounded to national and local electrical codes.

- Table top mounting The GSW 611R is also useable directly on a table: the unit is provided with 4 plastics feet.

IMPORTANT : Please read all the safety instructions (pages 2-3) before starting.

4) STARTING

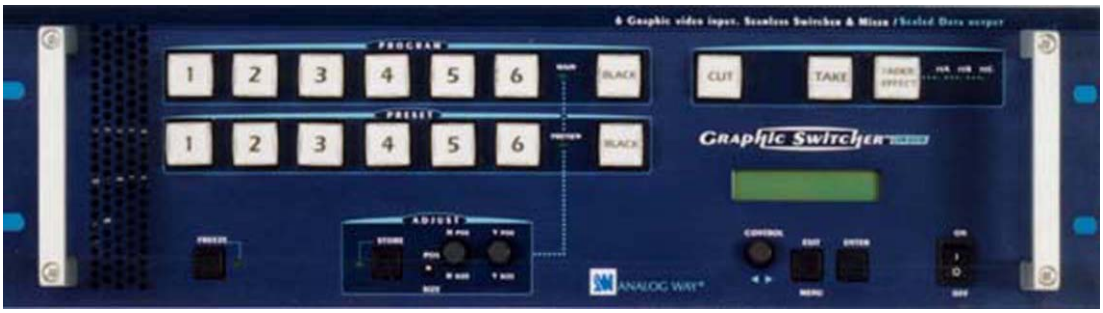
NOTE : All the equipment must be OFF before connecting.

① Connect your computers (PC, MAC, workstation) and your scaler sources to the inputs (up to 6) of the GSW 611R.
② Connect your MAIN display device (video projector, ...) to the "MAIN" output (BNC or HD15 connectors).
③ Connect your local PREVIEW monitor to the "PREVIEW" output (BNC or HD15 connectors).
④ Connect the AC power supply cord to the GRAPHIC SWITCHER and power "ON" the mains switch (front panel).
⑤ Turn ON the projector, the local monitor and then all your input sources.

THE UNIT SHOULD BE GIVEN 5 MINUTES TO WARM UP

5) TECHNICAL DESCRIPTION

- **FRONT PANEL**



PROGRAM : CONTROL KEYS of the PROGRAM BUS (MAIN output)

1 to 6	: 6 CONTROL KEYS, displaying one of the inputs.
MAIN LED	: LED turned ON indicates that the ADJUST functions are active on the PROGRAM BUS selected input (the adjustments are displayed on the MAIN output).
BLACK	: Active BLACK screen on MAIN output.

PRESET : CONTROL KEYS of the PRESET BUS (PREVIEW output)

1 to 6	: 6 CONTROL KEYS to select one of the inputs.
PREVIEW LED	: LED turned ON indicate that the ADJUST functions are active on the PRESET BUS selected input (the adjustments are displayed on the PREVIEW output).
BLACK	: Active BLACK screen on PREVIEW output.

SWITCHING BUS :

CUT	: Allows to switch seamlessly the PRESET selected input on the MAIN output (PROGRAM).
TAKE	: Allows to switch the PRESET selected input with the selected FADER EFFECT on the MAIN output (PROGRAM).
FADER EFFECT	: Allows to choose one of the memorized FADER EFFECT (FEA, FEB, FEC)

FREEZE : Image FREEZE (active when the LED is turned ON)

ADJUST :

RECALL /STORE	: RECALL, (a short push on the button), allows to recall the stored image setting. : STORE, (a long push, LED =ON), allows to store the input format with its image setting.
POS / SIZE	: Position or size image mode (controlled by the H & V buttons)
H POS / H SIZE	: Horizontal image control
V POS / V SIZE	: Vertical image control

LCD WINDOWS : 2 lines / 16 characters LCD

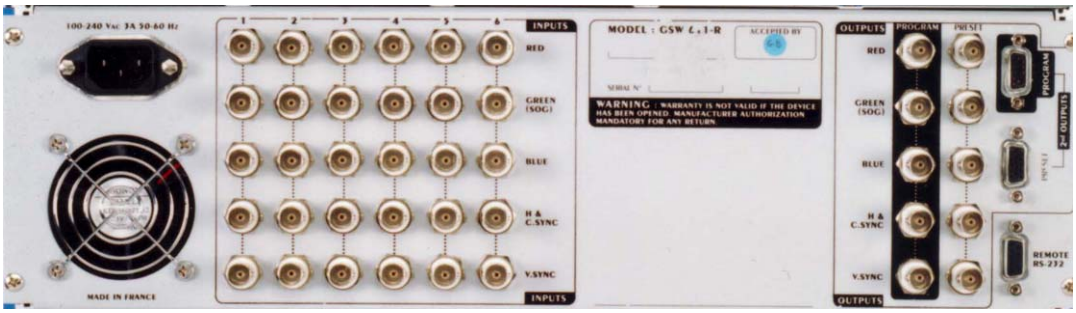
- CONTROL ◄ ►	: Please, see section 7.
- EXIT / MENU	: Please, see section 7.
- ENTER	: Please, see section 7.

ON / OFF : AC mains power switch (O = OFF, I = ON)

IMPORTANT : ALL THE ADJUSTMENTS MUST BE REALIZED WITHOUT THE "FREEZE"(LED OFF).

5) TECHNICAL DESCRIPTION (continued)

- **REAR PANEL**



POWER INPUT : Standard IEC connector (100-240 VAC, 50-60Hz automatic).

HD15 CONNECTOR : Not connected.

INPUTS : 6 x RGB inputs (PC, MAC, workstation, scalers, line multiplier) on 3, 4, or 5 BNC connectors.

The input sync type will be automatically detected by the GRAPHIC SWITCHER.

- RGsB (SOG) : on 3 BNC connectors,
NOTE : For SOG input, you must set the input in "USED" SOG position with the LCD menu #1-3
- RGB S (Composite Sync.) : on 4 BNC connectors,
- RGB HV (H & V separated Sync.) : on 5 BNC connectors.

OUTPUTS

MAIN : For the MAIN display device (video projector, PLASMA, data monitor, ...) on 3, 4, or 5 BNC connectors and additional HD15 connectors (2nd outputs).

PREVIEW : For the PREVIEW MONITOR, on 3, 4, or 5 BNC connectors and additional HD15 connectors (2nd outputs).

NOTE : The output Sync. type can be selected by the LCD menu #2-2

REMOTE RS232 : Standard remote control on DB9 connector.

6) IMAGE ADJUSTMENT & FORMAT MEMORY

The ADJUST Touch Control are dedicated to the control and storage of the image parameters.
Their direct access allows to modify instantaneously and easily the SIZE and POS adjustments of the picture.

- **MAIN & PREVIEW** : 2 LEDS indicating which output will be modified by the adjust function.

- **FREEZE** : Push button for image freeze (active when LED is ON)Freeze the MAIN and/or the PREVIEW output.

- **RECALL** : A short push on this button allows to recall and display instantaneously the stored image setting (H POS, H SIZE, V POS, V SIZE which are in memory).

- **STORE** : A long push on this button (3 seconds until the STORE LED lights up one time) allows to memorize the input format and all the image settings of the selected input.

  You can memorized in the GRAPHIC SWITCHER™ up to 16 input formats with their image setting (in the memory, the format and the image settings will always be associated with one of the 6 inputs).

- **POS / SIZE** : Position & size mode, switch which controls both H & V buttons.

- **H POS / H SIZE & V POS / V SIZE** : 2 digital buttons allow to adjust the Horizontal & Vertical adjustments (SIZING / POSITIONING)

IMPORTANT : ALL THE ADJUSTMENTS MUST BE REALIZED WITHOUT THE "FREEZE" (LED OFF)

All the correction adjustments on the position & size button will be directly visible on the MAIN and/or the PREVIEW outputs for one selected input (KEY 1 to 6).

If you memorize a new adjustment, it will always be stored on **both** the MAIN and the PREVIEW outputs.

7) LCD MENU & CONTROL

7-1) LCD CONTROL BUTTON

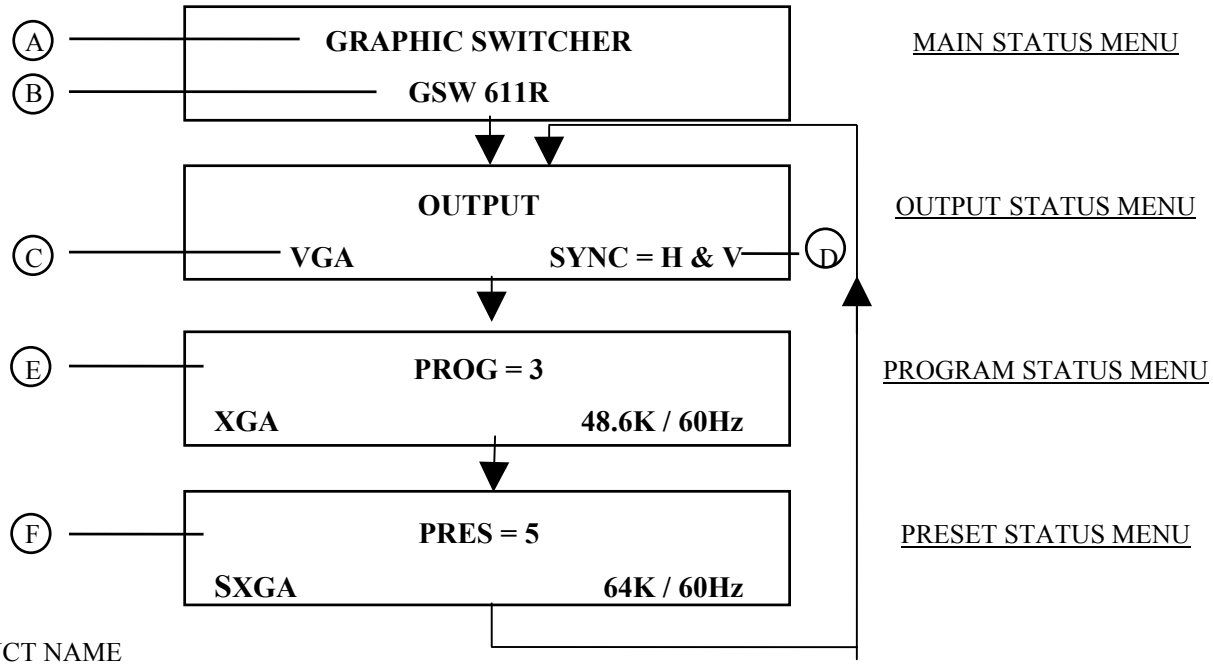
CONTROL ◂ ▸ button : Turn this button to adjust (increase, decrease) or select item on the LCD MENUS.

EXIT MENU button : • From the STATUS MENUS, push on this button to display the CONTROL MENUS
• From the CONTROL MENUS, push on this button to :
- return to the previous menu,
- return to the STATUS MENUS (push several times),
- return without safeguarding the item.

ENTER button : • From the STATUS MENUS, push on this button to return to the last consulted menu.
• From the CONTROL MENUS, push on this button to confirm a selected item.

NOTE : When entering in the CONTROL MENUS, the LCD windows will display automatically the STATUS MENUS after 60 seconds of inactivity of the front panel buttons.

7-2) LCD STATUS MENUS



(A) PRODUCT NAME

(B) PRODUCT PART NUMBER

(C) OUTPUT FORMAT
- [SXGA] = 1280 x 1024
- [XGA] = 1024 x 768
- [SVGA] = 800 x 600
- [VGA] = 640 x 480

(D) OUTPUT SYNC
- [H & V] = H & V separated Sync.
- [COMP] = composite Sync.
- [SOG] = Sync. on green

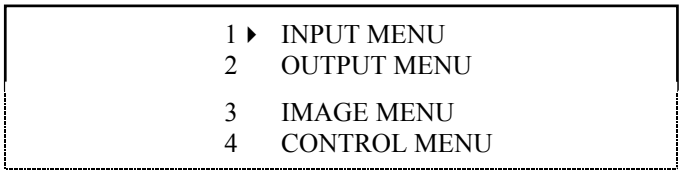
(E) SELECTED PROGRAM INPUT
- [PROG = 3] = number of the selected input
- [XGA] = input format
- [48.6K/60Hz] = line / frame frequency
- [NO INPUT] = no signal detected
- [CHECK H&V INPUT] = H&V Sync. not detected

(F) SELECTED PRESET INPUT
- [PRES = 5] = number of the selected input
- [SXGA] = input format
- [64K/60Hz] = line / frame frequency
- [NO INPUT] = no signal detected
- [CHECK H&V INPUT] = H&V Sync. not detected

7) LCD MENU & CONTROL (continued)

7-3) LCD CONTROL MENUS

Push on **EXIT** to DISPLAY THE CONTROL MENUS



Select menus 1 to 4 with ◂ ▸ button + **ENTER**

1 ▸ [Input Menu] + **ENTER**

1-1 [Input Status] + **ENTER**

Select [PROG = x] or [PRES = x] with ◂ ▸ + **ENTER**

- [PROG = x] = Number of the selected input on the PROGRAM BUS.
- [SYNC = xxxx] = Sync. type [H+V+] = H & V separated Sync. with polarities.
  [COMP] = Composite Sync.
  [SOG] = Sync. On Green.
- [XGA 48KHz/60Hz] = Name of the format, line / frame frequency [KHz/Hz],
  Interlaced [I] or non interlaced [ ] format.
- [BLACK] = Displays a black screen.
- [NO INPUT] = No signal detected on the "Selected input".
- [CHECK H&V INPUT] = H &V Sync. not detected.

IMPORTANT : WHEN LCD WINDOWS DISPLAYS [CHECK H & V INPUT] :
- PLEASE CHECK THE H.SYNC AND V.SYNC CONNECTIONS (RISK OF INTERVERTION BETWEEN H & V SYNC).
- PLEASE DECREASE THE REFRESH FREQUENCY OR THE RESOLUTION OF THE COMPUTER DISPLAY TO BE COMPATIBLE WITH THE INPUT RANGE OF THE DEVICE (SEE YOUR COMPUTER VIDEO CARD PARAMETER).

1-2 [Used inputs] + **ENTER**

Select [#1, #2, #3...] with ◂ ▸ + **ENTER** , to change the input locking.

- [#1 used] = Input #1 used (KEY 1 is lit ON and enabled).
- [#6 unused] = Input #6 unused (KEY 6 is lit OFF and disabled).

1-3 [Sync On Green] + **ENTER**

Select [#1, #2, #3...] with ◂ ▸ + **ENTER**

- [#1 used] = Input #1 is universal and can be connected to a RGsB (SOG) or a RGB S (COMP) or a RGB HV signal.
- [#2 unused] = Input #2 is not compatible with a RGsB (SOG) signal. Only the RGB S (COMP) and the RGB HV are recognized.
- [all used] = Sets all the inputs universal and compatible with the RGsB, RGB S and RGB HV signal.
- [all unused] = Sets all the inputs compatible only with the RGB S and the RGB HV.

NOTE : In most applications (without any RGsB (SOG) computer sources connected), please always set the SOG input In the unused position. This avoids any perturbation of the device when you connect a computer which is already powered ON.

7) LCD MENU & CONTROL (continued)

7-3) LCD CONTROL MENUS (continued)

1-4 [**H sync load**] + **ENTER**

Select [#1, #2, #3...] with ◄ ► + **ENTER**

- [#1 75Ω load] = Charge under 75Ω the H Sync. of input #1.
- [#2 Hi-Z] = Input #2 under high impedance.
- [all 75Ω Load] = Sets the H Sync. of all inputs under 75 Ohms.
- [all Hi-Z] = Sets all inputs under high impedance.

1-5 [**Contrast**] + **ENTER**

Select [PROG = x] or [PRES = x] with ◄ ► + **ENTER**

- [#3 contrast] = Adjustment of the contrast on input #3 with ◄ ► + **ENTER**

1-6 [**Black Level**] + **ENTER**

Select [PROG = x] or [PRES = x] with ◄ ► + **ENTER**

- [#3 Black level] = Adjustment of the black level on input #3 with ◄ ► + **ENTER**

2 ► [**Output Menu**] + **ENTER**

2-1 [**output format**] + **ENTER**

Select one of the following output format with ◄ ► + **ENTER**

FORMAT	RESOLUTION	LINE FREQUENCY	FRAME FREQUENCY
[VGA OUTPUT]	640 x 480	31.5KHz	60Hz
[SVGA OUTPUT]	800 x 600	37.8KHz	60Hz
[XGA OUTPUT]	1024 x 768	48.4KHz	60Hz
[SXGA OUTPUT]	1280 x 1024	64.0KHz	60Hz

2-2 [**output sync**] + **ENTER**

Select the output Sync. with ◄ ► + **ENTER**

- [H & V] = H & V separated Sync. **(on BNC & HD15 output connectors).**
- [COMP] = Composite Sync. **(on BNC & HD15 output connectors**).
- [SOG] = Sync. On Green **(on BNC output connector only).**

NOTE : The 2nd output HD15 female MAIN and PREVIEW do not deliver the Sync. On Green (SOG).

7) LCD MENU & CONTROL (continued)

7-3) LCD CONTROL MENUS (continued)

2-3 [**fading effect**] + **ENTER**

- Select a Fader Effect memory [FEA] or [FEB] or [FEC] with ◂ ▸ + **ENTER**
- Now choose one effect for the selected memory with ◂ ▸ + **ENTER**
  (Please see the list in section 12).
- Renew the operation for the 2 other memories.

NOTE : To see the Fader Effect stored in each memory (FEA or FEB or FEC), push on FADER EFFECT.
The Fader Effect corresponding to the selected memory is also displayed on the LCD windows.

2-4 [**test pattern**] + **ENTER**

- [OFF] = Turns OFF the test pattern.
- [ON prog + pres] = Displays a test pattern on the PROGRAM and the PRESET outputs.
- [ON prog] = Displays a test pattern on the PROGRAM output only.
- [ON pres] = Displays a test pattern on the PRESET output only.

NOTE : You can also turn OFF the test pattern by pushing the BLACK KEY on the PROGRAM or the PRESET BUS.

3 ▸ [**Image Menu**] + **ENTER**

3-1 [**optimize**] + **ENTER**

Select [PROG = x] or [PRES = x] with ◂ ▸ + **ENTER**

- [#3 optimize] = Optimization of the image on input #3 with ◂ ▸ + **ENTER**

3-2 [**horizont. smooth**] + **ENTER**

Select [PROG = x] or [PRES = x] with ◂ ▸ + **ENTER**

- [ON] = Horizontal smoothing.
- [OFF] = No Horizontal smoothing.

3-3 [**vertic. smooth**] + **ENTER**

Select [PROG = x] or [PRES = x] with ◂ ▸ + **ENTER**

- [ON] = Vertical smoothing.
- [OFF] = No Vertical smoothing.

3-4 [**pos status**] + **ENTER**

Select [PROG = x] or [PRES = x] with ◂ ▸ + **ENTER**

- [H = 127, V = 127] = Horizontal and Vertical image position value.

3-5 [**size status**] + **ENTER**

Select [PROG = x] or [PRES = x] with ◂ ▸ + **ENTER**

- [H = 127, V = 127] = Horizontal and Vertical image size value.

7) LCD MENU & CONTROL (continued)

7-3) LCD CONTROL MENUS (continued)

4 ▸ [Control Menu]

4-1 [languages]

4-2 [key locking] + **ENTER**

Select which locking function you need with ◂ ▸ + **ENTER**

- [all unlock] = Front panel unlocked.
- [all lock] = Front panel locked with a LCD message (how to unlock).
- [adj + frz lock] = Adjust + Freeze functions locked with a LCD message (how to unlock).

NOTE : To unlocked the front panel, push simultaneously on **ENTER and EXIT**

4-3 [cross fad/cut] **+ ENTER**

- [NO] = When switching with CUT or TAKE, the PRESET input is displayed on the PROGRAM and PRESET outputs.
- [YES] = When switching with CUT or TAKE, the PROGRAM input is permuted with the PRESET input.

4-4 [follow mode] + **ENTER**

- [NO] = The output frame rate is 60Hz.
- [YES] = The output frame rate is identical to the frame rate of the **INPUT 1** of the GRAPHIC SWITCHER.

NOTE : The INPUT 1 compatibility range in FOLLOW MODE is 50Hz frame or 60Hz frame only.

4-5 [erase all mem] + **ENTER**

- [NO] = Do not erase the input formats and settings memorized.
- [YES] = Erase all the following memorized information : - Input formats parameters,
  - Position & Size image settings,
  - Optimization adjustment.

4-6 [version] + **ENTER**

Status of the internal firmware.

- xxxx xxxx xxxx

4-7 [default value] + **ENTER**

- [NO] = No adjustments and settings are modified.
- [YES] = Clear the following adjustments and set them to the **factory** value.

1-2	Used Inputs	= All input KEY are enable
1-3	Sync On Green	= All input do not recognize the RGsB (SOG) signal
1-4	H Sync Load	= All H Sync. BNC inputs are Hi-Z
1-5	Contrast	= 0
1-6	Black Level	= 0
2-1	Output Format	= XGA
2-2	Output Sync	= H & V separated
2-3	Fading Effect	= FEA = fading 3s, FEB = title 5s, FEC = shad + title h
2-4	Test Pattern	= OFF
3-2	Horizont. Smooth	= OFF
3-3	Vertic. Smooth	= OFF
4-1	Languages	= English
4-3	Cross Fad / Cut	= Yes
4-4	Follow mode	= No

8) OPERATING MODE

8-1) INSTALLATION (Please see section 3 & 4).

8-2) ADJUSTMENTS

- **DEFAULT VALUE**

  Before a new adjustment, it is possible to reset the GSW 611R to its default value (factory setting) (Please, see section 7, menu # 4-7).

- **INPUT KEY**

  Before operating, use the LCD menu # 1-2 to disable the input KEY (1 to 6) which will be unused.

  Luminous code for KEY
  - Light OFF (for disable KEY)
  - Low light (no selected KEY)
  - Height light (selected KEY)
  - Blinking light (operation in progress)

- **OUTPUT SETTING**

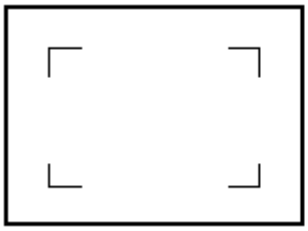
  - Select your output format resolution and Sync. type (Please, see section 7, menu # 2-1 & menu # 2-2).

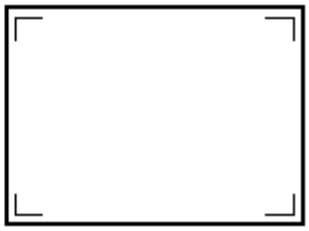
  NOTE : The SYNC ON GREEN (SOG) is available only on the BNC outputs.

- DISPLAY ADJUSTMENT (PROJECTOR)

  - Set the test pattern on [ON prog + pres] (LCD menu # 2-4).
    Four corner marks appear on the MAIN and the PREVIEW displayed images.

  - Use the 4 corner marks to fill in the full screen your displayed image with the display device parameters.





ADJUST DIRECTLY THE DISPLAY DEVICE PARAMETERS (PROJECTOR...)

  - Renew the same process to adjust your preview display.
    Now both the MAIN and the PREVIEW displays are identically adjusted (Position & Size of the picture) ; you have now the possibility to adjust a new input source directly on the PREVIEW monitor, even if you didn't have a direct visual entrance on the MAIN display.

- **INPUT IMAGE ADJUSTMENT**

  - Select one input on the PROGRAM or the PRESET BUS and make your Position and Size adjustments with the ADJUST functions of the GRAPHIC SWITCHER.

  - Push 3 seconds the STORE button (LED = ON) to memorize the adjustments.
    Now your input format and its image setting are memorized for both the MAIN and the PREVIEW outputs.

  - Renew the operation for each input used.

  - To turn OFF the test pattern, please see LCD menu # 2-4.

  NOTE : If you are in live display, you can also make corrections on the PREVIEW output only, without disturbing the main output picture (select [ON pres] with LCD menu # 2-4)

  NOTE : With a specific pattern image, you can also optimize the image (Please, see LCD menu # 3-1).

8) OPERATING MODE (continued)

8-3) SWITCHING OPERATION

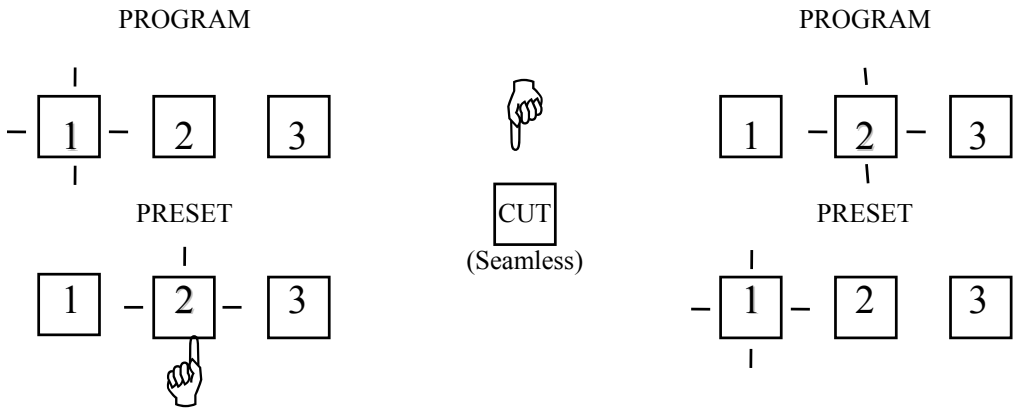
The GRAPHIC SWITCHER is equipped with three BUS of luminous KEYS :

- The PROGRAM (MAIN) BUS,
- The PRESET (PREVIEW) BUS,
- The SWITCHING BUS.

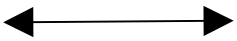
You can switch between two different modes : - In Seamless mode (with the CUT KEY),
- In Fader Effect mode (with the TAKE KEY),

NOTE : If switching directly on the same bus, the switch will operate with a **Fast to black**.

- **CUT**



Input #1 is displayed on the MAIN output
Input #2 is displayed on the PREVIEW output



Input #2 is displayed on the MAIN output
Input #1 is displayed on the PREVIEW output

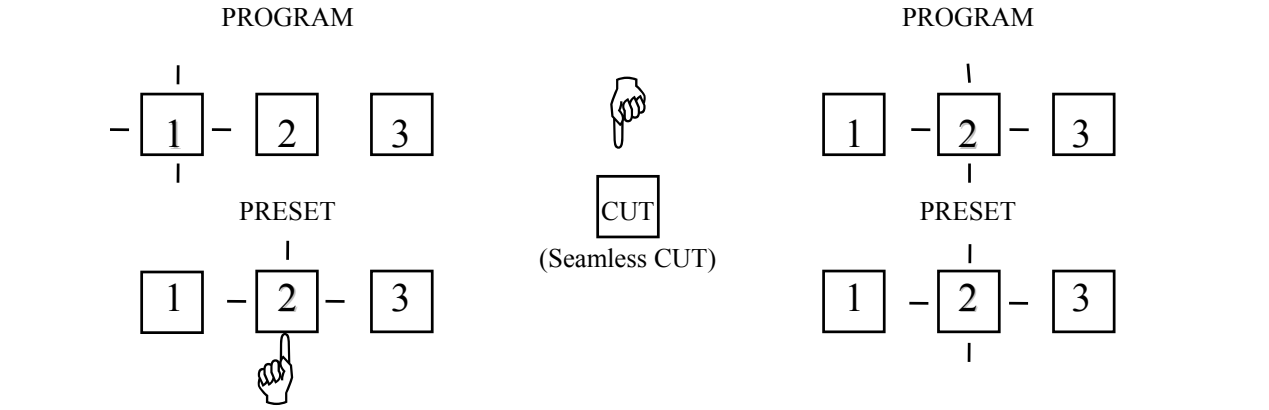
Pushing **CUT** a second time will set back the output.

NOTE : The CROSS CUT MODE CAN BE MODIFIED (Please, see section 7, menu #4-3).

8) OPERATING MODE (continued)

8-3) SWITCHING OPERATION (continued)

- **CUT (NOT CROSS)**

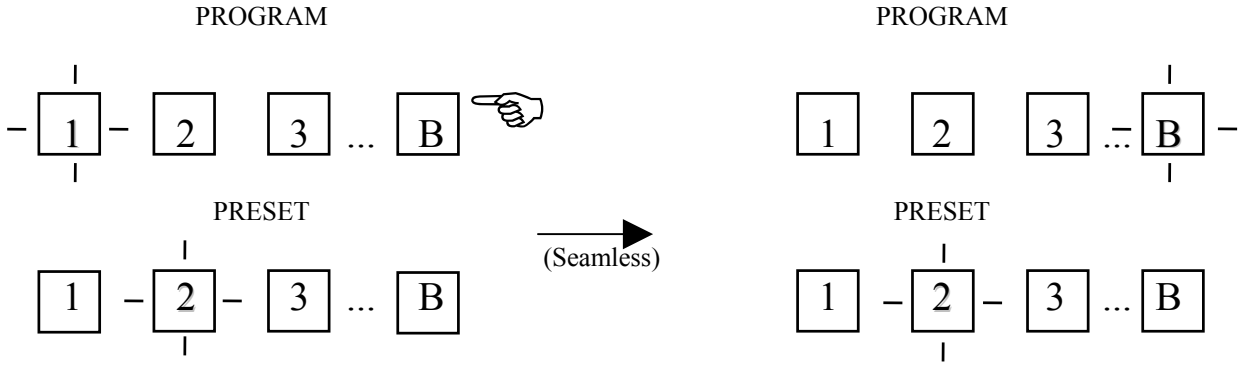


Input #1 is displayed on the MAIN output
Input #2 is displayed on the PREVIEW output

Input #2 is displayed on the MAIN output
Input #2 is displayed on the PREVIEW output

- **CUT TO BLACK**

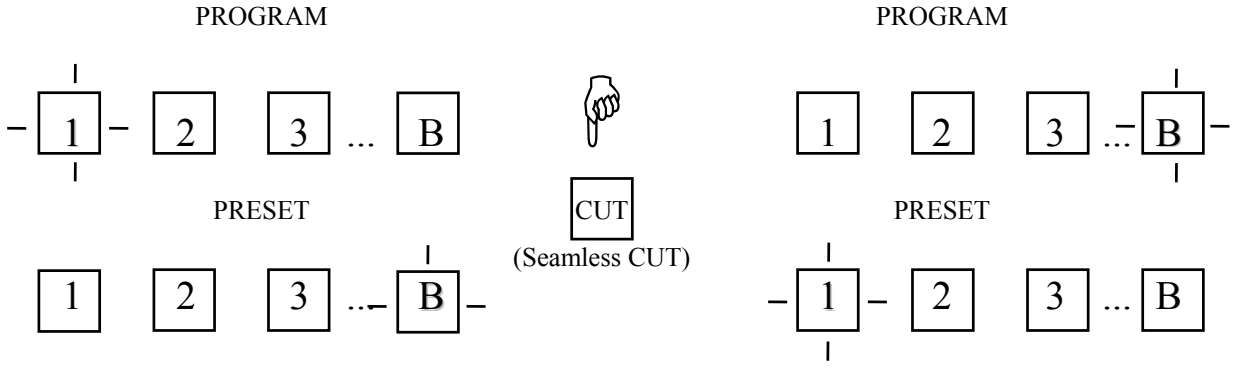
- You can directly PUSH THE BLACK KEY OF THE PROGRAM BUS



Input #1 is displayed on the MAIN output

Black screen is displayed on the MAIN output

- You can also proceed as a CUT



Input #1 is displayed on the MAIN output
Black screen is displayed on the PREVIEW output

Black screen is displayed on the MAIN output
Input #1 is displayed on the PREVIEW output

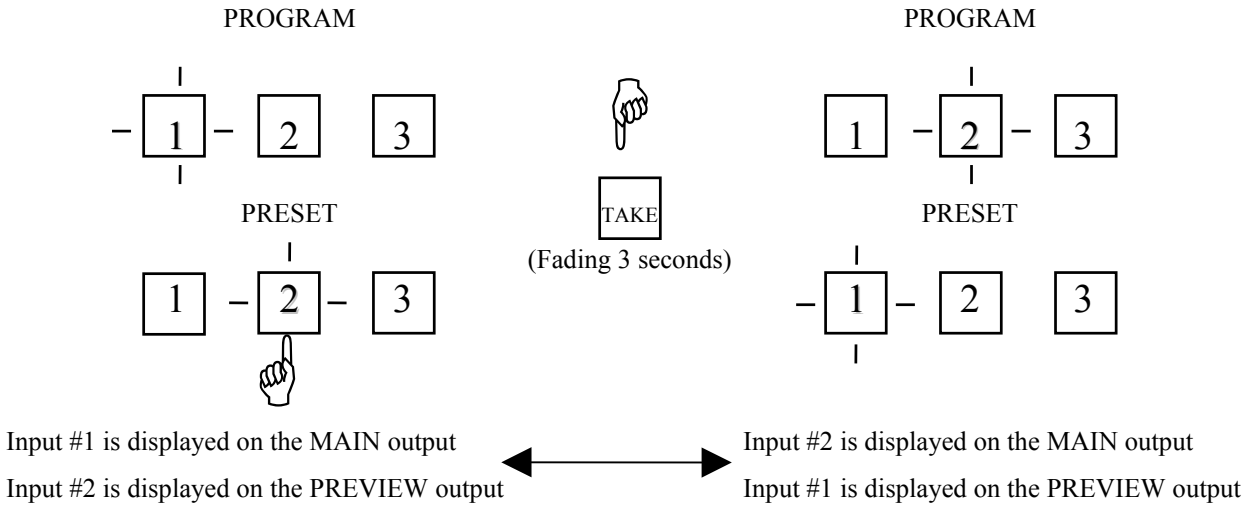
8) OPERATING MODE (continued)

8-3) SWITCHING OPERATION (continued)

- **FADE**

- Select the FADER EFFECT (FEA or FEB or FEC) with the FADER EFFECT KEY.
  Please, see section 7, menu # 2-3 to change the Effect in Fader Effect Memories (FEA or FEB or FEC).

The **TAKE** key allows to switch with the Fader Effect.



Input #1 is displayed on the MAIN output
Input #2 is displayed on the PREVIEW output

Input #2 is displayed on the MAIN output
Input #1 is displayed on the PREVIEW output

- This is a 3 seconds Fade between Input #1 and Input #2.

- **FADE TO BLACK**

Process identical to a CUT TO BLACK but uses the **TAKE** key.

- **FADER EFFECT LIST**

Please see the list in section 12.

9) TECHNICAL SPECIFICATION

- **DISPLAY**

THE RECOGNITION OF THE DIFFERENT DISPLAY MODES IS AUTOMATIC AND IMMEDIATE

Scanning : AUTO SCAN MODE.

Colors : 16 Millions (3 RGB Memory Plane).

Image Freeze : Synchronized in frame (Freeze).

- **INPUTS**

Software Compatibility : All software compatible.

Hardware Compatibility : Line frequency : From 31.5KHz to 130KHz.
: Resolutions : From 640 x 480 to 1600 x 1280.
: Sync : H & V, COMP, SOG.

Levels : R, V, B = 3 x 0.7Vp/p.
: H & V sync = TTL.
: Composite sync = TTL and 0.3Vp/p.
: SOG (Sync On Green) = 0.3Vp/p.

Impedance : 75 Ohms (R, V, B) ; Hi-Z or 75 Ohms (H & C Sync).

- **OUTPUTS (MAIN & PREVIEW)**

Levels : R, G, B = 3 x 0.7Vp/p.
: H & V Sync = TTL.
: Composite Sync = TTL.
: SOG = 0.3Vp/p under 75 Ohms.

Impedance : 75 Ohms for (R, G, B, S).

Format : The GRAPHIC SWITCHER allows to choose your output format (LCD Menu # 2-1) between:

- SXGA	1280 x 1024	64.0KHz / 60Hz
- XGA	1024 x 768	48.4KHz / 60Hz
- SVGA	800 x 600	37.8KHz / 60Hz
- VGA	640 x 480	31.5KHz / 60Hz.

- **REMOTE PORT**

Level : RS 232.

Data Rate : 9600 Bauds, 8 bits data, 1 bit stop, No parity bit.

- **ENVIRONMENTAL**

Power Supply : Internal CE / UL / CSA / IEC 950 (130W).
: Input : 100VAC to 240VAC ; 50-60Hz ; I = 3A Max.

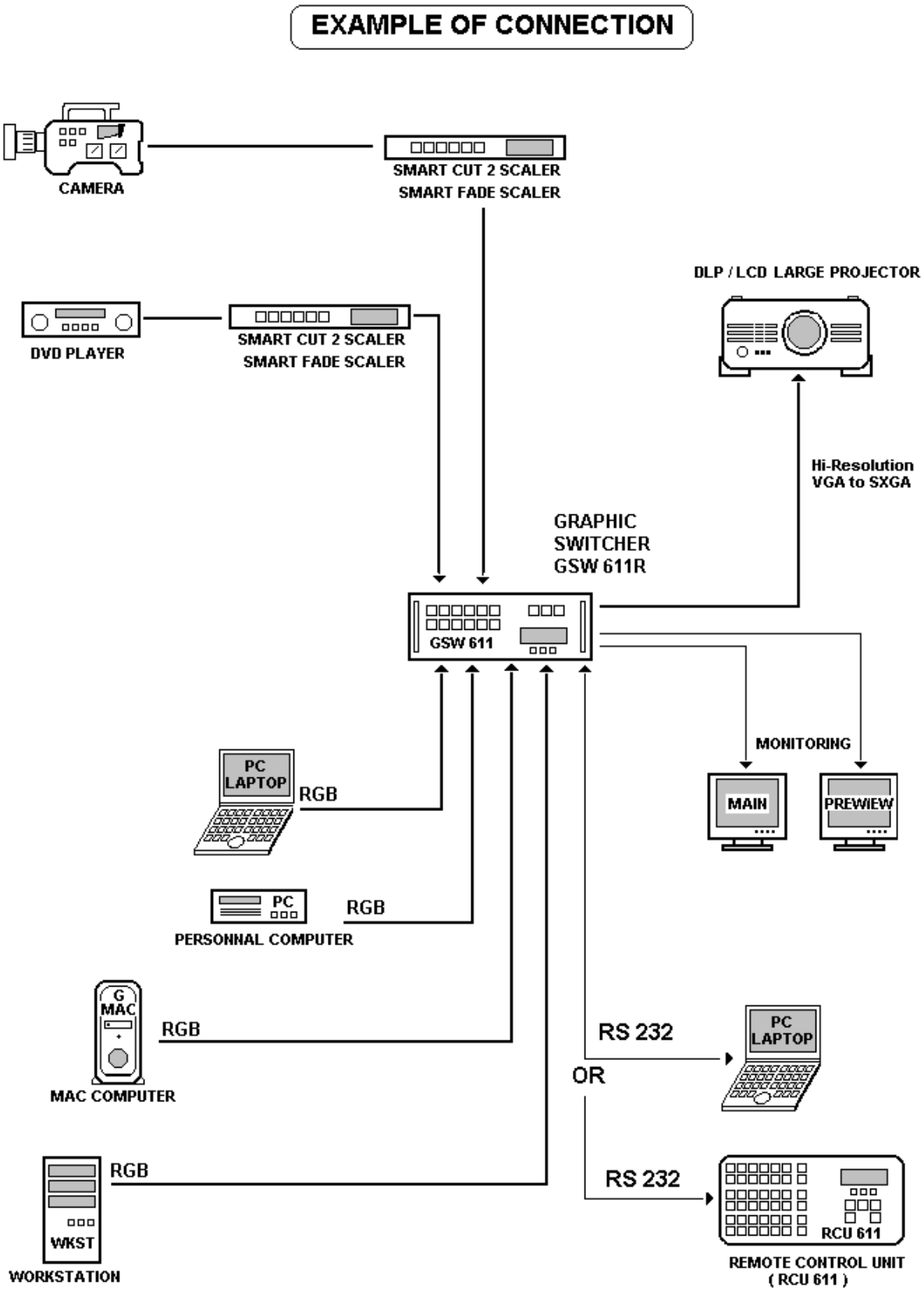
Temperature : Storage : -25 °C to +85 °C.

Hygrometry : 10% to 80% (without condensation).

Dimension : W480 x D340 x H133mm / 19”W x 13.4”D x 5.2”H.
: (Compatible with a 19” Standard, Height = 3 units).

Weight : 6.5Kg / 14.3Lbs.

10) CONNECTIONS



11) REMOTE CONTROL RS 232

The RS-232 communication interface built in your GRAPHIC SWITCHER, allows it to be controlled from a host system. The RS-232 connector pin-out and software installation are shown below.

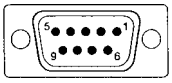
11-1) CONNECTION

- **CONNECTING THE RS-232** (*cable not supplied*)

To connect the GRAPHIC SWITCHER to a controlling device, connect a RS-232 straight cable (DB9 pins female / DB9 pins male) from the host serial port to the GRAPHIC SWITCHER connector labeled REMOTE RS-232.

- **PIN-OUT**

Pin #	Functions
2	TRANSMIT DATA (Tx)
3	RECEIVE DATA (Rx)
5	GROUND (Gnd)



DB 9 female connector
(Rear panel of GRAPHIC SWITCHER)

- **SPEED TRANSMISSION**

9600 bauds, 8 data bits, 1 stop bit, No parity.

11-2) "GRAPHIC SWITCHER CONTROL PANEL" SOFTWARE

Your GRAPHIC SWITCHER is shipped with a compatible WINDOWS 95/98/2000 "GRAPHIC SWITCHER CONTROL PANEL" (3"1/2 disk).This software allows you to make adjustments and controls by a simple mouse click.

- **INSTALLING ON PC :**

① Connect the serial port of the computer to the RS-232 remote connector of the GRAPHIC SWITCHER,

② Switch ON your computer and wait for WINDOWS to completely start,

③ Insert the disk into the floppy drive,

④ In the WINDOWS PROGRAM MANAGER menu, click on RUN,

⑤ Choose the disk drive and click on SETUP.EXE. (ex : A:\SETUP.EXE if disk 3"1/2 is drive A),

⑥ Follow the WINDOWS installation instructions, WINDOWS will create a C:\Program files\Analog Way\GSW 611.

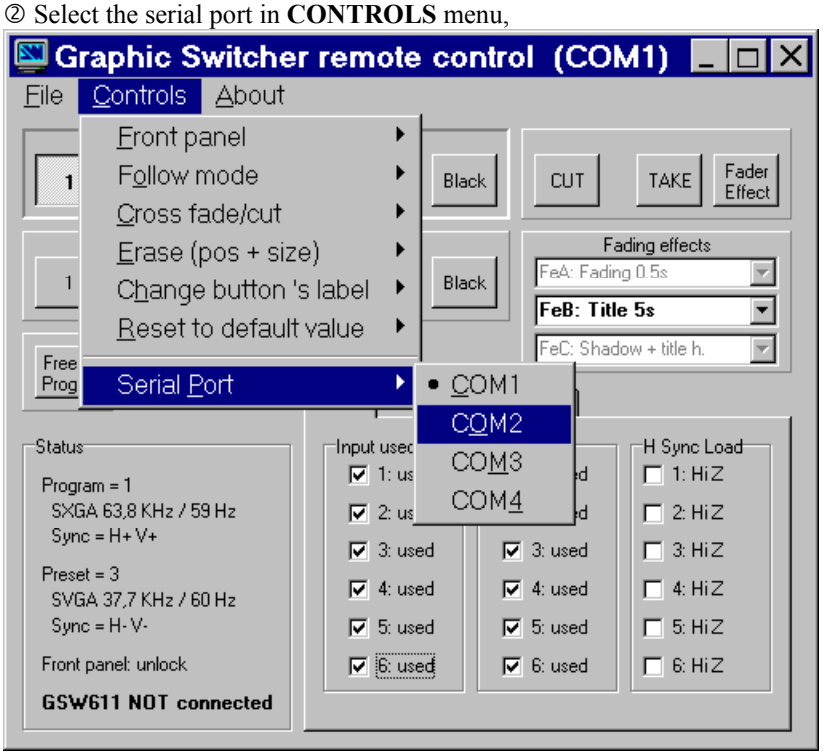
11) REMOTE CONTROL RS 232 (continued)

11-2) "GRAPHIC SWITCHER CONTROL PANEL" SOFTWARE (continued)

• **STARTING**

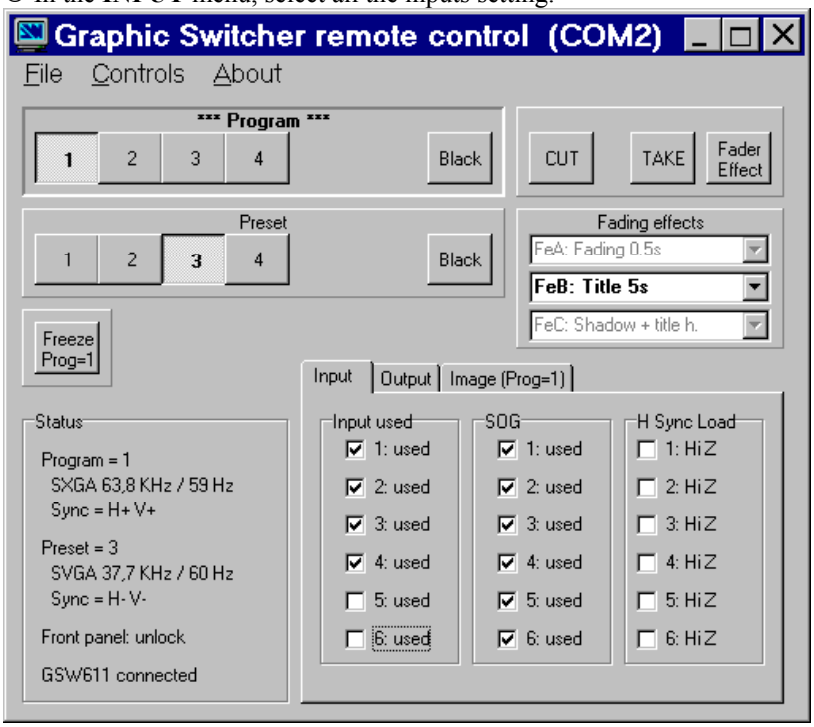
① Click on the program files GSW 611 in start –program - ANALOG WAY to run the software,

② Select the serial port in **CONTROLS** menu,



The GRAPHIC SWITCHER is now connected to the computer ; make a **RESET TO DEFAULT VALUE** (**CONTROLS** menu) if necessary.

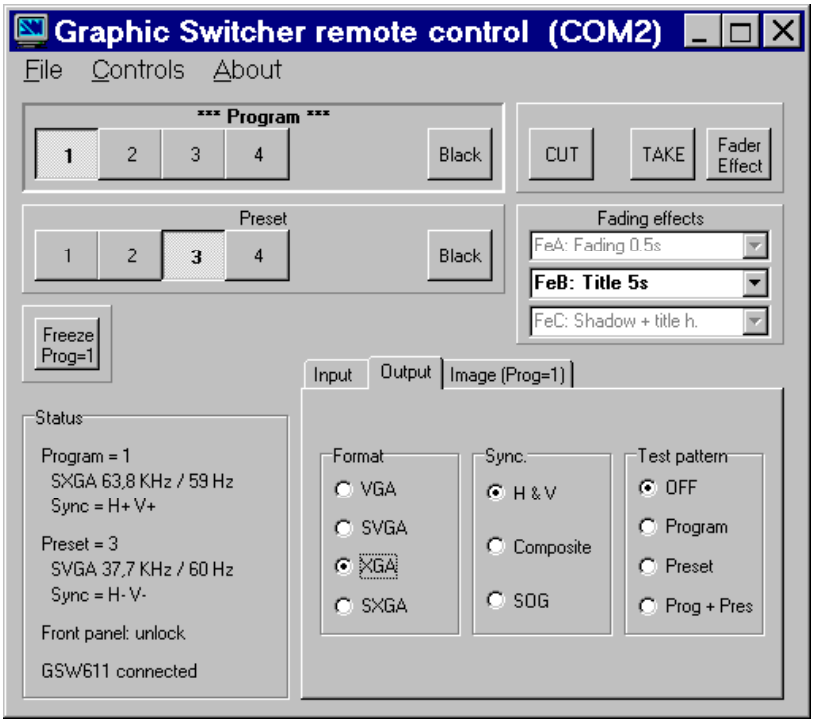
② In the **INPUT** menu, select all the inputs setting.



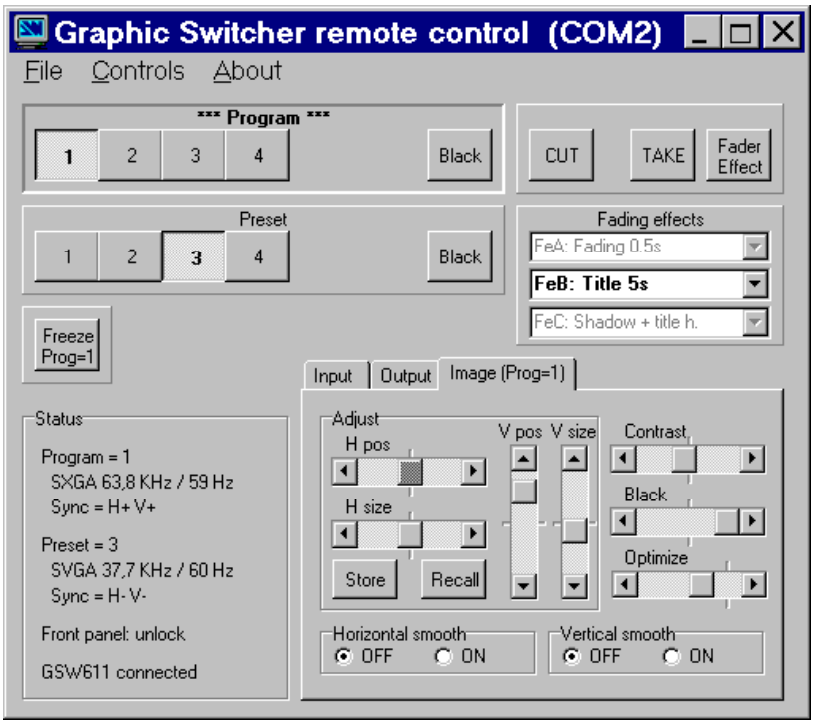
11) REMOTE CONTROL RS 232 (continued)

11-2) "GRAPHIC SWITCHER CONTROL PANEL" SOFTWARE (continued)

④ In the **OUTPUT** menu, select the output format and the output sync type



⑤ In the **IMAGE** menu, make the adjustments for all of your inputs. The adjustments are active on the last selected input.
NOTE : For position & size image adjustments, you can use the test pattern in output menu.



11) REMOTE CONTROL RS 232 (continued)

11-3) HOST / GRAPHIC SWITCHER COMMUNICATION

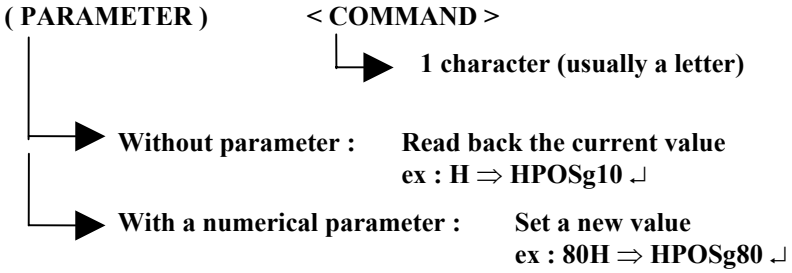
If you need to use your own control software program with a PC, MAC or WORKSTATION by a RS-232 port, the GRAPHIC SWITCHER allows to communicate by simple transmit or receive ASCII code.
The GRAPHIC SWITCHER treats any character that it received on the RS-232 as a possible command but accepts only legal commands. There are no codes to say that a command is coming, or that a command is ended.
A command could be a single character typed on a keyboard and does not required any special characters before or after (it is not necessary to press "ENTER" from the keyboard). Simple commands could be from a PC or any other controlling device. When the GRAPHIC SWITCHER receives a valid command, it will execute the command and send a response back to the host device. If the command is invalid, an error response will be returned to the host. All responses to the host end with a carriage return and a line feed (CR / LF) signaling the end of the response character string.

• **PROTOCOL** : Simple character

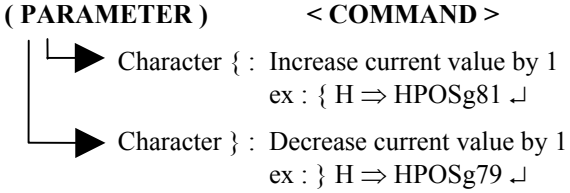
• **CONTROLS STRUCTURE**

Controls are usually composed of a numeric value followed by the letter of the command.
The letter used without numeric value returns the current setting of the command.

Please see "*COMMANDS AND RESPONSES TABLE*"



NOTE : The { or } parameter are active only on image positioning and sizing commands (H, V, W, S, h, v, w, s)



11) REMOTE CONTROL RS 232 (continued)

11-3) HOST / GRAPHIC SWITCHER COMMUNICATION (continued)

• COMMANDS AND RESPONSES TABLE

The following table resumes commands which are recognized as valid and the responses that will be returned to the host (on RS-232 port). Error response format and possible error type are shown at the bottom on this page.

ASCII COMMAND	RESPONSE TO HOST	COMMAND DESCRIPTION	VALUE		EXAMPLE		
			MIN	MAX	COMMAND	RESPONSE	ACTION EXPLANATION
Image positioning and sizing :							
H	HPOSg	Horizontal positioning (PROG)	0	255	20H	HPOSg20	Set H position to 20 (PROG)
h	HPOSs	Horizontal positioning (PRES)	0	255	h	HPOSs73	Read H position (PRES)
V	VPOSg	Vertical positioning (PROG)	0	255	V	VPOSg85	Read V position (PROG)
v	VPOSs	Vertical positioning (PRES)	0	255	v	VPOSs128	Read V position (PRES)
W	HSIZg	Horizontal width (PROG)	0	255	W	HSIZg110	Read H width (PROG)
w	HSIZs	Horizontal width (PRES)	0	255	w	HSIZs100	Read H width (PRES)
S	VSIZg	Vertical size (PROG)	0	255	S	VSIZg100	Read V size (PROG)
s	VSIZs	Vertical size (PRES)	0	255	150s	VSIZs150	Set V size to 150 (PRES)
Output Controls							
E	TSO	Output standard	0	4095	E	TSO33	Read Output standard
F	FAD	Fading effects	0	16383	F	FAD10325	Read Fading Effects
O	OPTIg	Image optimize (PROG)	0	255	120O	OPTIg120	Set optimize to 120 (PROG)
o	OPTIs	Image optimize (PRES)	0	255	o	OPTIs80	Read optimize (PRES)
Input Status (Read only)							
U	UNIT	Measures unity in KHz	0	65535	U	UNIT17734	Read unity of measures
D	DHIg	Horizontal period of input signal (PROG)	0	65535	D	DHIg564	Read line frequency (PROG)
d	DHIs	Horizontal period of input signal (PRES)	0	65535	d	DHIs564	Read line frequency (PRES)
L	GRTg	Number of line per field (PROG)	0	65535	L	GRTg600	Read line per field (PROG)
l	GRTs	Number of line per field (PRES)	0	65535	l	GRTs768	Read line per field (PRES)
T	TSYg	Sync Type (PROG)	0	255	T	TSYg113	Read Sync type (PROG)
t	TSYs	Sync Type (PRES)	0	255	t	TSYs125	Read Sync type (PRES)
Input controls							
N	BLVg	Black level (PROG)	0	255	85N	BLVg85	Set Black level to 85 (PROG)
n	BLVs	Black level (PRES)	0	255	n	BLVs110	Read Black level (PRES)
G	GAINg	Contrast (PROG)	0	255	G	GAINg20	Read contrast (PROG)
g	GAINs	Contrast (PRES)	0	255	g	GAINs30	Read contrast (PRES)
C	CHANg	Number of the input channel (PROG)	1	6	C	CHANg2	Read # of selected input (PROG)
c	CHANs	Number of the input channel (PRES)	1	6	3c	CHANs3	Select the 3rd input (PRES)
P	LOAD	H sync load under 75 Ω	0	63	P	LOAD1	Read the Hsync load (75 Ω) input
I	SELI	Used input	0	63	I	SELI3	Read the used input
i	SOGI	Valid the SOG inputs	0	63	i	SOGI35	Read the valid SOG inputs
Miscellaneous							
Y	CDE	Front panel selection	0	63	Y	CDE12	Read the Front panel selection
Z	DTC	Front panel status	0	65535	Z	DTC13242	Read the Front panel status
?	DEV	Device type	0	65535	?	DEV3	Read device type
R	R_	"R" Firmware Version	0	65535	R	R_57427	Read R version
M	M_	"M" Firmware Version	0	65535	M	M_13316	Read M version
X	L_	"L" Firmware Version	0	65535	X	L_18915	Read L version
K	K_	"K" Firmware Version	0	65535	K	K_12348	Read K version

NOTE : PROG = PROGRAM BUS, PRES = PRESET BUS.

11) REMOTE CONTROL RS 232 (continued)

11-3) HOST / GRAPHIC SWITCHER COMMUNICATION (continued)

• ERROR RESPONSES

When the GRAPHIC SWITCHER receives from the host an invalid command or value, it returns an error response

E10 ↵ invalid command (See "COMMAND" column)
E13 ↵ invalid value (See "VALUE" column)

• COMMANDS DESCRIPTION

Values sent or received are in decimal.
Depending on command letter, value can be used as linear control (ex : 255w to set Horiz Zoom at maximum) or as set of bits (ex : T command with multiple controls).
In this case, value must be converted in binary base to understand every bit action.

Example : Host receives message TSYg71
Decimal value 71 = binary value 0100 0111
71 = (128 x 0) + (64 x 1) + (32 x 0) + (16 x 0) + (8 x 0) + (4 x 1) + (2 x 1) + (1 x 1)
bit 7 = 0 means input signal compatible
bit 6 = 1 means non interlaced signal
bits 5, 4 and 3 = 000 mean H&V separated sync.
bit 2 = 1 means positive V sync.
bit 1 = 1 means positive H sync.
bit 0 = 1 means input signal detected

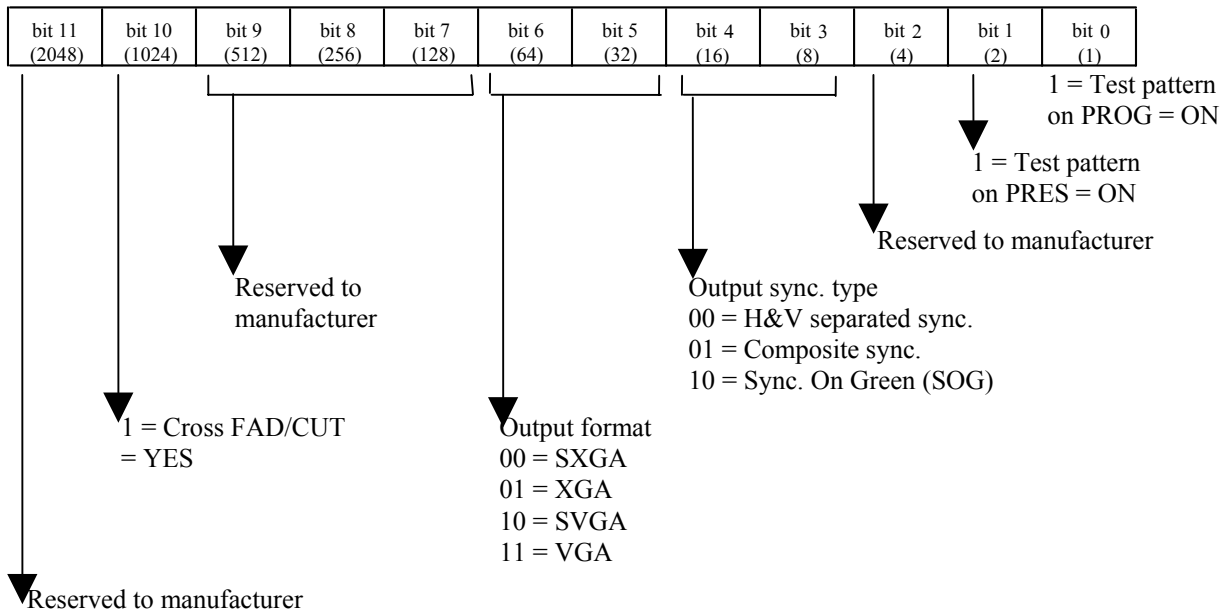
① IMAGE POSITIONING AND SIZING

• **H, h, V, v commands** are used to control Position of output image.
• **W, w, S, s commands** are used to control Size of output image.

Commands can be used in two different ways :
- Command letter alone to read present value,
- ASCII numbers followed by command letter to set a value.

② OUTPUT CONTROLS

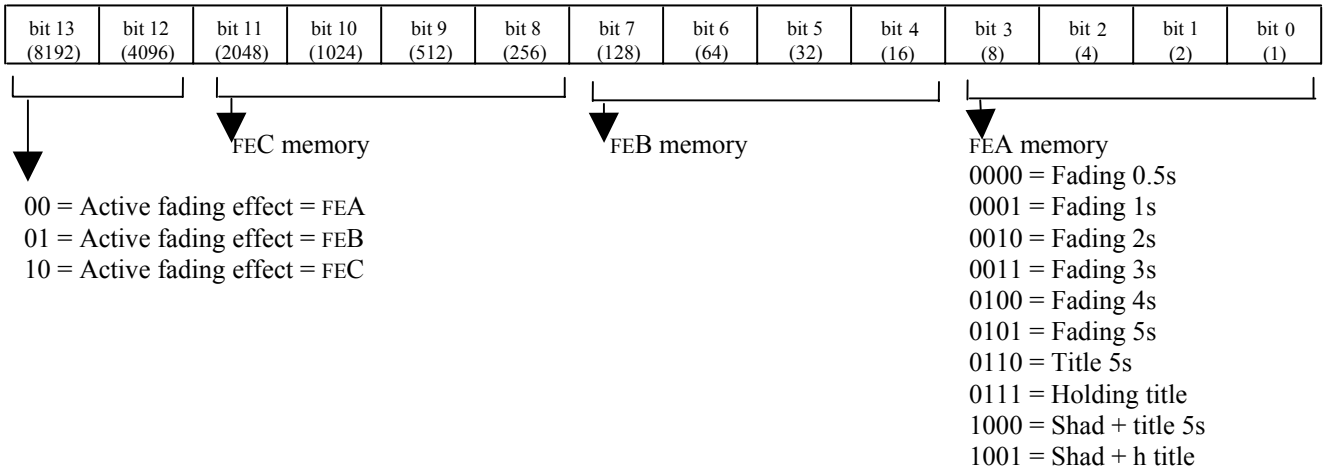
• **E command** is used to control output format, output sync, horizontal and vertical smoothing, test pattern, CROSS CUT/FAD setting :



11) REMOTE CONTROL RS 232 (continued)

11-3) HOST / GRAPHIC SWITCHER COMMUNICATION (continued)

• **F command** is used to select the fading effect (FEA, FEB, FEC) and choose an effect for FEA, FEB, and FEC memories.



• **O command** is used to optimize the MAIN output image.

• **o command** is used to optimize the PREVIEW output image .

③ **INPUT STATUS**

This control family is read only. They can't be preceded with value.

• **U command** returns the UNIT value.

•**D & d commands** return the DHI value.

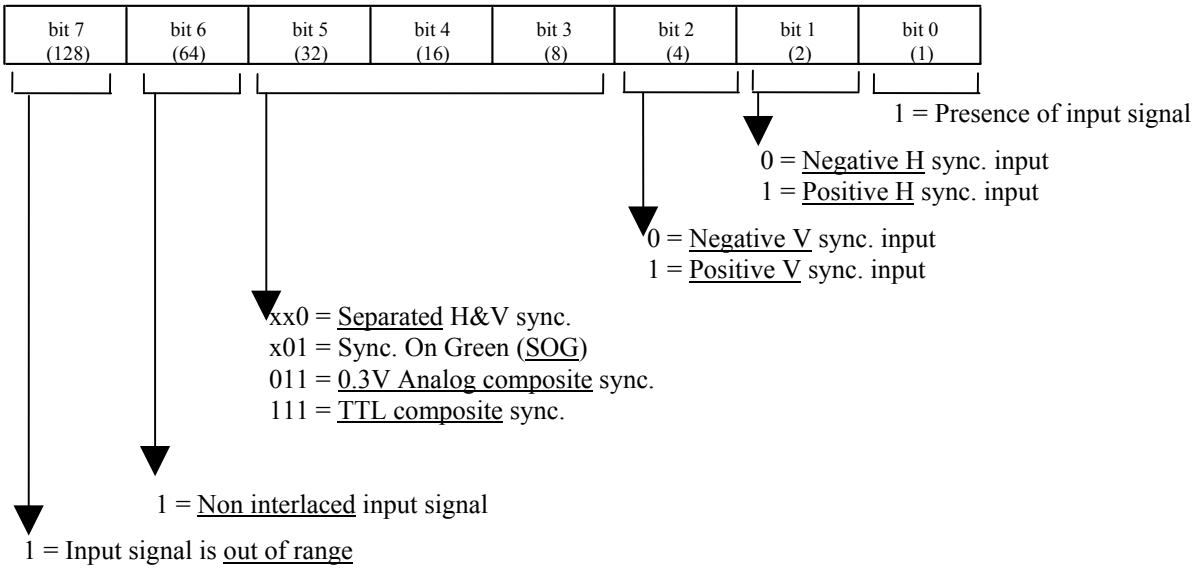
The following formula allows to calculate the computer input line frequency (in KHz) : $\frac{\text{UNIT VALUE}}{\text{DHI VALUE}}$

• **L & l commands** return the GRT value.

The following formula allows to calculate the input frame frequency (in Hz) : $\frac{\text{Input line frequency (Hz)}}{\text{GRT Value}}$

• **T command** returns the signal status of the input selected on PROGRAM BUS.

• **t command** returns the signal status of the input selected on PRESET BUS.

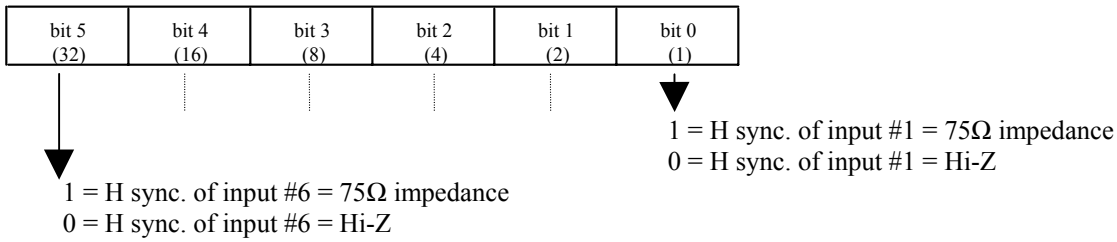


11) REMOTE CONTROL RS 232 (continued)

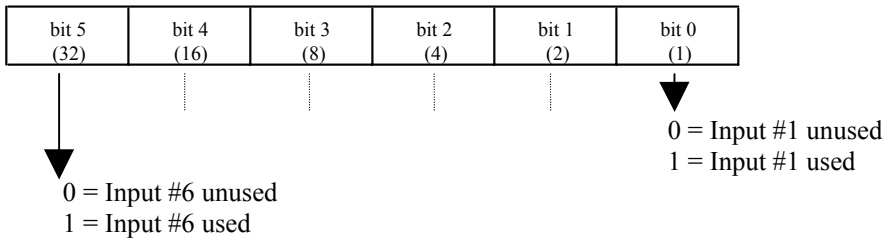
11-3) HOST / GRAPHIC SWITCHER COMMUNICATION (continued)

④ INPUT CONTROLS

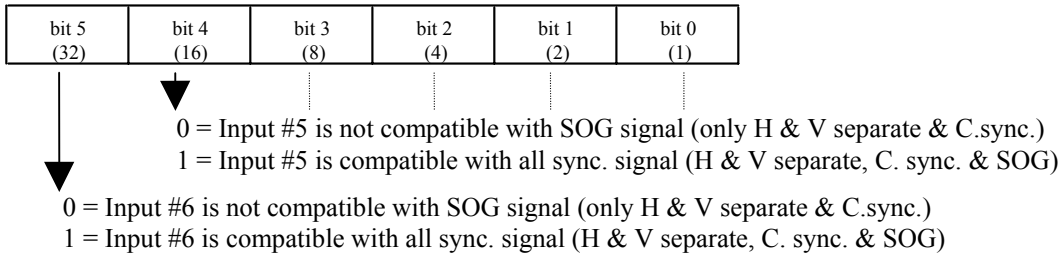
- **P command** allows to load under 75 Ohms or high impedance the H sync. BNC connector of each input.



- **I command** allows to enable or disable each input and the corresponding front panel luminous key :



- **i command** allows to enable or disable the SOG (Sync. On Green) detection of each input :



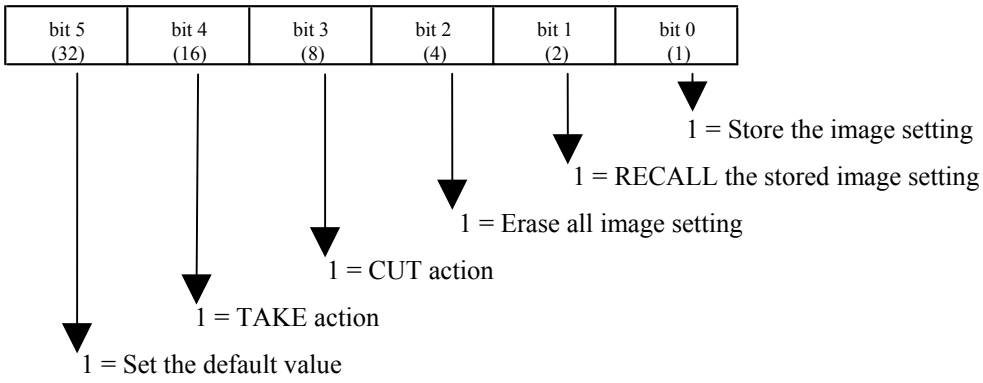
- **N command** is used to control the black level of the MAIN output.
- **n command** is used to control the black level of the PREVIEW output.
- **G command** is used to control the contrast of the MAIN output.
- **g command** is used to control the contrast of the PREVIEW output.
- **C command** is used to select an input on the PROGRAM bus.
- **c command** is used to select an input on the PRESET bus.

11) REMOTE CONTROL RS 232 (continued)

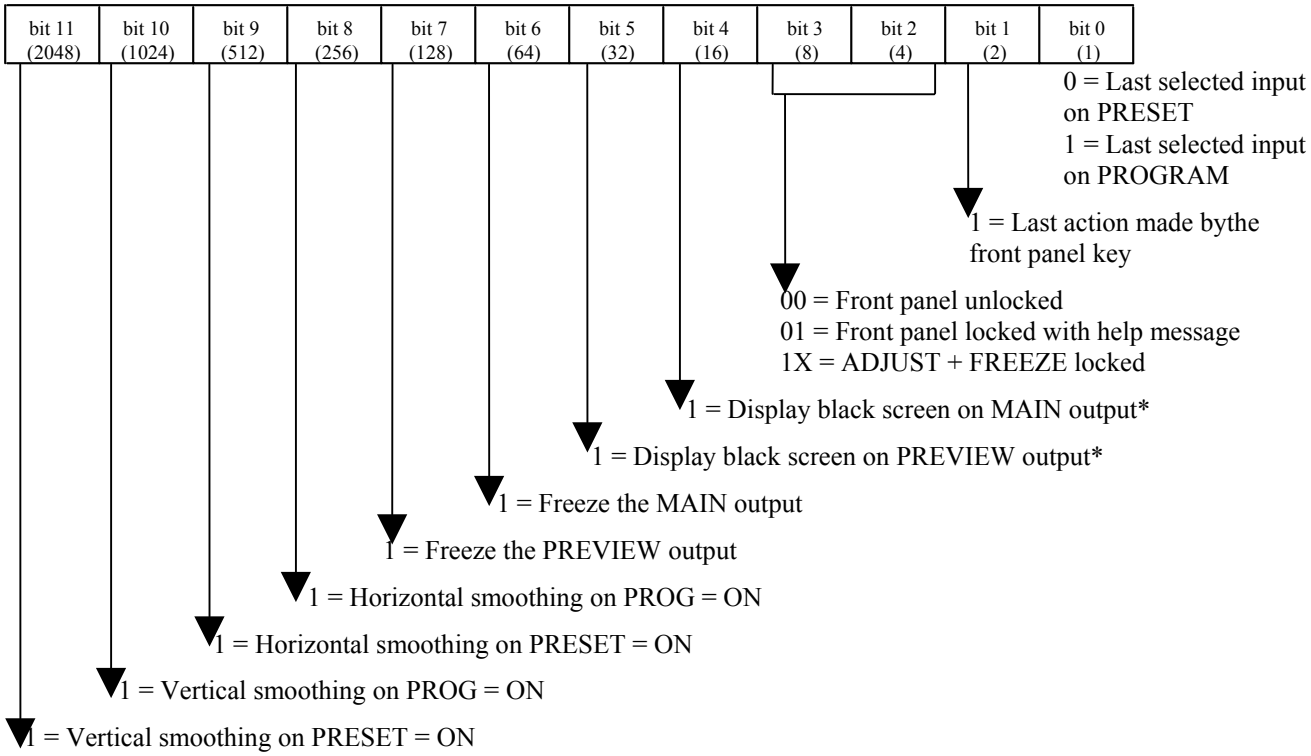
11-3) HOST / GRAPHIC SWITCHER COMMUNICATION (continued)

⑤ **MISCELLANEOUS**

•**Y command** controls actions from FRONT PANEL.



• **Z command** controls the FRONT PANEL.



*Please do not set the bit #4 and bit #5 directly to 0 value with the **Z command**.
To switch OFF the black screen, you must select another input (1, 2, 3, ..., 6) with the **C command**.

• **?, R, M, L, K, commands** are the status of the device's internal firmware (read only).

ASCII / HEX / DEC TABLE

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
/	2 F	47	O	4 F	79	o	6 F	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

12) FADER EFFECT LIST

All the following effects are available in le LCD menu # 2-3.

1	Fading 0.5s	The Preview image fades in with the Main image in 0.5 second.
2	Fading 1s	The Preview image fades in with the Main image in 1 second.
3	Fading 2s	The Preview image fades in with the Main image in 2 seconds.
4	Fading 3s	The Preview image fades in with the Main image in 3 seconds.
5	Fading 4s	The Preview image fades in with the Main image in 4 seconds.
6	Fading 5s	The Preview image fades in with the Main image in 5 seconds.
7	Title 5s	• The PROGRAM BUS is displaying the Main image • Select on PRESET BUS a black image with a white title (made the title with a Text or Drawn standard software). • Push TAKE : The title is inserted on the main image. • The title disappears automatically after 5 seconds.
8	Holding Tittle	Same function as Title 5s. But you must push again TAKE to remove the title.
9	Shad + Tittle 5s	Same function as Title 5s, excepted that a shadow bar appears at the bottom of the image.
10	Shad + Tittle h	Same function as Shad + Title 5s. But you must push again TAKE to remove the shadow and the title.

NOTE : The Shad + Tittle h and the Shad + Tittle 5s effects are not available when the test pattern is active.

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 option, 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.