



ANALOG WAY®



# TRANS-SCALER XT™ (TSC550)

## User's Manual

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## **CERTIFICATION INFORMATION / INFORMATION SUR LES CERTIFICATIONS**

This device wear the CE label: it complies with the requirements of the "Low Voltage" directive (73/23/EEC) and the "EMC" directive (89/336/EEC) published by the European Community Commission. The conformity of these directives include the conformity of the following European rules.

- Safety: EN 60950.
- EMC: EN 55024, EN 61000-3-2, EN 61000-3-3, EN 55022 Class A.

**WARNING:** The device is a class A device. In a residential installation, this device may cause harmful interference in radio communication. In this case, the user is encouraged to take appropriate measures.

*Ce produit porte le logo CE: il est conforme à la directive sur les basses tensions (73/23/CEE) et à la directive CEM (89/336/CEE) publiées par la Commission de la Communauté Européenne. La conformité à ces directives implique la conformité aux normes suivantes:*

- Sécurité: EN 60950.

- CEM: EN 55024, EN 61000-3-2, EN 61000-3-3, EN 55022 Classe A.

**AVERTISSEMENT:** *Cet appareil est un appareil de classe A. Dans un environnement résidentiel, cet appareil peut provoquer des brouillages radioélectriques. Dans ce cas, il peut être demandé à l'utilisateur de prendre des mesures appropriées.*

## **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.

**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 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 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 erroneo 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 (Accesso I / 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 entrambi 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 enthalten.

### **VORSICHT & WARENUNG**

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.

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:**

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.



# TRANS-SCALER XT™

## **Chapter 1 : INTRODUCTION**

### **1-1. SUPPLIED EQUIPMENT**

- 1 TRANS-SCALER XT™.
- 1 Set of 19" brackets.
- 1 AC Power supply Cord.
- 1 RCA male / RCA male cable.
- 1 VGA cable (HD15 Male / HD15 Male).
- 1 S.VIDEO (Y/C) cable (4-pin mini DIN Male/ Male).
- 1 RCA Female / BNC male adapter.
- 1 User's manual.
- 1 Remote Control Software (3.5" disk).

### **1-2. GENERAL INFORMATION**

**The TRANS-SCALER XT™ combines the functions of a Video Scaler with a Multi-input Video Switcher. In addition, a Computer or External input is provided for direct display of your Presentations or Internet applications.**

- The TRANS-SCALER XT™ is a new SCALER / LINE DOUBLER / QUADRUPLER / MULTIPLIER which significantly increases the Video image resolution and brightness. The High Quality Digital decoder includes a new advanced Comb Filter, a robust sync. detection and a 3D auto-adaptive de-interlacing scheme (for motion artifacts), with correction of the "film to video" transfer (3/2 pulldown for NTSC). It provides you with a "cinema like" image.
- In addition, and according to your requirements, you can adjust special image parameters like the Sharpness for detail emphasis, and the Gamma corrector, which optimizes your Display "Near Black" Luma response. You can also select a filter which removes unwanted alias frequencies found in some LCD video-projectors.
- The input source aspect-ratio (4/3 - Letterbox - Widescreen Anamorphic) can be selected, as well as the 4/3 & 16/9 Screen selection to avoid "resizing" the video-projector ZOOM when viewing 4/3 Sources on a 16/9 display.
- It provides a cost effective, time base corrected scaling solution for the A/V Pro & Home Theater applications.
- The black & White composite is accepted (for industrial, security, camera applications).

## **Chapter 2 : INSTALLATION**

- Table Top Mounting : The TRANS-SCALER XT™ can be used directly on a table. The unit is delivered with 4 plastic feet.

- Rack Mounting : The TRANS-SCALER XT™ is compatible with a 19" enclosure. Please follow the instructions below to install the TRANS-SCALER XT™ into a 19" rack:

- ① Screw the supplied 19" brackets to the sides of the TRANS-SCALER XT™.



- ② Put the TRANS-SCALER XT™ into the rack.

**NOTE :** The 19" front panel screws are not included.

### **IMPORTANT:**

- Be sure that no weight is added on the TRANS-SCALER XT™ in excess of 2 kg (4.4 lbs.).
- 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.



## Chapter 3 : TECHNICAL DESCRIPTION

### 3-1. FRONT PANEL



#### **[INPUT SELECTION]**

**COMPOSITE 1 & 2:** Composite Video input selection.

**S.VIDEO 1 & 2:** S.VIDEO input selection.

**RGB/S & COMPONENT:** RGB/S and COMPONENT (R-Y, Y, B-Y) input selection.

**COMPUTER:** Computer input selection.

#### **[FORMAT]**

2 LED's indicating the selected input aspect ratio.

4/3 : 4/3 format.

16/9 : Letterbox format.

4/3 + 16/9 : Widescreen Anamorphic format.

#### **[DISPLAY]**

Selection of the display device type.

- **LCD:** Liquid Crystal Display device.
- **CRT/DMD:** Display device using CRT or DMD (DLP) technologies.

#### **[LCD CONTROL]**



Allows to select items in LCD menu.

**EXIT MENU:**

Allows to exit from an LCD menu.

**ENTER:**

Allows to validate a selected item.

#### **[ON/OFF]**

AC power switch (O = OFF, I = ON)

### 3-2. REAR PANEL



#### **[POWER INPUT]**

Standard IEC connector (100-250 VAC, 0.5 A, 50-60Hz).

#### **[REMOTE RS-232]**

Standard Remote Control on DB9 Female connector.

#### **[VIDEO INPUTS]**

**C.V1:** COMPOSITE VIDEO 1 Input (on BNC connector).

**C.V2:** COMPOSITE VIDEO 2 Input (on BNC connector).

**S.V1:** S.VIDEO 1 (Y/C) input (on 4-pin mini DIN connector).

**S.V2:** S.VIDEO 2 (Y/C) input (on 4-pin mini DIN connector).

**R-Y, Y, B-Y:** COMPONENT (YUV) video Inputs (on 3 BNC connectors).

**R, G, B, SYNC:** RGB/S video input (on 4 BNC connectors).

#### **[COMPUTER INPUT]**

Computer (PC, MAC, WORKSTATION) input on HD15 female connector.

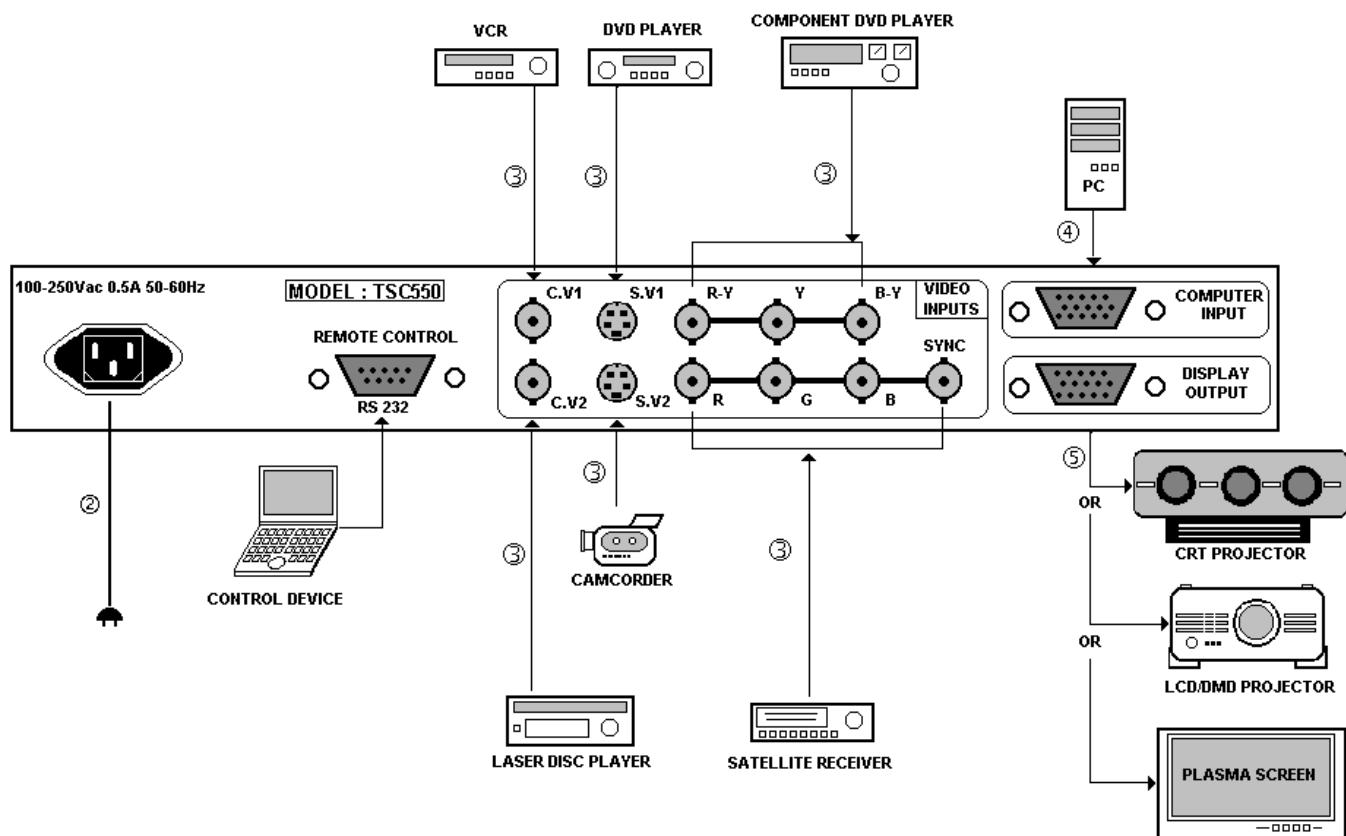
#### **[DISPLAY OUTPUT]**

DATA output (RGB HV or RGB/S) on HD15 female connector.

## Chapter 4 : STARTING

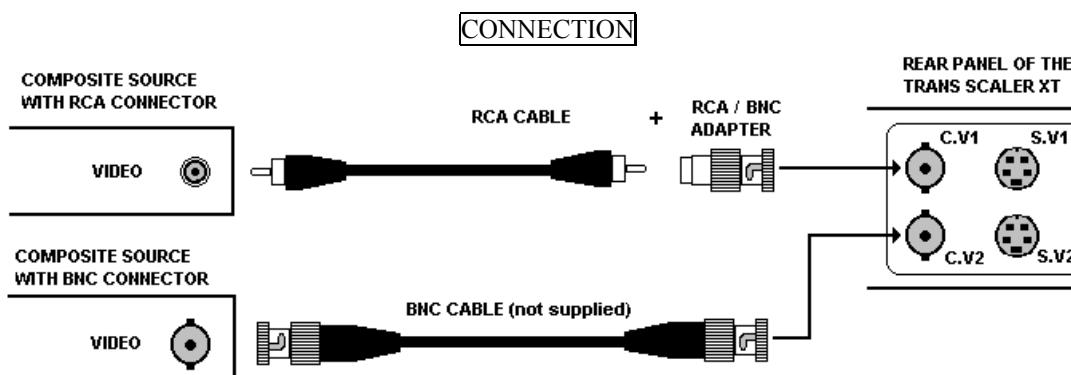
### 4-1. CONNECTIONS

- ① Turn OFF all of your equipments before connecting.
- ② Connect the AC Power Supply Cord to the TRANS-SCALER XT™ and to an AC power outlet.
- ③ Connect your Video Sources (VCR, DVD, Camera, Laser disc, ...) to the C.V1, C.V2, S.V1, S.V2 , RGB/S and COMPONENT (R-Y, Y, B-Y) inputs.
- ④ Connect your computer source to the COMPUTER input.
- ⑤ Connect the "DISPLAY OUTPUT" of the TRANS-SCALER XT™ to the DATA INPUT of your Display device (Data projector, Plasma screen...).
- ⑥ Turn ON all of your input sources, the TRANS-SCALER XT™ (front panel main switch) and then your display device.
- ⑦ Select a source with the front panel keys, to display it on the output (LED turned ON).



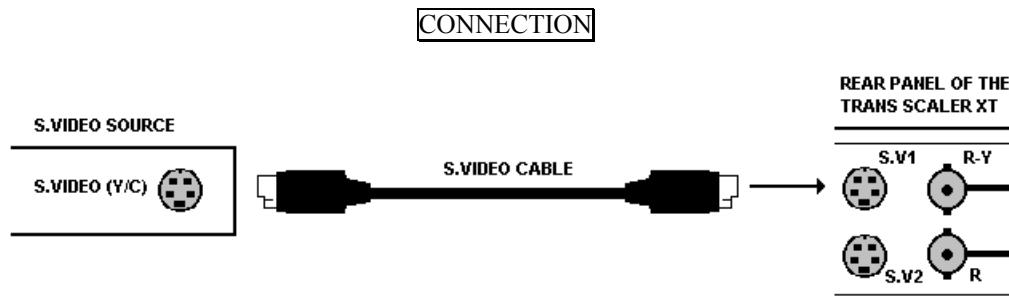
### 4-2. COMPOSITE VIDEO INPUTS (C.V1 & C.V2)

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



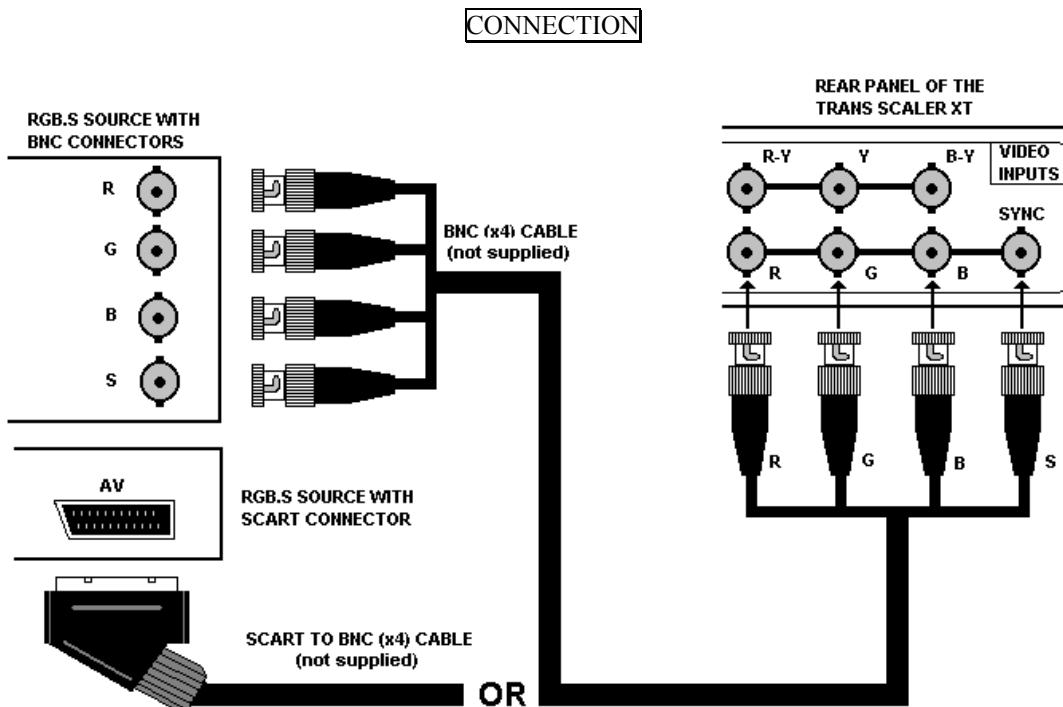
#### 4-3. S.VIDEO INPUTS (S.V1 & S.V2)

The S.VIDEO (Super Video) signal, also called Y/C, HI-8™, or S.VHS™, is available on most DVD players and high quality VCR (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.



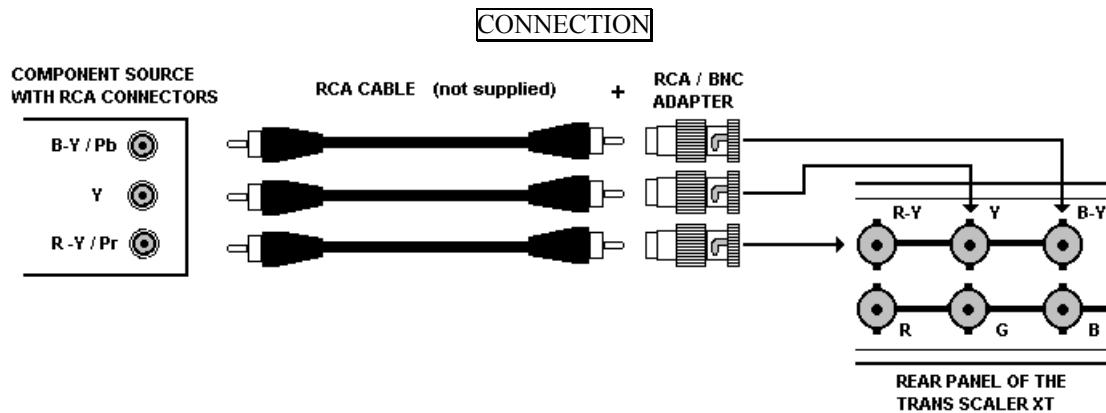
#### 4-4. RGB/S INPUT

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



#### 4-5. COMPONENT VIDEO INPUT

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 on 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) connectors.



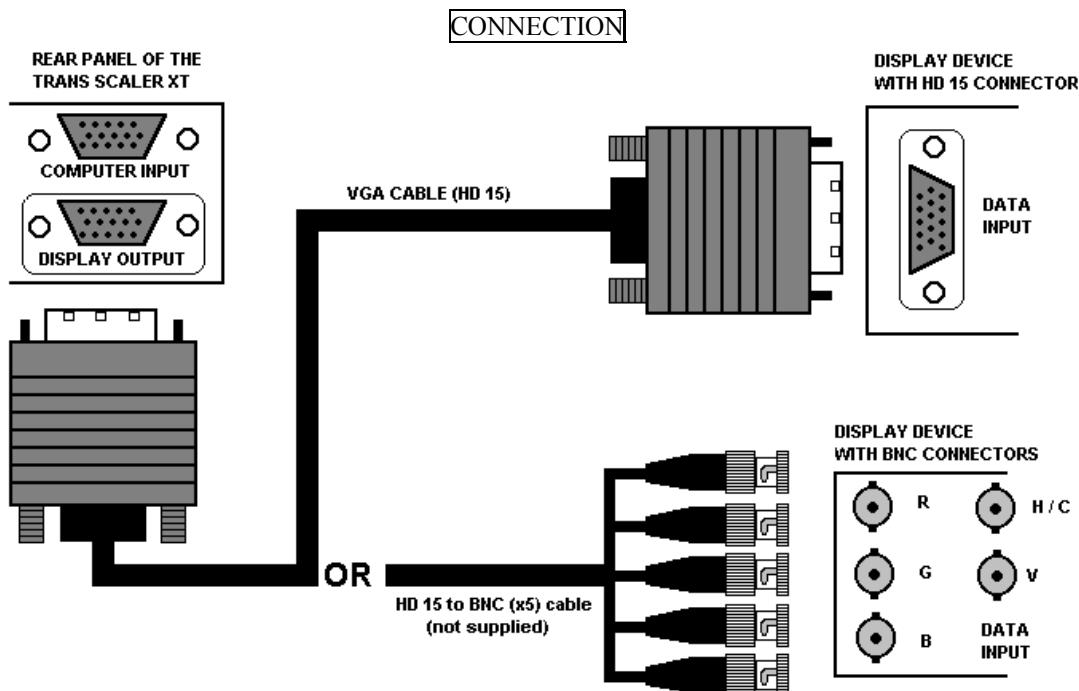
#### 4-6. COMPUTER INPUT

This input is used to pass-through any High-Definition or Computer signals. The signal connected to this input is sent directly to the display output. Also you may connect a Computer source (PC, MAC, WORKSTATION), or a high definition source (progressive DVD player, HDTV). Use the VGA supplied cable (HD15 male/male) to connect a PC. For the others sources you may need some adapters (not supplied).

#### 4-7. DISPLAY OUTPUT

The TRANS-SCALER XT™ is equipped with an HD15 female output connector. If your display device is equipped only with 5 BNC input connectors : use an HD15 to BNC (x5) cable (please see connection schematic below).

The TRANS-SCALER XT™ can provide an RGBHV (H & V Separate Sync.) or an RGBS (Composite Sync.) output signal.



## **Chapter 5 : OPERATING MODE**

### **5-1. SETTINGS**

- ① We recommend to reset the TRANS-SCALER XT™ to all of its default values, with the LCD menu # 4-4, before proceeding.
- ② Select the video type of the signal connected to the RGB input (LCD menu # 1-2).
- ③ Select the Type of Screen (4/3 or 16/9) in the LCD menu # 2-3.
- ④ Select the Output Sync. type which corresponds to your display device (LCD menu # 2-2).
- ⑤ Select the type of display device (LCD or DMD/CRT) with the front panel DISPLAY switch.
- ⑥ Select an Output Format (LCD menu # 2-1).

**NOTE:** For fixed pixels display devices (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.

**NOTE:** The COMPUTER input is routed directly through to the DISPLAY OUTPUT connector. You can therefore connect a Computer source (PC, MAC, WORKSTATION) or a High Definition video source (progressive DVD player, HDTV) to the COMPUTER INPUT. Thus when the COMPUTER INPUT is selected the output format is identical to the format connected to the COMPUTER input.

### **5-2. IMAGE ADJUSTMENTS**

For all input sources connected to the TRANS-SCALER XT™, make the following adjustments:

- ① Select the aspect ratio of your input source (LCD menu # 3-6).
- ② Adjust the position and size of the image (LCD menu # 3-1 to 3-4).
- ③ Make the others adjustments, if necessary, available in the LCD menu # 3 (color, brightness, image process...).

**NOTE:** The image adjustments are only active for the selected video input.

**NOTE:** To preset your image adjustments to the factory default values, select the video input and then use the LCD menu # 3-12 (Preset).

## **Chapter 6 : LCD SCREEN DESCRIPTION**

### **6-1. INTRODUCTION**

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

- The STATUS MODE indicates the input and the output status of the TRANS-SCALER XT™.
- The CONTROL MODE allows to select and adjust the parameters of the TRANS-SCALER XT™.

### **6-2. LCD CONTROL BUTTONS**

The LCD screen is controlled by 3 buttons :

**◀ ▶ CONTROL** knob: To scroll thru the different menus.

**EXIT / MENU** button:

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

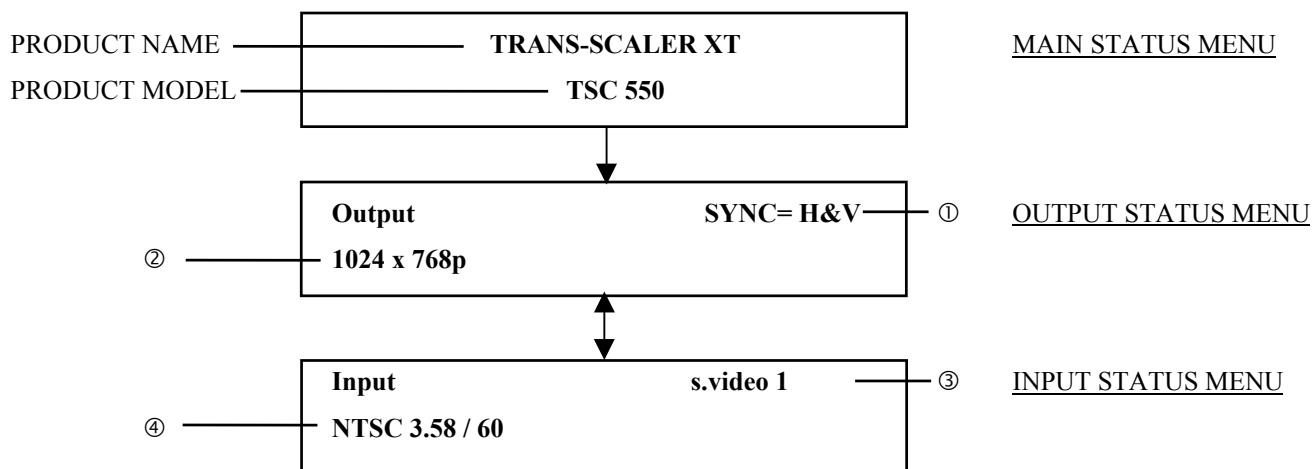
**ENTER** button :

- From the STATUS MODE, press this button to return to the last consulted menu.
- From the CONTROL MODE, press this button to confirm a selected item.

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

### **6-3. STATUS MODE**

When switched ON, the LCD screen shows the product's name and reference as follows:



① OUTPUT SYNC TYPE (H&V = Separate H &V Sync., COMP = Composite Sync.).

② OUTPUT FORMAT.

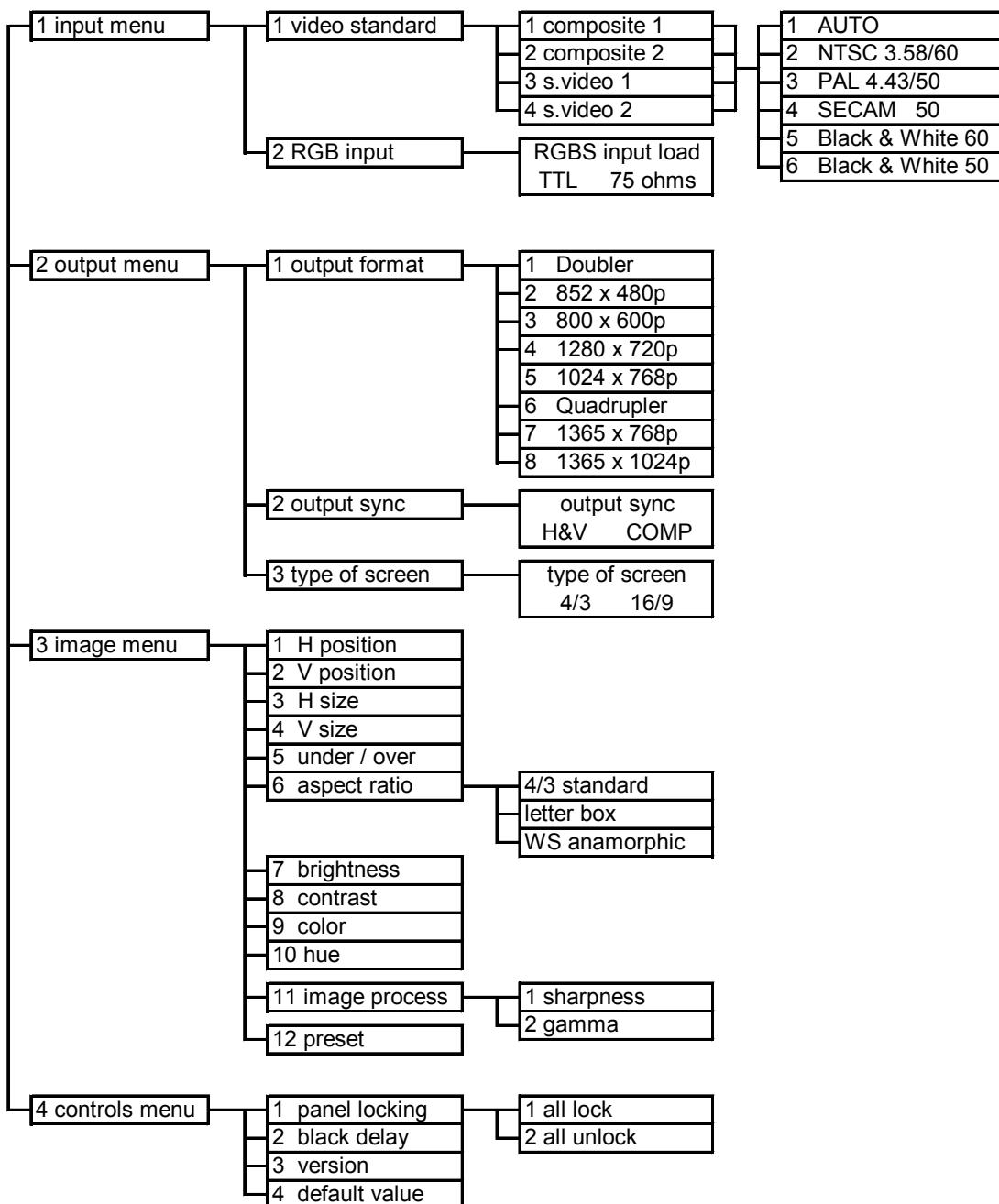
③ DISPLAYED INPUT.

④ VIDEO STANDARD OF THE DISPLAYED INPUT.



#### 6-4. CONTROL MODE

The menus of the CONTROL MODE are configured as follow:



## **Chapter 7 : LCD FUNCTIONS DESCRIPTION**

### **1 ▶ [INPUT MENU] + ENTER.**

#### **1-1 [video standard] + ENTER.**

- ① Select an input with **◀ ▶ + ENTER.**
- ② Then select the video standard with **◀ ▶ + ENTER.**
- [AUTO] = Automatic detection.
- [NTSC (3.58/60 Hz)] = NTSC detection only.
- [PAL (4.43/50 Hz)] = PAL detection only.
- [SECAM (50 Hz)] = SECAM detection only.
- [Black and white 50 Hz] = Black and White at 60 Hz detection only.
- [Black and white 60 Hz] = Black and White at 50 Hz detection only.

#### **1-2 [RGB input] + ENTER.**

Select the video type for the RGBS input between:

- [TTL] = RGB/S video signal with TTL Sync.
- [75 ohms] = RGB/S with an analog Sync. (0.3 Vp/p).

### **2 ▶ [OUTPUT MENU] + ENTER.**

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

Select an output format with **◀ ▶ + ENTER.**

- Doubler (480p at 59.94 Hz or 576p at 50 Hz - 4/3)
- 852 x 480p (Plasma 42" at 50 Hz or 59.94 Hz - 16/9)
- 800 x 600p (at 50 Hz or 59.94 Hz - 4/3)
- 1280 x 720p (HDTV at 50 Hz or 59.94 Hz - 16/9)
- 1024 x 768p (at 50 Hz or 59.94 Hz - 4/3)
- Quadrupler (960p at 59.94 Hz or 1152p at 50 Hz - 4/3)
- 1365 x 768p (at 50 Hz or 59.94 Hz - 16/9)
- 1365 x 1024p (at 50 Hz or 59.94 Hz - 4/3)

**NOTE:** The output frame rate is 50 Hz for PAL & SECAM video inputs, and 59.94 Hz for NTSC video inputs.

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

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

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

- [H&V] = Separate H & V Sync.
- [COMP] = Composite Sync.

#### **2-3 [type of screen]**

Select an item with **◀ ▶ + ENTER.**

- [4/3] = if your image is displayed on a 4/3 screen.
- [16/9] = if your image is displayed on a 16/9 screen.

### **3 ▶ [IMAGE MENU] + ENTER.**

**NOTE:** This menu is available and active on the selected video source. This menu is not available for the COMPUTER INPUT. The image settings and adjustments can be different and separately memorized for each video input.

#### **3-1 [H position] + ENTER.**

Adjust the Horizontal position with **◀ ▶ + ENTER.**

#### **3-2 [V position] + ENTER.**

Adjust the Vertical position with **◀ ▶ + ENTER.**

#### **3-3 [H size] + ENTER.**

Adjust the Horizontal size with **◀ ▶ + ENTER.**

#### **3-4 [V size] + ENTER.**

Adjust the Vertical size with **◀ ▶ + ENTER.**



**3-5 [u/overscan] + ENTER.**

Select Underscan or Overscan with **◀ ▶ + ENTER.**

- [underscan] = Output image is the full input image.
- [overscan] = Output image is 10% bigger than in Underscan mode. This mode avoid to seeing the corners and the borders of the image.

**3-6 [aspect ratio] + ENTER.**

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

- [4/3 standard] = 4/3 input format.
- [letterbox] = Letterbox input format.
- [WS anamorphic] = Widescreen Anamorphic input format (to be used only if your DVD player is set in 16/9 TV shape).

**3-7 [brightness] + ENTER.**

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

**3-8 [contrast] + ENTER.**

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

**3-9 [color] + ENTER.**

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

**3-10 [hue] + ENTER.**

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

**3-11 [image process] + ENTER.**

Select a function with **◀ ▶ + ENTER**, adjust with **◀ ▶**, and validate with **ENTER**.

- [sharpness]: Increase the details of the image (value > 0) or increase the Smoothness (value < 0).
- [gamma]: Gives greater depth to darker portions of the image for more exciting theatrical experience or brightens dark portions of the image for more enhanced presentations.

**3-12 [preset] + ENTER.**

This function allows to set the all image parameters (3-1, 3-2, 3-3, 3-4, 3-5, 3-7, 3-8, 3-9, 3-10, 3-11) to the factory values.

**4 ▶ [CONTROLS MENU] + ENTER.****4-1 [panel locking] + ENTER.**

This function allows to lock the front panel switches. Select an item with **◀ ▶ + ENTER.**

- [all lock] = All front panel switches are locked.
- [all unlock] = All front panel switches are unlocked.

**4-2 [black delay] + ENTER.**

This function allows to adjust the duration of the black delay when switching between sources.

Adjust the delay (between 1 and 10 seconds) with **◀ ▶ + ENTER.**

**4-3 [version] + ENTER.**

Status of the internal firmware of the unit.

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

- [no] = No Adjustments and Settings are modified.
- [yes] = Clears the following Adjustments and sets them to the Factory Settings.

**1-1 = AUTO.**

**3-6 = 4/3 standard.**

**1-2 = 75 Ω.**

**3-12 = PRESET.**

**2-1 = 1024 x 768p.**

**4-1 = unlock.**

**2-2 = Separate H & V Sync.**

**4-2 = 2 seconds.**

**2-3 = 4/3.**

## **Chapter 8 : TECHNICAL SPECIFICATIONS**

### **8-1. VIDEO INPUTS**

- **RGB/S** (4 BNC connectors)

15.625 kHz / 50 Hz .... 15.735 kHz / 60 Hz (625L .....525L)

*Levels:* R, G, B = 3 x 0.7 Vp/p.  
SYNC. = 0.3 Vp/p or TTL.

*Impedance:* R, G, B = 75 Ohms.  
SYNC. = 75 Ohms or Hi-Z.

- **COMPONENT (YUV) - R-Y / Y / B-Y** (3 BNC connectors)

15.625 kHz / 50 Hz .... 15.735 kHz / 60 Hz (625L .....525L)

*Levels:* Y = 1 Vp/p (0.7 V Luma + 0.3 V Sync.).  
R-Y = 0.7 Vp/p.  
B-Y = 0.7 Vp/p.

*Impedance:* Y, R-Y, B-Y = 75 Ohms.

- **S.VIDEO (Y/C)** (4 pin mini DIN connector)

PAL / SECAM 15.625 kHz / 50 Hz (625L)

NTSC (3.58 MHz / 4.43 MHz) 15.735 kHz / 60 Hz (525L)

*Levels:* Y = 1 Vp/p (0.7 V Luma + 0.3 V Sync.).  
C = 0.3 Vp/p.

*Impedance:* 75 Ohms.

- **COMPOSITE VIDEO** (BNC connector)

PAL / SECAM 15.625 kHz / 50 Hz (625L)

NTSC (3.58MHz / 4.43 MHz) 15.735 kHz / 60 Hz (525L)

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

*Impedance:* 75 Ohms.

### **8-2. COMPUTER INPUT (15 PINS HD Female connector)**

*Hardware compatibility:* Line frequency : From 24 kHz to 85 kHz.

Frame frequency : From 24 Hz to 120 Hz.

### **8-3. DISPLAY OUTPUT (HD15 Female connector)**

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

*Impedance:* R, G, B, H, V = 75 Ohms.

*Format:*

- If the computer input is selected: the output format is identical to the Computer input format.
- If a video input is selected: one of the output format available in the LCD menu # 2-1.



8-4. REMOTE PORT (DB9 Female connector)

*Level:* RS-232.  
*Data Rate:* 9600 bauds, 8 data bits, 1 stop bit, no parity bit, no flow control.

8-5. ENVIRONMENTAL

*Power Supply:* Internal CE / UL / CSA / IEC 950 (25W), Universal, Automatic.  
Input : 100 VAC to 250 VAC ; 50-60Hz ; I = 0.5 A Max.

*Storage temperature:* -25 °C to +85 °C (-13 °F to +185 °F).

*Operating temperature:* 0 °C to 50 °C (32 °F to 122 °F).

*Maximum ambient operating temperature:* < 40 °C (<104 °F).

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

*Dimension:* W 440 x D 200 x H 44 mm.                    W 17.3" x D 7.8" x H 1.73".  
W = 480 / 19" with the rackmount kit.  
Compatible with a standard 19" rack, height = 1 unit.

*Weight:* 2.5 kg / 5.5 lbs.

## **Chapter 9 : CONTROL SOFTWARE**

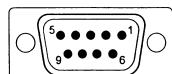
### **9-1. CONNECTION**

#### **• CONNECTING THE RS-232**

Connect the serial port of your control device to the REMOTE CONTROL (RS-232) connector (DB9 Female) of the TRANS-SCALER XT™ with the a **straight** cable (DB9 female / DB9 male).

#### **• PIN-OUT**

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



DB9 female connector.

(Rear panel of the TRANS-SCALER XT™).

#### **• SPEED TRANSMISSION : 9600 bauds, 8 data bits, 1 stop bit, no parity bit, no flow control.**

### **9-2. "TRANS-SCALER XT™ REMOTE CONTROL" SOFTWARE**

Your TRANS-SCALER XT™ is shipped with a WINDOWS 95/98/2000/Me/XP compatible "TRANS-SCALER XT™ REMOTE CONTROL" software (3.5" disk). This software allows you to control and make adjustments to the TSC550 by a simple mouse click (output format, image adjustments, etc....).

#### **• SOFTWARE INSTALLATION:**

- ① Turn ON your computer and wait for WINDOWS to completely start.
- ② Insert the disk into the floppy drive.
- ③ In the WINDOWS START menu, click on RUN.
- ④ Choose the disk drive and click on **setup.exe** (ex : A:\setup.exe if the 3.5" disk is drive A).
- ⑤ Follow the WINDOWS installation instructions: WINDOWS will create a file C:\Program files \ ANALOGWAY \ Trans-scaler XT Remote Control.

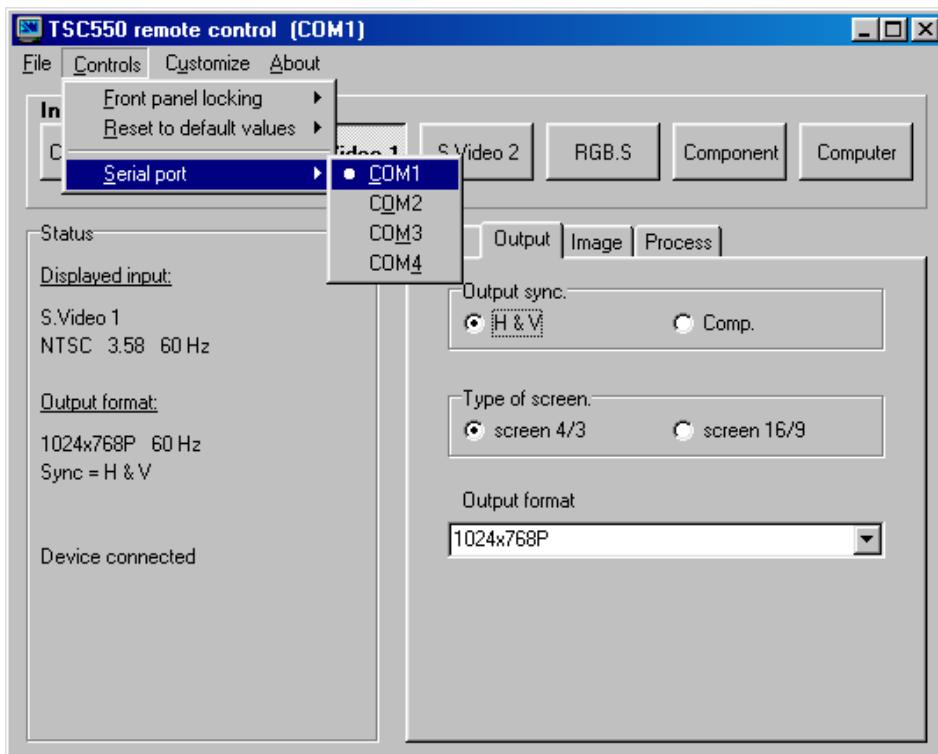
#### **• STARTING UP:**

- ① Connect the RS-232 cables between the control device and the TRANS-SCALER XT™ as indicated in section 9-1.
- ② Then power ON all of the devices.
- ③ Click on the programs file TSC550 in Start-Program-ANALOG WAY to run the software.
- ④ Click on the **Controls** menu and select the **Serial port**.

The TRANS-SCALER XT™ is now connected to the computer (if not, verify the DB9 serial connection and the selected serial port).

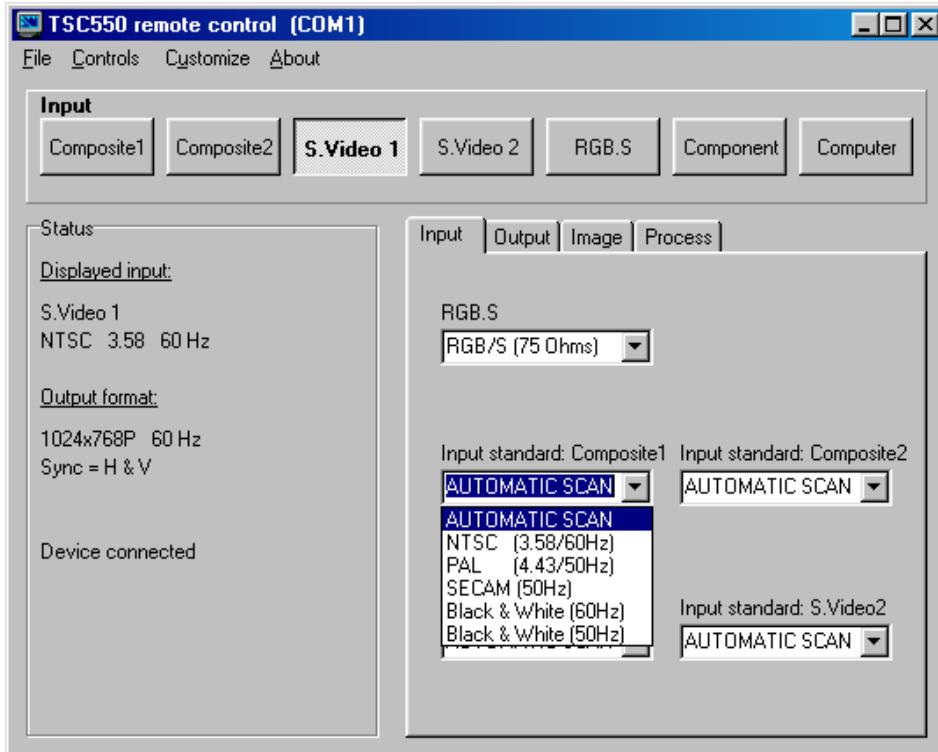
### 9-3. SOFTWARE SETUP:

- ① Select the **Serial port** in the **Controls** menu.



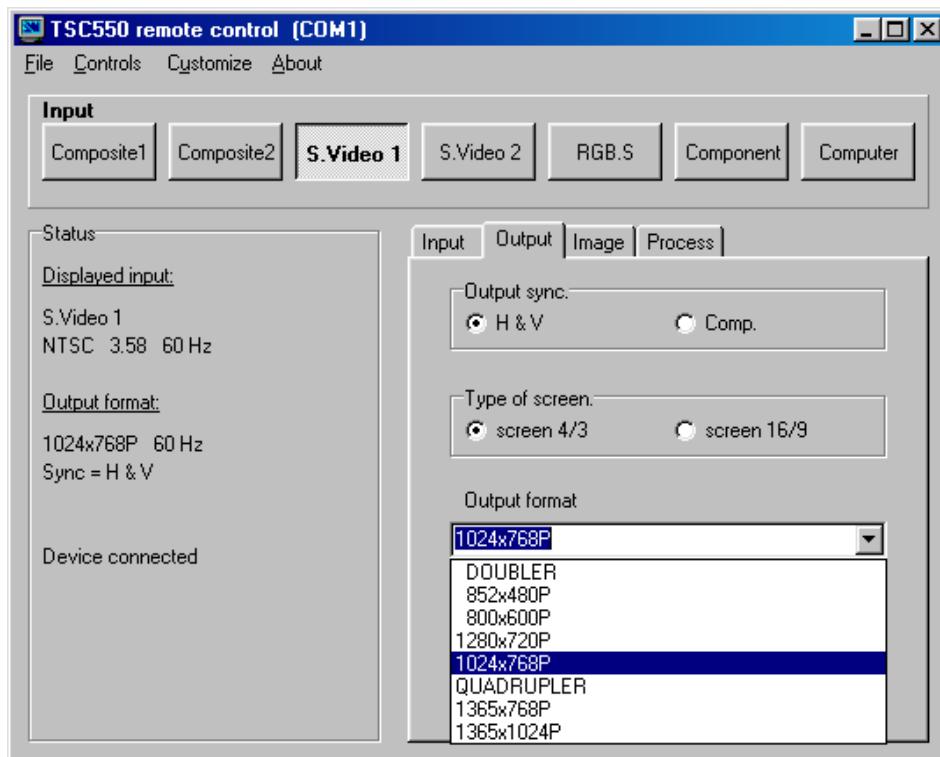
The TRANS-SCALER XT™ is now connected to the computer ; do a **Reset to default value** (**controls** menu) if necessary.

- ② In the **Input** menu, select the video type for the **RGB** input, and set the video standard for all of the other video inputs.



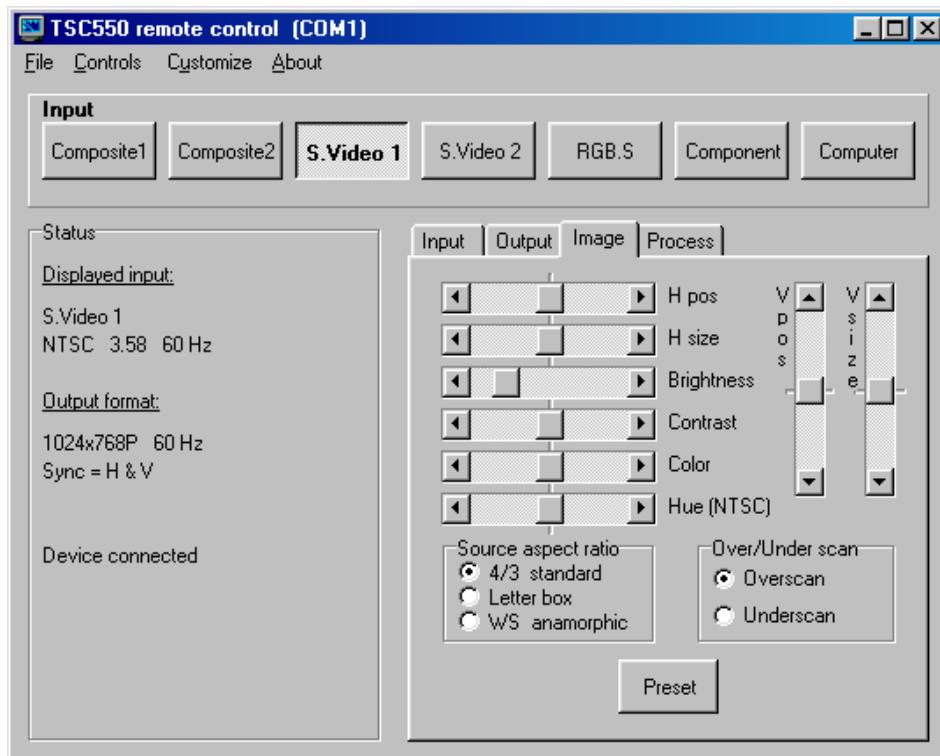
### 9-3. SOFTWARE SETUP: (continued)

- ③ In the **Output** menu, select the **Output Format**, the **Output Sync** and the **Type of screen**.



- ④ In the **Image** and **Process** menu, make the adjustments for all of your video TV inputs.

**NOTE:** The **Image** and **Process** menu is available only for video inputs, and acts on the video displayed output.



## **Chapter 10 : PROGRAMMER'S GUIDE**

### **10-1. INTRODUCTION**

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

The TRANS-SCALER XT™ treats any character that it receives on the RS-232 as a possible command but it 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 10-2. COMMANDS STRUCTURE).

When the TRANS-SCALER XT™ receives a valid command, it will execute the command. Then the TSC550 will send back the status of all 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 TRANS-SCALER XT™ will just sends 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 10-3. ERROR RESPONSES).

### **10-2. COMMANDS STRUCTURE**

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

COMMAND structure = VALUE (optional) + CHARACTER(S).

Examples:

<b>COMMAND</b>		<b>RESPONSE</b>	<b>DESCRIPTION</b>
VALUE	CHARACTER(S)		
<b>none</b>	<b>H</b>	<b>HPOS15</b>	Read Horizontal position.
<b>10</b>	<b>V</b>	<b>VPOS10</b>	Set Vertical position to 10.

### **10-3. ERROR RESPONSES**

When the TRANS-SCALER XT™ receives from the controlling device an invalid command or value, it returns an error response:

<b>COMMAND</b>		<b>RESPONSE</b>	<b>DESCRIPTION</b>
VALUE	CHARACTER(S)		
<b>none</b>	<b>Z</b>	<b>E10</b>	Invalid command.
<b>70260</b>	<b>V</b>	<b>E13</b>	Invalid value.

10-4. COMMANDS AND RESPONSES TABLE

The following table resumes commands which are recognized as valid and the responses that will be returned to the control device (on the RS-232 port).

ASCII COMMAND	RESPONSE TO HOST	COMMAND DESCRIPTION	VALUE		EXAMPLES		
			MIN	MAX	COMMAND	RESPONSE	ACTION EXPLANATION
<b>Input commands</b>							
C	CH	Input selection.	0	6	1C	CH1	Select composite 2 input.
p	PSTD	Standard input selection.	0	14	0p	PSTD0	Set to NTSC standard.
L	TTL	TTL/75Ω load selection.	0	1	0L	TTL0	Set RGBS sync. under 75Ω.
<b>Output commands</b>							
F	OFMT	Output format selection.	0	5	2F	OFMT2	Select 800 x 600p.
f	OSYNC	Output Sync. selection.	0	1	1f	OSYNC1	Select composite sync.
s	SCRN	Type of Screen selection.	0	1	0s	SCRN0	Select 4/3 screen.
<b>Image commands</b>							
P	PCH	Input selection for adjustment.	0	7	1P	PCH1	Select composite 2 input.
H	HPOS	Horizontal position.	0	255	15H	HPOS15	Set H position to 15.
V	VPOS	Vertical position.	0	255	10V	VPOS10	Set V position to 10.
W	HSIZ	Horizontal size.	0	255	W	HSIZ250	Read H size value.
S	VSIZ	Vertical size.	0	255	150S	VSIZ150	Set V size to 150.
D	CON	Contrast adjustment.	0	255	D	CON128	Read contrast value.
O	COL	Color adjustment.	0	255	55O	COL55	Set color value to 55.
B	BRIG	Brightness adjustment.	0	255	45B	BRIG45	Set brightness value to 45.
T	HUE	Hue adjustment.	0	255	T	HUE128	Read HUE value.
Q	OVER	Under/Overscan mode selection.	0	1	0Q	OVER0	Set to overscan mode.
a	IASP	Input aspect ratio selection.	0	2	0a	IASP0	Set aspect ratio to 4/3.
R	SHAR	Sharpness adjustment.	0	8	8R	SHAR8	Set sharpness value to 100.
M	GAM	Gamma adjustment.	0	3	M	GAM2	Read gamma value.
<b>Controls commands</b>							
r	PRES	Image Preset.	0	1	1r	PRES1	Set the image adjustments to the factory settings.
y	LOCK	Front panel locking.	0	1	0y	LOCK0	Unlock the front panel.
K	BLKD	Black delay selection.	0	10	3K	BLKD3	Set black delay to 3s.
v	VER	Product version.	0	65535	v	VER-----	Read the unit's internal version (0 to 65535).
Y	FRES	DEFAULT VALUE.	0	1	1Y	FRES1	Reset to default values.
?	DEV	Device type.		none	?	DEV14	# value of the TSC550.
<b>Status commands (read only)</b>							
I	IFA	Input video standard status.		none	I	IFA0	Selected input is NTSC standard (3.58/60).

**NOTE :** The commands values are describe in the following section.



## 10-5. VALUES DESCRIPTION

ASCII COMMAND	RESPONSE TO HOST	COMMAND DESCRIPTION	VALUE	DESCRIPTION
<b>Input commands</b>				
C	CH	Input selection.	None 0 1 2 3 4 5 6	Read the selected input. Select COMPOSITE 1 input. Select COMPOSITE 2 input. Select S.VIDEO 1 input. Select S.VIDEO 2 input. Select RGBS input. Select COMPONENT (YUV) input. Select COMPUTER input.
p	PSTD	Input standard selection for the Composite and S.VIDEO inputs.	None 0 1 2 3 4 14	Read the input type. Set to NTSC(3.58/60). Set to PAL (4.43 / 50). Set to SECAM (50). Set to Black & White (60). Set to Black & White (50). Set to AUTO.
L	TTL	TTL/75Ω selection (RGBS input)	None 0 1	Read the RGB/S input status. Set the RGB/S sync. to 75Ω load. Set the RGB/S sync. to TTL.
<b>Output commands</b>				
F	OFMT	Output format selection.	None 0 1 2 3 4 5 6 7	Read the output format. Set to Doubler. Set to 852 x 480p Set to 800 x 600p. Set to 1280 x 720p. Set to 1024 x 768p. Set to Quadrupler. Set to 1365 x 768p. Set to 1365 x 1024p.
f	OSYNC	Output Sync selection.	None 0 1	Read the output sync. type. Set to H & V separate sync. Set to Composite sync.
s	SCRN	Type of Screen selection.	None 0 1	Read the output screen type. Set to 4/3 screen. Set to 16/9 screen.
<b>Image commands</b>				
P	PCH	Input selection for adjustment.		Identical as C command
Q	OVER	Under/Overscan mode selection.	None 0 1	Read the Under/Overscan mode. Set to Overscan mode. Set to Underscan mode.
a	IASP	Input Aspect Ratio selection.	None 0 1 2	Read the selected input aspect ratio. Select 4/3 standard. Select letterbox. Select Widescreen Anamorphic.
M	GAM	Gamma selection.	None 0 1 2 3	Read gamma value. Set gamma to -1. Set gamma to 0. Set gamma to 1. Set gamma to 2
<b>Controls commands</b>				
K	BLKD	Black delay selection.	None 0 1 (...) 10	Read the black delay. Set black delay to factory default value. Set black delay value to 1 second. Set black delay value to (...). Set black delay value to 10 seconds.
y	LOCK	Front panel locking function.	None 0 1	Read the front panel locking status. Unlock the front panel. Lock the front panel.

10-5. VALUES DESCRIPTION

ASCII COMMAND	RESPONSE TO HOST	COMMAND DESCRIPTION	VALUE	DESCRIPTION
<b>Status commands</b>				
I	IFA	Status of the selected input.	0	NTSC (3.58/60 Hz).
			1	PAL (4.43/50 Hz).
			2	SECAM (50 Hz).
			3	black and white 60 Hz.
			4	black and white 50 Hz.
			5	YUV 60 Hz.
			6	YUV 50 Hz.
			7	RGB/S 60 Hz.
			8	RGB/S 50 Hz.
			9	Incompatible signal.
			10	No input.
			11	Computer signal.

10-6. 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



## Chapter 11 : TROUBLESHOOTING

SYMPOTM	CAUSE	CORRECTION	PLEASE SEE
<b>• NO POWER</b> <i>The LCD is OFF.</i>	• The power cord is disconnected.	• Connect the AC power cord to the TRANS-SCALER XT and to the power outlet.	• Chapter 4-1.
	• The TRANS-SCALER XT™ is “POWER OFF”.	• Press on the power switch on the front panel.	• Chapter 4-1.
<b>• NO PICTURE</b>  <i>The LCD input status displays “No video”. For example : S.Video 1 = No video.</i>	• The input source is not selected correctly.	• Select the input source, with the front panel push button, according to the equipment connected to the TRANS-SCALER XT™.	• Chapter 4-1.
	• The input source is OFF.	• Power ON the input source.	• Input source user’s manual.
	• The input source is disconnected.	• Connect the input source to the TRANS-SCALER XT™.	• Chapter 4-1.
<b>• NO PICTURE</b>  <i>The LCD input status displays the right status of the video. (For example : S.Video 1 = NTSC) but no image appears on the display device.</i>	• The display device is OFF.	• Power ON the display device.	• Display device user’s manual.
	• The display device is disconnected.	• Connect the DISPLAY OUTPUT of the TRANS-SCALER XT™ to the PC/RGB input of your display device.	• Display device user’s manual.
	• The DATA (PC/RGB) input of your display device is not selected correctly.	• Select the DATA (PC/RGB) input on your display device.	• Display device user’s manual.
	• The display device is not compatible with the selected output format.	• Check if the Display device is compatible with the selected output format.	• Chapter 7 : LCD menu # 2-1. • Display device user’s manual.
	• The display device is not compatible with the selected output Sync. Type.	• Check if the display device is compatible with the selected output Sync. type.	• Chapter 7 : LCD menu # 2-2. • Display device user’s manual.
<b>• The RS-232 software displays “TRANS-SCALER XT not connected”.</b>	• The RS-232 cable is disconnected.	• Connect the serial port of your computer to the RS-232 connector of the TRANS-SCALER XT™ (using a straight cable).	• Chapter 9-1.
	• The serial port is not selected correctly.	• Select the serial port in the <b>Controls menu</b> .	• Chapter 9-3.

## Chapter 12 : OPTIONAL ACCESSORIES

DESIGNATION	LENGTH	REFERENCE
S-VIDEO (Y/C) CABLE (4 pin mini DIN M/M)	5 m / 16 ft	10093
S-VIDEO (Y/C) CABLE (4 pin mini DIN M/M)	10 m / 33 ft	10094
VGA TO 5 BNC CABLE (HD15 M / BNC M)	1.8 m / 6 ft	10023
VGA TO 5 BNC CABLE (HD15 M / BNC M)	3 m / 10ft	10024
VGA TO 5 BNC CABLE (HD15 M / M)	6 m / 20 ft	10022
VGA TO 5 BNC CABLE (HD15 M / M)	10 m / 33 ft	10076
SET OF MAC (RGB HV) TO VGA CABLE ADAPTER (DB15 M / HD15 F)	2 x 0.3 m / 2 x 1 ft	10045
REMOTE CABLE (DB9 M/F)	3 m / 10ft	10110
REMOTE CABLE (DB9 M/F)	5 m / 16 ft	10111
REMOTE CABLE (DB9 M/F)	10 m / 33 ft	10112

## **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 à 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.

