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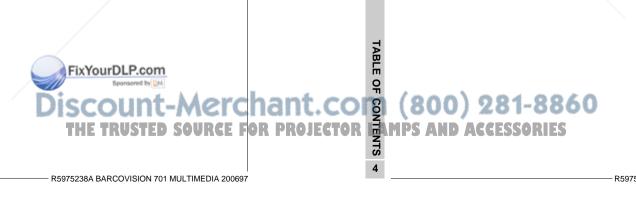
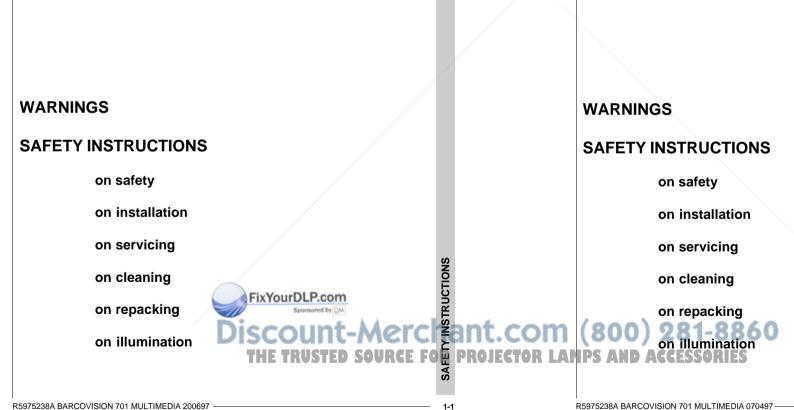
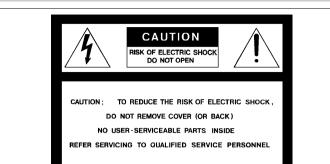


TABLE OF CONTENTS







The lightning flash with an arrowhead within a triangle is intended to tell the user that parts inside this product may cause a risk of electrical shock to persons.



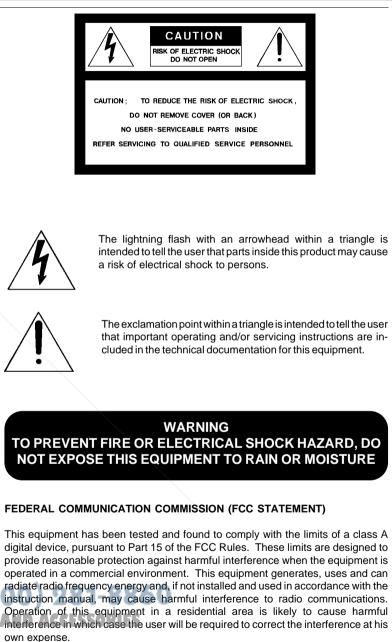
The exclamation point within a triangle is intended to tell the user that important operating and/or servicing instructions are included in the technical documentation for this equipment.

# WARNING TO PREVENT FIRE OR ELECTRICAL SHOCK HAZARD, DO NOT EXPOSE THIS EQUIPMENT TO RAIN OR MOISTURE

#### FEDERAL COMMUNICATION COMMISSION (FCC STATEMENT)

This equipment has been tested and found to comply with the limits of a class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection again a commercial environme is equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference at his own expense.

# SAFETY INSTRUCTIONS



SAFETY INSTRUCTIONS

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 ${\bf 3}.$  Do not allow anything to rest on the power cord. Do not locate this product where persons will walk on the cord.

To disconnect the cord, pull it out by the plug. Never pull the cord itself.

**4**. If an extension cord is used with this product, make sure that the total of the ampere ratings on the products plugged into the extension cord does not exceed the extension cord ampere rating. Also make sure that the total of all products plugged into the wall outlet does not exceed 15 amperes.

**5.** Never push objects of any kind into this product through cabinet slots as they may touch dangerous voltage points or short out parts that could result in a risk of fire or electrical shock.

Never spill liquid of any kind on the product. Should any liquid or solid object fall into the cabinet, unplug the set and have it checked by qualified service personnel before resuming operations.

**6**. Lightning - For added protection for this video product during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet. This will prevent damage to the projector due to lightning and AC power-line surges.

## **On installation**

1. Do not place this equipment on an unstable cart, stand, or table. The product may fall, causing serious damage to it.

2. Do not use this equipment near water.

**3**. Slots and openings in the cabinet and the back or bottom are provided for ventilation; to ensure reliable operation of the product and to protect it from overheating, these openings must not be blocked or covered. The openings should never be blocked by placing the product on a bed, sofa, rug, or other similar surface. This product should never be placed near or over a radiator or heat register. The projector should not be placed in a built-in installation or enclosure unless proper ventilation is provided.

# **On servicing**

Do not attempt to service this product yourself, as opening or removing covers may expose you to dangerous voltage pot s and risk of electric shock! Refer all servicing to qualified service shock is a service of the service of the

Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:

a. When the power cord or plug is damaged or frayed.

# SAFETY INSTRUCTIONS

3. Do not allow anything to rest on the power cord. Do not locate this product where persons will walk on the cord.

To disconnect the cord, pull it out by the plug. Never pull the cord itself.

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UCTION

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PROJEC

When installing the projector and screen, care must be taken to avoid exposure to ambient light directly on the screen. Avoid adverse illumination on the screen from direct sunlight or fluorescent lighting fixtures.

The use of controlled ambient lighting, such as incandescent spot light or a dimmer, is recommended for proper room illumination. Where possible, care should also be taken to ensure that the floors and walls of the room in which the projector is to be installed are non-reflecting, dark surfaces. Brighter surfaces will tend to reflect and diffuse the ambient light and hence reduce the contrast of the projected image on the screen.

# SAFETY INSTRUCTIONS

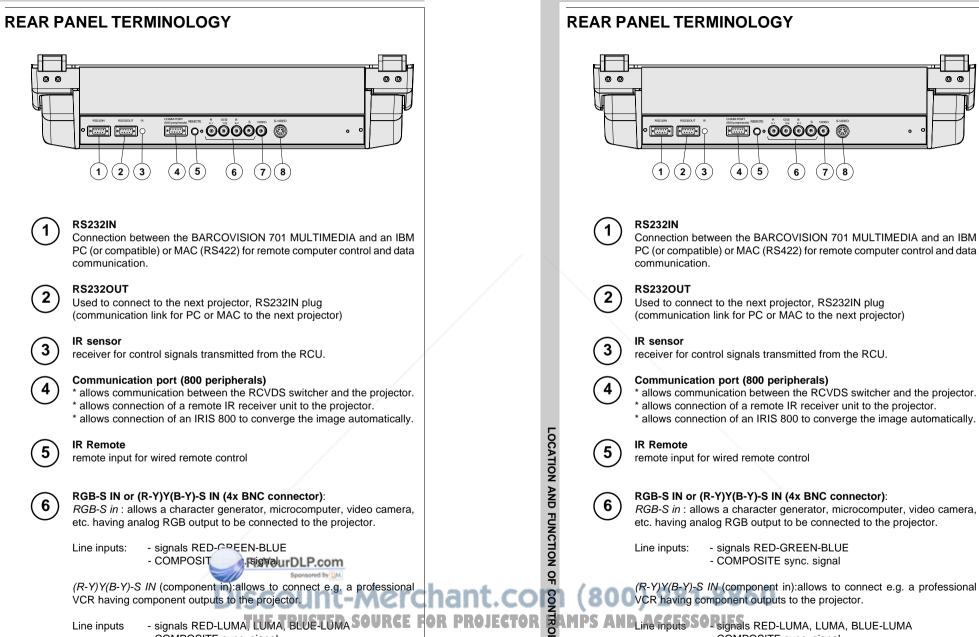
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FixYourDLP.com Source to March Source for the trusted source for the projector Lamps and Accessories

# LOCATION AND FUNCTION OF CONTROLS **OF CONTROLS Rear Panel Terminology Rear Panel Terminology Front Panel Terminology Front Panel Terminology RCU** Terminology **RCU** Terminology FUNCTION FixYourDLP.com Source by M SCOUNT-Merci Sant.com (800) 281-8860 THE TRUSTED SOURCE FOR PROJECTOR LAMPS AND ACCESSORIES FixYourDLP.com R5975238A BARCOVISION 701 MULTIMEDIA 200697 2-1 R5975238A BARCOVISION 701 MULTIMEDIA 200697

# LOCATION AND FUNCTION OF CONTROLS



- signals RED-GREEN-BLUE

- COMPOSITE sync. signal

- COMPOSITE sync. signal

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LOCATION AND FUNCTION OF CONTROLS

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2-2

- COMPOSITE sync. signal

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R5975238A BARCOVISION 701 MULTIMEDIA 200697

# LOCATION AND FUNCTION OF CONTROLS

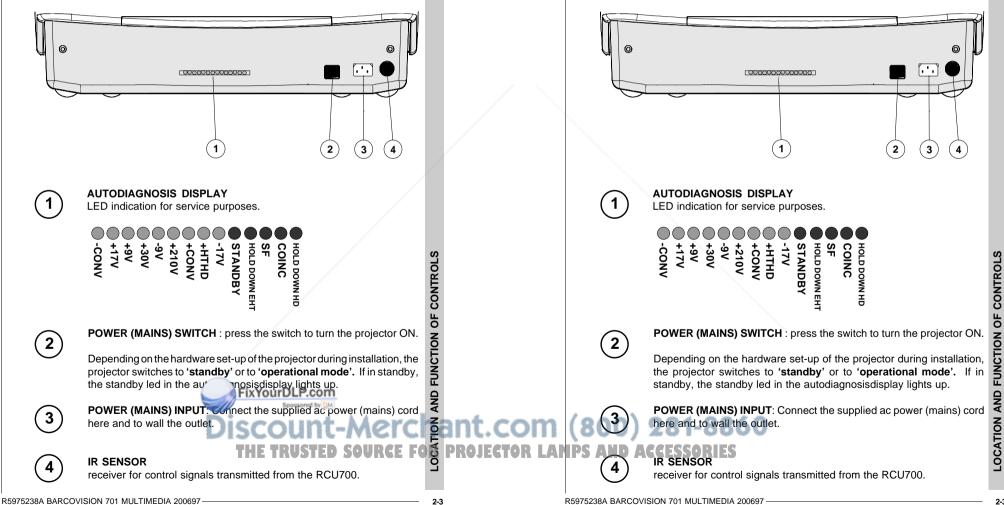


8

VIDEO IN (Composite video, 1x BNC connector): allows a video tape recorder, video camera, color receiver/monitor, etc. having video line output to be connected to the projector.

**S-VIDEO IN:** Separated Y/C (luma-chroma) signal inputs and outputs for higher quality playback of Super VHS signals (4-pin S-VIDEO connector).

# FRONT PANEL TERMINOLOGY



### LOCATION AND FUNCTION OF CONTROLS

7

8

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# FRONT PANEL TERMINOLOGY

#### To open this door, push as indicated on next drawing and turn it to the front side of To open this door, push as indicated on next drawing and turn it to the front side of the projector. the projector. b. RCU control panel terminology b. RCU control panel terminology This remote control includes a battery powered infrared (IR) transmitter that allows This remote control includes a battery powered infrared (IR) transmitter that allows LOCATION AND FUNCTION OF CONTROLS LOCATION AND FUNCTION OF the user to control the projector remotely. the user to control the projector remotely. This remote control is used for source selection, control, adaptation and set-up. It This remote control is used for source selection, control, adaptation and set-up. It includes automatic storing of : includes automatic storing of : - picture controls (Brightness, Sharpness,....) - picture controls (Brightness, Sharpness,....) - picture geometry adjustments - picture geometry adjustments - convergence adjustments - convergence adjustments Other functions of the remote control are: Other functions of the remote control are: - switching between standby and operational modes - switching between standby and operational modes - switching to "pause" (blanked pictu power for immediate restarting) - switching to "pause" (blanked picture, full power for immediate restarting) - direct access to all connected soul - direct access to all connected sources - variable adjustment speed : when pushing continuously on the arrow keys or the - variable adjustment speed : when pushing continuously on the arrow keys or the picture keys, the adjustment will be executed in an accelerated fashion. 8 picture keys, the adjustment will be executed in an accelerated fashion. SAMPS AND ACCESSORIES HE TRUSTED SOURCE ົລ R5975238A BARCOVISION 701 MULTIMEDIA 200697 R5975238A BARCOVISION 701 MULTIMEDIA 200697

# LOCATION AND FUNCTION OF CONTROLS

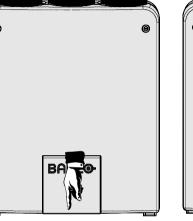
## **Control panel terminology**

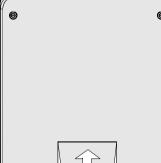
## a. The local keypad

#### Getting access

2-4

The local keypad is covered by a door on which the projector logo is screened.





# LOCATION AND FUNCTION OF CONTROLS

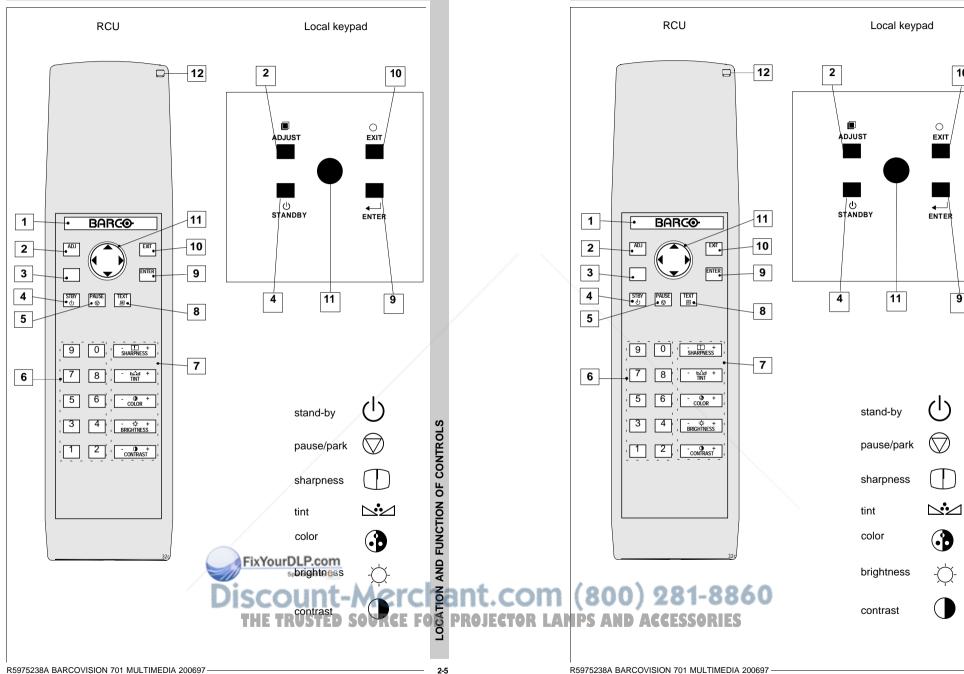
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LOCATION AND FUNCTION OF CONTROLS

LOCATION AND FUNCTION OF CONTROLS

10

9

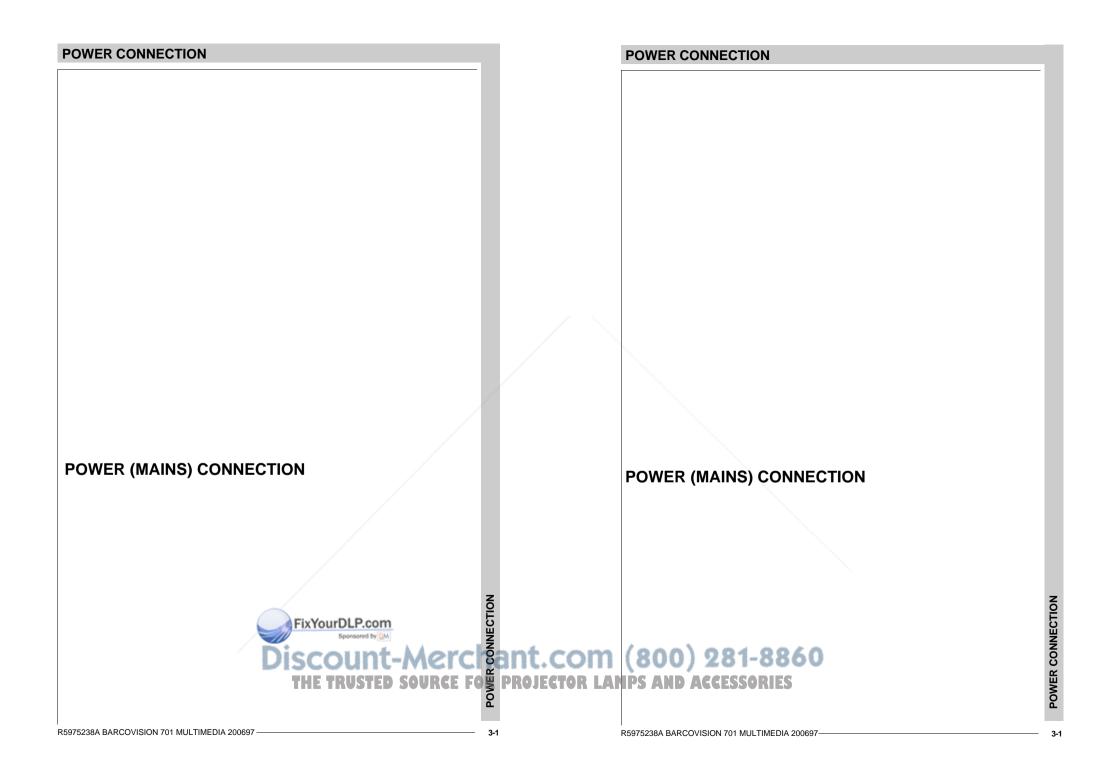
2-5

# LOCATION AND FUNCTION OF CONTROLS

	Back light key: when activated, all keys will be lit up and visible in the dark.				Back light key: when activated, all keys will be lit up and visible in the dark.
1	ADJ. : adjust key, to enter or exit the adjustment mode.			1	ADJ. : adjust key, to enter or exit the adjustment mode.
2				2	
3	<b>Address key</b> (recessed key), to enter the address of the projector (between 0 and 9). Press the address key, followed by pressing one digit button between 0 and 9.			3	Address key (recessed key), to enter the address of the projector (between 0 and 9). Press the address key, followed by pressing one digit button between 0 and 9.
4	<b>STBY</b> : stand by button : - to initiate remote power up operation - to stop projection without main power off.			4	<b>STBY</b> : stand by button : - to initiate remote power up operation - to stop projection without main power off.
5	<b>Pause</b> :to blank the image, press PAUSE. The image disappears but full power is retained for immediate restarting.			5	<b>Pause</b> :to blank the image, press PAUSE. The image disappears but full power is retained for immediate restarting.
6	<b>Digit buttons</b> : direct input selection.			6	Digit buttons : direct input selection.
7	<b>Picture controls</b> : use these buttons to obtain the desired level (see also 'Controlling') for each picture function.	/		7	<b>Picture controls</b> : use these buttons to obtain the desired level (see also 'Controlling') for each picture function.
8	<b>TEXT</b> : when adjusting one of the image controls during a meeting, the displayed bar scale can be removed by pressing 'TEXT' key first. To re- display the bar scale on the screen, press 'TEXT' key again. 'TEXT' key is only active in operational mode. When 'TEXT' is off, no warning message will be displayed.			8	<b>TEXT</b> : when adjusting one of the image controls during a meeting, the displayed bar scale can be removed by pressing 'TEXT' key first. To redisplay the bar scale on the screen, press 'TEXT' key again. 'TEXT' key is only active in operational mode. When 'TEXT' is off, no warning message will be displayed.
9	<b>ENTER</b> : to start up the adjustment mode or to confirm an adjustment or selection in the adjustment mode.			9	<b>ENTER</b> : to start up the adjustment mode or to confirm an adjustment or selection in the adjustment mode.
10	<b>EXIT</b> : to leave the adjustment mode or to scroll upwards when in the adjustment mode.			10	<b>EXIT</b> : to leave the adjustment mode or to scroll upwards when in the adjustment mode.
11	<b>Control disk</b> : to make menu selections when in the adjustment mode. Also allows to increment or decrement an adjustment in the adjustment mode.		LOCATI	11	<b>Control disk</b> : to make menu selections when in the adjustment mode. Also allows to increment or decrement an adjustment in the adjustment mode.
	control disk up = up arrow in the menus control disk down = down arrow in the menus control disk to the right = arrow to the right on the menus		ON AN		control disk up = up arrow in the menus control disk down = down arrow in the menus control disk to the right = arrow to the right on the menus
	control disk to the left = arrow to the left on the menus		D F		control disk to the left = arrow to the left on the menus
12	RC operating indication : lights up when a button on the remote control is pressed. (This is a visual indication of the remote control)		LOCATION AND FUNCTION O	12	<b>RC operating indication</b> : lights up when a button on the remote control is pressed. (This is a visual indicator to check the operation of the remote control)
	Discount-Merc THE TRUSTED SOURCE F	hant.co	FCON	(800	) 281-8860
	THE TRUSTED SOURCE F	OR PROJECTOR	ITRO	MPS AND	ACCESSORIES
			STC		

LOCATION AND FUNCTION OF CONTROLS

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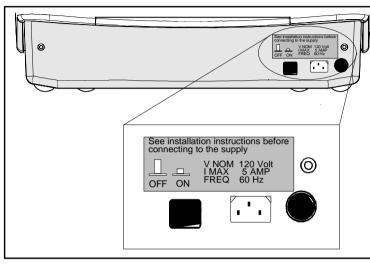


## **POWER CONNECTION**

# POWER CONNECTION

# Power (mains) cord connection

Use the supplied power cord to connect your projector to the wall outlet. Plug the female power connector into the male connector at the front of the projector.



# Switching on/off

The projector is switched ON and OFF using the power (mains) switch ON/OFF.

#### Pressed : ON

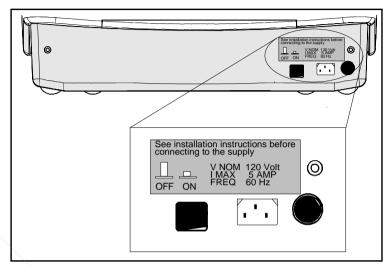
#### Not pressed : OFF

The projector can start now in the 'operational mode' (image displayed) or in the 'stand by mode', depending on the position of the 'power up' dip switch on the controller unit. This DIP switch is set during installation by a gualified technician. If you want to change this start up mode, call a qualified technician.

Stand by indication lamp : no light up : projector in operational mode red : projector is in stand by. Leds on the front plate of the projector

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# Switching on/off

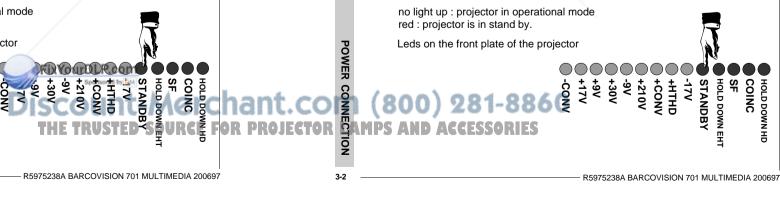
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Stand by indication lamp :



# SOURCE CONNECTIONS

- connecting a Video source
- connecting a S-Video source
- connecting a RGsB or RGBS analog source
- connecting a RG3sB or RGB3S analog source
- connecting a (R-Y)Ys(B-Y) or (R-Y)Y(B-Y)S analog source
- -connecting a (R-Y)Y3s(B-Y) or (R-Y)Y(B-Y)3S analog source

# PERIPHERAL EQUIPMENT CONNECTION

- Connecting a computer, e.g. IBM PC (or compatible), Apple Macintosh to the RS232 input of the projector.

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- connecting a RCVDS 05
- connecting a VSO5

## CONNECTIONS

# SOURCE CONNECTIONS

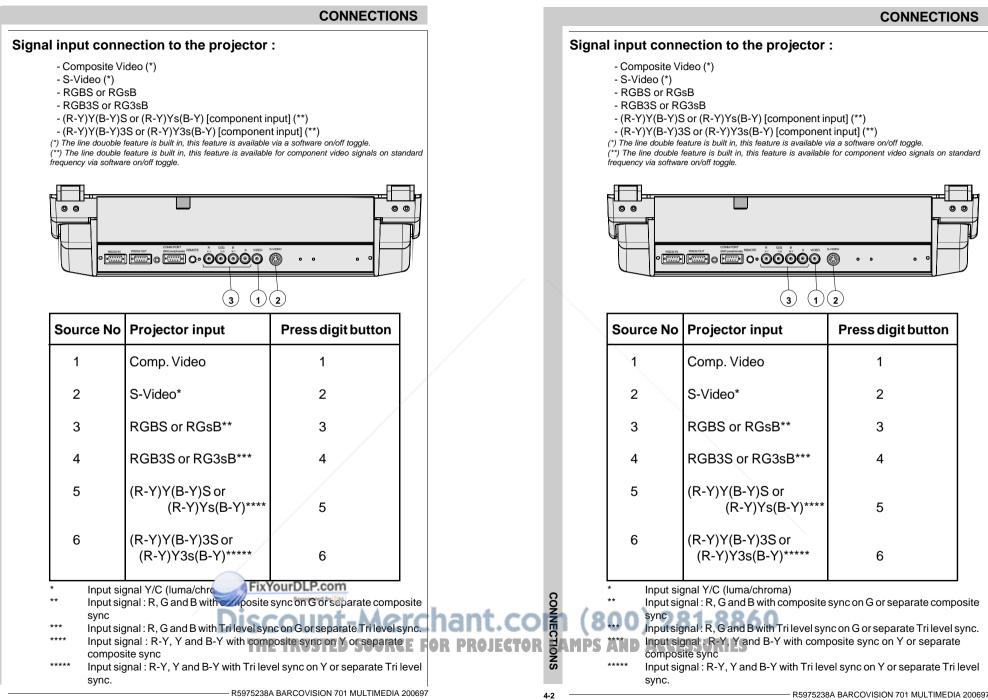
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- connecting a RCVDS 05

- connecting a VSO5

- connecting an IR Remote Receiver RUSTED SOURCE FOR PROJECTOR LANDS A CONNECTING AN IR Remote Receiver



4-2

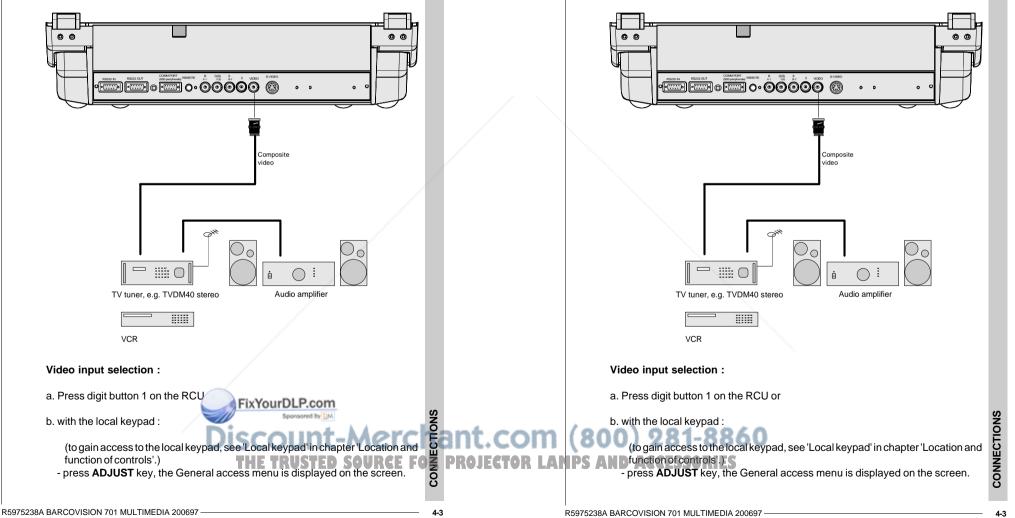
# Connecting a Composite Video source.

Composite video signals from a VCR, OFF air signal decoder, etc..

A line doubler is built in :

the default position of this line doubler is ON (active), the video input signal will be displayed as a non interlaced image (= improved image stability).

To enable or to disable this line doubler function, enter the adjustment mode and change the position of the ON/OFF toggle switch (see Picture tuning in chapter 'Guided' adjustment mode or 'Random access' adjustment mode).



CONNECTIONS

Connecting a Composite Video source.

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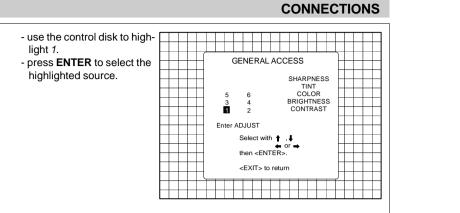
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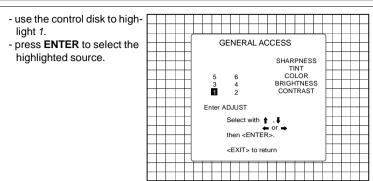


# Connecting a S-Video source.

Separate Y-luma/C-chroma signals for higher quality playback of Super VHS signals.

If a line doubler is built in :

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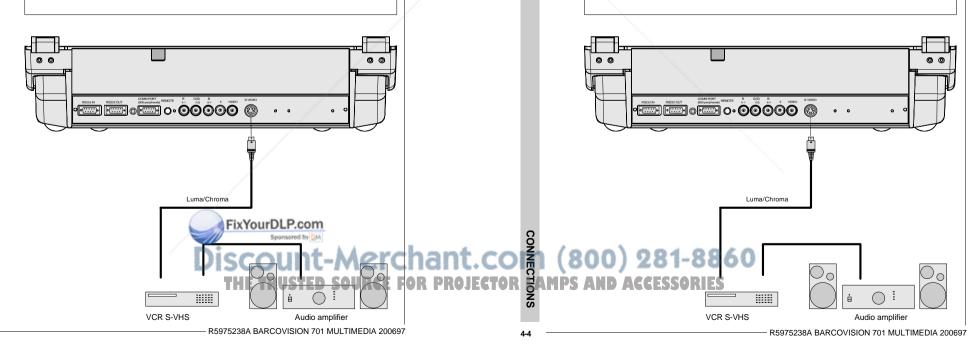


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4-4

#### S-Video input selection

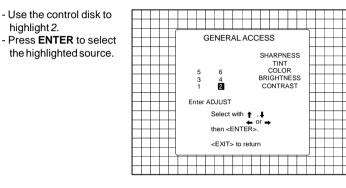
a. Press digit button 2 on the RCU or

#### b. with the local keypad :

highlight 2.

(to gain access to the local keypad, see 'Local keypad' in chapter 'Location and function of controls'.)

- Press ADJUST key, the General access menu is displayed on the screen.



# Connecting a RGB Analog source with composite sync.

RGB analog input terminals with composite sync input or with sync on green. The projector detects automatically where the sync signal is located. Always use an interface when a computer and local monitor have to be connected to the projector. Examples of interfaces which can be applied :

Universal analog interface	R9826100
RGB 120 MHz Analog Interface	R9826570 (230V)
Multifunctional Analog Interface Kit	R9828120 (230V)
(MAGIK)	R9828129 (120V)
VGA interface	R9828070 (230V)
	R9828079 (120V)
MAC interface	R9828050 (230V)
	R9828059 (120V)

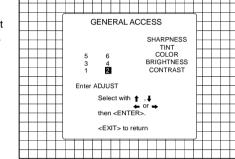
# CONNECTIONS

#### S-Video input selection

- a. Press digit button 2 on the RCU or
- b. with the local keypad :

(to gain access to the local keypad, see 'Local keypad' in chapter 'Location and function of controls'.)

- Press ADJUST key, the General access menu is displayed on the screen.
- Use the control disk to highlight 2. - Press ENTER to select the highlighted source.

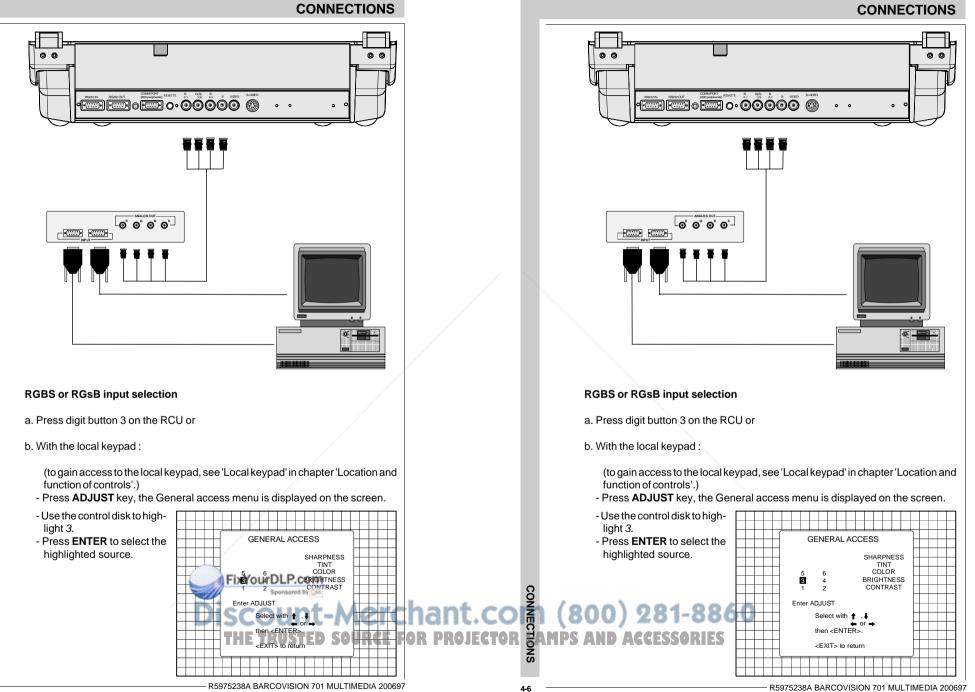


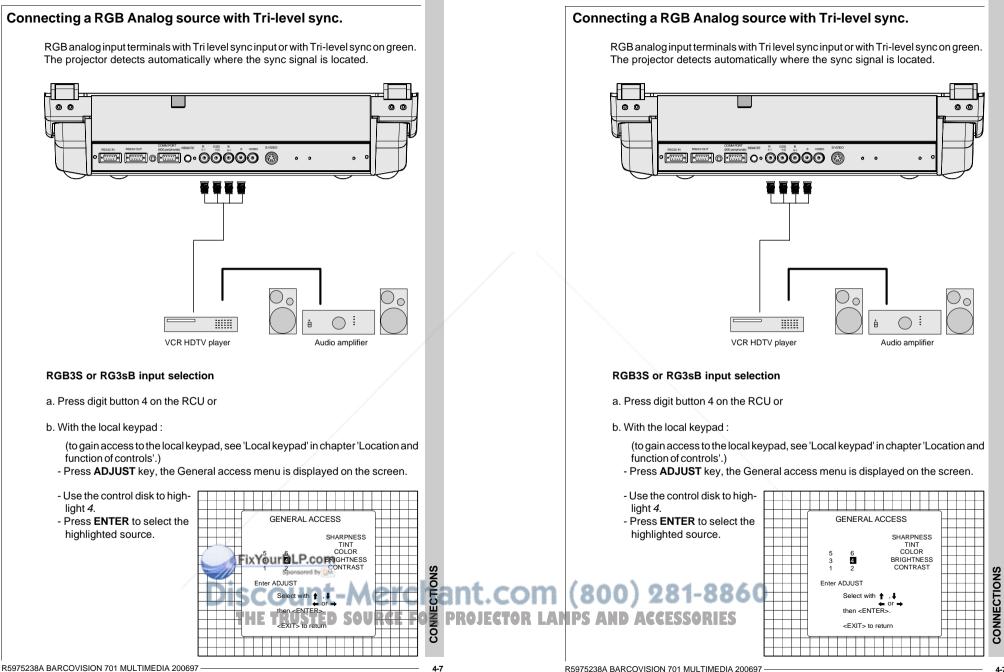
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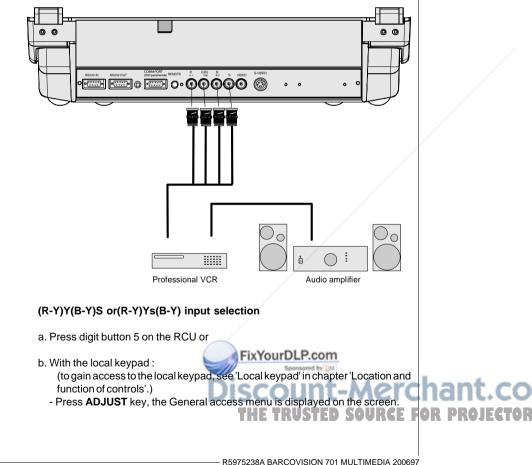
CONNECTIONS

# Connecting a Component source.

(R-Y)Y(B-Y) analog input terminals with sync input or with sync on the luminance (Y) input. The projector detects automatically where the sync signal is located. *Line doubling is possible for component video input sources on standard line frequency.* 

#### A line doubler is built in :

the default position of this line doubler is ON (active), the component video input signal will be displayed as a non interlaced image (= improved image stability). To enable or to disable this line doubler function, enter the adjustment mode and change the position of the ON/OFF toggle switch (see Picture tuning in chapter 'Guided' adjustment mode or 'Random access' adjustment mode).

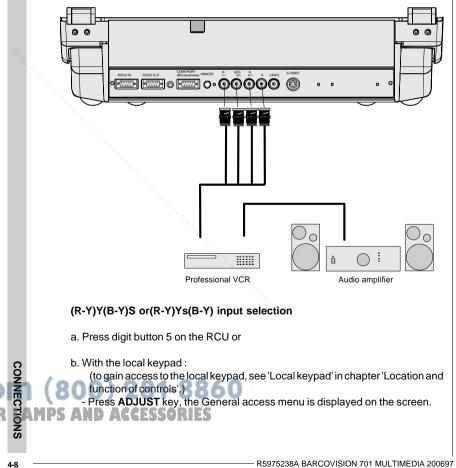


## Connecting a Component source.

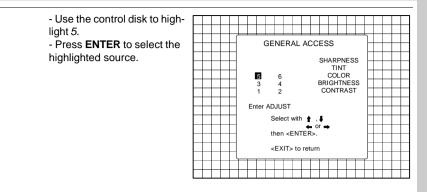
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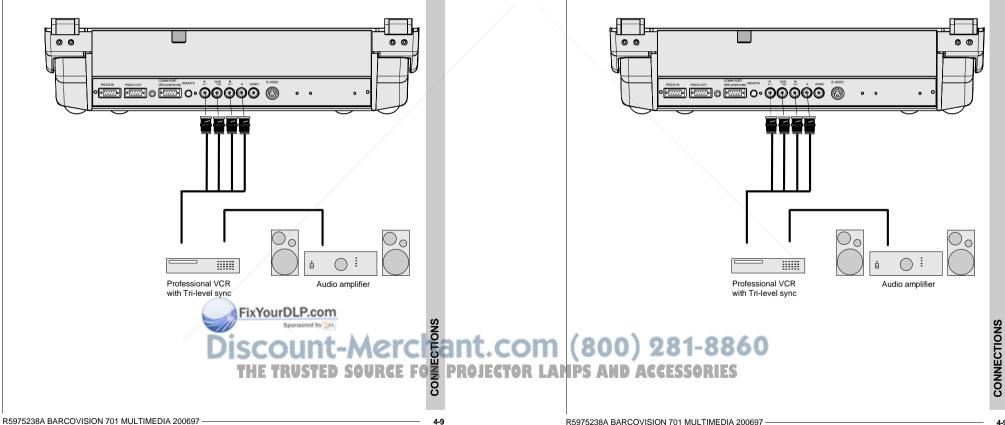


CONNECTIONS

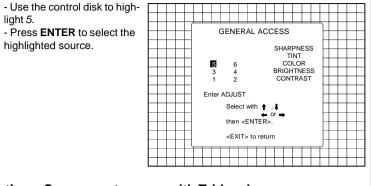


# Connecting a Component source with Tri-level sync.

(R-Y)Y(B-Y) analog input terminals with Tri-level sync input or with Tri-level sync on the luminance input.

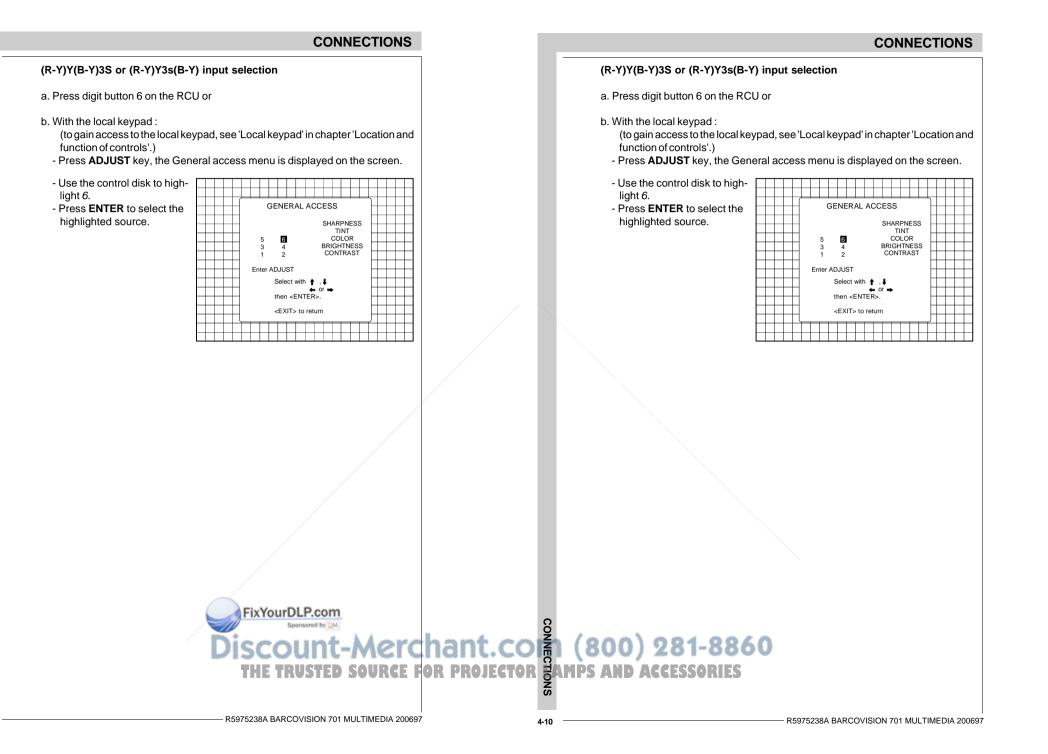


light 5.



# Connecting a Component source with Tri-level sync.

(R-Y)Y(B-Y) analog input terminals with Tri-level sync input or with Tri-level sync on the luminance input.



# Connecting a computer, e.g. IBM PC (or compatible), Apple Macintosh to the RS232 input of the projector.

The projector has a RS232 port that allows it to communicate with a computer.

Applications: remote control and data communications.

#### a) remote control:

- easy adjustment of the projector via IBM PC (or compatible) or MAC connection.
- allow storage of multiple projector configurations and set ups.
- wide range of control possibilities.
- address range from 0 to 255.

#### b) data communications:

- sending data to the projector or copying the data from the projector to a hard memory device.

# CONNECTIONS

# Connecting a computer, e.g. IBM PC (or compatible), Apple Macintosh to the RS232 input of the projector.

The projector has a RS232 port that allows it to communicate with a computer.

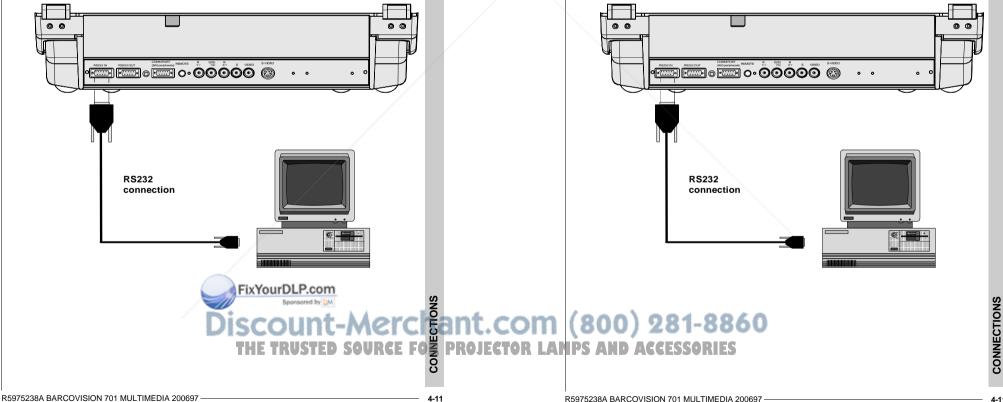
Applications: remote control and data communications.

#### a) remote control:

- easy adjustment of the projector via IBM PC (or compatible) or MAC connection.
- allow storage of multiple projector configurations and set ups.
- wide range of control possibilities.
- address range from 0 to 255.

#### b) data communications:

- sending data to the projector or copying the data from the projector to a hard memory device.



# PERIPHERAL EQUIPMENT

## Connecting a RCVDS 05 switcher to the projector.

- Up to 10 inputs (20 inputs when video and S-video) with the RCVDS 05 switcher and up to 90 inputs when 10 RCVDS switchers are linked via the expansion modules. - Serial communication with the projector.
- Remote control buttons on the RCVDS to control the projector (source selection and analog settings)
- The selected source number will be displayed on a 2 digit display and the selected input modules will be indicated with a LED on the rear.

For more information about the use of the RCVDS 05, consult the Owner's Manual. order number: R5975765.

# Connecting a VS05 switcher to the projector.

The VS05 can switch up to 5 Composite Video sources, 3 S-Video Sources and 1 RGB analog or component Video source to the projector. In addition, the audio signal proper to the source, can be switched to an audio amplifier. Order number : R9827890.

For more information about the use of the VS05, consult the Owner's Manual, order number: R5975245.

## Connecting an IR Remote Receiver to the projector

This infra-red receiver unit makes it possible to control the projector from another room. There is a communication line cable between the IR receiver and the projector or the RCVDS. The infrared control information from the Remote Control Unit is sent to the IR Remote Receiver. The IR Remote Receiver 800 displays the selected source on a 7-segment display. Order number : R9827515

# PERIPHERAL EQUIPMENT

# Connecting a RCVDS 05 switcher to the projector.

- Up to 10 inputs (20 inputs when video and S-video) with the RCVDS 05 switcher and up to 90 inputs when 10 RCVDS switchers are linked via the expansion modules. - Serial communication with the projector.

CONNECTIONS

- Remote control buttons on the RCVDS to control the projector (source selection and analog settings)
- The selected source number will be displayed on a 2 digit display and the selected input modules will be indicated with a LED on the rear.

For more information about the use of the RCVDS 05, consult the Owner's Manual. order number: R5975765.

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The VS05 can switch up to 5 Composite Video sources. 3 S-Video Sources and 1 RGB analog or component Video source to the projector. In addition, the audio signal proper to the source, can be switched to an audio amplifier. Order number : R9827890.

For more information about the use of the VS05, consult the Owner's Manual, order number: R5975245.

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4-12

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4-12

# CONTROLLING

Battery installation in the RCU

How to use the RCU

**Projector address** 

How to display a projector address

How to program an address into the RCU

FixYourDLP.com

Input selection

**Picture controls** 

The Pause key

# CONTROLLING

Battery installation in the RCU

How to use the RCU

Projector address

How to display a projector address

How to program an address into the RCU

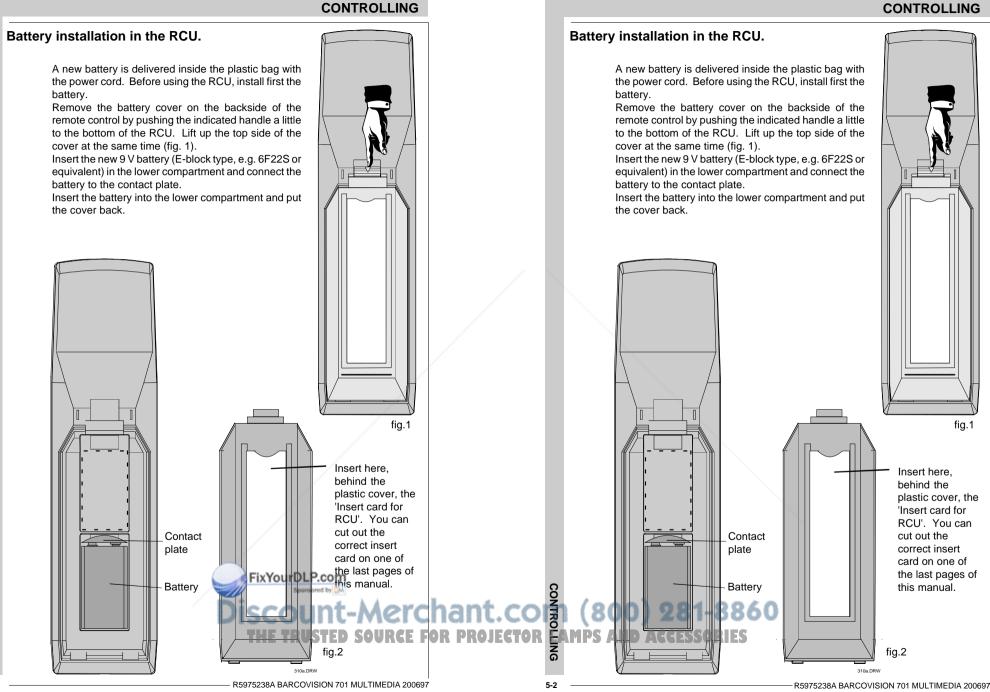
Input selection

**Picture controls** 

The Pause key Discount-Merchant.com (800) 281-8860 THE TRUSTED SOURCE FOE PROJECTOR LAMPS AND ACCESSORIES

0

5-1



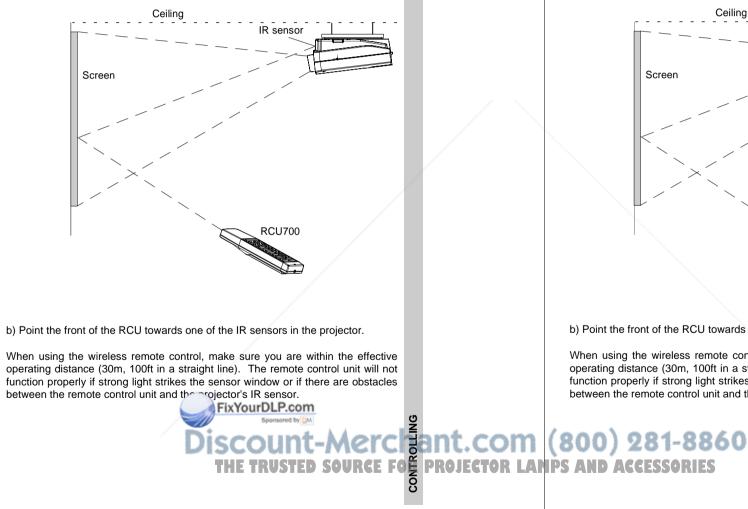
## CONTROLLING

The BARCOVISION 701 MULTIMEDIA can be controlled with a. the RCU b. the hardwired RCU (cable not included) c. the local keypad.

Controlling the projector with the RCU and the hardwired RCU is the same.

## How to use the RCU

a) Point the front of the RCU towards the reflective screen surface



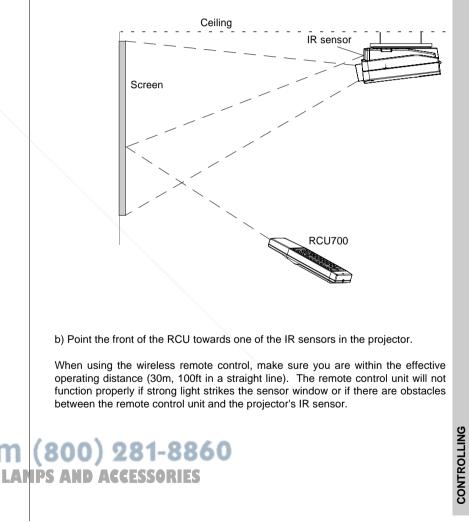
## CONTROLLING

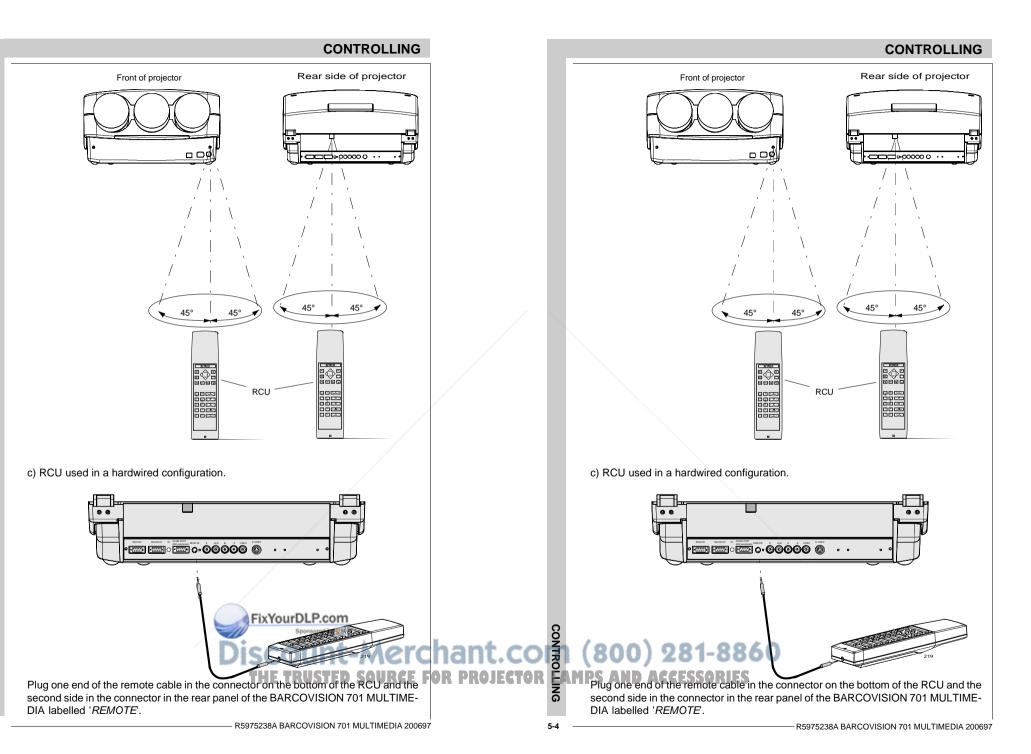
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- b. the hardwired RCU (cable not included)
- c. the local keypad.

Controlling the projector with the RCU and the hardwired RCU is the same.

# How to use the RCU

a) Point the front of the RCU towards the reflective screen surface





## CONTROLLING

#### Projector address

#### a. hardware set up of the projector address.

Every projector requires an individual address between 0 and 16 which is set with hardware DIP switches inside the projector. To change that address, contact a BARCO authorized technician.

#### b. How to control the projector.

The projector's address may be set to any value between 0 and 16. When the address is set, the projector can be controlled now with :

- the RCU for addresses between 0 and 9.
- computer, e.g. IBM PC (or compatible), Apple MAC, etc. for addresses between 0 and 16 (only when the optional RS232 communication port is installed)

Note : a projector will respond to an RCU set to an address of '0' regardless of what address is set in the projector itself.

#### c. Using the RCU.

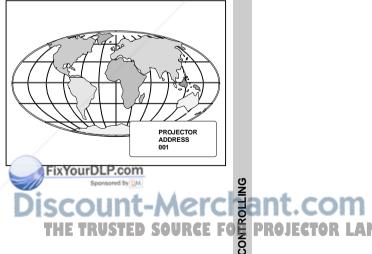
Before using the RCU, it is necessary to enter the projector address into the RCU (only when that address is between 1 and 9). The projector with the corresponding address will listen to that specific RCU.

When address 0, 'zero address' is programmed into the RCU, every projector, without exception will listen to the commands given by this RCU.

## How to display a projector address?

Press the ADDRESS key (recessed key on the RCU) with a pencil.

The projector's address will be displayed in a 'Text box'. This text box disappears after a few seconds. To continue using your RCU, it is necessary to enter an address with the digit buttons (address between 0 and 9). For example : if the Address key displays projector address 003, the press "3" digit button on the RCU to set the RCU's address to match the projector's address. Do not press digit 003. This will address the remote to '0' and control all projectors in the room.



## CONTROLLING

#### Projector address

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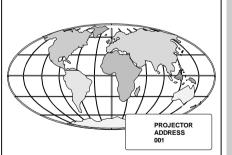
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CONTROLLING

PROJECTOR

PC POOM D ACCESSORIES

# How to program an address into the RCU?

Press the ADDRESS key (recessed key on the RCU) with a pencil and enter the address with the digit buttons. That address can be any digit between 0 and 9. When programming '0', zero address, the RCU will control a projector regardless of the projector's address. This feature allows multiple projectors with different addresses to be controlled by a single RCU.

#### Input selection

Source No	Projector input	Press digit button
1	Comp. Video	1
2	S-Video	2
3	RGBS or RGsB	3
4	RGB3S or RG3sB	4
5	(R-Y)Y(B-Y)S or (R-Y)Ys(B-Y)	5
6	(R-Y)Y(B-Y)3S or (R-Y)Y3s(B-Y)	6

Two possible ways of selecting an input :

- a) With the digit buttons on the RCU, it is possible to select one of the four input sources, Video, S-Video, RGsB or RGBS, RG3sB or RGB3S, (R-Y)Ys(B-Y) or (R-Y)Y(B-Y)S, (R-Y)Y3s(B-Y) or (R-Y)Y(B-Y)3S.
- b) With the local keypad :
- press first the **ADJUST** key to display the *General access* menu.

Press the ADDRESS key (recessed key on the RCU) with a pencil and enter the address with the digit buttons. That address can be any digit between 0 and 9. When programming '0', zero address, the RCU will control a projector regardless of the projector's address. This feature allows multiple projectors with different addresses to be controlled by a single RCU.

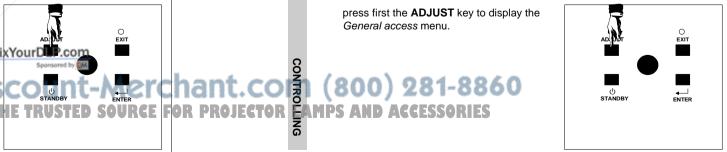
# Input selection

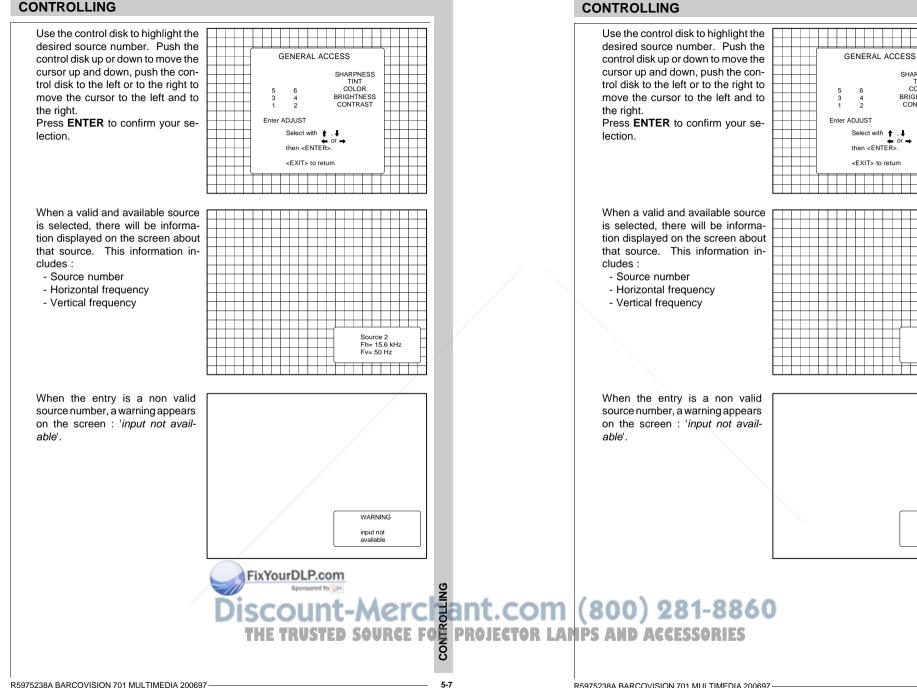
	Source No	Projector input	Press digit button
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b) With the local keypad :





CONTROLLING

SHARPNESS TINT COLOR

BRIGHTNESS

CONTRAST

Source 2

Ev- 50 Hz

WARNING

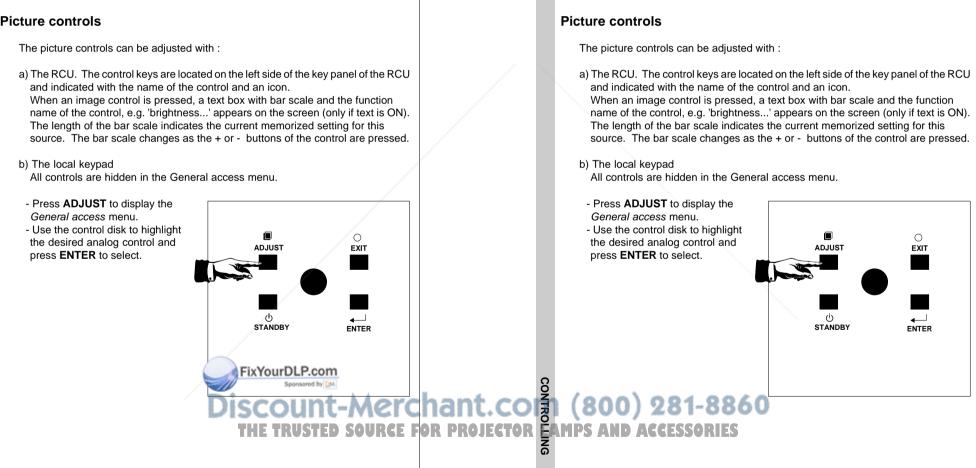
input not

available

Eb= 15.6 kHz

# When a valid source number is selected, the projector will display this source or it will wait on the selected source number until the source becomes available. A message 'source not available' will be displayed for a short time. WARNING source not available

#### Picture controls



5-8

When a valid source number is

selected, the projector will display

this source or it will wait on the

selected source number until the

source becomes available. A mes-

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# CONTROLLING

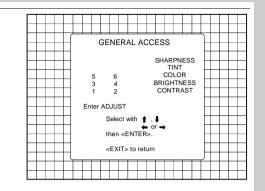
CONTROLLING

#### CONTROLLING

WARNING

source not

available

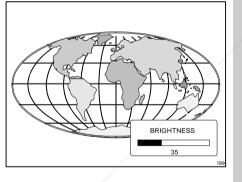


When a picture control is selected, a text box with bar scale and the function name of the control appear on the screen. The length of the bar scale indicates the current memorized setting for this source (percentage scale). The bar scale changes as the control disk is pushed to the left or to the right.

#### **Brightness Control**

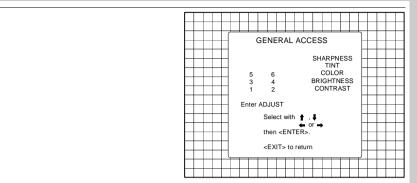
A correct 'brightness' setting is important for good image reproduction. Adjust the brightness with the + button and - button (RCU) or pushing the control disk to the left or to the right (local keypad) until the darkest parts of the picture appear black.

A bar scale gives a visual indication on the screen of the current brightness setting while pressing on the above indicated buttons. If the bar scale is not visible on the screen, press '**TEXT**' once and retry the above indicated buttons. The bar scale increases when pressing on the + button (higher brightness) and decreases when pressing on the - button (lower brightness).



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#### CONTROLLING



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BRIGHTNESS

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#### Contrast Control

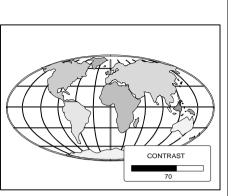
A correct 'contrast' setting is important for good image reproduction. Adjust the contrast to the level you prefer, according to room lighting conditions.

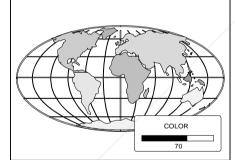
A bar scale gives a visual indication on the screen of the current contrast setting while pressing the + or - buttons (RCU) or pushing the control stick to the left or to the right (local keypad). If the bar scale is not visible on the screen, press 'TEXT' key once and retry the above indicated buttons.

The bar scale increases when pressing on the + button (higher contrast) and decreases when pressing on the - button (lower contrast).

#### **Color Saturation Control**

Color saturation is only active for Video and S-Video. Adjust the color intensity of the picture. Adiust the color saturation using the + and - buttons (RCU) or pushing the control stick to the left or to the right (local keypad). A bar scale gives a visual indication on the screen of the current color setting while pressing on the above indicated buttons. If the bar scale is not visible on the screen, press 'TEXT' key once and retry the above indicated buttons. The bar scale increases when pressing on the + button (richer colors) and decreases when pressing the button (lighter colors).





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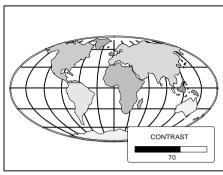
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#### Contrast Control

A correct 'contrast' setting is important for good image reproduction. Adjust the contrast to the level you prefer, according to room lighting conditions.

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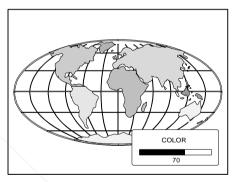
The bar scale increases when pressing on the + button (higher contrast) and decreases when pressing on the - button (lower con-



#### trast).

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#### **Tint Control**

Tint is only active for Video and S-Video. Tint control is effective only when using the NTSC 4.43 or NTSC 3.58 system. A bar scale gives a visual indication on the screen of the current tint setting while pressing the + or - buttons (RCU) or pushing the control disk to the left or to the right (local keypad). If the bar scale is not visible on the screen, press the '**TEXT**' key once and retry the above indicated buttons.

The bar scale increases when pressing on the + button and decreases when pressing the - button.

#### Sharpness Control.

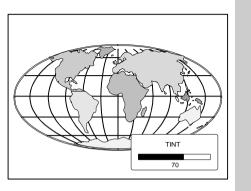
Sharpness control only active for Video and S-Video. A bar scale gives a visual indication on the screen of the current sharpness setting while pressing the + or buttons (RCU) or pushing the control disk to the left or to the right (local keypad). If the bar scale is not visible on the screen, press 'TEXT' key once and retry the above indicated buttons. The bar scale increases when pressing on the + button (sharper picture) and decreases when pressing on the - button (softer picture).

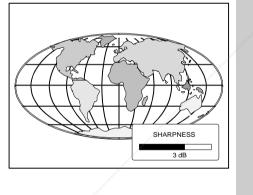
#### The Pause key.

When the Pause key is pressed, the image projection is stopped but the projector remains with full power for immediate

To restart the image : - Press the Pause key,

- Select a source number.



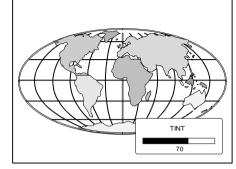


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#### CONTROLLING

#### Tint Control

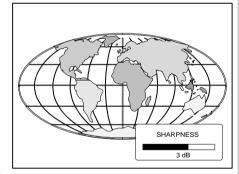
Tint is only active for Video and S-Video. Tint control is effective only when using the NTSC 4.43 or NTSC 3.58 system. A bar scale gives a visual indication on the screen of the current tint setting while pressing the + or - buttons (RCU) or pushing the control disk to the left or to the right (local keypad). If the bar scale is not visible on the screen, press the '**TEXT**' key once and retry the above indicated buttons.



The bar scale increases when pressing on the + button and decreases when pressing the - button.

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Sharpness control only active for Video and S-Video. A bar scale gives a visual indication on the screen of the current sharpness setting while pressing the + or buttons (RCU) or pushing the control disk to the left or to the right (local keypad). If the bar scale is not visible on the screen, press 'TEXT' key once and retry the above indicated buttons. The bar scale increases when pressing on the + button (sharper picture) and decreases when pressing on the - button (softer picture).



#### The Pause key.

When the Pause key is pressed, the image projection is stopped but the projector remains with full power for immediate restart.

To restart the image :

SCOUNT-Merci a source number 860 THE TRUSTED SOURCE FOR PROJECTOR LANDS AND ACCESSORIES

#### R5975238A BARCOVISION 701 MULTIMEDIA 200697 -

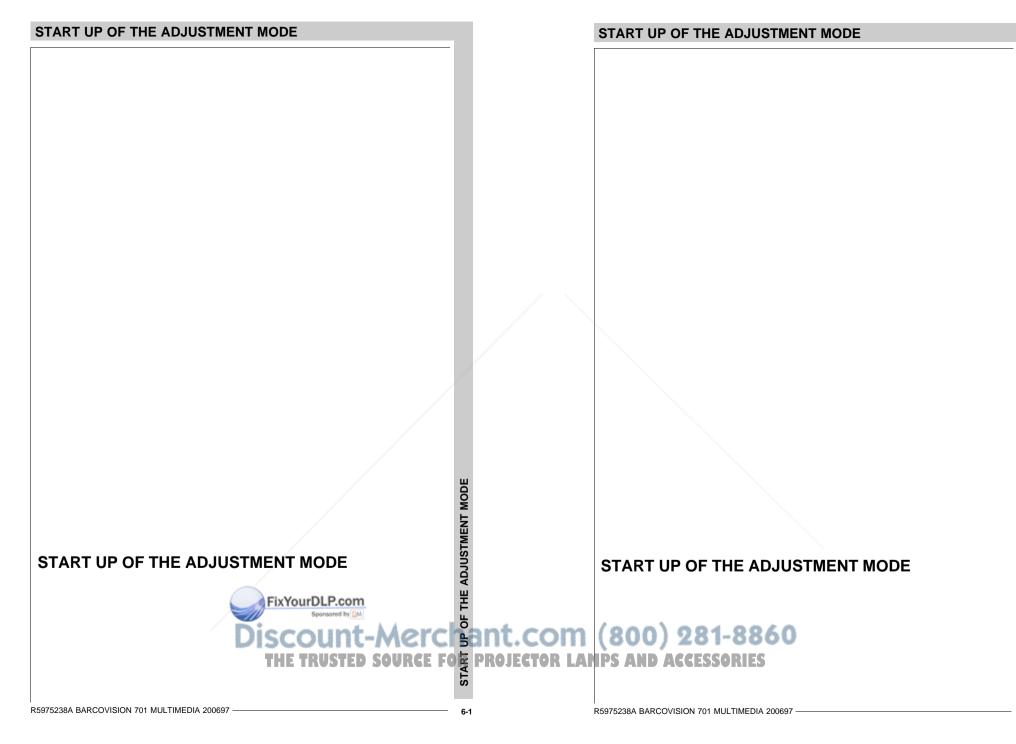


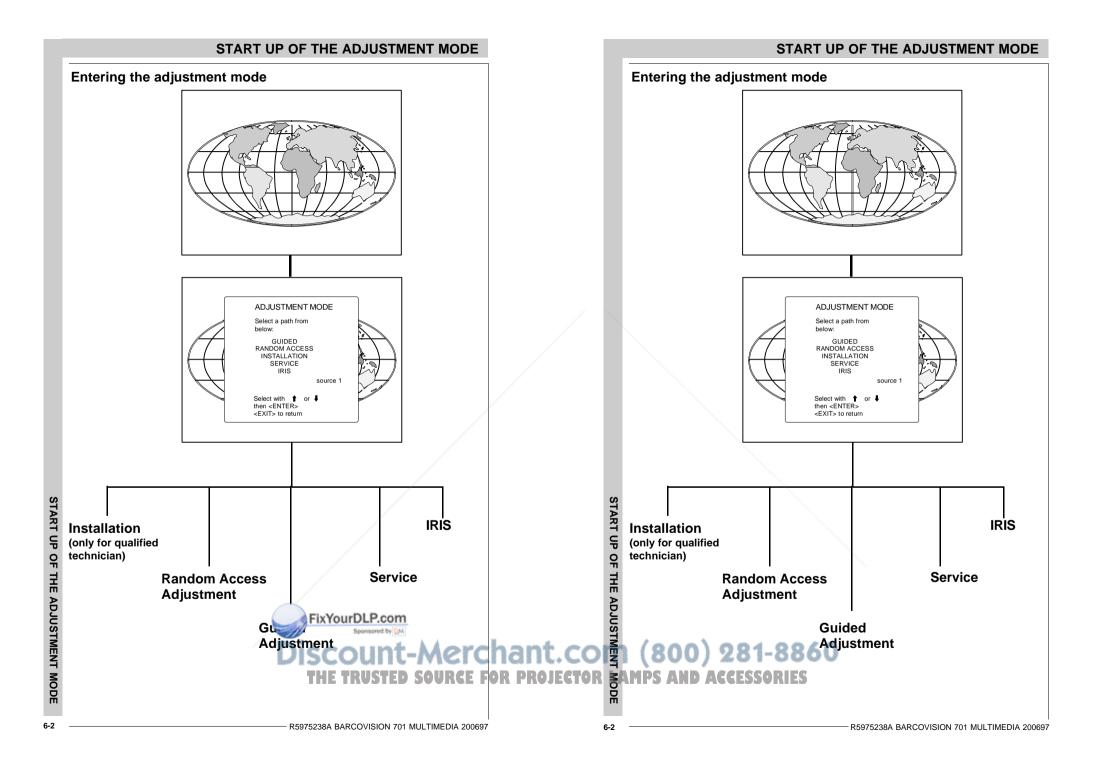


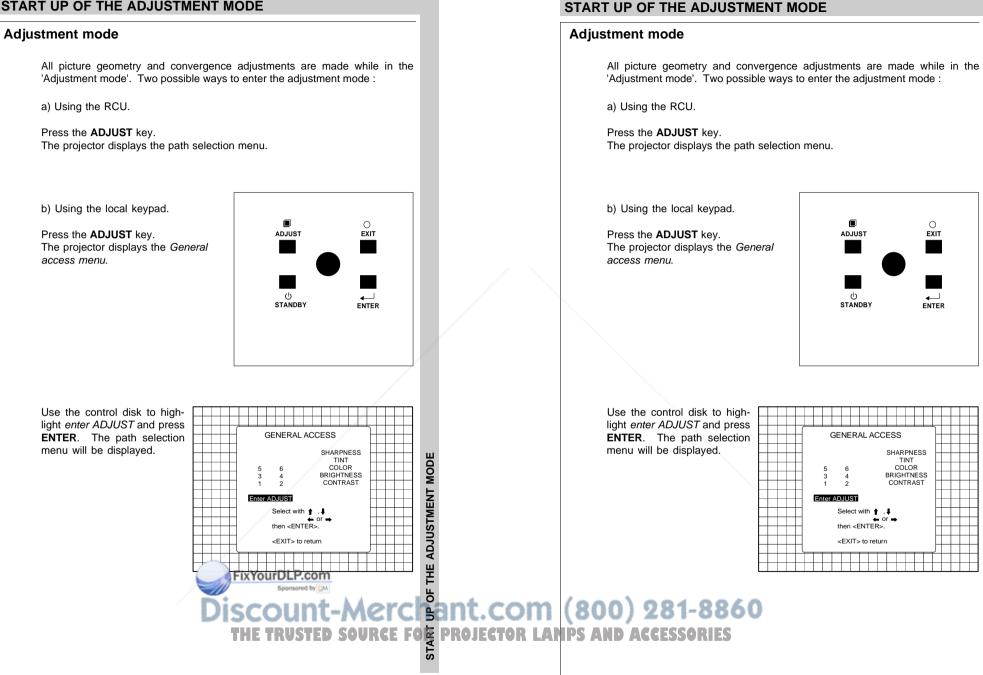
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R5975238A BARCOVISION 701 MULTIMEDIA 200697

MODE

START UP OF THE ADJUSTMENT

## START UP OF THE ADJUSTMENT MODE

Note : to adjust the Analog picture control while in the 'Adjustment mode', press the ADJUST key. The next General Access menu will be displayed.

Push the control disk up or down to select the analog control to be adjusted and press the ENTER key to confirm. When the analog control is adjusted the projector returns automatically to the General access menu. When you want to return to the Adjustment mode, press EXIT, otherwise select *quit ADJUST* and press **ENTER** to return to operational mode.

GENERAL ACCES	s H
SH/	ARPNESS
++++	COLOR
	GHTNESS
cc	NTRAST
qui	t ADJUST
Select with 1,	
then <enter>.</enter>	•
their <enter>.</enter>	
<exit> to return</exit>	
	64
	5

You are now in the 'Adjustment mode'. The control disk is used to make menu selections and also vertical and horizontal adjustments. The ENTER and EXIT keys are used to move forward and backward through the menu structure. The ADJUST key can be used to terminate the adjustment mode while a path selection menu (head menu) is displayed.

There are 5 possible paths to follow once in the Adjustment mode. They are :

**INSTALLATION** - Installation should be selected if the pro-ADJUSTMENT MODE iector has been relocated and/ or a different screen size is Select a path from holow desired. GUIDED When selecting 'Installation', RANDOM ACCESS INSTALLATION the user or operator will be SERVICE warned to call a gualified tech-IRIS source nician to perform the installation procedure (see example Select with 1 or 4 then <ENTER> of projected warning on next <EXIT> to return page). **GUIDED** - Guided should be selected if the user intends to perform a complete alignment of the projected image. All of the necessary geometry and convergence adjustments are made in a predetermined sequence. Full be selected if the user intends to RANDOM ACCESS - Random Acc make only a few adjustments. SERVICE - Service should be selected if the user intends to delete blocks, change

password or apply information.

THE TRUSTED SOURCE F

IRIS - This selection will only be available when the autoconvergence unit IRIS is connected to the projector.

R5975238A BARCOVISION 701 MULTIMEDIA 200697

6-4

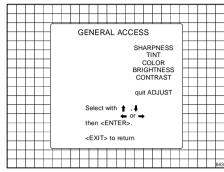
臣

START UP

OF THE ADJUSTMEN

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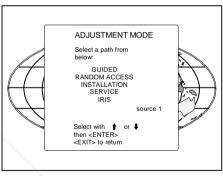


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**INSTALLATION** - Installation should be selected if the proiector has been relocated and/ or a different screen size is desired.

When selecting 'Installation', the user or operator will be warned to call a qualified technician to perform the installation procedure (see example of projected warning on next page).



**GUIDED** - Guided should be selected if the user intends to perform a complete alignment of the projected image. All of the necessary geometry and convergence adjustments are made in a predetermined sequence.

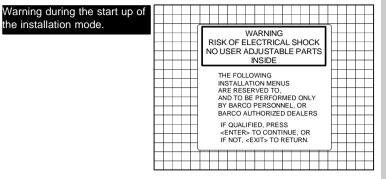
RANDOM ACCESS - Random Access should be selected if the user intends to make only a few adjustments.

SERVICE - Service should be selected if the user intends to delete blocks, change 00 password or apply information.

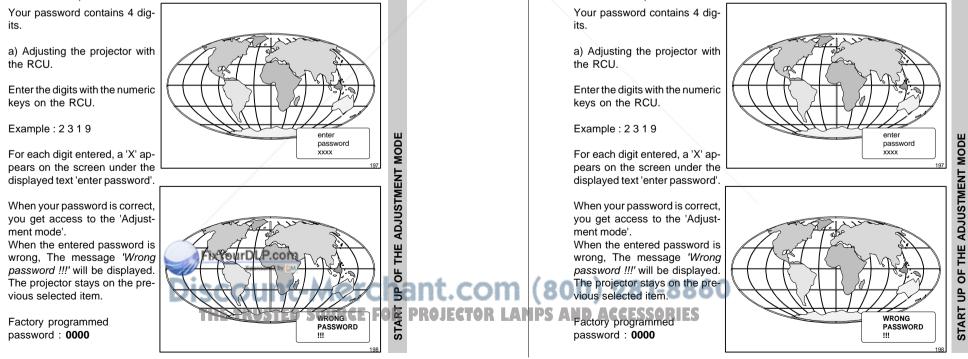
IRIS - This selection will only be available when the autoconvergence unit IRIS is connected to the projector.

R5975238A BARCOVISION 701 MULTIMEDIA 200697

While in Guided or Random Access adjustment Mode, the user may use an external source, an internally generated genlocked pattern or an internally generated multifrequency cross hatch pattern as a setup pattern.



Some items in the Adjustment mode are password protected. While selecting such an item, the projector asks you to enter your password. (Password protection is only available when the password DIP switch on the controller module is in the ON position. Contact a BARCO authorized technician when no password is requested during the adjustment procedure and password protection is desired.)



6-5

#### START UP OF THE ADJUSTMENT MODE

Warning d

the installa

R5975238A BARCOVISION 701 MULTIMEDIA 200697

While in Guided or Random Access adjustment Mode, the user may use an external source, an internally generated genlocked pattern or an internally generated multifrequency cross hatch pattern as a setup pattern.

luring the start up of ation mode.						= E	ELE AD	TR ST	IC/	al BLE						
				INS AR BY BA IF <e< td=""><td>BTA E F D T BA RC QL</td><td></td><td>AT BE BE O AU</td><td>D T RF RS( DRI DRI DRI</td><td>ro, or on zei res nti</td><td>ME NEL D D</td><td>EA</td><td>OR LEI OR</td><td>RS</td><td></td><td></td><td></td></e<>	BTA E F D T BA RC QL		AT BE BE O AU	D T RF RS( DRI DRI DRI	ro, or on zei res nti	ME NEL D D	EA	OR LEI OR	RS			

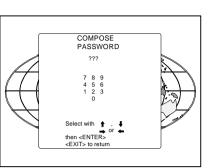
Some items in the Adjustment mode are password protected. While selecting such an item, the projector asks you to enter your password. (Password protection is only available when the password DIP switch on the controller module is in the ON position. Contact a BARCO authorized technician when no password is requested during the adjustment procedure and password protection is desired.)

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START |

b) adjusting the projector with the local keypad.

When the 'compose password' menu is displayed, select with control disk the first digit of your password and press ENTER. Continue by selecting the second digit with the control disk and press ENTER. Handle in the same way for the third and fourth digit.



When your password is correct. you get access to the 'Adjustment mode'.

When the entered password is wrong, the message 'Wrong password' will be displayed.

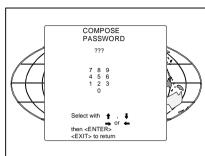
Once the password is correctly entered, all other password protected items are accessible without re-entering your password.

When re-entering the adjustment mode, it will be necessary to enter your password again when selecting a password protected item.

#### START UP OF THE ADJUSTMENT MODE

b) adjusting the projector with the local keypad.

When the 'compose password' menu is displayed, select with control disk the first digit of your password and press ENTER. Continue by selecting the second digit with the control disk and press ENTER. Handle in the same way for the third and fourth digit.



When your password is correct, you get access to the 'Adjustment mode'.

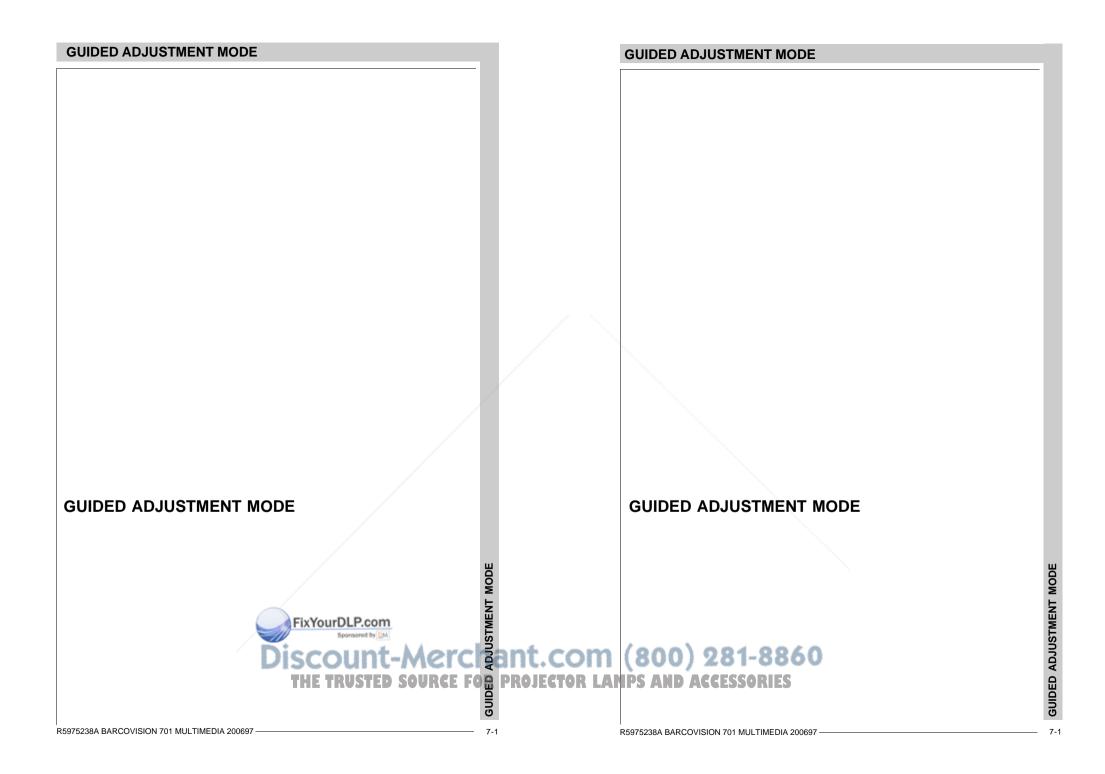
When the entered password is wrong, the message 'Wrong password' will be displayed.

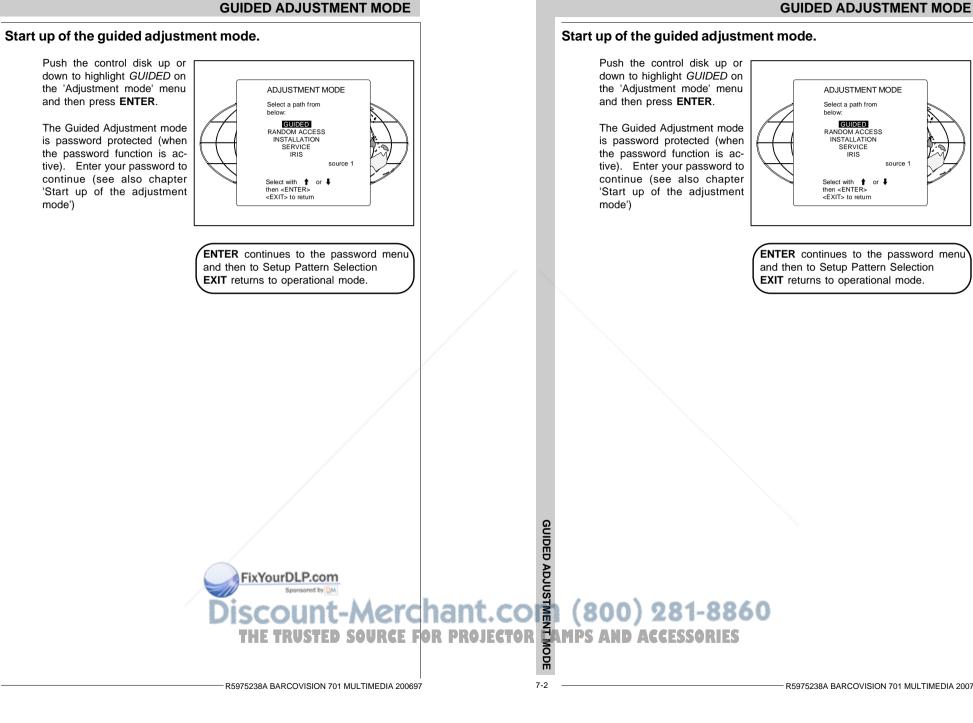
Once the password is correctly entered, all other password protected items are accessible without re-entering your password.

When re-entering the adjustment mode, it will be necessary to enter your password again when selecting a password protected item.

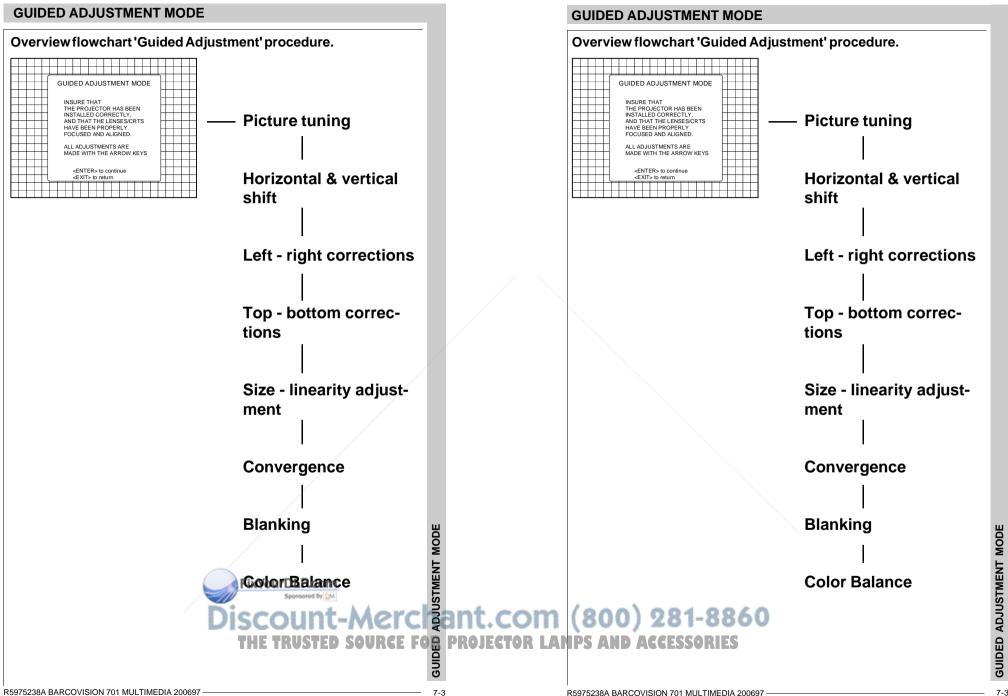
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R5975238A BARCOVISION 701 MULTIMEDIA 200797



# **GUIDED ADJUSTMENT MODE**

#### **Selecting Setup Pattern**

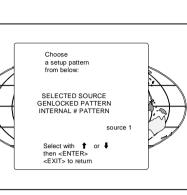
If an external source is connected to the projector, the Setup pattern menu will be displayed. Push the control disk up or down to highlight the desired setup pattern and then press ENTER.

Genlocked pattern : internally generated cross hatch pattern, locked on the external source.

Internal # pattern : internally generated cross hatch pattern and locked on internal generated sync signals. (No external source necessary)

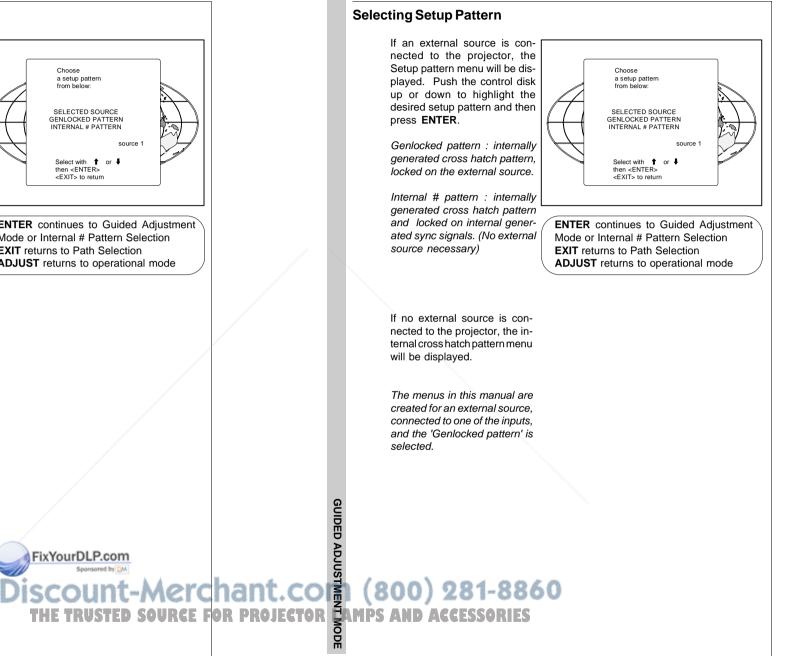
If no external source is connected to the projector, the internal cross hatch pattern menu will be displayed.

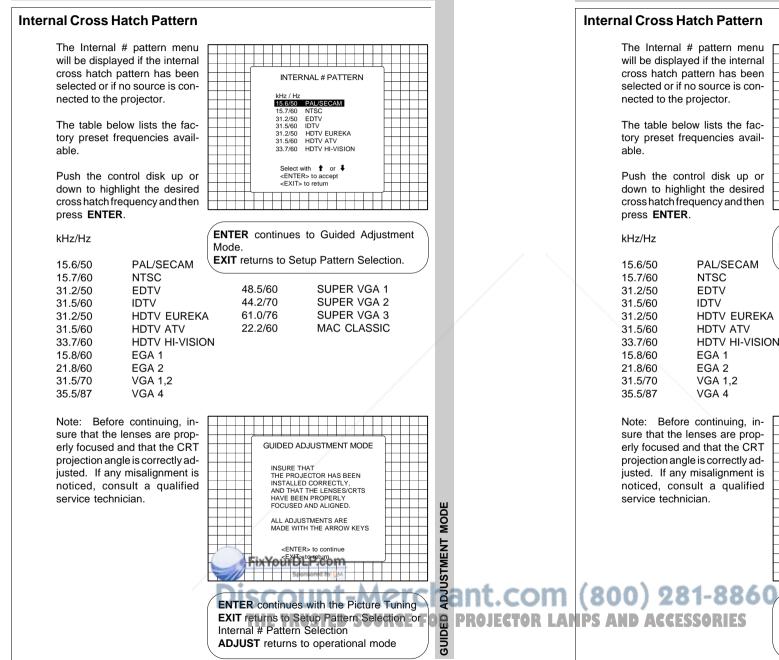
The menus in this manual are created for an external source. connected to one of the inputs. and the 'Genlocked pattern' is



ENTER continues to Guided Adjustment Mode or Internal # Pattern Selection **EXIT** returns to Path Selection ADJUST returns to operational mode

selected.





# **GUIDED ADJUSTMENT MODE**

#### The Internal # pattern menu will be displayed if the internal cross hatch pattern has been **INTERNAL # PATTERN** selected or if no source is conkHz / Hz 15.6/50 PAL/SECAM nected to the projector. 15.7/60 NTSC 31.2/50 EDTV 31.5/60 IDTV The table below lists the fac-31.2/50 HDTV EUREKA tory preset frequencies avail-31.5/60 HDTV ATV 33.7/60 HDTV HI-VISION Select with 1 or Push the control disk up or <ENTER> to accept <EXIT> to return down to highlight the desired cross hatch frequency and then **ENTER** continues to Guided Adjustment Mode. EXIT returns to Setup Pattern Selection. PAL/SECAM NTSC EDTV 48.5/60 SUPER VGA 1 SUPER VGA 2 IDTV 44.2/70 HDTV EUREKA 61.0/76 SUPER VGA 3 22.2/60 MAC CLASSIC HDTV ATV HDTV HI-VISION EGA 1 EGA 2 VGA 1.2 VGA 4 Note: Before continuing, insure that the lenses are prop-GUIDED ADJUSTMENT MODE erly focused and that the CRT projection angle is correctly ad-INSURE THAT THE PROJECTOR HAS BEEN justed. If any misalignment is INSTALLED CORRECTLY, noticed, consult a qualified AND THAT THE LENSES/CRTS HAVE BEEN PROPERLY MODE FOCUSED AND ALIGNED ALL ADJUSTMENTS ARE MADE WITH THE ARROW KEYS ADJUSTMENT <ENTER> to continue <EXIT> to return **ENTER** continues with the Picture Tuning GUIDED EXIT returns to Setup Pattern Selection or Internal # Pattern Selection ADJUST returns to operational mode

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#### **Picture tuning**

Depending on the source type (video, S-Video, RGB(S) analog with composite or Tri-level sync, component input with composite or Tri-level sync) the picture tuning menu offers the possibility to togale :

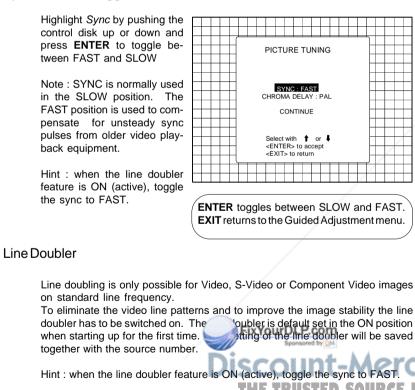
For Video. S-Video or Component video sources :

- The Synchronisation speed
- The Line Doubler feature

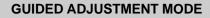
For RGB analog or component input with composite or tri-level sync sources:

- Synchronisation speed
- Enhanced blue on or off

# Sync Fast/Slow toggle



When a bad video tape has to be displayed, switch off the line doubler feature to obtain a stable image.



#### **Picture tuning**

Depending on the source type (video, S-Video, RGB(S) analog with composite or Tri-level sync, component input with composite or Tri-level sync) the picture tuning menu offers the possibility to togale :

For Video, S-Video or Component video sources :

- The Synchronisation speed
- The Line Doubler feature

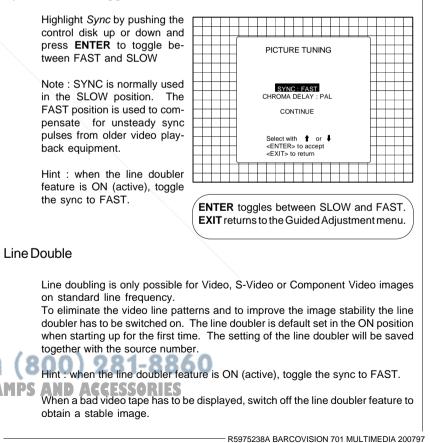
For RGB analog or component input with composite or tri-level sync sources: - Synchronisation speed

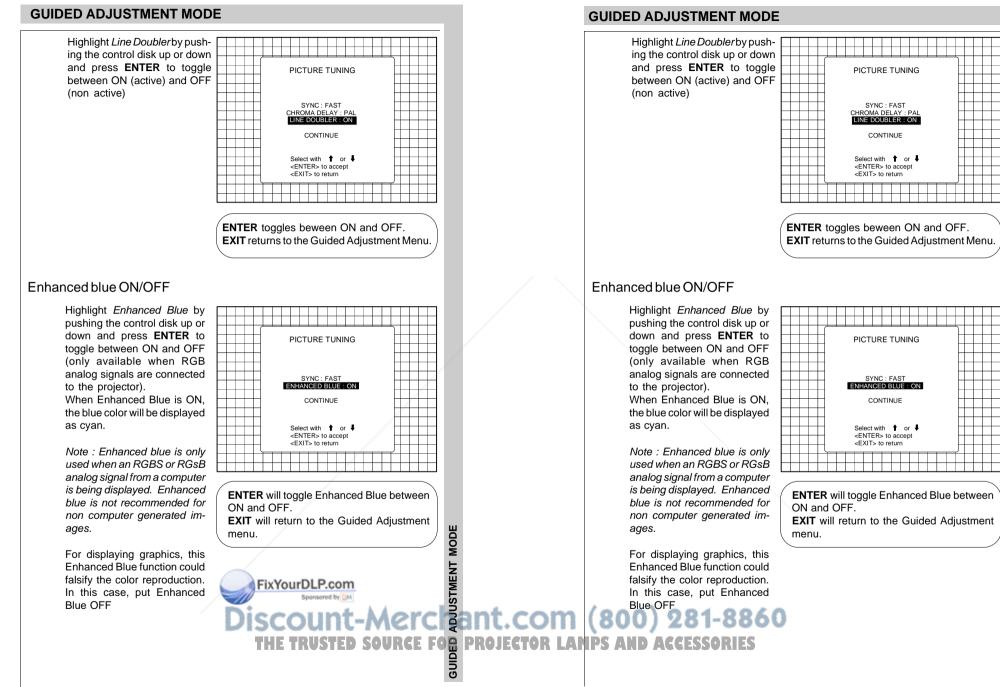
- Enhanced blue on or off

# Sync Fast/Slow toggle

GUIDED ADJUSTME

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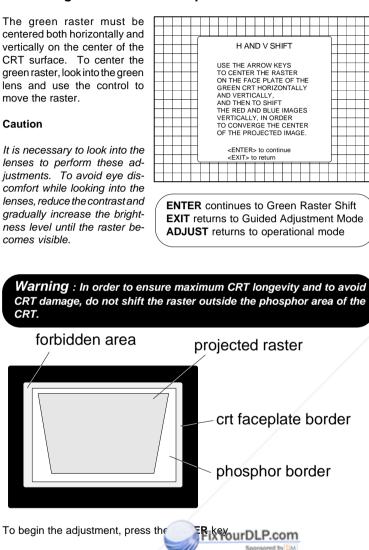




7-7

GUIDED ADJUSTMENT MODE

#### **Raster Centering on Green CRT Faceplate**



## centered both horizontally and vertically on the center of the H AND V SHIFT CRT surface. To center the USE THE ARROW KEYS green raster, look into the green TO CENTER THE RASTER ON THE FACE PLATE OF THE lens and use the control to GREEN CRT HORIZONTALLY AND VERTICALLY, AND THEN TO SHIFT move the raster. THE RED AND BLUE IMAGES VERTICALLY, IN ORDER Caution TO CONVERGE THE CENTER OF THE PROJECTED IMAGE. It is necessary to look into the <ENTER> to continue <EXIT> to return lenses to perform these adjustments. To avoid eye discomfort while looking into the lenses, reduce the contrast and **ENTER** continues to Green Raster Shift gradually increase the bright-**EXIT** returns to Guided Adjustment Mode ness level until the raster be-ADJUST returns to operational mode comes visible. Warning : In order to ensure maximum CRT longevity and to avoid CRT damage, do not shift the raster outside the phosphor area of the CRT. forbidden area projected raster crt faceplate border phosphor border To begin the adjustment, press the ENTER key.

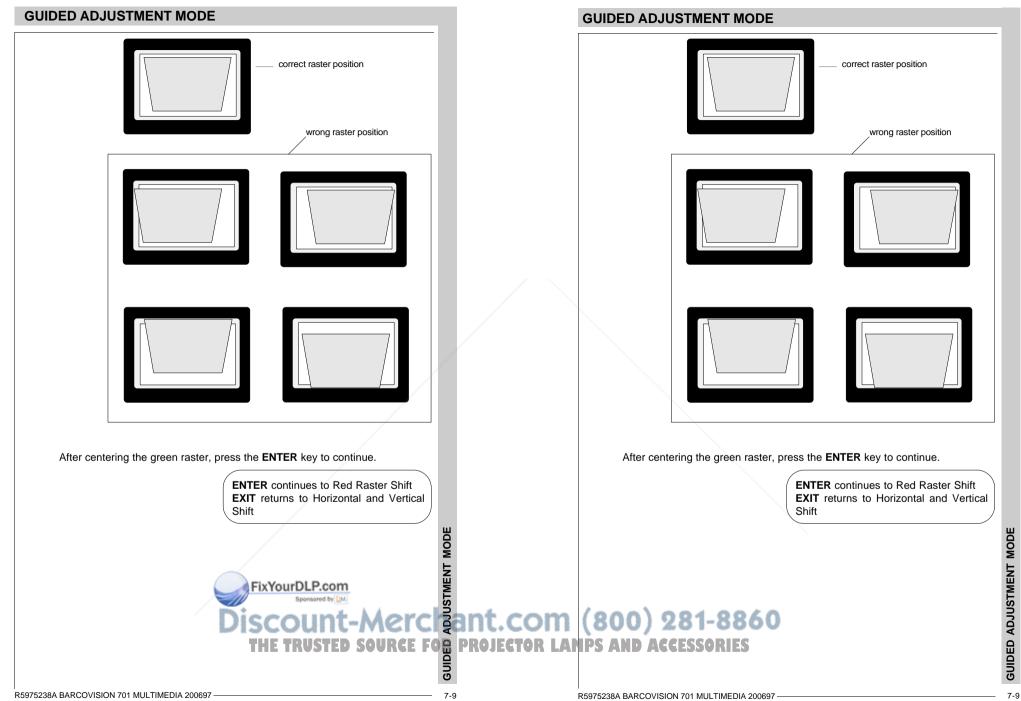
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7-8

#### **GUIDED ADJUSTMENT MODE**

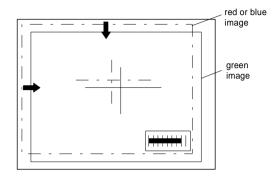
# **Raster Centering on Green CRT Faceplate**

The green raster must be



#### Shifting Red and Blue on Green

Use the control disk to shift the red image until the center coincides with the center of the green image.



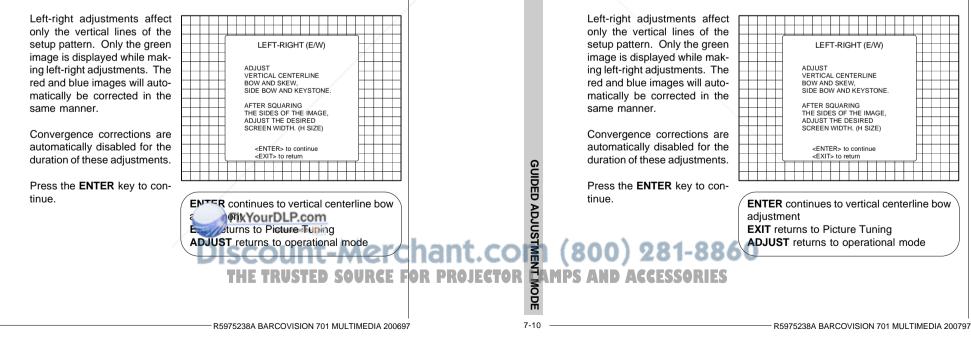
When the red image is correctly positioned, press the **ENTER** key to continue with the blue image.

**ENTER** continues to blue raster shift **EXIT** returns to green raster shift

# Left-Right (East-West) Adjustments

**GUIDED ADJUSTMENT MODE** 

7-10



#### **GUIDED ADJUSTMENT MODE**

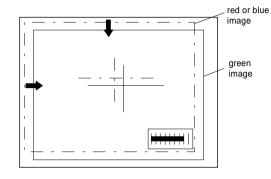
**ENTER** continues to blue raster shift

EXIT returns to green raster shift

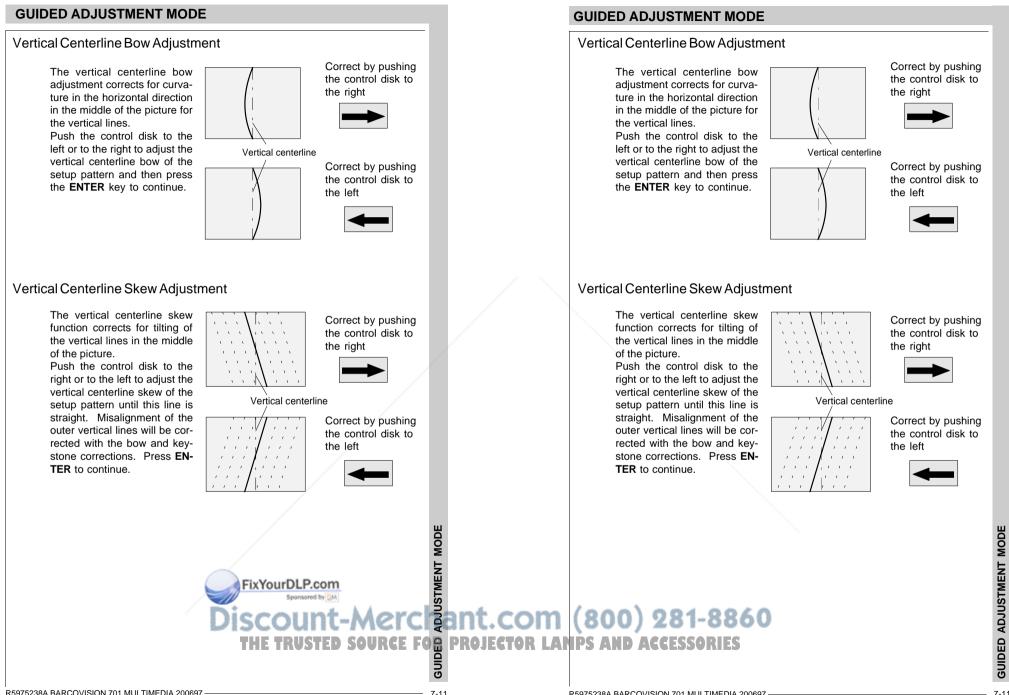
#### Shifting Red and Blue on Green

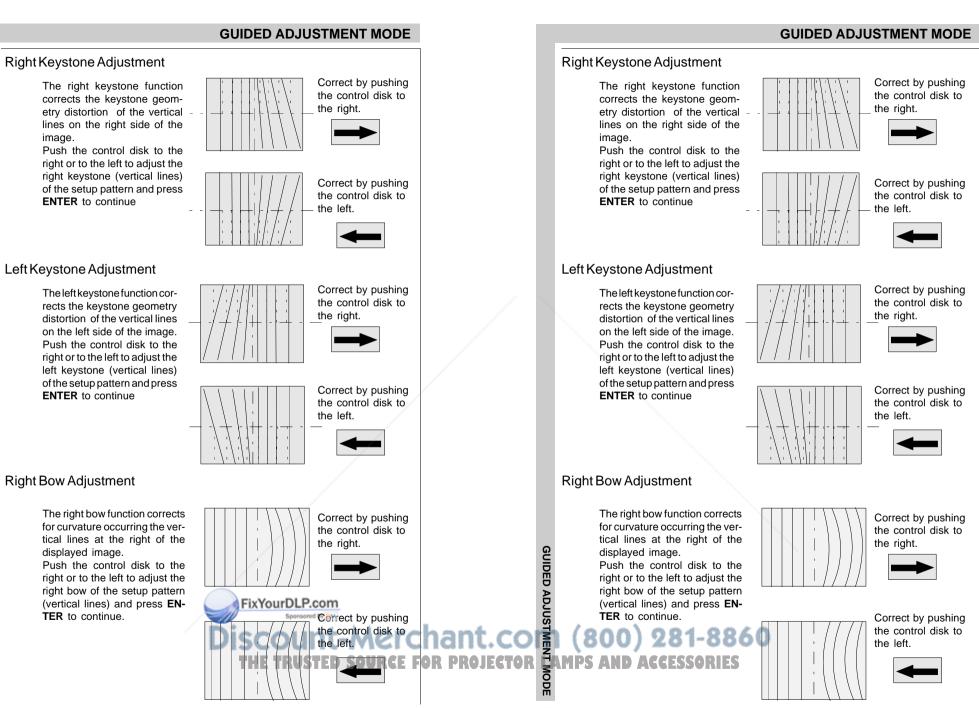
Left-Right (East-West) Adjustments

Use the control disk to shift the red image until the center coincides with the center of the green image.



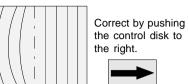
When the red image is correctly positioned, press the **ENTER** key to continue with the blue image.

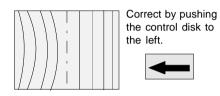




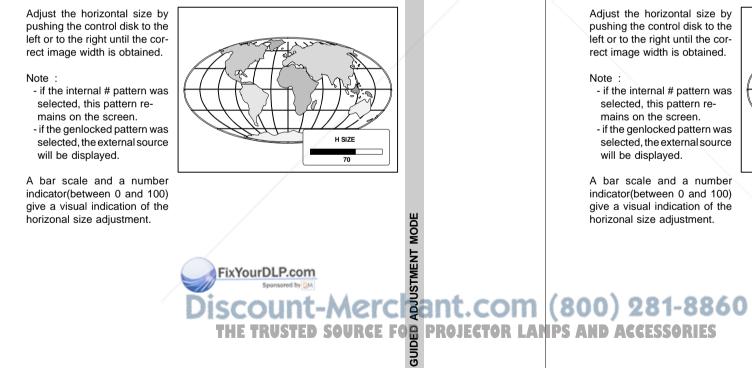
#### Left Bow Adjustment

The left bow function corrects for curvature occurring the vertical lines at the left of the displayed image. Push the control disk to the left or to the right to adjust the left bow of the setup pattern (vertical lines) and press EN-TER to continue.





# Horizontal Size Adjustment



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# **GUIDED ADJUSTMENT MODE**

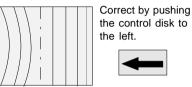
#### Left Bow Adjustment

The left bow function corrects for curvature occurring the vertical lines at the left of the displayed image. Push the control disk to the left or to the right to adjust the left bow of the setup pattern (vertical lines) and press EN-TER to continue.









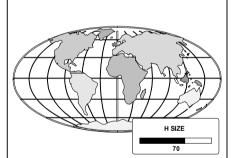
# Horizontal Size Adjustment

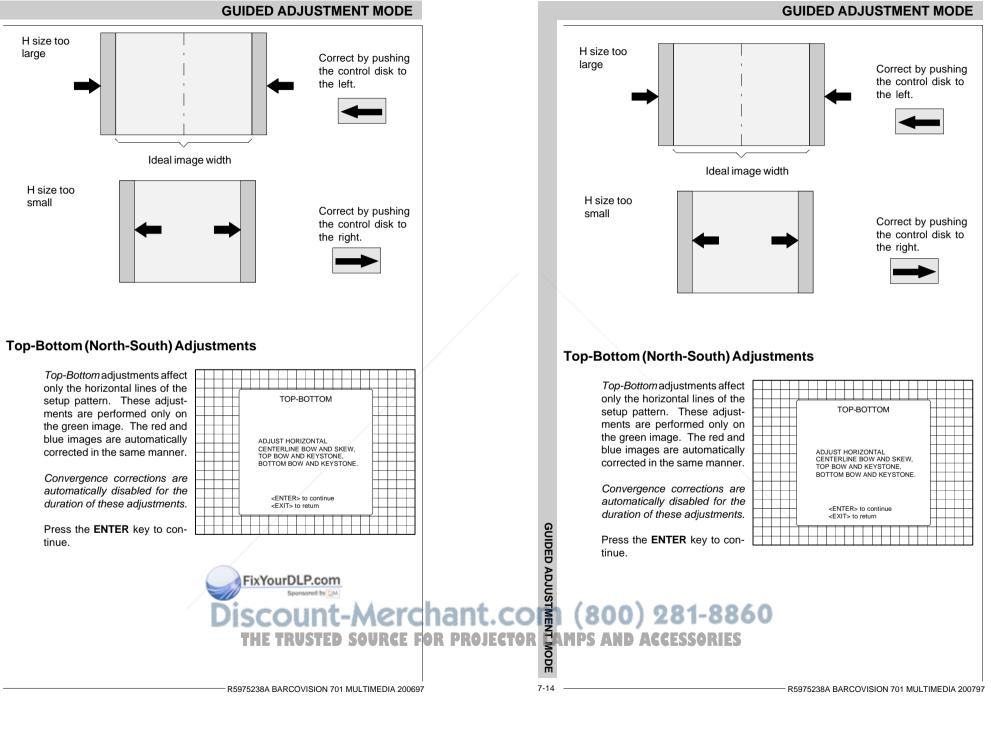
Adjust the horizontal size by pushing the control disk to the left or to the right until the correct image width is obtained.

#### Note :

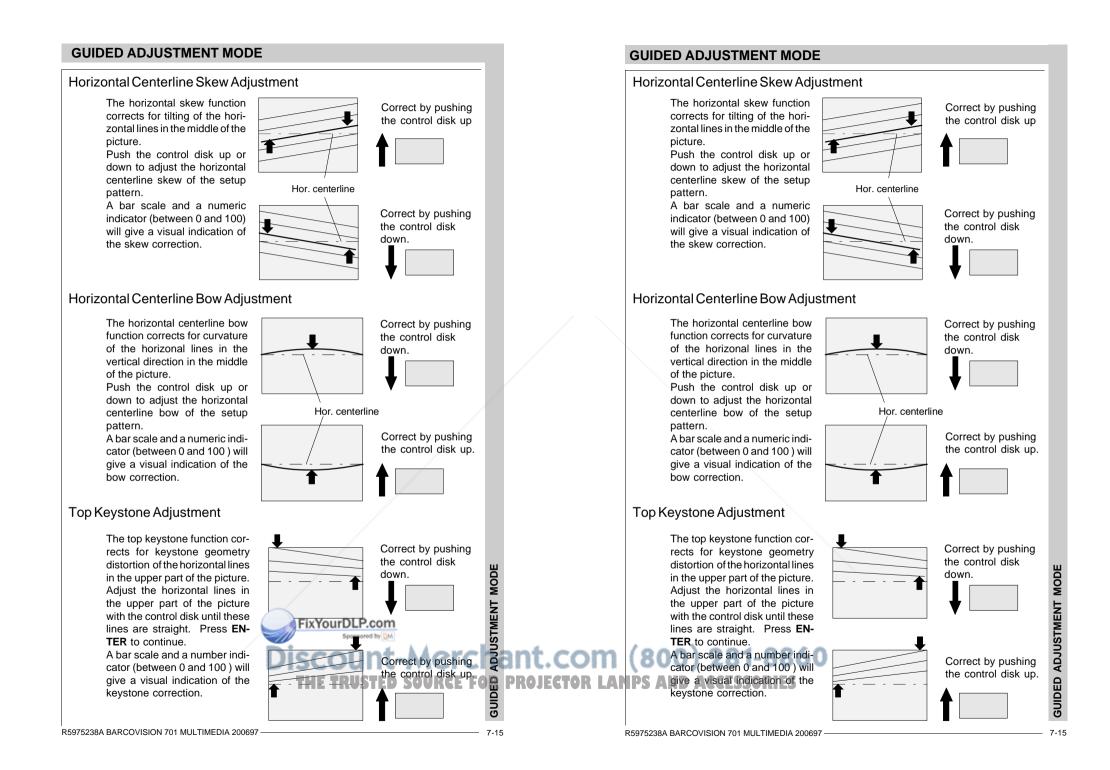
- if the internal # pattern was selected, this pattern remains on the screen. - if the genlocked pattern was selected, the external source will be displayed.

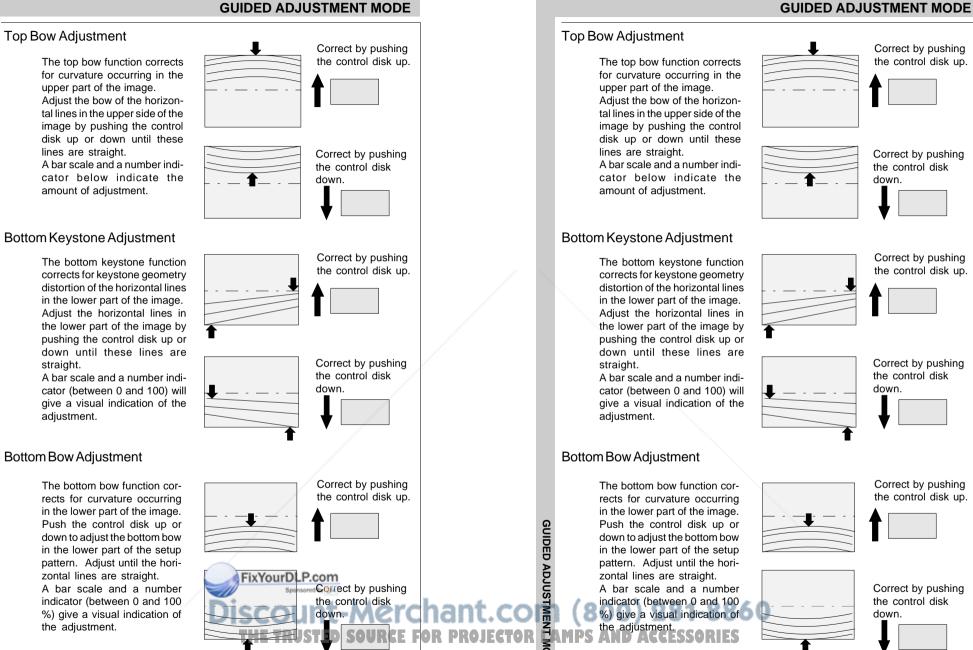
A bar scale and a number indicator(between 0 and 100) give a visual indication of the



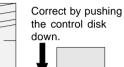


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Correct by pushing the control disk up.



Correct by pushing

the control disk up.

Correct by pushing

the control disk

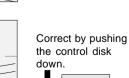
down.

zontal lines are straight. A bar scale and a number indicator (between 0 and 100

%) give a visual indication of

the adjustment.

Correct by pushing the control disk up.



down.

Correct by pushing

the control disk

7-16

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tal lines in the upper side of the image by pushing the control disk up or down until these lines are straight. A bar scale and a number indicator below indicate the amount of adjustment.

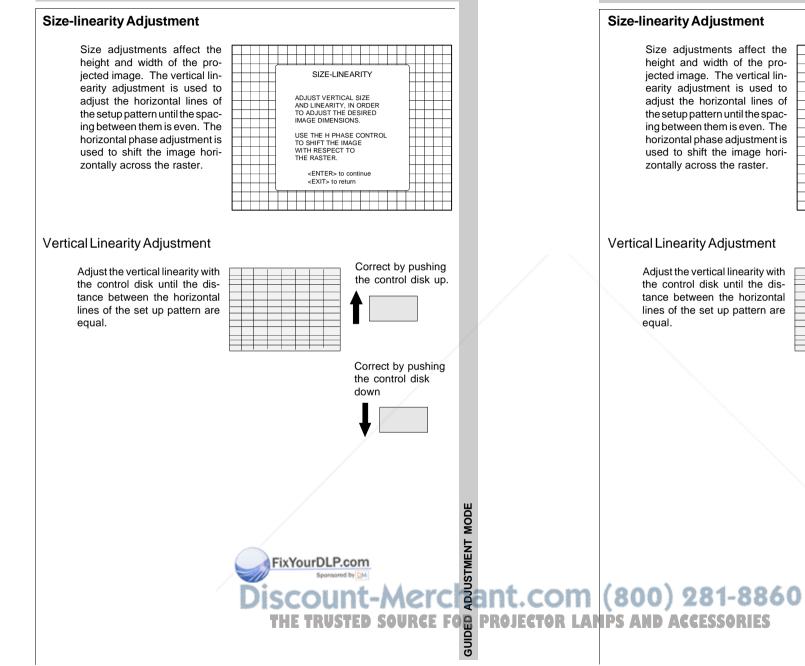
# **Bottom Keystone Adjustment**

The bottom keystone function corrects for keystone geometry distortion of the horizontal lines in the lower part of the image. Adjust the horizontal lines in the lower part of the image by pushing the control disk up or down until these lines are straight.

A bar scale and a number indicator (between 0 and 100) will give a visual indication of the adjustment.

# **Bottom Bow Adjustment**

The bottom bow function corrects for curvature occurring in the lower part of the image. Push the control disk up or down to adjust the bottom bow in the lower part of the setup pattern. Adjust until the horizontal lines are straight. A bar scale and a number indicator (between 0 and 100 %) give a visual indication of the adjustment.



**GUIDED ADJUSTMENT MODE** 

SIZE-LINEARITY

ADJUST VERTICAL SIZE

IMAGE DIMENSIONS.

WITH RESPECT TO

THE RASTER.

AND LINEARITY. IN ORDER

TO ADJUST THE DESIRED

USE THE H PHASE CONTROL TO SHIFT THE IMAGE

<ENTER> to continue

Correct by pushing

the control disk up.

Correct by pushing

the control disk

down

<EXIT> to return

# GUIDED ADJUSTMENT MODE

#### Vertical Size Adjustment

Adjust the vertical size by pushing the control disk up or down until the exact image height is obtained.

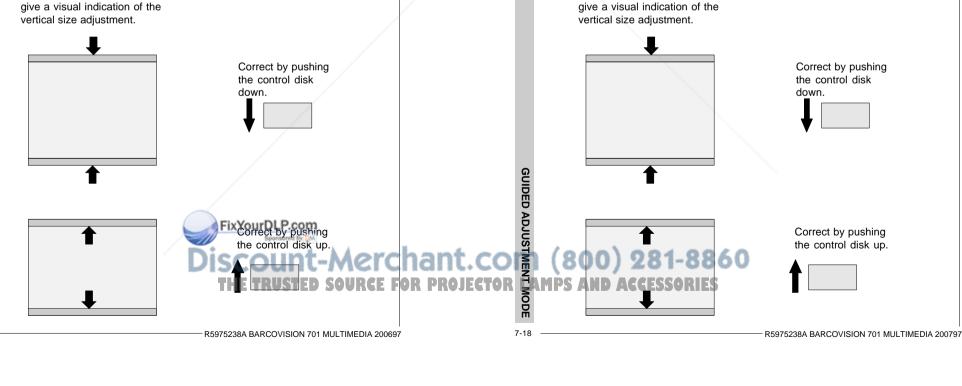
#### Note:

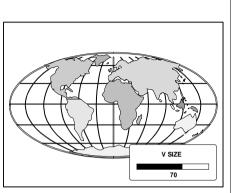
if the internal # pattern was selected, this pattern remains on the screen.
if the genlocked pattern was selected, the external source will be displayed.

#### Hint :

In order to avoid loss of resolution in the projected image and to ensure maximum CRT longevity, do not use an exessively small vertical size setting.

A bar scale and a number indicator (between 0 and 100) give a visual indication of the vertical size adjustment.





# **GUIDED ADJUSTMENT MODE**

#### Vertical Size Adjustment

Adjust the vertical size by pushing the control disk up or down until the exact image height is obtained.

#### Note :

Hint :

setting.

if the internal # pattern was selected, this pattern remains on the screen.
if the genlocked pattern was selected, the external source will be displayed.

In order to avoid loss of resolution in the projected image and

to ensure maximum CRT lon-

gevity, do not use an

exessively small vertical size

A bar scale and a number indi-

cator (between 0 and 100)



GUIDED ADJUSTMENT MODE

#### Horizontal Phase Adjustment

Note : No horizontal phase adjustment is available on the internal # pattern.

For external sources : If the raster shift is correctly adjusted, the text box H phase is projected in the middle of the raster. At that moment. the >< indicates the middle of the raster. Adjust the hor phase control until the middle of the projected image is equal with the



middle of >< .

- if the genlocked pattern was selected, the external source will be displayed.

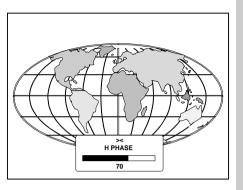
A bar scale and a number indicator (between 0 and 100) on the screen give a visual indication of the horizontal phase adjustment.

Correct by pushing the control disk to the right.



Correct by pushing the control disk to the left.





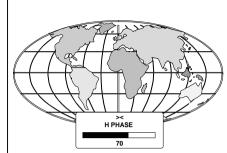
Note : No horizontal phase adjustment is available on the internal # pattern.

**GUIDED ADJUSTMENT MODE** 

Horizontal Phase Adjustment

#### For external sources : If the raster shift is correctly adjusted, the text box H phase is projected in the middle of the raster. At that moment. the >< indicates the middle of the raster. Adjust the hor phase control

until the middle of the projected image is equal with the middle of >< .



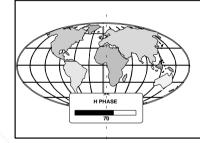
#### Note :

- if the genlocked pattern was selected, the external source will be displayed.

A bar scale and a number indicator (between 0 and 100) on the screen give a visual indication of the horizontal phase adjustment.

Correct by pushing the control disk to the right.







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GUID

PROJECTOR

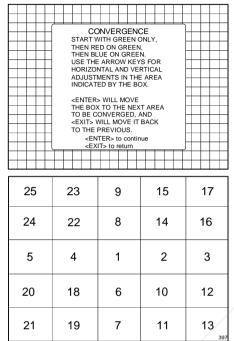
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#### **Convergence Adjustment**

Convergence adjustments affect both the horizontal and vertical lines of the setup pattern. These adjustments are performed on the red image while superimposed on the green image and then on the blue image while superimposed on the green image.

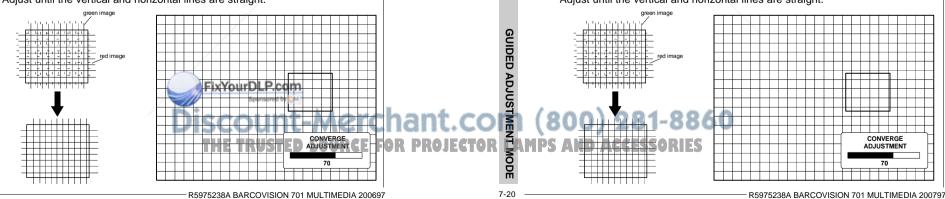
The screen area is divided into 25 areas. Within each area it is possible to move the horizontal and vertical lines of the red and blue picture until they coincide with the green lines.

Use the control disk to make horizontal and vertical convergence adjustments in the area indicated by the box. Pressing ENTER will move the box to the next area of the setup pattern to be converged. Pressing EXIT will move the box back to the last area.



The 'guided adjustment' program will start with the convergence adjustment of the red picture on the green and continues with the blue image on the green image.

Attention : when green convergence adjustments are available (option). The control software starts with these green corrections (the menu will indicate it also). Adjust until the vertical and horizontal lines are straight.



#### **GUIDED ADJUSTMENT MODE**

#### **Convergence Adjustment**

Convergence adjustments affect both the horizontal and vertical lines of the setup pattern. These adjustments are performed on the red image while superimposed on the green image and then on the blue image while superimposed on the green image.

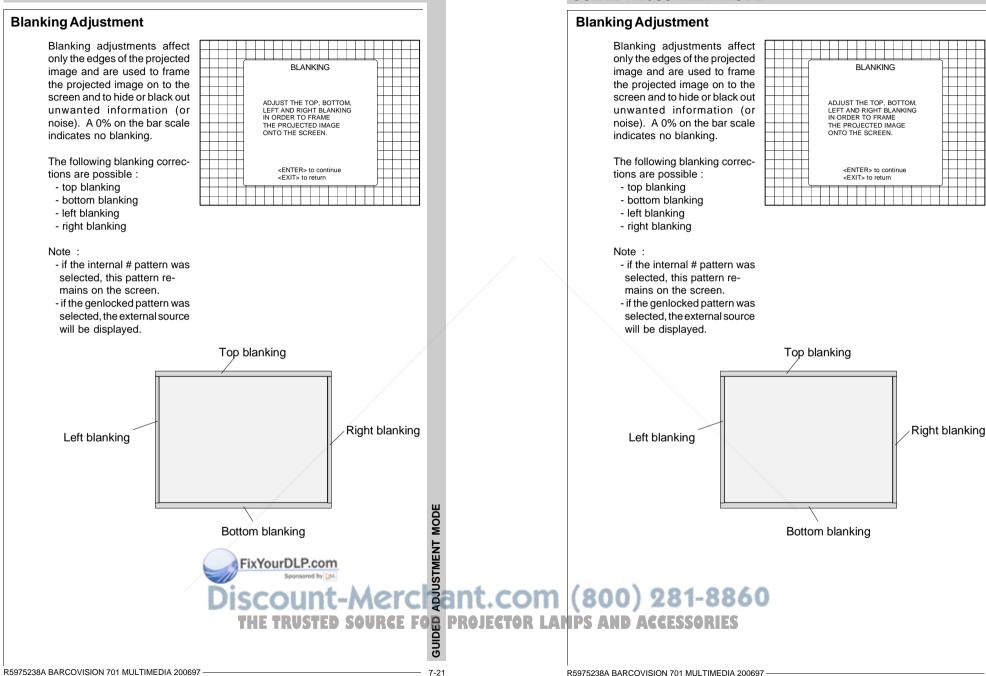
The screen area is divided into 25 areas. Within each area it is possible to move the horizontal and vertical lines of the red and blue picture until they coincide with the green lines.

Use the control disk to make horizontal and vertical convergence adjustments in the area indicated by the box. Pressing ENTER will move the box to the next area of the setup pattern to be converged. Pressing EXIT will move the box back to the last area.

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	_				START WITH GREEN ONLY,																				
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																			E						
	+	-		-	ADJUSTMENTS IN THE AREA																				
	_				<enter> WILL MOVE THE BOX TO THE NEXT AREA</enter>																				
	+				TO BE CONVERGED, AND																				
					TO THE PREVIOUS.																				
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		2 5 20	25 24 5 20 21	5 20	24 5 20	24 5 20	25 2 24 2 5 4 20 1	25 23 24 22 5 4 20 18	STAR           THEN           USE T           HEN           USE T           HEN           CONTRACT           STAR           THEN           USE T           HENDICA           TO TH           CONTRACT           TO TH           CONTRACT           TO TH           CONTRACT           CONTRACT <t< td=""><td>START W         THEN RE           THEN RE         THEN BL           USE THE         HORIZON           ADJUSTN         NDIOCATE           CENTER         THE BOX           TO BE CC         CENTER           TO THE F         TO THE F           TO THE F         CENTER           TO THE F</td><td>START WITH THEN RED C THEN BLUE USE THE AR HORIZONTA ADJUSTMEN INDICATED I           CENTER&gt;W           CENTER&gt;W           CENTER&gt;W           CENTER&gt;W           CENTER&gt;W           CENTER&gt;W           CENTER&gt;W           CENTER&gt;W           CENTER           CENT</td><td>START WITH G           THEN RED ON           THEN RED ON           HEN RED ON           TO BE RECONVER           EXTTS WILL           CENTRS           EXTTS WILL           CENTRS           EXTTS WILL           Z25         Z3           Z4         Z2           S         4           Z0         18</td><td>START WITH GRE       THEN RED ON GR       THEN BLUE ON G       USE THE ARROW       HORIZONTAL ANL       ADJUSTMENTS IN       ADJUSTMENTS IN       ADJUSTMENTS IN       CENTERS WILL MOV       THE REON THE PREVIOU       CENTERS WILL MOV       TO BE CONVERGING       Z5     Z3       9       24     22       5     4       1       20     18</td><td>START WITH GREEN       THEN RED ON GREE       THEN RED ON GREE       THEN BLUE ON GREE       USE THE ARROW KE       HORIZONTAL AND VI       ADJUSTMENTS IN TH       NDICATED BY THE       CENTERS WILL MOVE       TO BE CONVERGED,       CENTERS WILL MOVE       TO THE PREVIOUS.       CENTERS IN THE       Z5     Z3       9       24     22       5     4       1       20     18</td><td>START WITH GREEN ON THEN RED ON GREEN, THEN BLUE ON GREEN, USE THE ARROW KEYS HORIZONTAL AND VER ADJUSTMENTS IN THE. INDICATED BY THE BOX CENTERS WILL MOVE THE BOX TO THE REVIOUS. CENTERS to continue CENTER to continue CENTE</td><td>THEN RED ON GREEN, THEN BLUE ON GREEN, USE THE ARROW KEYS FC HORIZONTAL AND VERTIC, ADJUSTMENTS IN THE ARI INDICATED BY THE BOX.       CENTER-WILL MOVE THE BOX TO THE NEXT AR TO BE CONVERGED, AND CENTER-WILL MOVE IT BAC TO THE PREVIOUS. CENTER-SWILE MOVE IT BAC TO THE PREVIOUS.       25     23       24     22       5     4       1     1       20     18</td><td>START WITH GREEN ONLY, THEN RED ON GREEN.           USE THE ARROW KEYS FOR HORIZONTAL AND VENTICAL ADJUSTMENTS IN THE AREA INDICATED BY THE BOX.           CENTER&gt; WILL MOVE THE BOX TO THE NEXT AREA TO BE CONVERGED, AND <exits back<br="" it="" move="" will="">TO THE PREVIOUS.           225         23         9         13           24         22         8         14           5         4         1         2           20         18         6         10</exits></td><td>START WITH GREEN ONLY, THEN RED ON GREEN, USE THE ARROW KEYS FOR HORIZONTAL AND VERTICAL ADJUSTMENTS IN THE AREA INDICATED BY THE BOX.       CENTERS WILL MOVE       THE BOX TO THE NEXT AREA TO BE CONVERGED, AND <exits back<br="" it="" move="" will="">TO THE PREVIOUS.       Z5     23     9       Z5     23     9       Z4     22     8       Z0     18     6</exits></td><td>START WITH GREEN ONLY, THEN BED ON GREEN, USE THE ARROW KEYS FOR HORIZONTAL AND VERTICAL ADJUSTMENTS IN THE AREA INDICATED BY THE BOX.       CENTER-WILL MOVE THE BOX TO THE NEXT AREA TO BE CONVERCED, AND <exits back<br="" it="" move="" will="">TO THE PREVIOUS.       25     23     9       25     23     9       24     22     8       5     4     1       20     18     6</exits></td><td>START WITH GREEN ONLY, THEN RED ON GREEN, USE THE ARROW KEYS FOR HORIZONTAL AND VENTICAL ADJUSTMENTS IN THE AREA INDICATED BY THE BOX.       CONVERGED AND CENTERS WILL MOVE THE BOX TO THE NEXT AREA TO BE CONVERGED AND CEXITS WILL MOVE IT BACK TO THE PREVIOUS. CENTERS to continue CEXITS to return       25     23     9     15       24     22     8     14       5     4     1     2       20     18     6     10</td><td>START WITH GREEN ONLY, THEN BED ON GREEN, USE THE ARROW KEYS FOR HORIZONTAL AND VERTICAL ADJUSTMENTS IN THE AREA INDICATED BY THE BOX.       CENTER&gt; WILL MOVE THE BOX TO THE NEXT AREA TO BE CONVERED, AND CEXITS WILL MOVE IT BACK TO THE CONVERTED, AND CEXITS TO RETURN CENTERS to continue CEXITS to return       25     23     9       24     22     8       5     4     1       20     18     6</td><td>START WITH GREEN ONLY, THEN RED ON GREEN.           USE THE ARROW KEYS FOR HORIZONTAL AND VERTICAL           ADJUSTMENTS IN THE AREA INDICATED BY THE BOX.           CENTER&gt; WILL MOVE THE BOX TO THE NEXT AREA TO BE CONVERCED, AND <exit> WILL MOVE IT BACK TO THE PREVIOUS.           Z5         23         9           Z4         22         8         14           5         4         1         2         3           20         18         6         10         12</exit></td><td>START WITH GREEN ONLY, THEN RED ON GREEN.           USE THE ARROW KEYS FOR HORIZONTAL AND VERTICAL ADJUSTMENTS IN THE AREA INDICATED BY THE BOX.           CENTER&gt; WILL MOVE THE BOX TO THE NEXT AREA TO BE CONVERGED, AND CENTER&gt; to continue CENTER&gt; to continue CENTER&gt; to continue CENTER&gt; to continue CENTER&gt; to and CENTER&gt; to and CENTER CEN</td></t<>	START W         THEN RE           THEN RE         THEN BL           USE THE         HORIZON           ADJUSTN         NDIOCATE           CENTER         THE BOX           TO BE CC         CENTER           TO THE F         TO THE F           TO THE F         CENTER           TO THE F	START WITH THEN RED C THEN BLUE USE THE AR HORIZONTA ADJUSTMEN INDICATED I           CENTER>W           CENTER>W           CENTER>W           CENTER>W           CENTER>W           CENTER>W           CENTER>W           CENTER>W           CENTER           CENT	START WITH G           THEN RED ON           THEN RED ON           HEN RED ON           TO BE RECONVER           EXTTS WILL           CENTRS           EXTTS WILL           CENTRS           EXTTS WILL           Z25         Z3           Z4         Z2           S         4           Z0         18	START WITH GRE       THEN RED ON GR       THEN BLUE ON G       USE THE ARROW       HORIZONTAL ANL       ADJUSTMENTS IN       ADJUSTMENTS IN       ADJUSTMENTS IN       CENTERS WILL MOV       THE REON THE PREVIOU       CENTERS WILL MOV       TO BE CONVERGING       Z5     Z3       9       24     22       5     4       1       20     18	START WITH GREEN       THEN RED ON GREE       THEN RED ON GREE       THEN BLUE ON GREE       USE THE ARROW KE       HORIZONTAL AND VI       ADJUSTMENTS IN TH       NDICATED BY THE       CENTERS WILL MOVE       TO BE CONVERGED,       CENTERS WILL MOVE       TO THE PREVIOUS.       CENTERS IN THE       Z5     Z3       9       24     22       5     4       1       20     18	START WITH GREEN ON THEN RED ON GREEN, THEN BLUE ON GREEN, USE THE ARROW KEYS HORIZONTAL AND VER ADJUSTMENTS IN THE. INDICATED BY THE BOX CENTERS WILL MOVE THE BOX TO THE REVIOUS. CENTERS to continue CENTER to continue CENTE	THEN RED ON GREEN, THEN BLUE ON GREEN, USE THE ARROW KEYS FC HORIZONTAL AND VERTIC, ADJUSTMENTS IN THE ARI INDICATED BY THE BOX.       CENTER-WILL MOVE THE BOX TO THE NEXT AR TO BE CONVERGED, AND CENTER-WILL MOVE IT BAC TO THE PREVIOUS. CENTER-SWILE MOVE IT BAC TO THE PREVIOUS.       25     23       24     22       5     4       1     1       20     18	START WITH GREEN ONLY, THEN RED ON GREEN.           USE THE ARROW KEYS FOR HORIZONTAL AND VENTICAL ADJUSTMENTS IN THE AREA INDICATED BY THE BOX.           CENTER> WILL MOVE THE BOX TO THE NEXT AREA TO BE CONVERGED, AND <exits back<br="" it="" move="" will="">TO THE PREVIOUS.           225         23         9         13           24         22         8         14           5         4         1         2           20         18         6         10</exits>	START WITH GREEN ONLY, THEN RED ON GREEN, USE THE ARROW KEYS FOR HORIZONTAL AND VERTICAL ADJUSTMENTS IN THE AREA INDICATED BY THE BOX.       CENTERS WILL MOVE       THE BOX TO THE NEXT AREA TO BE CONVERGED, AND <exits back<br="" it="" move="" will="">TO THE PREVIOUS.       Z5     23     9       Z5     23     9       Z4     22     8       Z0     18     6</exits>	START WITH GREEN ONLY, THEN BED ON GREEN, USE THE ARROW KEYS FOR HORIZONTAL AND VERTICAL ADJUSTMENTS IN THE AREA INDICATED BY THE BOX.       CENTER-WILL MOVE THE BOX TO THE NEXT AREA TO BE CONVERCED, AND <exits back<br="" it="" move="" will="">TO THE PREVIOUS.       25     23     9       25     23     9       24     22     8       5     4     1       20     18     6</exits>	START WITH GREEN ONLY, THEN RED ON GREEN, USE THE ARROW KEYS FOR HORIZONTAL AND VENTICAL ADJUSTMENTS IN THE AREA INDICATED BY THE BOX.       CONVERGED AND CENTERS WILL MOVE THE BOX TO THE NEXT AREA TO BE CONVERGED AND CEXITS WILL MOVE IT BACK TO THE PREVIOUS. CENTERS to continue CEXITS to return       25     23     9     15       24     22     8     14       5     4     1     2       20     18     6     10	START WITH GREEN ONLY, THEN BED ON GREEN, USE THE ARROW KEYS FOR HORIZONTAL AND VERTICAL ADJUSTMENTS IN THE AREA INDICATED BY THE BOX.       CENTER> WILL MOVE THE BOX TO THE NEXT AREA TO BE CONVERED, AND CEXITS WILL MOVE IT BACK TO THE CONVERTED, AND CEXITS TO RETURN CENTERS to continue CEXITS to return       25     23     9       24     22     8       5     4     1       20     18     6	START WITH GREEN ONLY, THEN RED ON GREEN.           USE THE ARROW KEYS FOR HORIZONTAL AND VERTICAL           ADJUSTMENTS IN THE AREA INDICATED BY THE BOX.           CENTER> WILL MOVE THE BOX TO THE NEXT AREA TO BE CONVERCED, AND <exit> WILL MOVE IT BACK TO THE PREVIOUS.           Z5         23         9           Z4         22         8         14           5         4         1         2         3           20         18         6         10         12</exit>	START WITH GREEN ONLY, THEN RED ON GREEN.           USE THE ARROW KEYS FOR HORIZONTAL AND VERTICAL ADJUSTMENTS IN THE AREA INDICATED BY THE BOX.           CENTER> WILL MOVE THE BOX TO THE NEXT AREA TO BE CONVERGED, AND CENTER> to continue CENTER> to continue CENTER> to continue CENTER> to continue CENTER> to and CENTER> to and CENTER CEN		

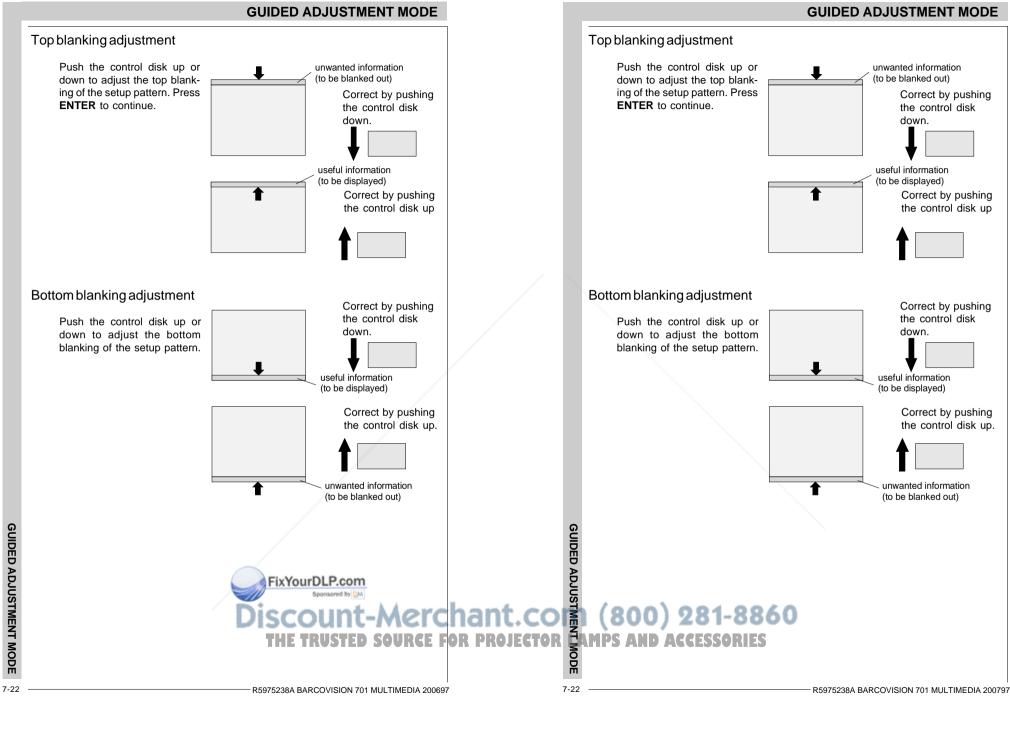
The 'guided adjustment' program will start with the convergence adjustment of the red picture on the green and continues with the blue image on the green image.

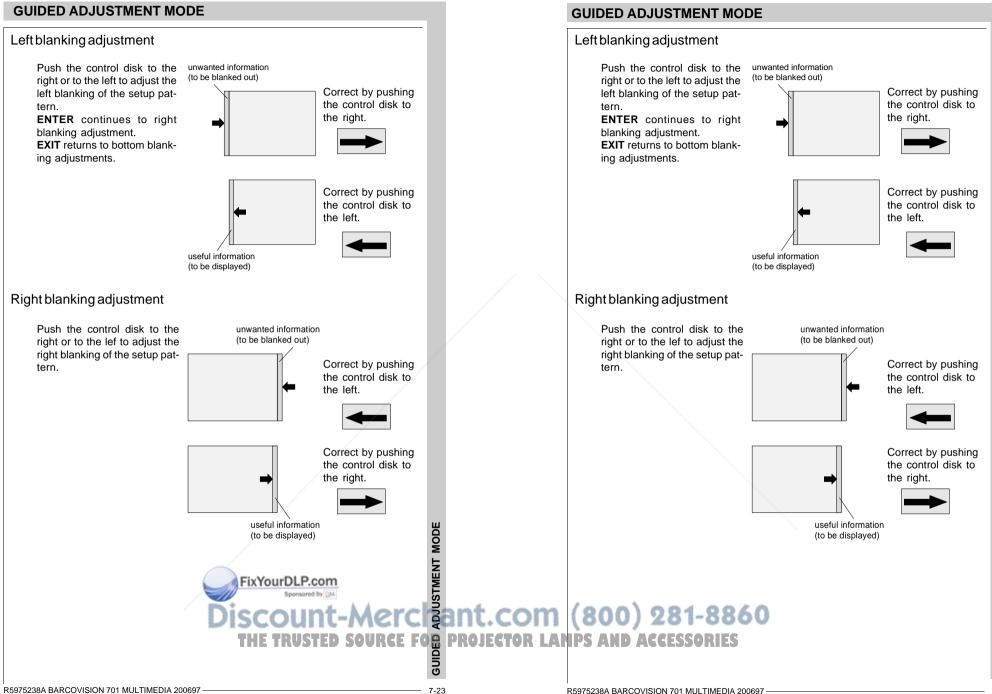
Attention : when green convergence adjustments are available (option). The control software starts with these green corrections (the menu will indicate it also). Adjust until the vertical and horizontal lines are straight.



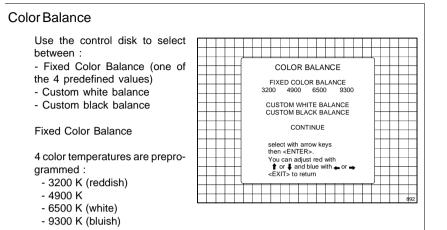
**GUIDED ADJUSTMENT MODE** 

GUIDED ADJUSTMENT MODE





# **GUIDED ADJUSTMENT MODE**



Select one of the 4 preprogrammed color temperatures with the control disk and press ENTER to display the desired color balance on the screen. Press ENTER again to continue.

# **Custom White Balance**

Select custom white balance with the control disk and press ENTER to start the adjustment. Push the control disk up or down to adjust red gain and push the control disk to the right or to the left to adjust the blue gain. A bar scale indicates the amount of adjustment.

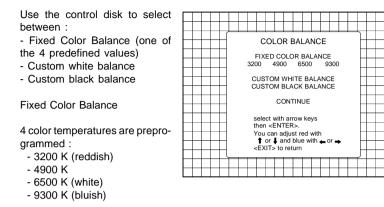
# **Custom Black Balance**

Select custom black balance with the control disk and press ENTER to start the adjustment. Push the control disk up or down to adjust the red cut off and push the control disk to the right or to the left to adjust the blue cut off.

When the color balance is adjusted, select continue with the control disk and press ENTER.

# **GUIDED ADJUSTMENT MODE**

## Color Balance



Select one of the 4 preprogrammed color temperatures with the control disk and press ENTER to display the desired color balance on the screen. Press ENTER again to continue.

# **Custom White Balance**

Select custom white balance with the control disk and press ENTER to start the adjustment. Push the control disk up or down to adjust red gain and push the control disk to the right or to the left to adjust the blue gain. A bar scale indicates the amount of adjustment.

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Select custom black balance with the control disk and press ENTER to start the adjustment. Push the control disk up or down to adjust the red cut off and push the control disk to the right or to the left to adjust the blue cut off.

When the color balance is adjusted, select continue with the control disk and press ENTER.



FixYourDLP.com Source For Projector (800) 281-8860 THE TRUSTED SOURCE FOR PROJECTOR AMPS AND ACCESSORIES

ODE

# RANDOM ACCESS ADJUSTMENT MODE Starting up the random access adjustment mode **Overview flow chart 'Random Access adjustment mode' Selecting Setup Pattern** Internal cross hatch pattern **Picture tuning** Color balance Svnc Fast/Slow Line Doubler Enhanced Blue **Geometry adjustments** Horizontal phase **Raster shift adjustment** Left-right adjustments **Top-Bottom adjustments** Horizontal size Vertical linearity Vertical size **Blanking adjustments Convergence adjustments** Color select FixYourDLP.com Sponsored by DM

# RANDOM ACCESS ADJUSTMENT MODE

# RANDOM ACCESS ADJUSTMENT MODE

Starting up the random access adjustment mode

**Overview flow chart 'Random Access adjustment mode'** 

**Selecting Setup Pattern** 

Internal cross hatch pattern

**Picture tuning** Color balance Sync Fast/Slow Line Doubler Enhanced Blue

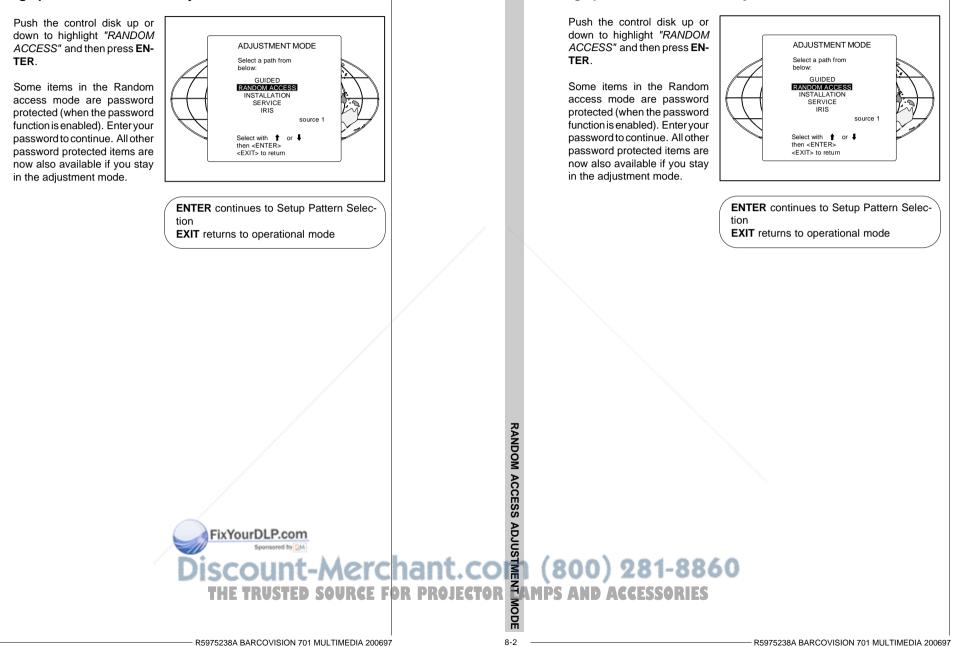
**Geometry adjustments** Horizontal phase Raster shift adjustment Left-right adjustments **Top-Bottom adjustments** Horizontal size Vertical linearity Vertical size **Blanking adjustments** 

**Convergence adjustments** 

Color select

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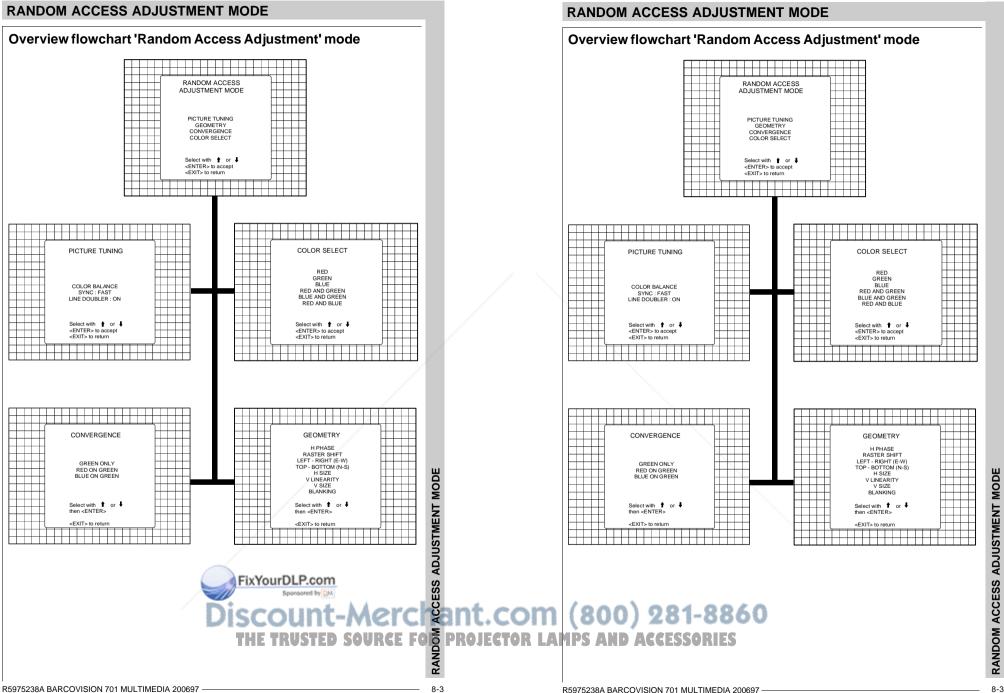
# Starting up the random access adjustment mode.

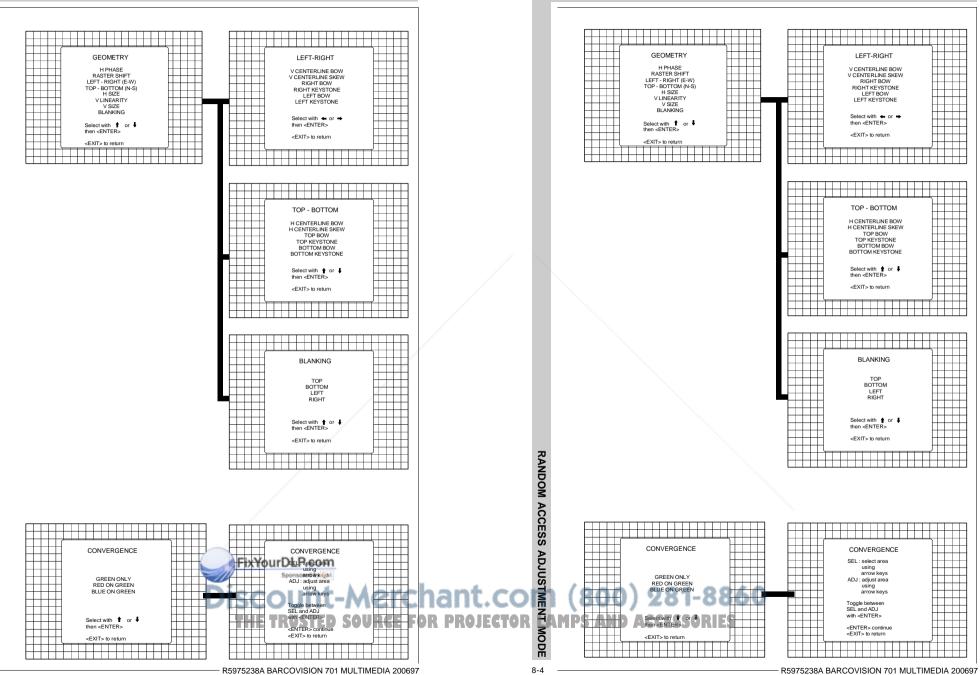


RANDOM ACCESS ADJUSTMENT MODE

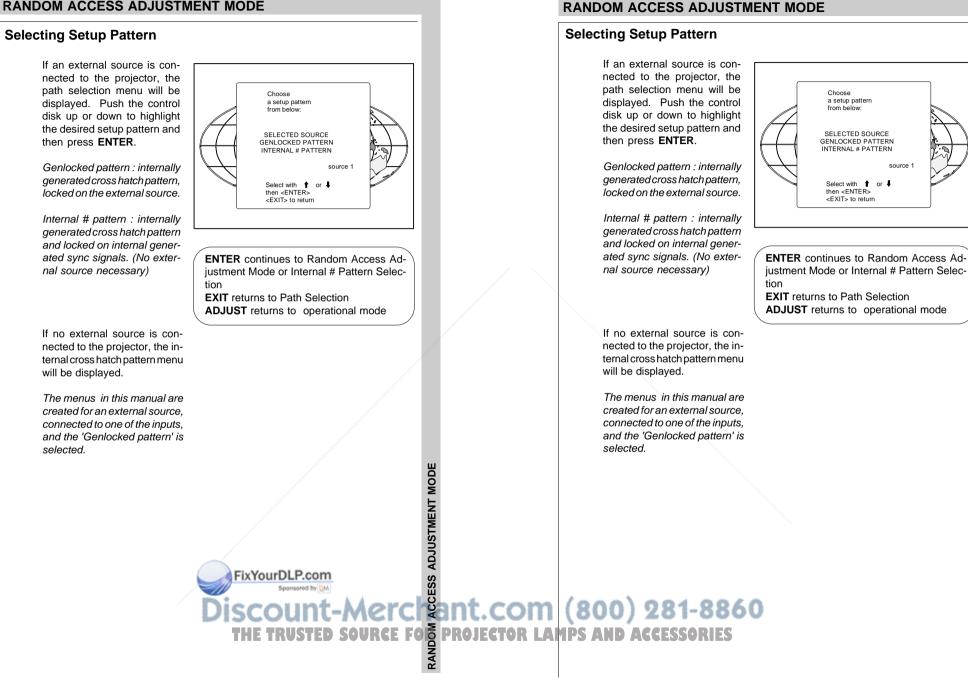
Starting up the random access adjustment mode.

RANDOM ACCESS ADJUSTMENT MODE

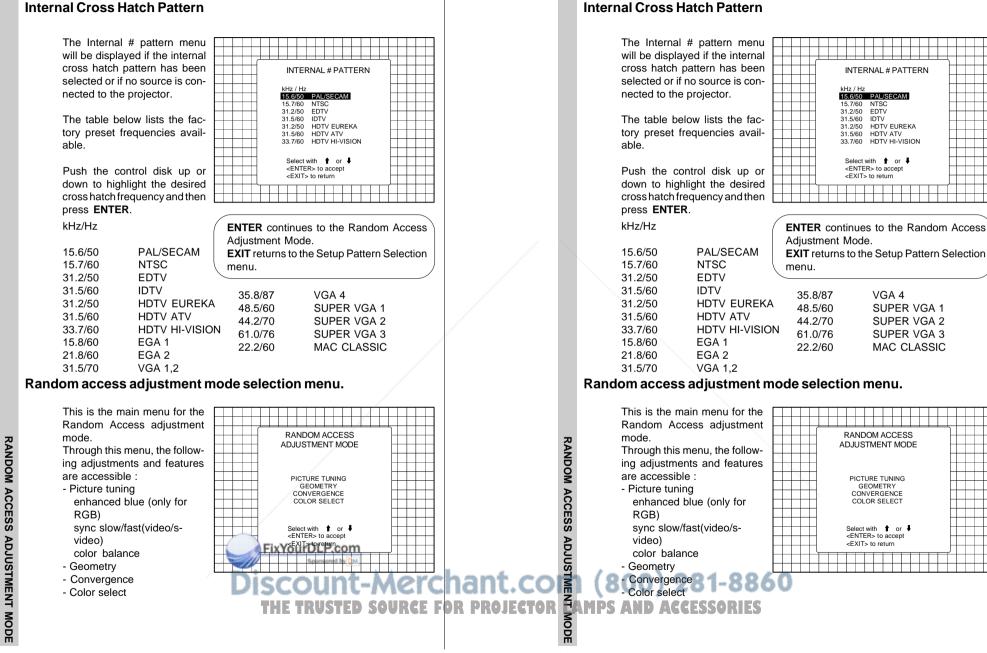




**RANDOM ACCESS ADJUSTMENT MODE** 



RANDOM ACCESS ADJUSTMENT MODE



# RANDOM ACCESS ADJUSTMENT MODE

VGA 4

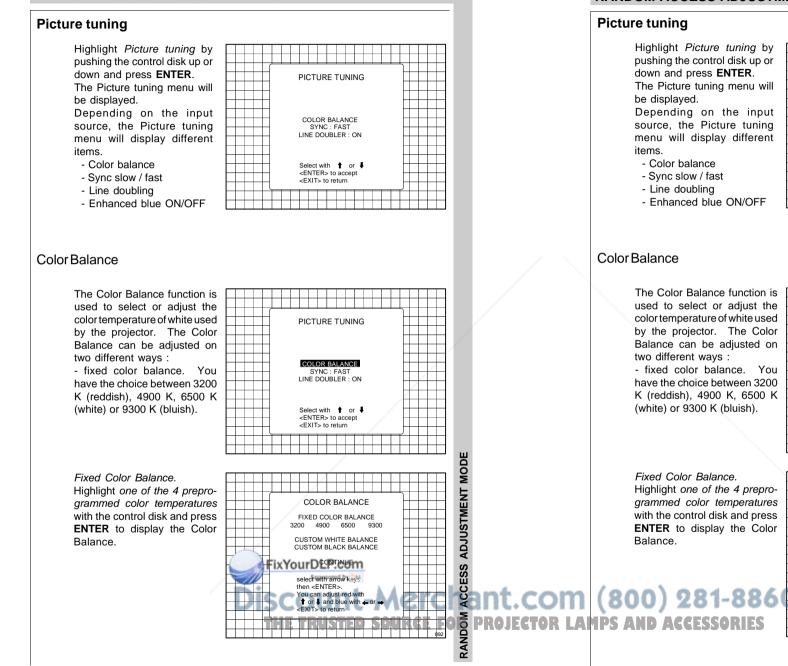
SUPER VGA 1

SUPER VGA 2

SUPER VGA 3

MAC CLASSIC

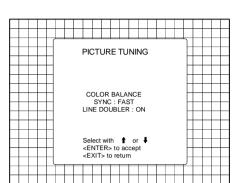
R5975238A BARCOVISION 701 MULTIMEDIA 200697



8-7

# RANDOM ACCESS ADJUSTMENT MODE

Highlight *Picture tuning* by pushing the control disk up or down and press ENTER. The Picture tuning menu will Depending on the input source, the Picture tuning menu will display different

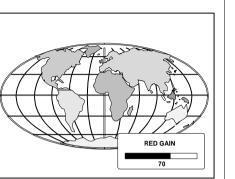


The Color Balance function is used to select or adjust the color temperature of white used PICTURE TUNING by the projector. The Color Balance can be adjusted on two different ways : COLOR BALANCE - fixed color balance. You SYNC : FAST have the choice between 3200 K (reddish), 4900 K, 6500 K (white) or 9300 K (bluish). Select with 1 or 4 <ENTER> to accept <EXIT> to return Fixed Color Balance. Highlight one of the 4 prepro-ADJUSTMENT COLOR BALANCE grammed color temperatures with the control disk and press FIXED COLOR BALANCE 3200 4900 6500 9300 ENTER to display the Color CUSTOM WHITE BALANCE CUSTOM BLACK BALANCE CONTINUE ESS select with arrow keys then <ENTER>. ACCI You can adjust red with 1 or 1 and blue with a or <EXIT> to return RANDOM R5975238A BARCOVISION 701 MULTIMEDIA 200697

#### Custom Color Balance

Select custom white balance by pushing the control disk up or down and press ENTER to start the adjustment.

Push the control disk up or down to adjust the red gain and push the control disk to the left or to the right to adjust the blue gain. A bar scale indicates the amount of adjustment. Select custom black balance with the control disk and press ENTER to start the adjustment. Push the control disk up or down to adjust the red cut-off and push the control disk to the left or to the right to adjust the blue cut-off.



When the color balance is adiusted, select continue by pushing the control disk up or down and press ENTER

# Sync Fast/Slow Adjustment

The sync function is used to minimize horizontal jittering or tearing at the top to the displayed image. Highlight SYNC with the control disk and press ENTER to toggle between FAST and SLOW.

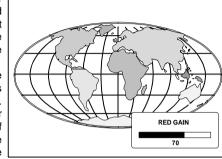
minimize horizontal jittering or tearing at the top to the dis-PICTURE TUNING played image. Highlight SYNC with the control disk and press ENTER to COLOR BALANCE SYNC : FAST toggle between FAST and CODING : EBU SLOW. LINE DOUBLER : ON RANDOM ACCESS Select with 👔 or 🖡 <ENTER> to accept Note: SYNC is normally used Note: SYNC is normally used <EXIT> to return in the SLOW position. The in the SLOW position. The FAST position is used to com-FAST position is used to compensate for unsteady sync pensate for unsteady sync pulses from older video playpulses from older video play-ENTER will toggle Sync between FAST back equipment. back equipment. ADJUSTME and SLOW in return to the Randam Access Hint : when the line doubler Hint : when the line doubler feature is ON (active), toggle feature is ON (active), toggle Adustment menu. Adjustment menu. the sync to FAST the sync to FAST. AMPS AND ACCESSO USTED SOURCE FOR PROJEC NODE

# RANDOM ACCESS ADJUSTMENT MODE

#### Custom Color Balance

Select custom white balance by pushing the control disk up or down and press ENTER to start the adjustment.

Push the control disk up or down to adjust the red gain and push the control disk to the left or to the right to adjust the blue gain. A bar scale indicates the amount of adjustment. Select custom black balance with the control disk and press ENTER to start the adjustment. Push the control disk up or down to adjust the red cut-off and push the control disk to the left or to the right to adjust the blue cut-off.



When the color balance is adiusted, select continue by pushing the control disk up or down and press ENTER

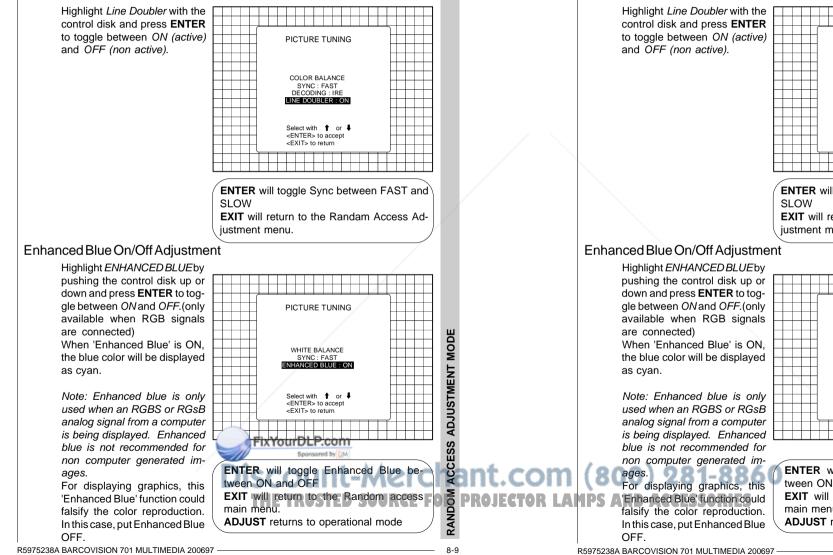
Sync Fast/Slow Adjustment

# The sync function is used to PICTURE TUNING COLOR BALANCE SYNC : FAST DECODING : EBU LINE DOUBLER : ON Select with 🛔 or 🌷 <ENTER> to accept <EXIT> to return ENTER will toggle Sync between FAST EXIT will return to the Randam Access

## Line Doubler

Line doubling is only possible for Video. S-Video or Component Video images on standard line frequency.

To eliminate the video line patterns and to improve the image stability, the line doubler has to be switched on. The line doubler is default set in the ON position when starting up for the first time. The setting of the line doubler will be saved together with the source number. Each time this source number is selected, the last saved version will be loaded.

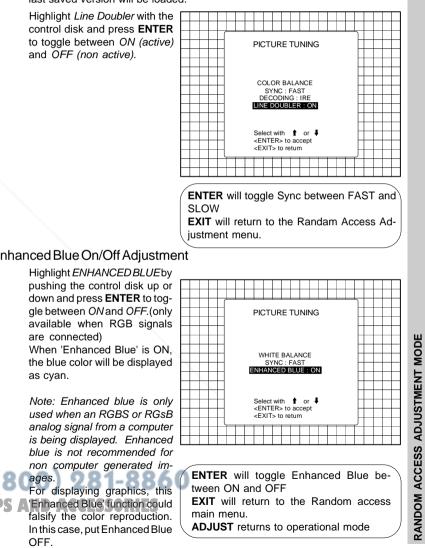


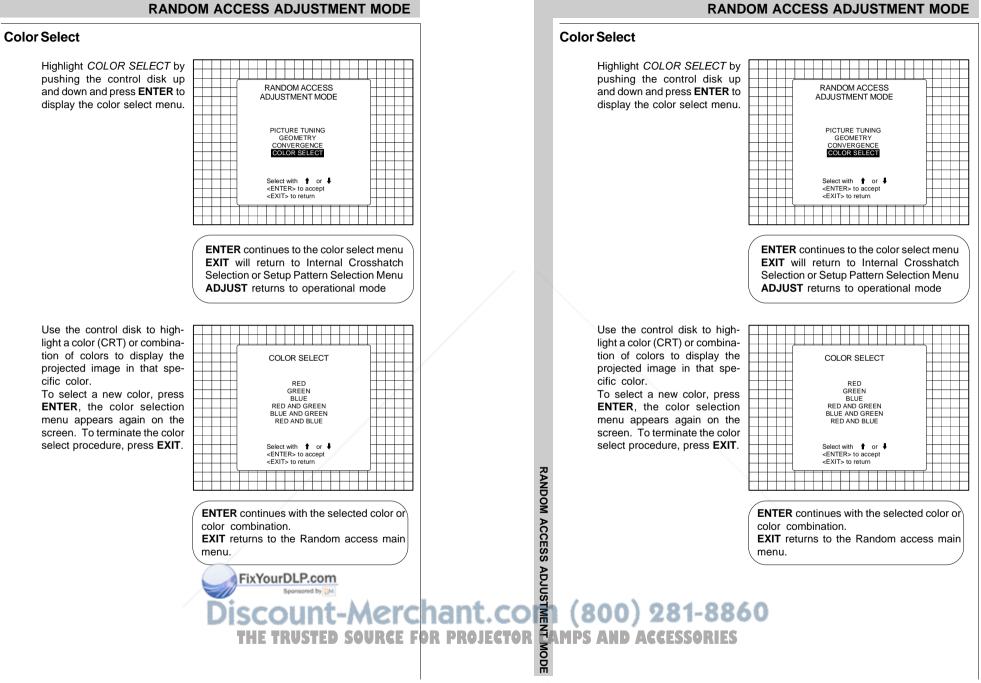
RANDOM ACCESS ADJUSTMENT MODE

# Line Doubler

Line doubling is only possible for Video. S-Video or Component Video images on standard line frequency.

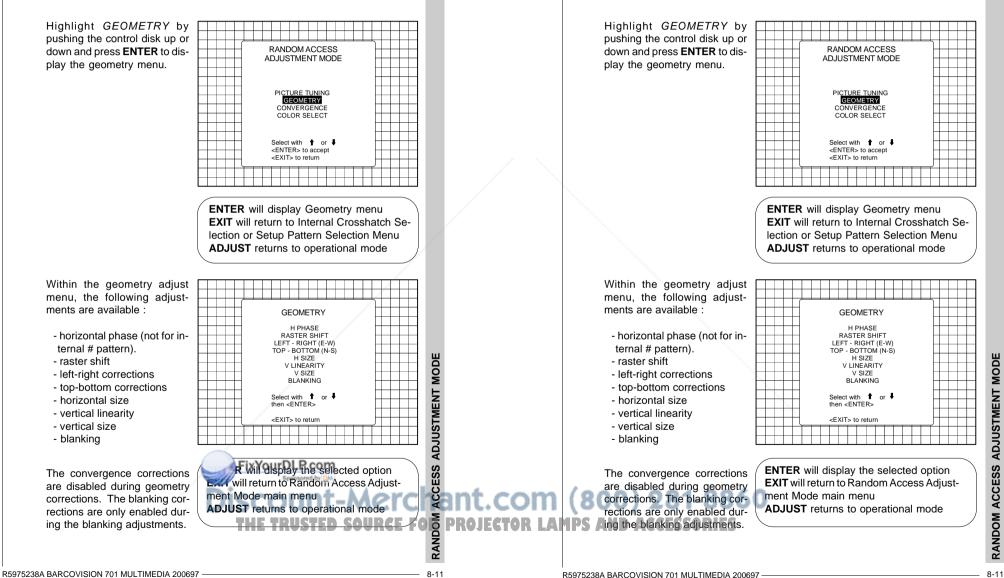
To eliminate the video line patterns and to improve the image stability, the line doubler has to be switched on. The line doubler is default set in the ON position when starting up for the first time. The setting of the line doubler will be saved together with the source number. Each time this source number is selected, the last saved version will be loaded.





# **Geometry Adjustments**

The geometry adjustments have to be done only on the green image. These adjustments are automatically implemented for the other color images : Left-right (EW) and Top-Bottom corrections, blanking, Horizontal amplitude, vertical amplitude, vertical linearity and Horizontal phase.



RANDOM ACCESS ADJUSTMENT MODE

amplitude, vertical linearity and Horizontal phase.

The geometry adjustments have to be done only on the green image. These

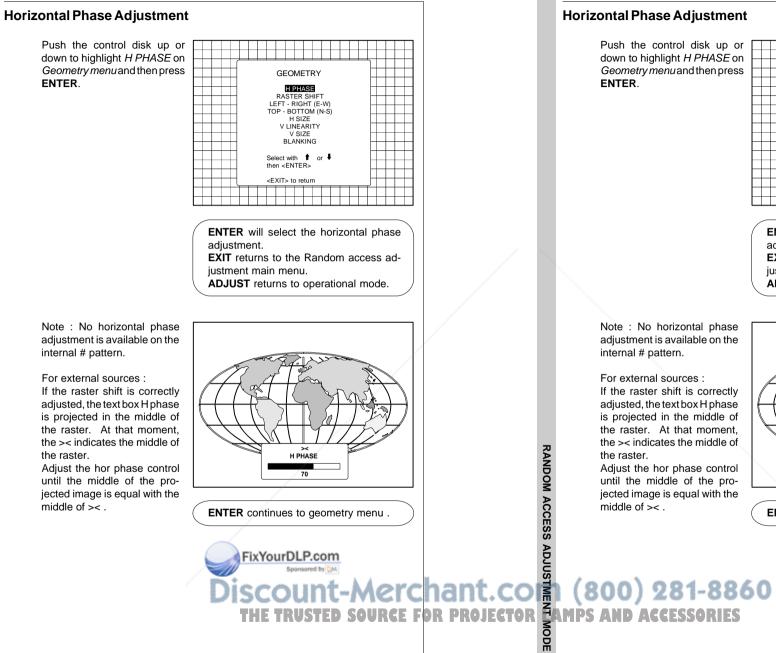
adjustments are automatically implemented for the other color images : Left-right

(EW) and Top-Bottom corrections, blanking, Horizontal amplitude, vertical

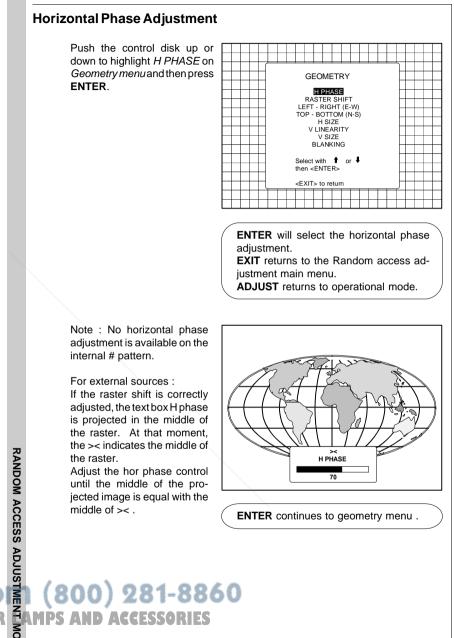
**Geometry Adjustments** 

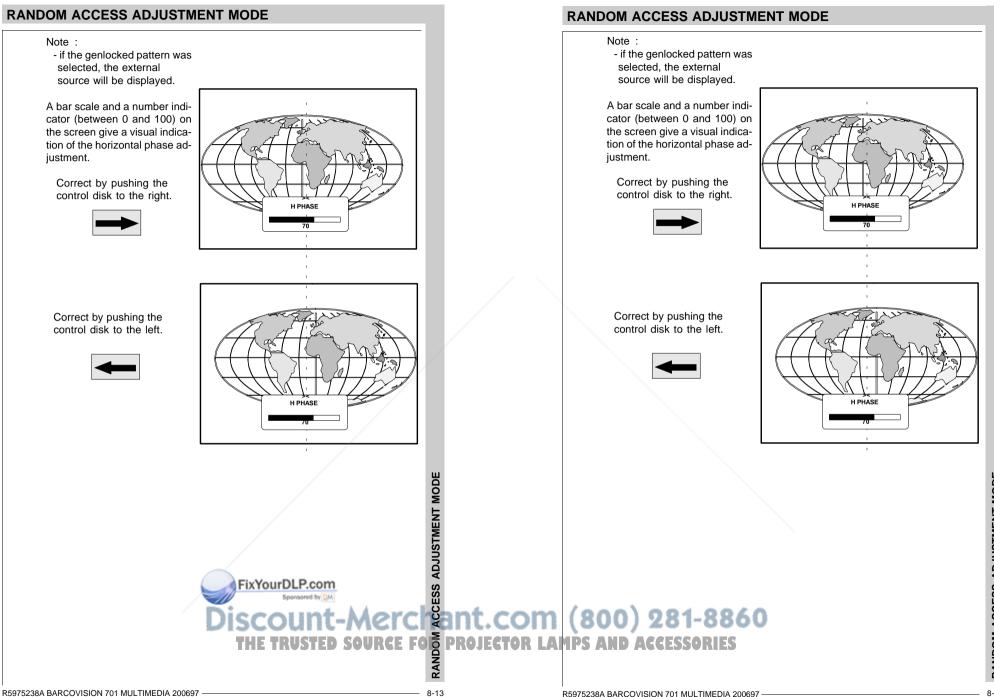
MODE

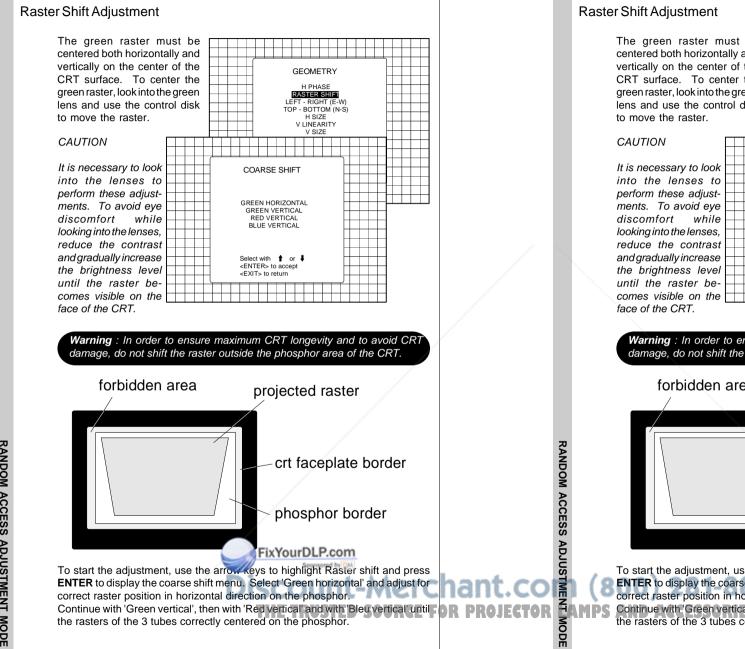
ADJUSTMENT



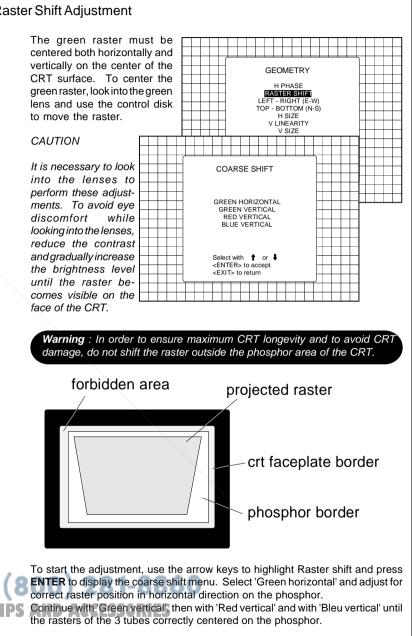
# RANDOM ACCESS ADJUSTMENT MODE

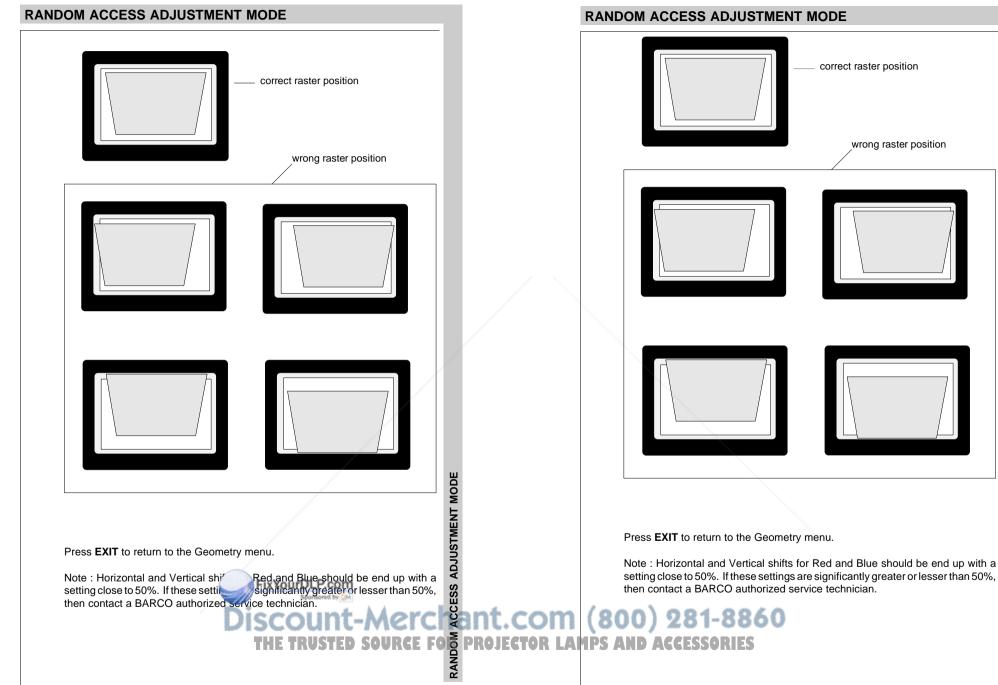






# RANDOM ACCESS ADJUSTMENT MODE





#### 8-15

# **RANDOM ACCESS ADJUSTMENT MODE**

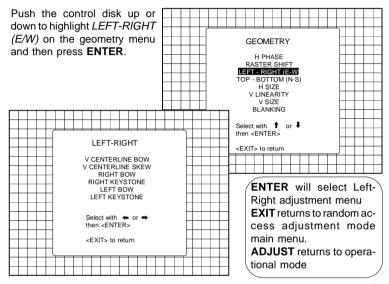
correct raster position

wrong raster position

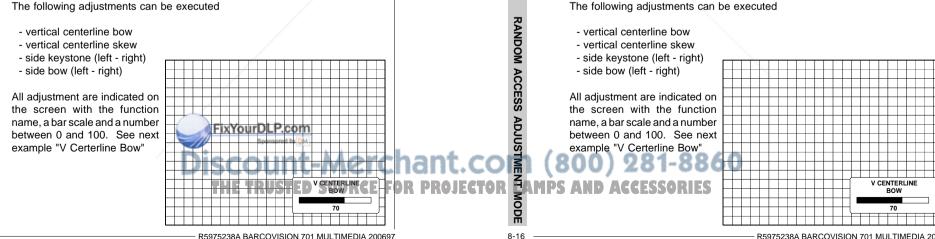
# Left-Right (east-west) Adjustments

Left-right and center adjustments affect only the vertical lines of the projected image.

To start up the left-right and center adjustments, follow the next procedure :



Only the green image is displayed while making left-right adjustments. The red and blue images will automatically be corrected in the same manner. Convergence corrections are automatically disabled for the duration of these adjustments.

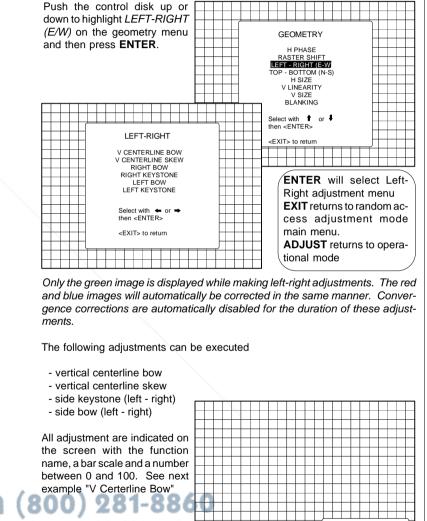


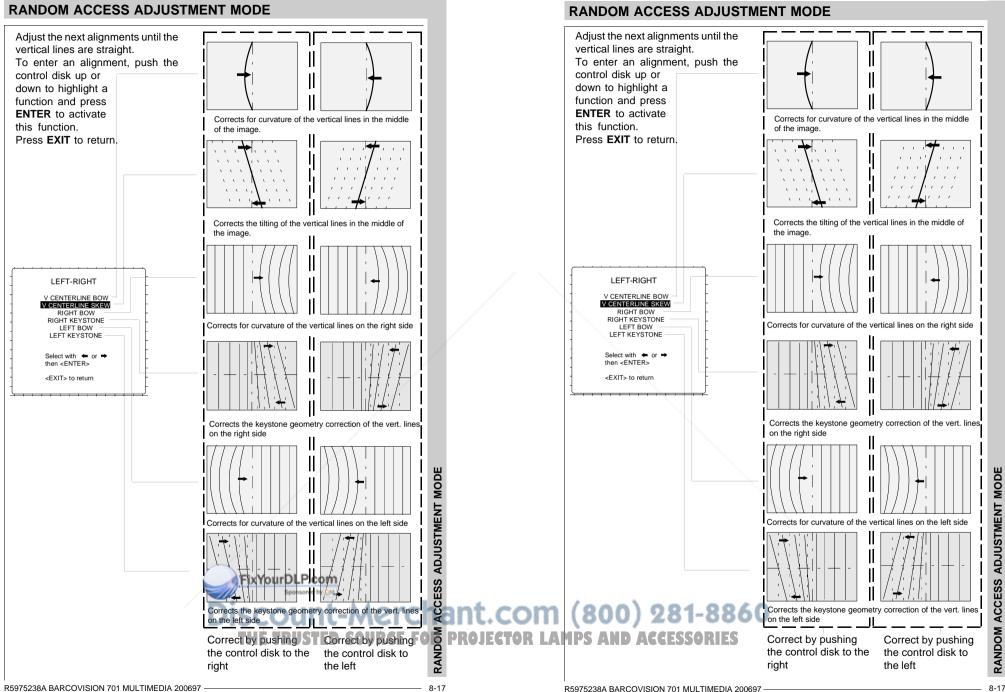
# RANDOM ACCESS ADJUSTMENT MODE

# Left-Right (east-west) Adjustments

Left-right and center adjustments affect only the vertical lines of the projected image.

To start up the left-right and center adjustments, follow the next procedure :

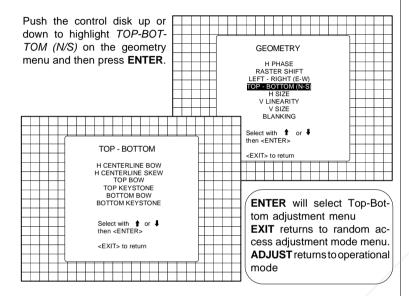




# Top-Bottom (north-south) Adjustments

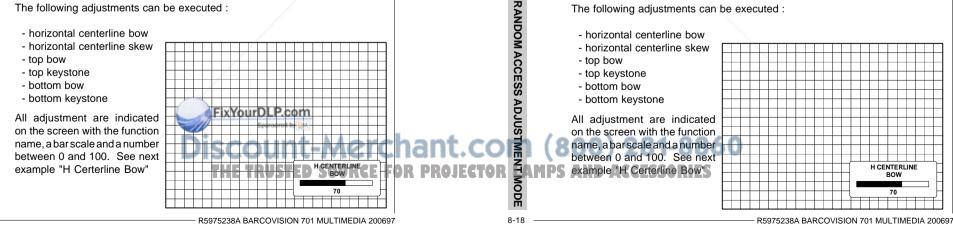
Top-Bottom and center adjustments affect only the horizontal lines of the projected image.

To start up the Top-Bottom and center corrections, follow the next procedure :



Only the green image is displayed while making top-botton adjustments. The red and blue images will automatically be corrected in the same manner. Convergence corrections are automatically disabled for the duration of these adjustments.

The following adjustments can be executed :

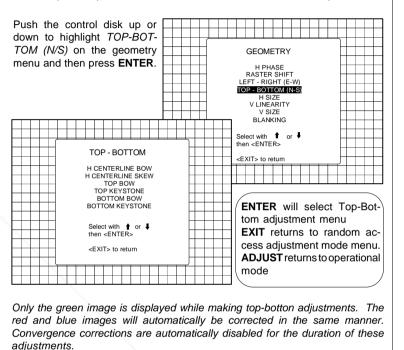


# RANDOM ACCESS ADJUSTMENT MODE

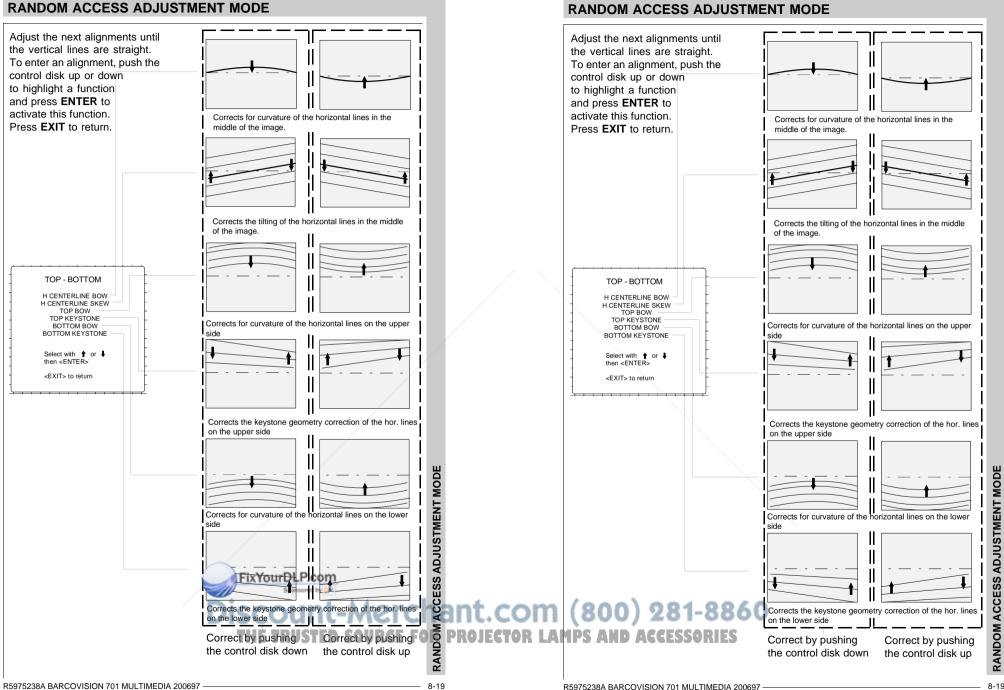
# Top-Bottom (north-south) Adjustments

Top-Bottom and center adjustments affect only the horizontal lines of the projected image.

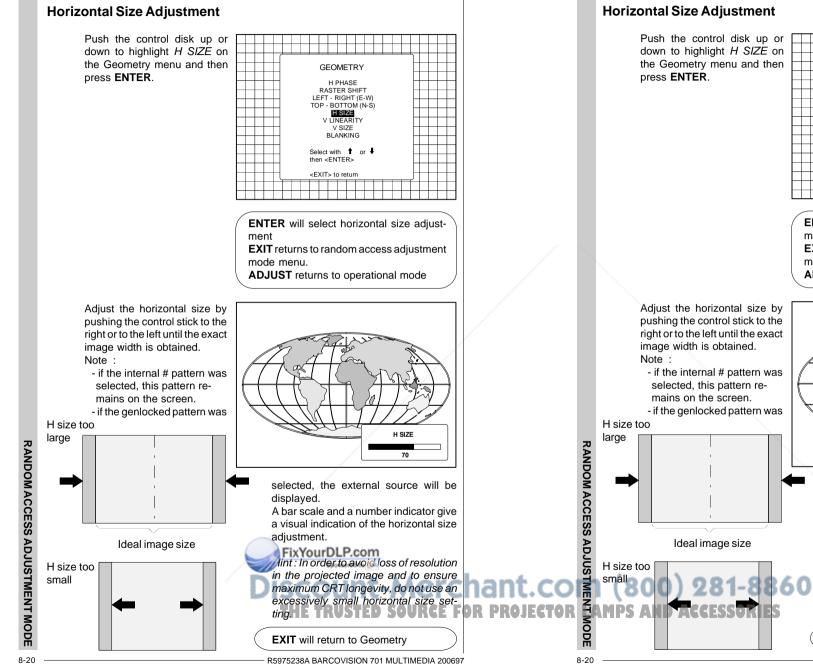
To start up the Top-Bottom and center corrections, follow the next procedure :



The following adjustments can be executed :

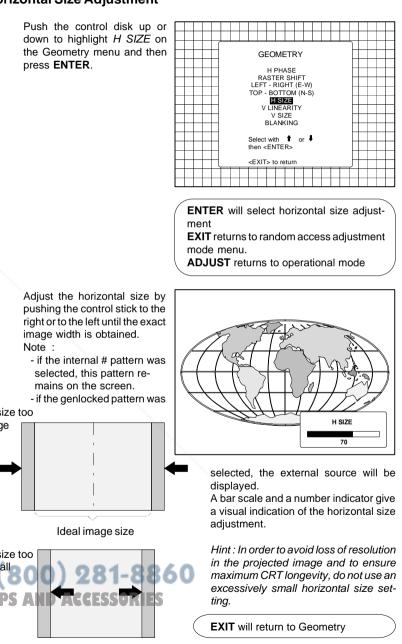


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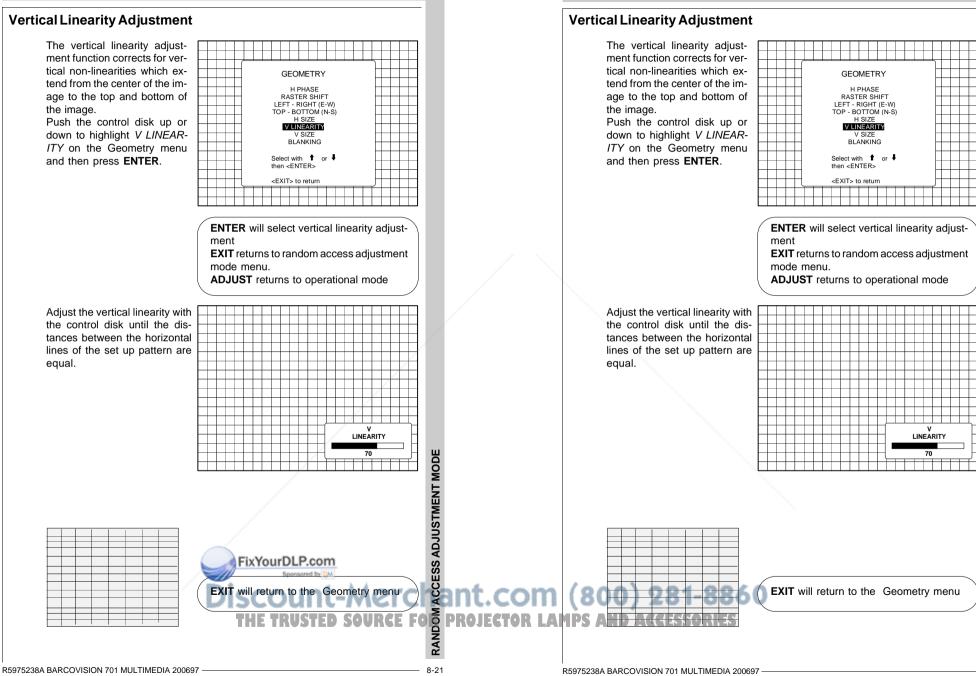


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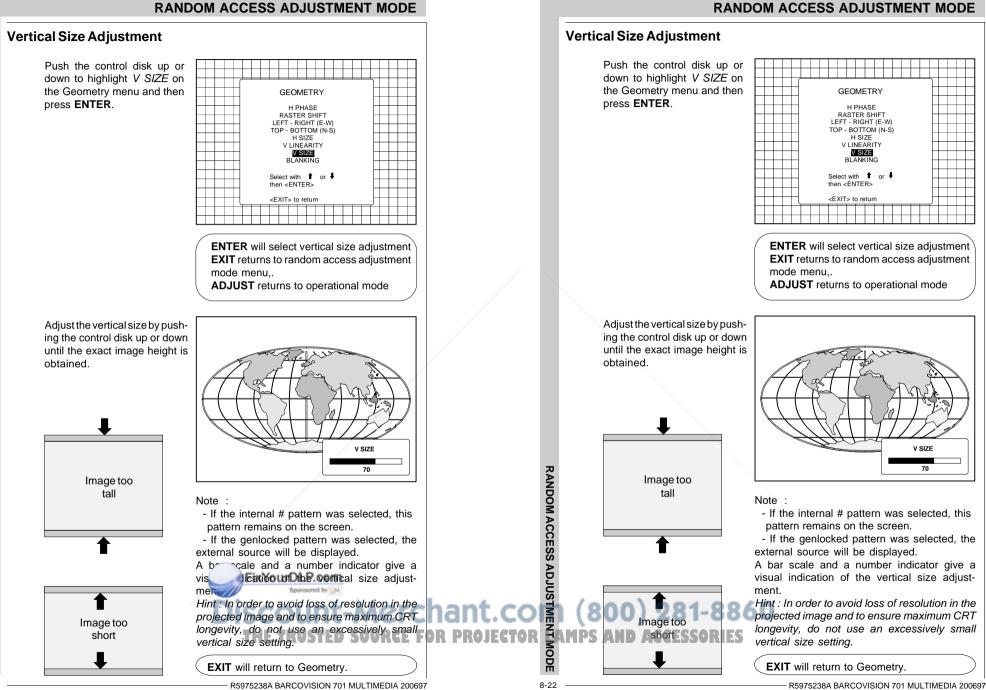
# RANDOM ACCESS ADJUSTMENT MODE



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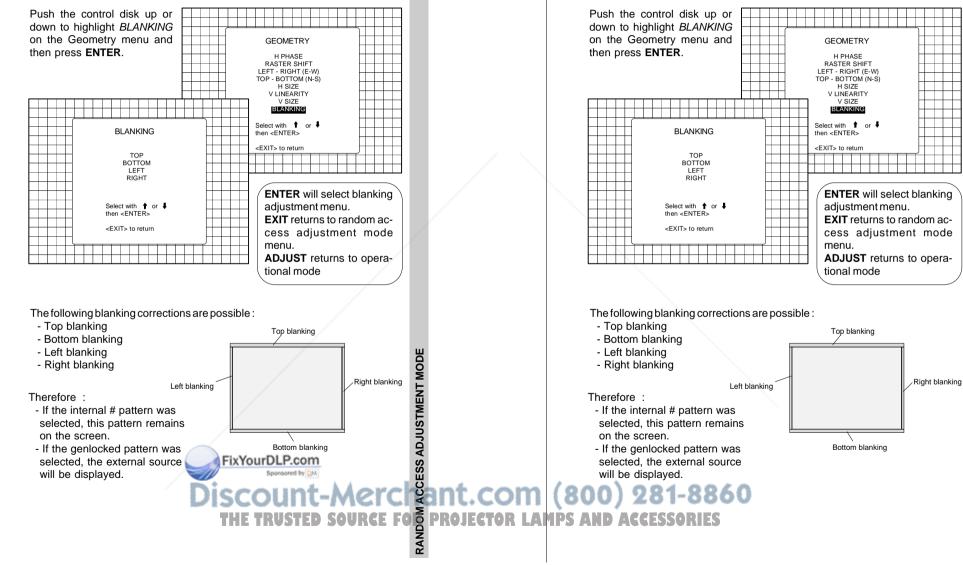


RANDOM ACCESS ADJUSTMENT MODE



# **Blanking Adjustments**

Blanking adjustments affect only the edges of the projected image and are used to frame the projected image on to the screen and to hide or black out unwanted information (or noise). A 0% on the bar scale indicates no blanking. To start up the Blanking adjustments, follow the next procedure :



RANDOM ACCESS ADJUSTMENT MODE

Blanking adjustments affect only the edges of the projected image and are used

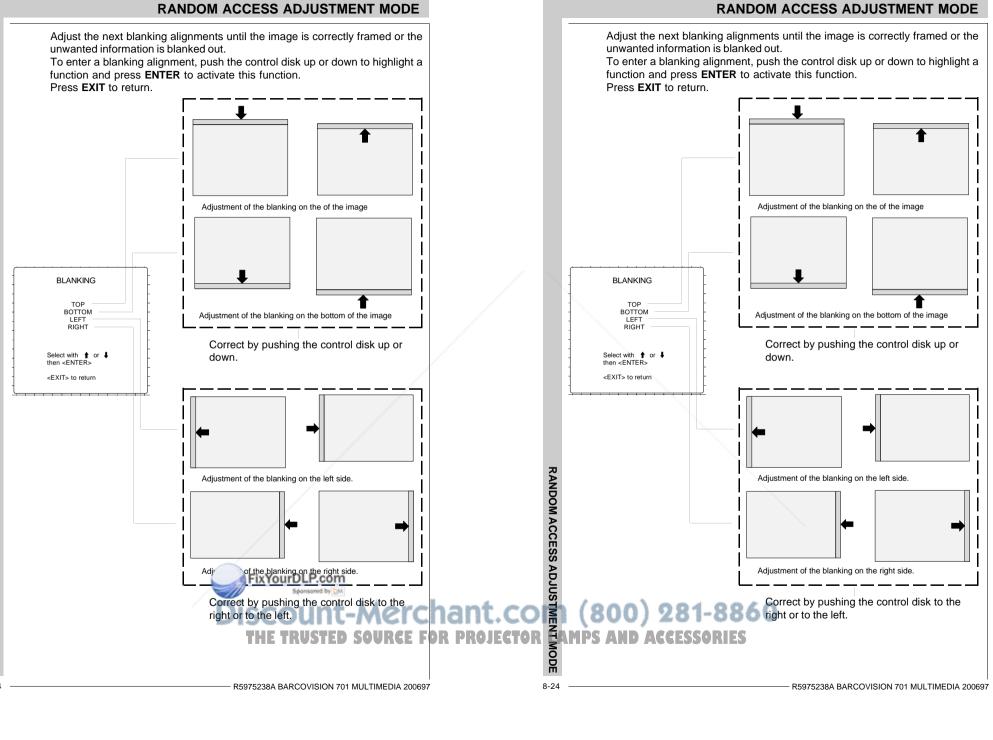
to frame the projected image on to the screen and to hide or black out unwanted

information (or noise). A 0% on the bar scale indicates no blanking.

To start up the Blanking adjustments, follow the next procedure :

**Blanking Adjustments** 

**RANDOM ACCESS ADJUSTMENT MODE** 

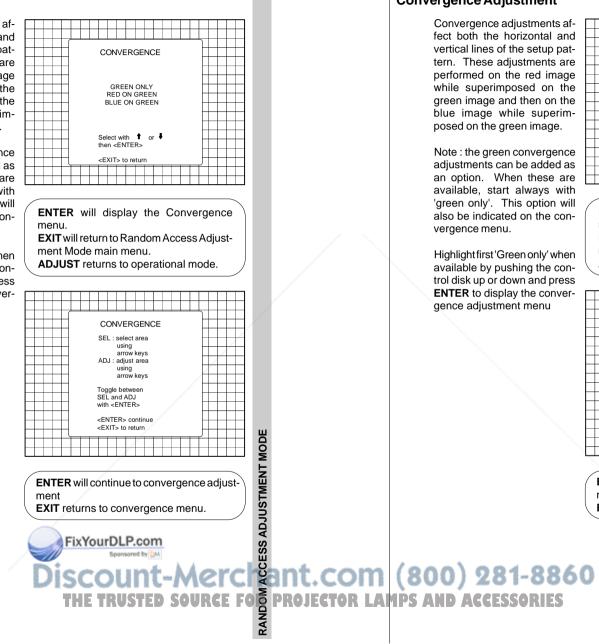


# **Convergence Adjustment**

Convergence adjustments affect both the horizontal and vertical lines of the setup pattern. These adjustments are performed on the red image while superimposed on the green image and then on the blue image while superimposed on the green image.

Note : the green convergence adjustments can be added as an option. When these are available, start always with 'green only'. This option will also be indicated on the convergence menu.

Highlight first 'Green only' when available by pushing the control disk up or down and press ENTER to display the convergence adjustment menu



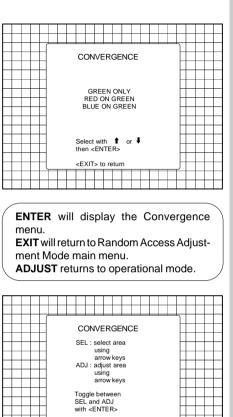
# RANDOM ACCESS ADJUSTMENT MODE

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Highlight first 'Green only' when available by pushing the control disk up or down and press ENTER to display the convergence adjustment menu



ENTER will continue to convergence adjustment **EXIT** returns to convergence menu.

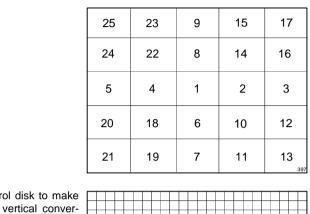
<ENTER> continue <EXIT> to return

#### R5975238A BARCOVISION 701 MULTIMEDIA 200697

MODE

**RANDOM ACCESS ADJUSTMENT** 



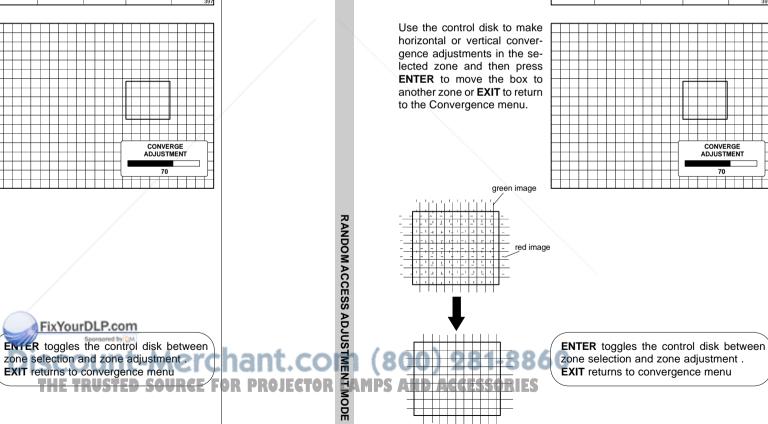


CONVERGE

ADJUSTMENT

70

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8-26

# **RANDOM ACCESS ADJUSTMENT MODE**

The screen area is divided into 25 areas. Use the control disk to move the box to the desired zone and then press ENTER to begin the convergence adjustment. Start the convergence adjustment with zone one and continue as mentioned in the diagram hereafter.



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Use the control disk to make horizontal or vertical convergence adjustments in the selected zone and then press ENTER to move the box to another zone or **EXIT** to return to the Convergence menu.

green image

red image

Starting up the service mode

Overview flow chart Service mode

**Projector Set Up** 

Memory Management

**Common Settings** 

I2C Diagnostics

# SERVICE MODE

Starting up the service mode

Overview flow chart Service mode

**Projector Set Up** 

**Memory Management** 

**Common Settings** 

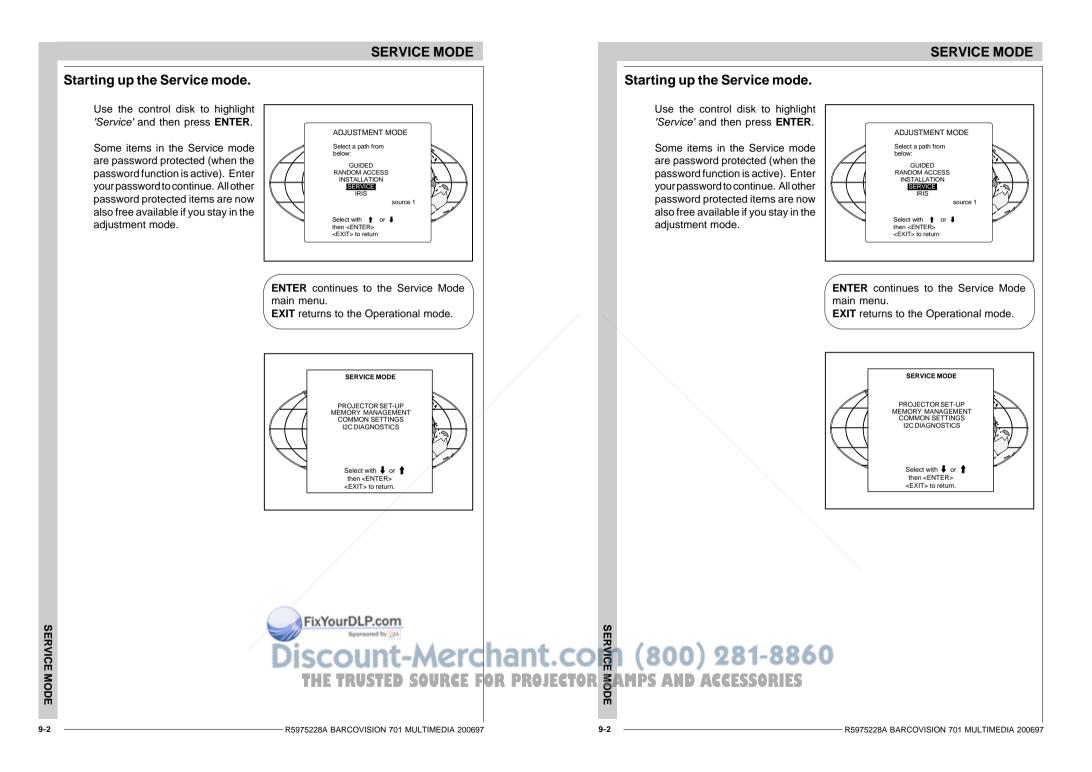
**I2C Diagnostics** 

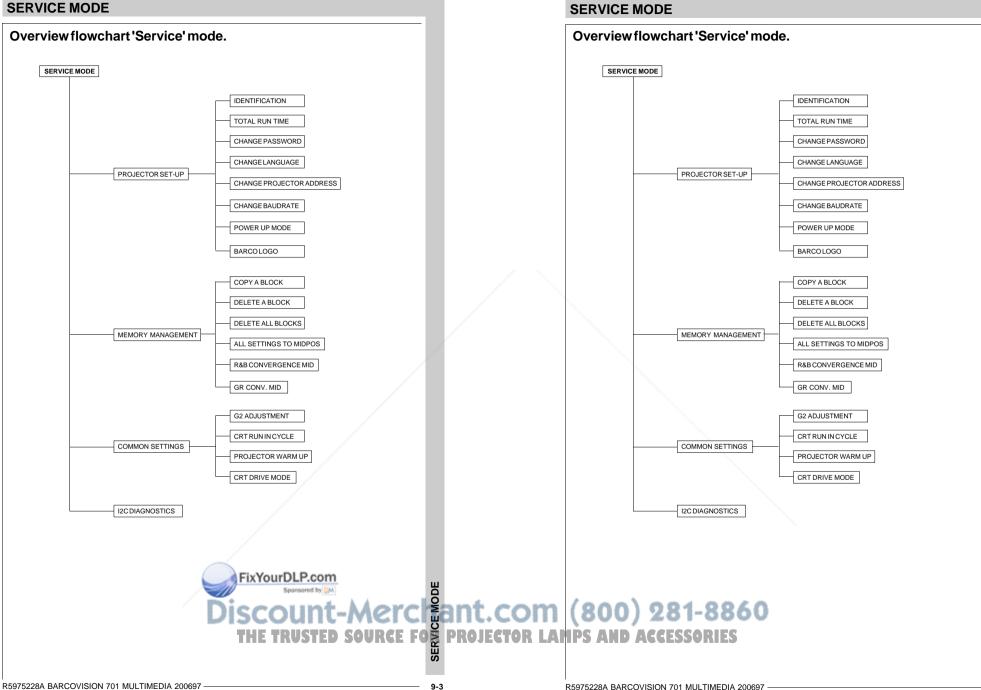
iscount-Merchant.com (800) 281-8860 THE TRUSTED SOURCE FOR PROJECTOR LAMPS AND ACCESSORIES

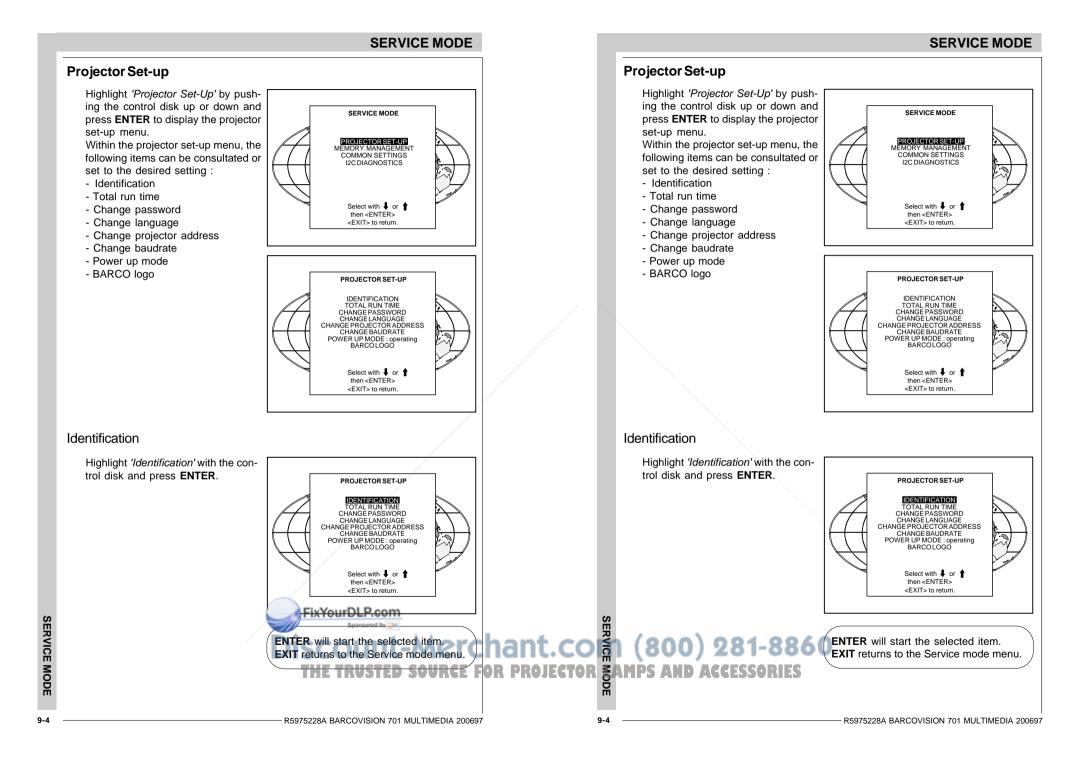
5

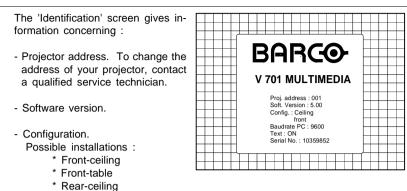
FixYourDLP.com

SERVICE MODE









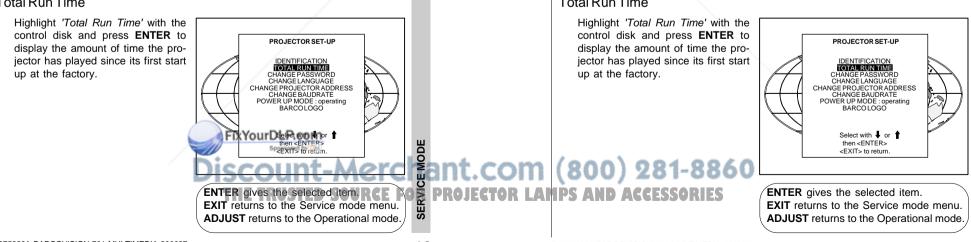
- \* Rear-table
- Baud rate PC : transfer speed for communication with an IBM PC (or compatible) or MAC. The baud rate of the projector must be the same as the baud rate of the connected computer. When there is a difference, contact a qualified service technician to make the appropriate changes.
- Text ON/OFF

Indicates in operational mode if the bar scale and number indicator will be displayed and if warnings and failures will be displayed. ON : displayed OFF : not displayed

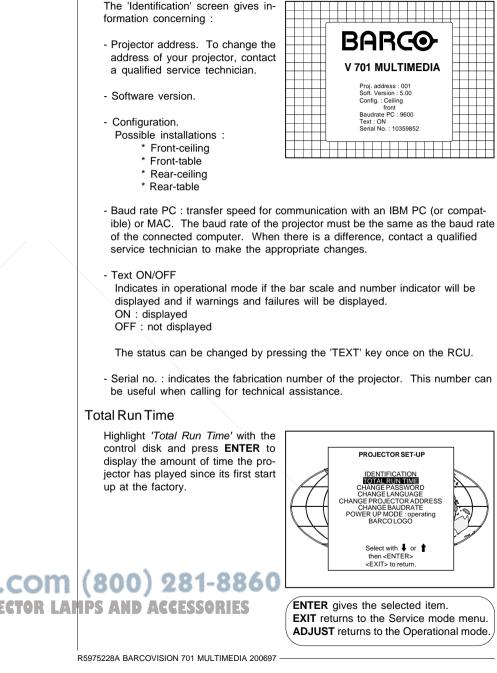
The status can be changed by pressing the 'TEXT' key once on the RCU.

- Serial no. : indicates the fabrication number of the projector. This number can be useful when calling for technical assistance.

# **Total Run Time**

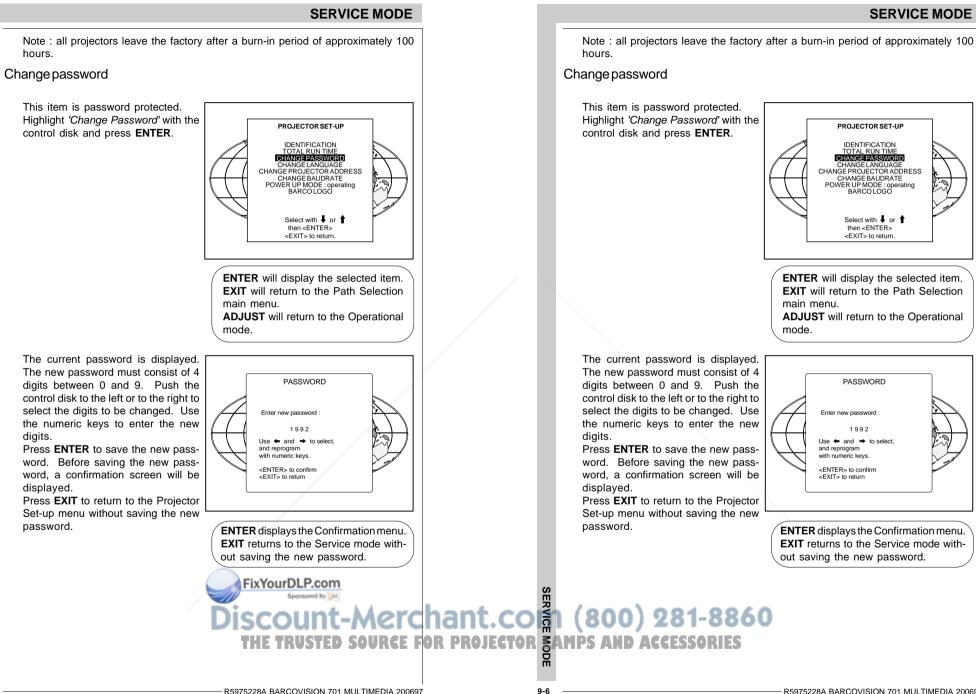


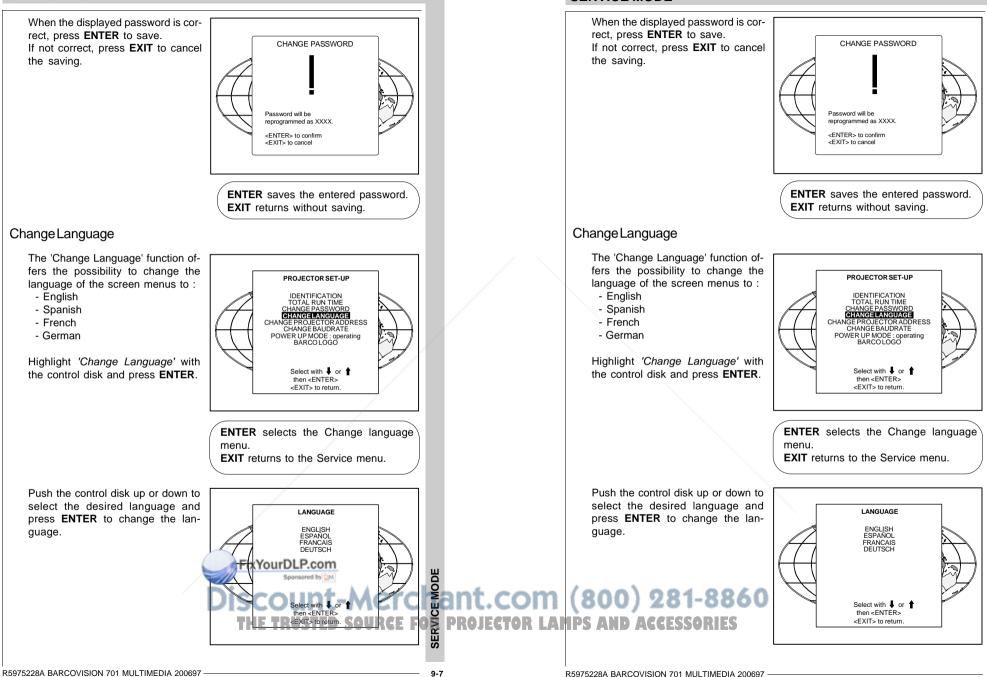
# SERVICE MODE



MODE

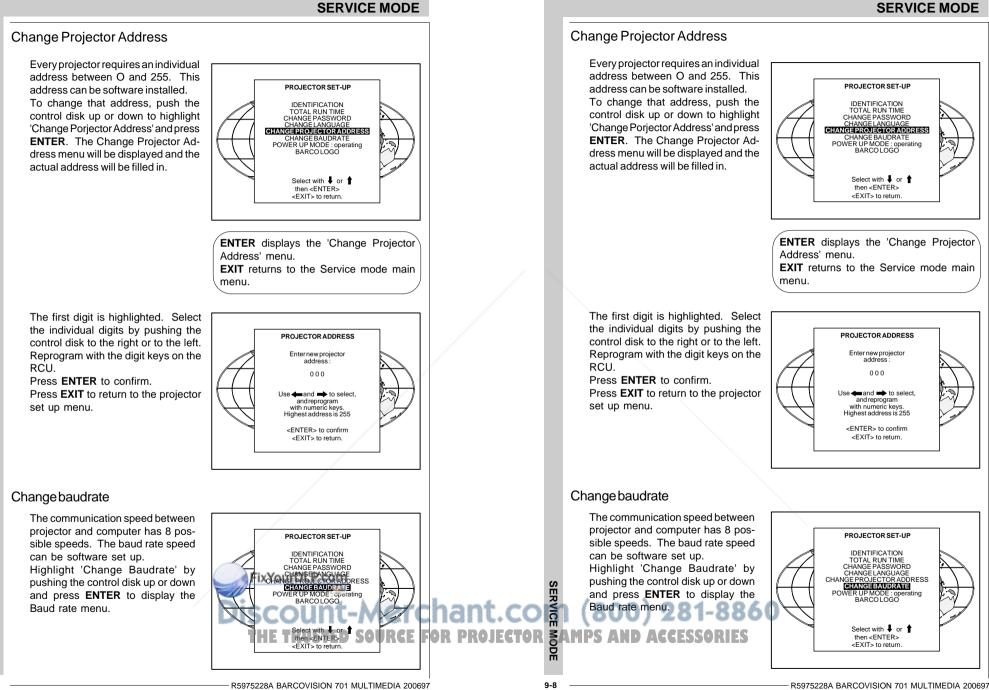
SERVICE



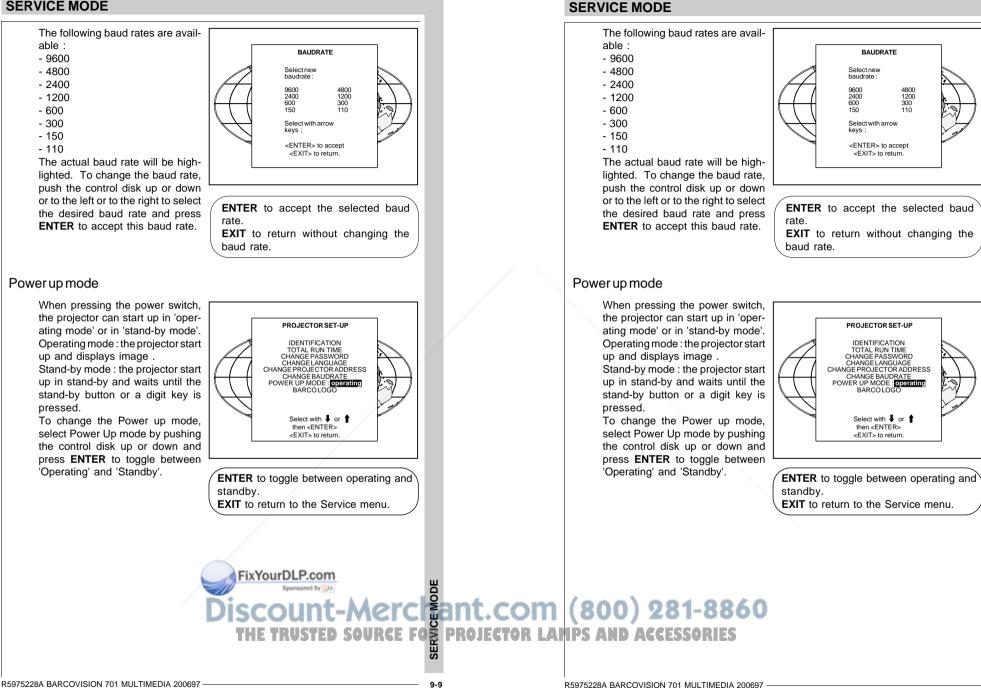


SERVICE MODE

SERVICE MODE



R5975228A BARCOVISION 701 MULTIMEDIA 200697



9-9

BAUDRATE

4800

1200

110

Selectnew baudrate

Select with arrow

<ENTER> to accept

<FXIT> to return

PROJECTOR SET-UP

**IDENTIFICATION** 

TOTAL RUN TIME CHANGE PASSWORD

Select with 4 or

then <ENTER>

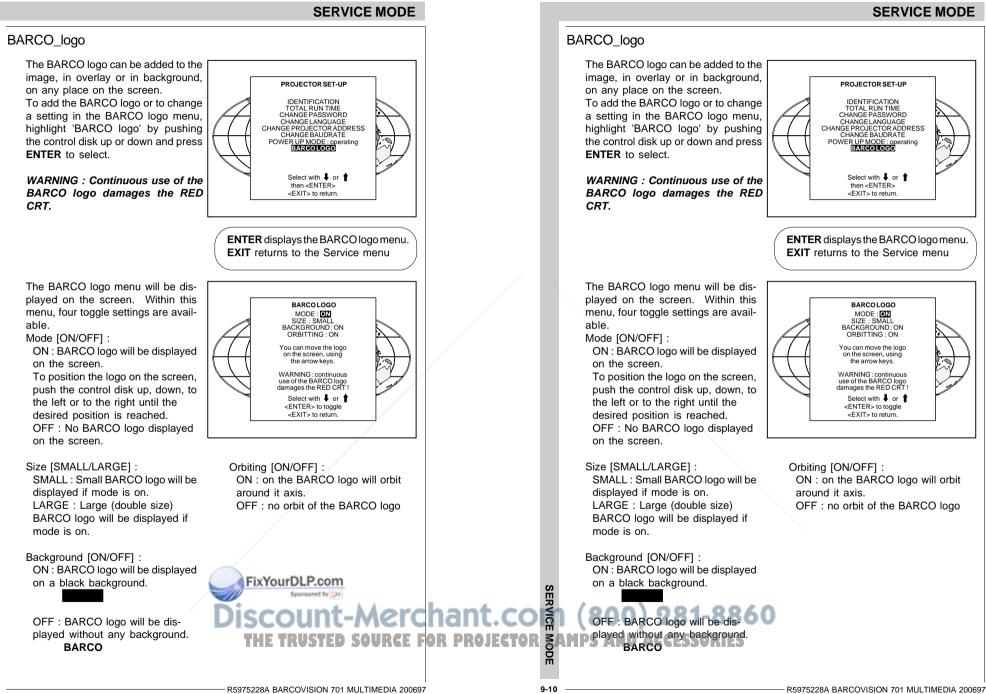
<EXIT> to return.

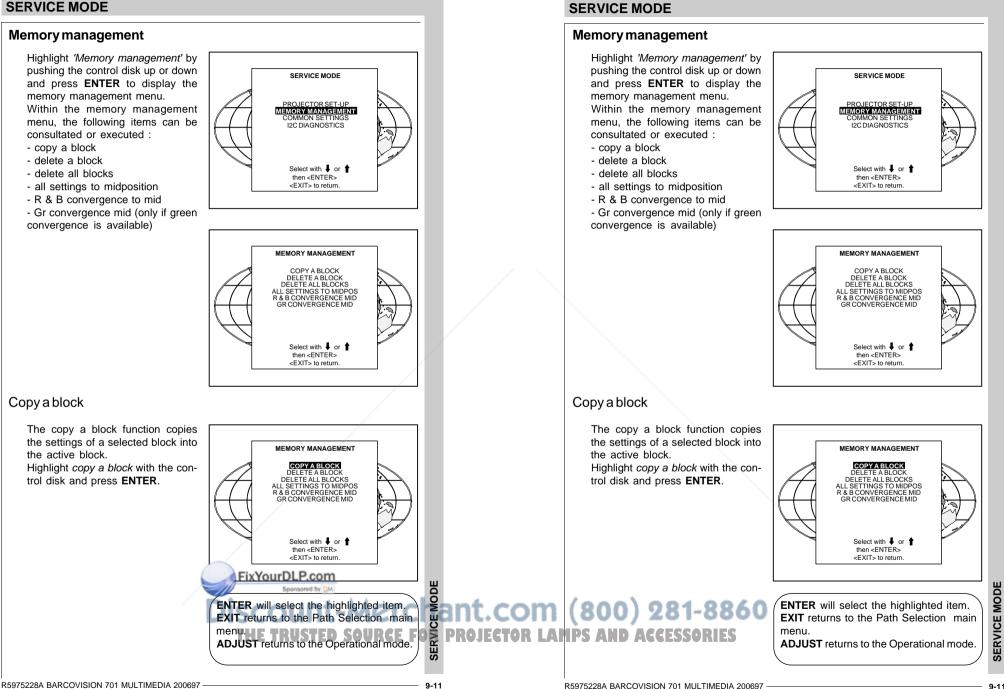
9600

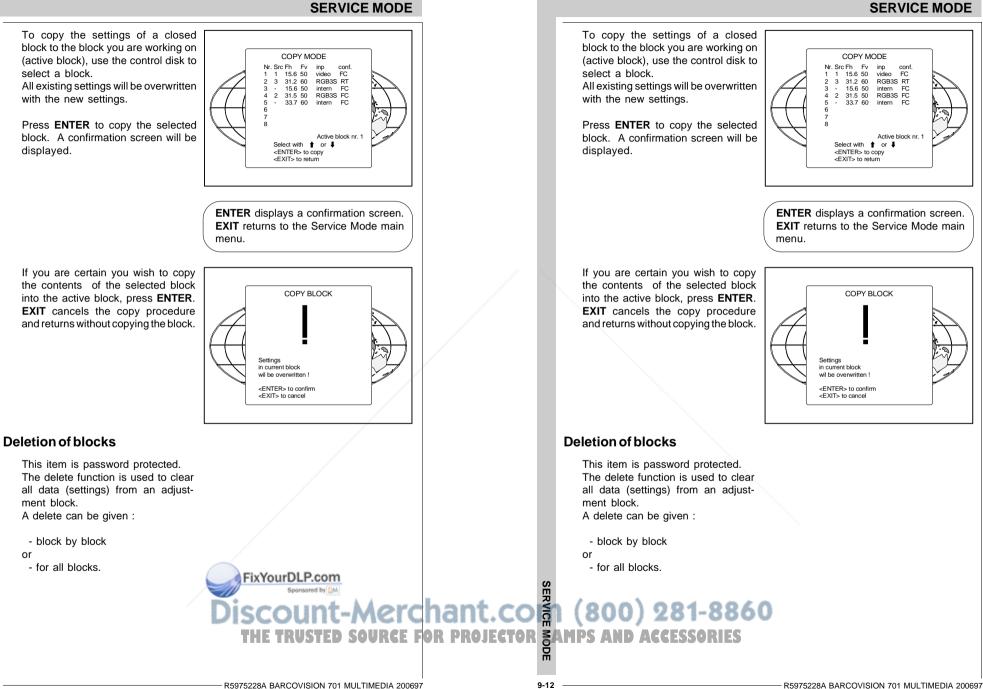
2400 600

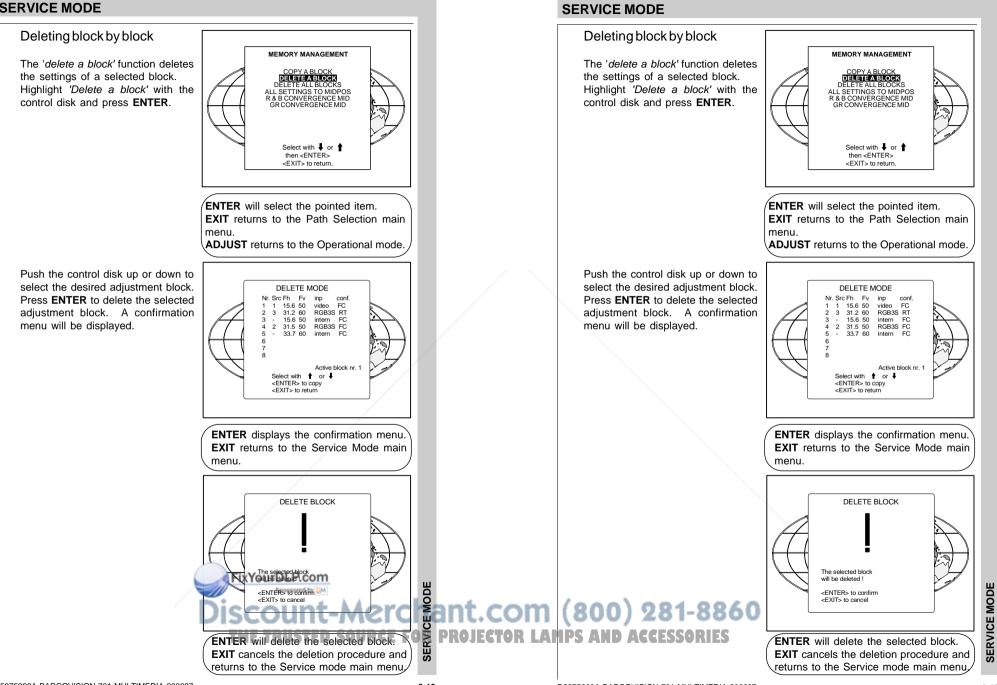
150

kevs



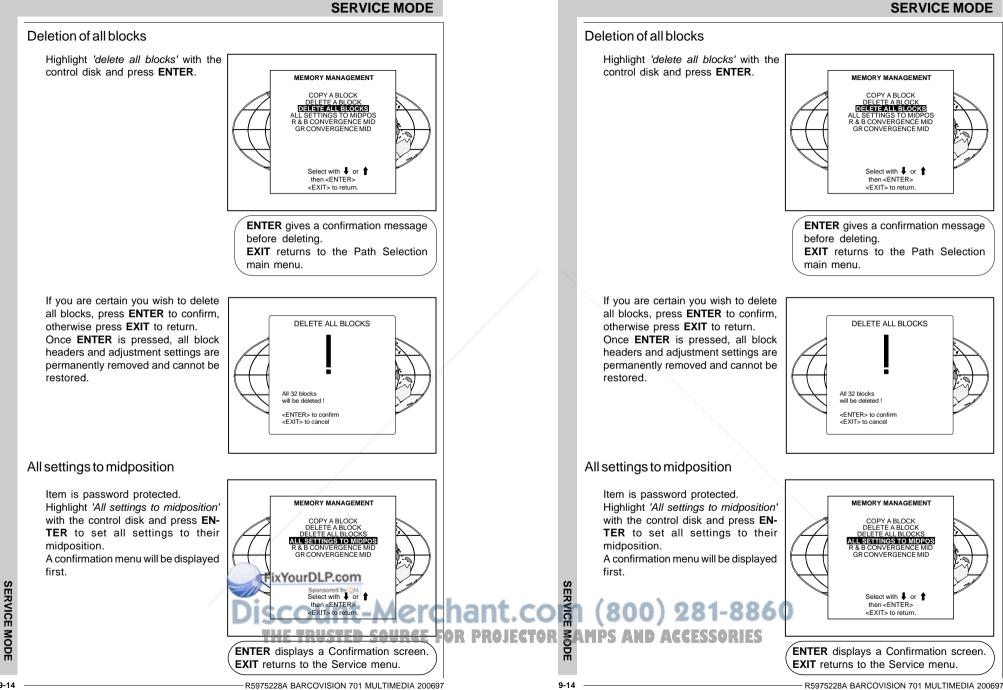




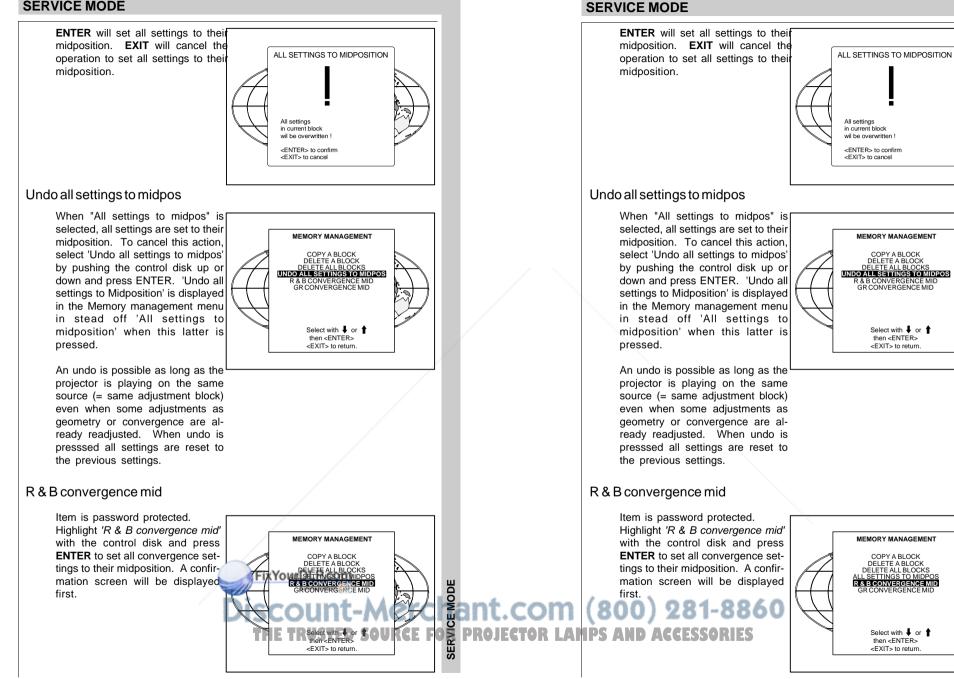


R5975228A BARCOVISION 701 MULTIMEDIA 200697

R5975228A BARCOVISION 701 MULTIMEDIA 200697



### 9-14



SERVICE MODE

Select with 4 or 1

then <ENTER>

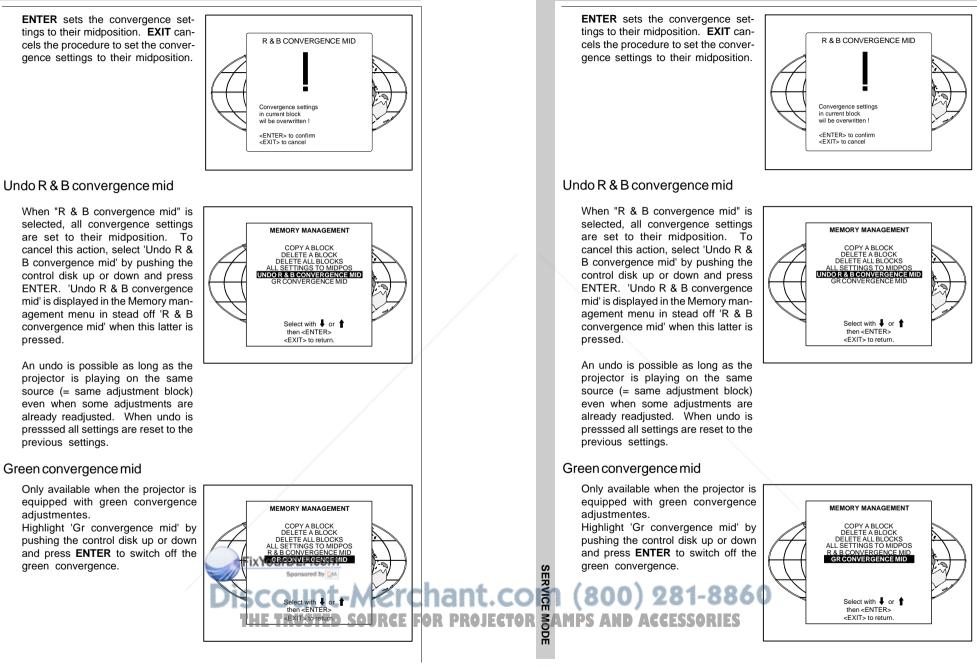
<EXIT> to return

COPY A BLOCK

DELETE A BLOCK

Select with 4 or 1

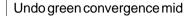
then < ENTER> <FXIT> to return



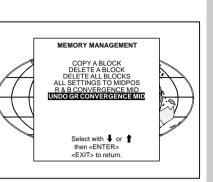
SERVICE MODE

SERVICE MODE

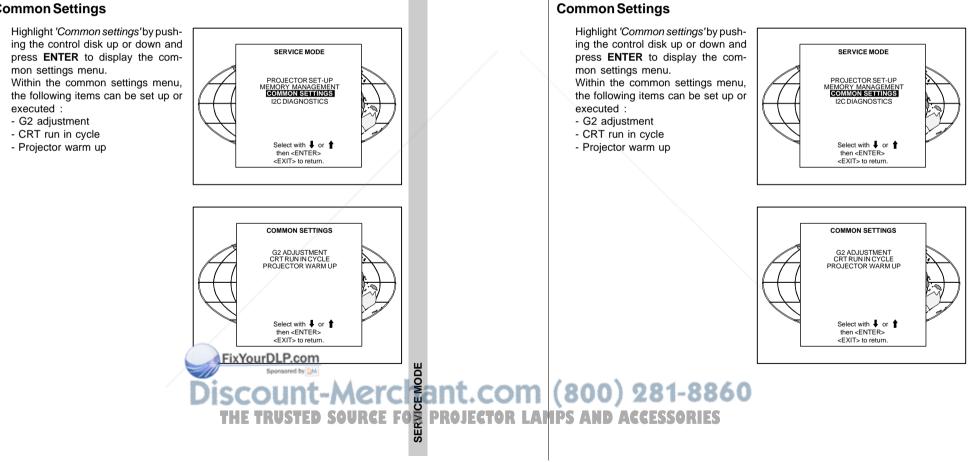
9-16



Only available when the projector is equipped with areen convergence adjustmentes. The item 'Undo green convergence mid' will automatically be displayed when the green convergence is switched to midposition. Press ENTER to switch on the green convergence.



### **Common Settings**



SERVICE MODE

Undo green convergence mid

gence adjustmentes.

switched to midposition.

convergence.

Only available when the projector

is equipped with areen conver-

The item 'Undo green convergence

mid' will automatically be displayed

when the green convergence is

Press ENTER to switch on the green

MEMORY MANAGEMENT

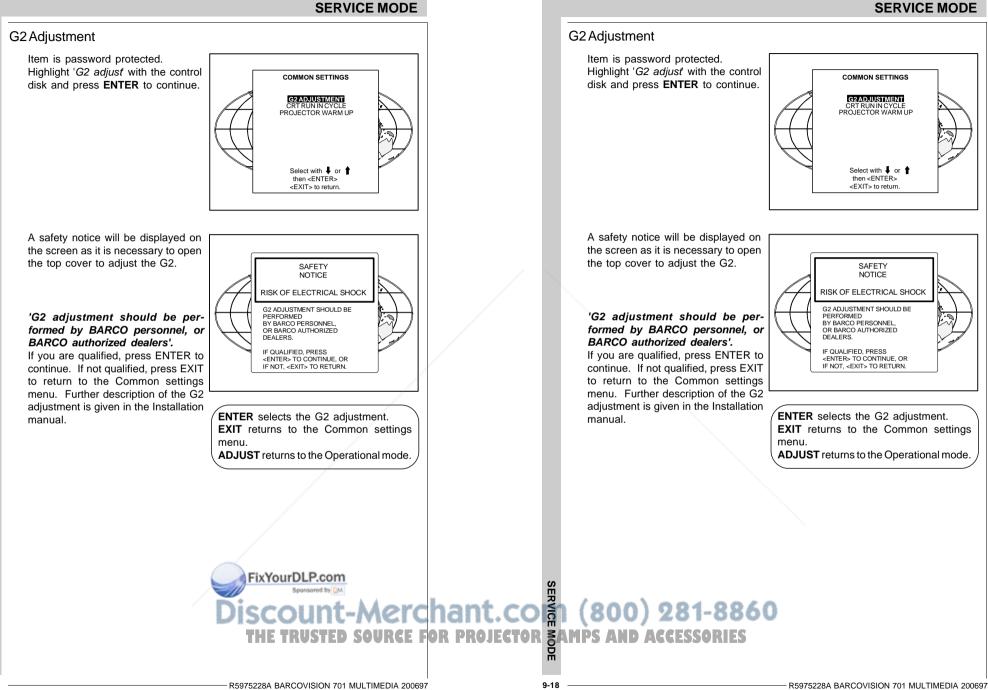
COPY A BLOCK

DELETE ALL BLOCKS ALL SETTINGS TO MIDPOS

Select with I or

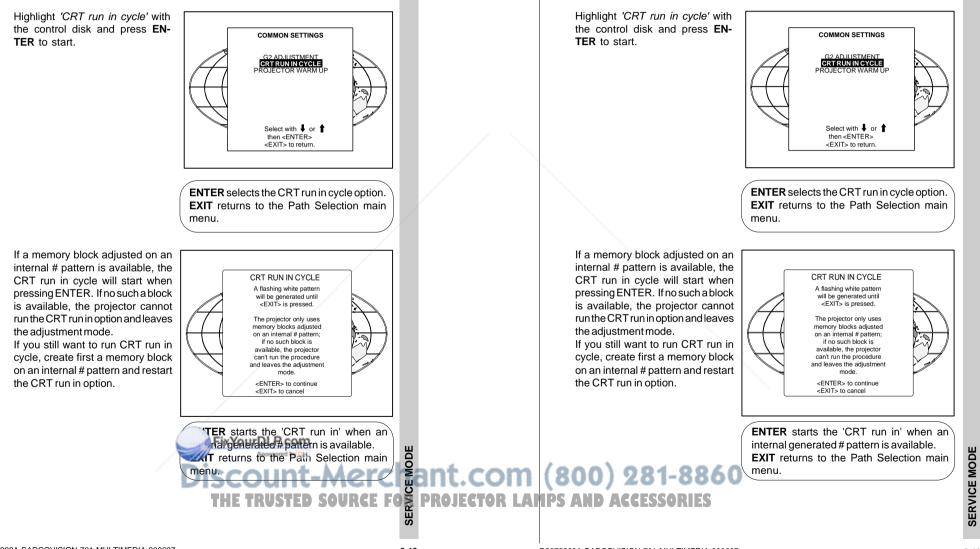
then <ENTER>

<EXIT> to return.



### CRT run in cycle

The CRT run in cycle option can only be activated when memory blocks on an internal # pattern are available. When one or more such blocks are available, a flashing white image (5sec on, 5 sec off) is generated and that for 5 min on the first internal block. In the next 5 min, a second internal block will be used to generate the flashing white image. The image will also be shifted in a vertical way to prevent a CRT burn in. To quit the CRT run in cycle option, press EXIT.



SERVICE MODE

CRT run in cvcle

The CRT run in cycle option can only be activated when memory blocks on an internal

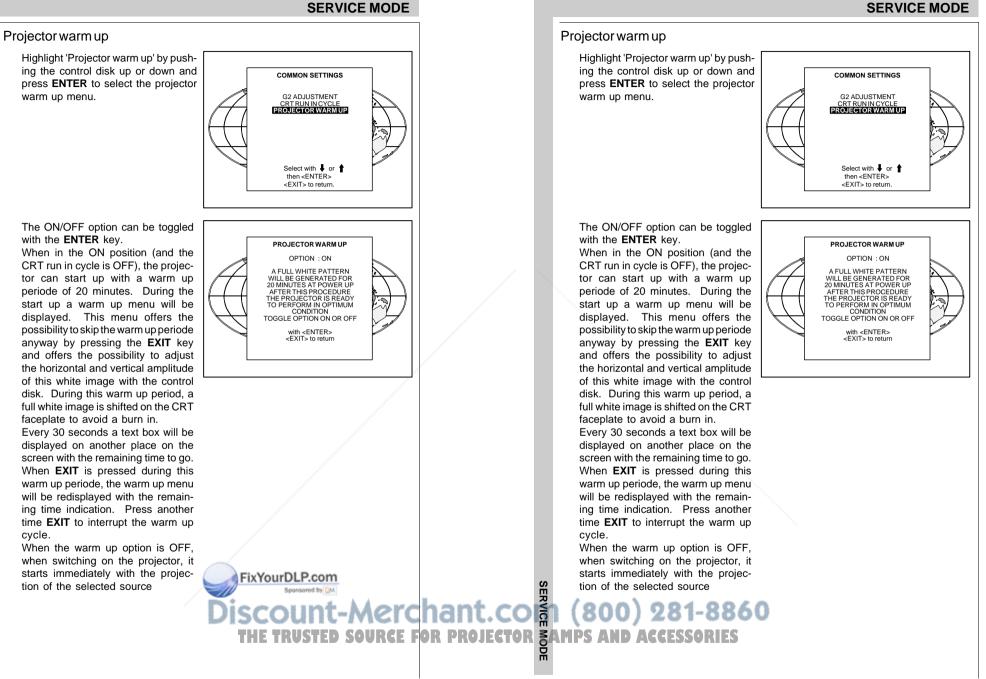
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image (5sec on, 5 sec off) is generated and that for 5 min on the first internal block.

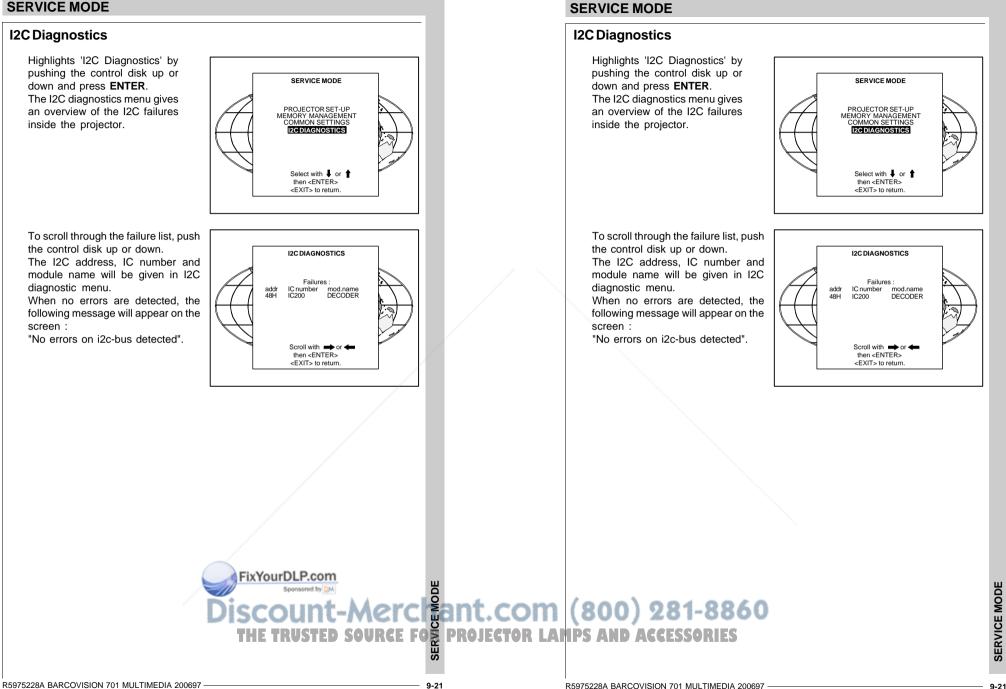
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image. The image will also be shifted in a vertical way to prevent a CRT burn in. To

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9-20

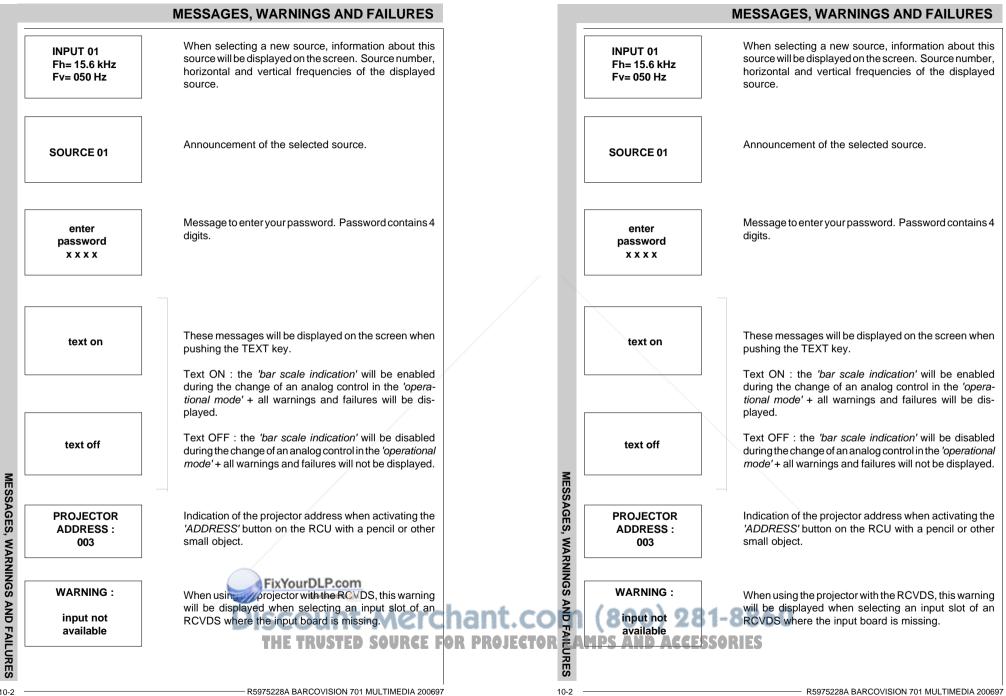


SERVICE MODE



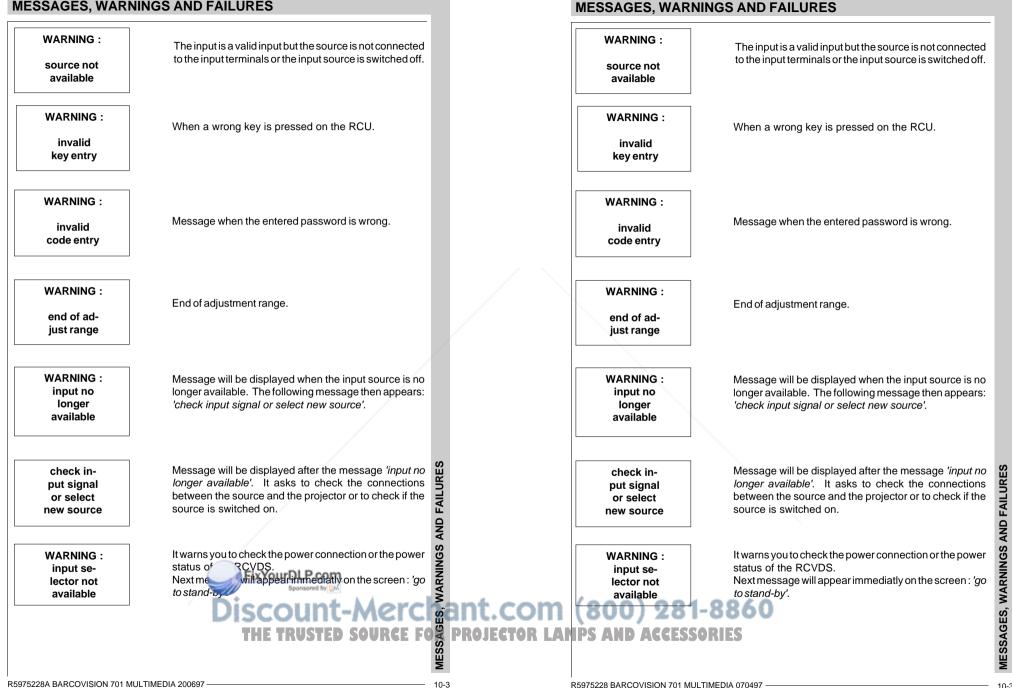
9-22





R5975228A BARCOVISION 701 MULTIMEDIA 200697

### **MESSAGES, WARNINGS AND FAILURES**



	MESSAGES, WARNINGS AND FAILURES	MESSAGES, WARNINGS AND FAILUF
WARNING : go to stand by	Projector will switch to ' <i>stand-by</i> ' when the RCVDS is no longer available.	WARNING :       Projector will switch to 'stand-by' when the RCVDS longer available.         go to       stand by
WARNING : invalid frequency input	The entered frequency or applied frequency of the source is out of the projector's range.	WARNING :       invalid         invalid       source is out of the projector's range.         frequency       input
table is deleted	Message to inform that selected table is deleted. This message will be followed by 'confirm message', on which the user has to answer.	table is deletedMessage to inform that selected table is deleted. message will be followed by 'confirm message', on the user has to answer.
FAILURE I2C error addr. : 7FH3	Hardware failure. Call a qualified service technician for repair.	FAILURE       Hardware failure. Call a qualified service technicia         I2C error       repair.         addr. : 7FH3       12
FAILURE short circuit on I2C bus	Hardware failure. Call a qualified service technician for repair.	FAILURE       Hardware failure. Call a qualified service technicia         short       repair.         L2C bus       Interpretent of the service technicia
FAILURE RCVDS com- munication error	Serial communication error between the RCVDS and the projector.	FAILURE RCVDS com- munication error SS
FAILURE IRIS commu- nication error	Communication error between IRIS 800 and the projec- tor. Call a qualified service technician.	error         FAILURE IRIS commu- nication error         Communication error between IRIS 800 and the pritor. Call a qualified service technician.
WAIT starting up IRIS	Message during the start up of the IRIS 800. Message will disappear when the IRIS 800 is ready to accept commands.	WAIT Starting 28 Up WAIT Wessage during the start up of the IRIS 800. Message during the start up of the IRIS 800. Message during the start up of the IRIS 800 is ready to an commands.
	R5975228A BARCOVISION 701 MULTIMEDIA 200697	ល           10-4         R5975228A BARCOVISION 701 MULTIMEDI.

### **OPTIONS**

IR receiver 800

Hardwired RCU

**Projector Control software** 

**RCVDS 05** 

VS05

Adapter and communication cables

Ceiling mount CM50

Soft edge matching

**Contrast modulation** 

**Picture Orbiting** 

FixYourDLP.com

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**Contrast modulation** 

**Picture Orbiting** Merchant.com 860 THE TRUSTED SOURCE F \*\*!!:!!\*\*

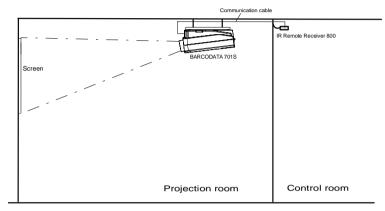
ō

### **IR Receiver 800**

This infrared receiver unit makes it possible to control the projector from another room.

There is a communication line with cable between the IR receiver and the projector or the RCVDS05. The control information from the RCU can now be sent to this IR receiver.

The IR receiver 800 displays the selected source on a 7-segment display. Order number : R9827515.

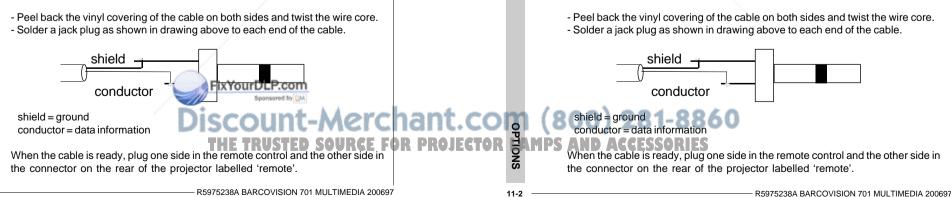


### Hardwired RCU.

The control signals from the RCU can be sent to the projector via a wired connection.

Preparing your remote cable :

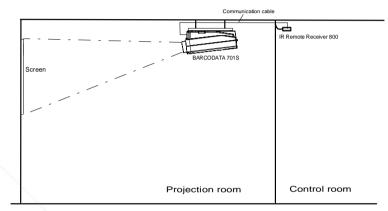
Use a shielded cable with a maximum length of 100 m and two mini-jack 3.5 mm connectors (order number : R313043).



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### **Projector Control software**

Only available for projectors equipped with the optional RS232 communication port.

The software is user-friendly and makes full use of : mouse control, pull down menus and dialog boxes.

Two main applications are available with this software : remote control and transferring and receiving data of projector settings.

remote control simulation. Advantage : address range 0 to 15.

adjustment data : where can it be located when an IBM PC (or compatible) or MAC or Workstation is connected :

- hard memory device with files of settings.
- the contents of the local memory of the computer.
- the contents of the projector.

### **RCVDS 05**

An optional RCVDS 05 source selector makes it possible to connect up to 20 sources to the projector. When RCVDS's are linked via the expansion module, even 90 inputs can be connected to the projector.

The selected source number will be displayed on a 2 digit display and the selected input module will be indicated with a LED on the rear.

### **VS05**

The VS05 is a versatile Video and HDTV source selector for all BARCO's digitally controlled large screen projectors. It offers the possibility to connect and switch up to 5 different Video sources, 3 different S-Video sources and 1 RGB Analog source to a BARCO projector. In addition, the audio signal proper to the source, can be switched to an audio amplifier.

### Adapter and communication cables

BARCO provides several cables to connect peripheral equipment to the projector.

- a. D9-D9 communication cable
- To connect an IBM PC (or compatible) to the projector. (only if the optional RS232 port is installed.)

- To connect an RCVDS to the pro

- To connect an IR receiver to the RCvDS05 or to the projector.
- To be used as extension cable for all other adapter cables.

### Available length :5 m (16ft), order number R982770; 15 m (50ft), order number PROJECT R9827560; and 30 m (100ft), order number R9827570

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- To be used as extension cable for all other adapter cables.

# PS A Available length :5 m (16ft), order number R982770; 15 m(50ft), order number R9827560; and 30 m (100ft), order number R9827570

5

100

Merchant.com

OPTION

### b. Din Mini8-D9 adapter cable.

- To connect a Macintosh computer to the projector. Available length : 1 m, order number R9827640.

- c. D25-D9 adapter cable
- To connect a workstation to the projector. Available length : 1 m, order number R9827630

### Ceiling mount CM50

This suspension system enables to mount any projector from the BARCO 700 series to the ceiling without using any mechanical interface, and to adapt the projector perfectly to the local mounting requirements. Order number CM50 with pulley : R9827990 Order number CM50 without pulley : R9827991.

### **Orbiting Kit**

Static pictures are very often shown on large screen projectors, especially in process control and presentation applications. Due to the fact that the same picture information is shown for a long period in the same place, picture tubes can be damaged by 'local burn-in'. To avoid this problem, a special Orbiting circuit is available which moves the picture very slowly around a predefined screen area. The cycle time is very long to make the movement of the projected image imperceptible. The use of the orbiting kit is described in appendix A. Order number : R9827780

### Soft edge matching kit

Multi-screens are popular for many applications. In these installations, the goal is to obtain a contiguous matched image, forming one homogenous view. The soft edge matching feature provides a solution to the annoying side effects when adjusting two or more projected images next to each other. To improve this junction, both images must be overlapping within a certain percentage of the total screen width. During the overlapping period, both video signals are modulated by appropriate waveforms so that the resulting light output equals the rest of the image.

### Contrast modulation kit

The contrast modulation kit is designed to improve overall light output uniformity and to overcome the inherent color shift errors, normally associated with CRT projection. The laws of physics applied to projection optics dictate that the center of the projected image will be brighter the content to as 'corner fall off'. Due to the mal off-axis projection of the red and blue images, CRT projection displays a phenomenon referred to as 'color shift', whereby one side of the image is reddish and the other blueish. By modulating the amplitude of the video signal with appropriate waveforms we are able to overcome both problems. The use of this contrast modulation kit is described in appendix C.

Order number : R9827800

- b. Din Mini8-D9 adapter cable.
- To connect a Macintosh computer to the projector. Available length : 1 m, order number R9827640.
- c. D25-D9 adapter cable
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### Contrast modulation kit

PTIO

SN

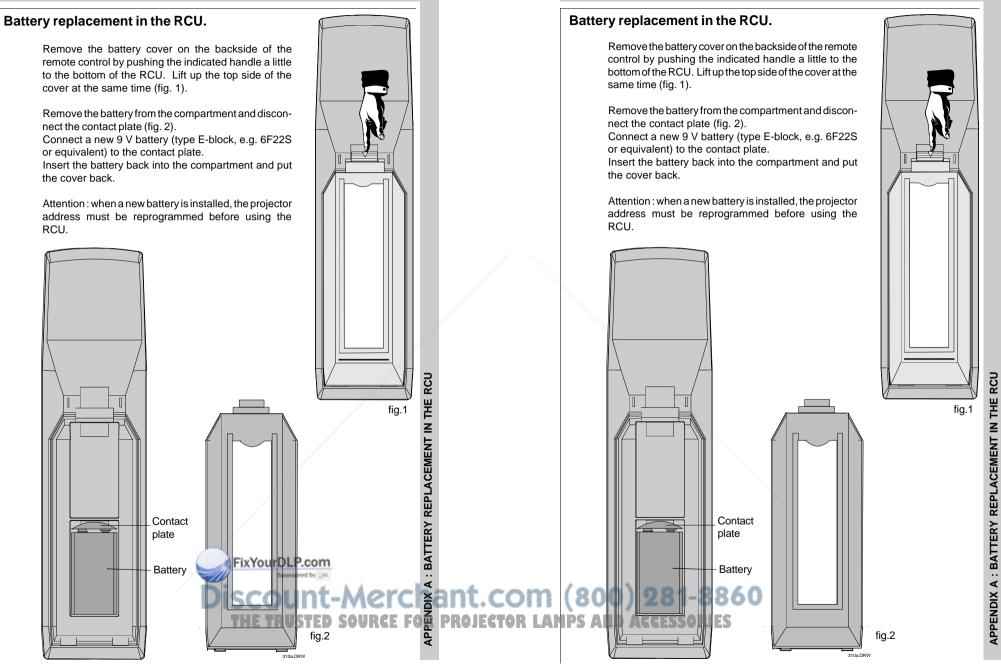
11-4

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The use of this contrast modulation kit is described in appendix C. Order number : R9827800

OPTIONS

### APPENDIX A : BATTERY REPLACEMENT IN THE RCU

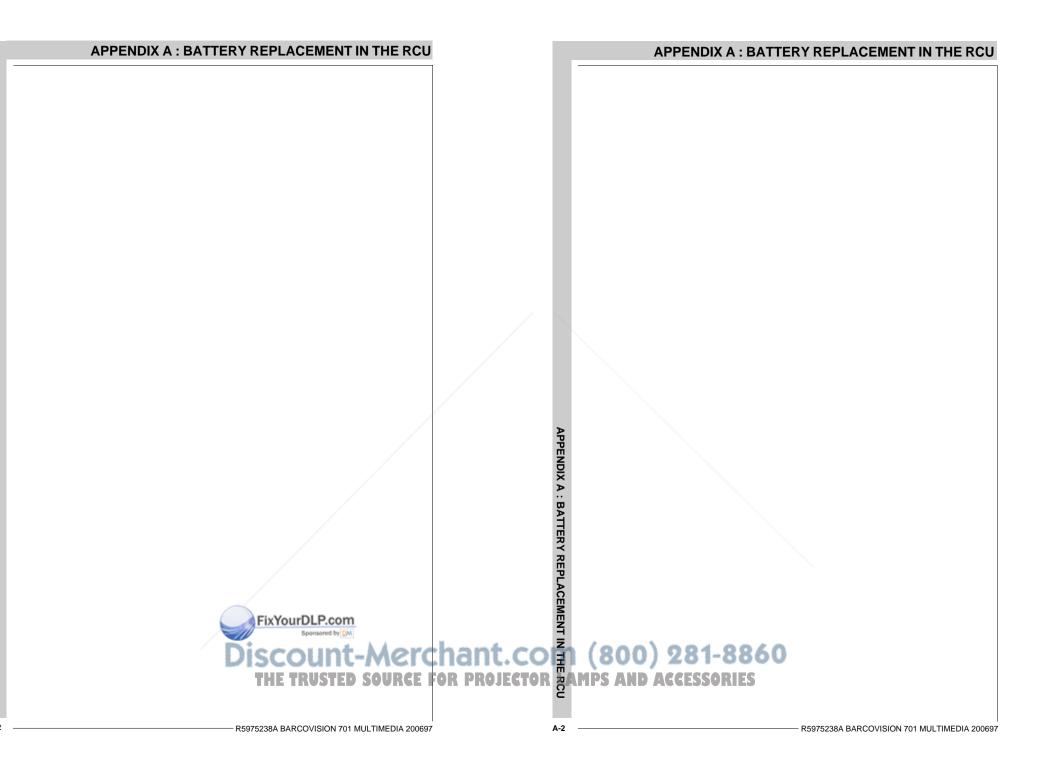


A-1

**APPENDIX A : BATTERY REPLACEMENT IN THE RCU** 

R5975238A BARCOVISION 701 MULTIMEDIA 200697

R5975238A BARCOVISION 701 MULTIMEDIA 200697



### **Orbiting (option)**

Static pictures are very often shown on large screen projectors, especially in process control and presentation applications. Due to the fact that the same picture information is shown for a long period on the same place, picture tubes can be damaged by 'local burn-in'. To avoid this problem, BARCO has designed special Orbiting circuitry which moves the picture very slowly around a predefined screen area. The orbiting circuitry has been designed using a very long cycle time to make the movement of the projected image imperceptible.

### Adjustment procedure :

The orbiting path is automatically added to the Random Access Adjustment mode menu when installed.

Press **ADJUST** to enter the Adjustment mode and select Random. The Random Access Adjustment Mode menu will be displayed. Highlight *ORBITING* with the control disk and press **ENTER**.

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				RANDOM ACCESS ADJUSTMENT MODE												Г			Γ		
						A	JJI	05	IN		NI	IVI	OL	E							Γ
				PICTURE TUNING																	Γ
				GEOMETRY CONVERGENCE COLOR SELECT COLOR BALANCE DOBITING CONTR. MODULATION SOFT EDGE															Γ		
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+	-	-	-	-					-	-	-		-	-	-	-	-	-	-	6	t

ENTER continues to the Master Orbiting menu. EXIT returns to the Operational mode. ADJUST returns to the Operational mode.

FixYourDLP.com

### Orbiting mode toggle switches

The orbiting module is provided with a three pin connector for connection with the BARCO's BCI link option module, used in multiple projector installations. For Orbiting, one projector operates as master whereas the others operate as slave.

### **APPENDIX B : ORBITING**

### **Orbiting (option)**

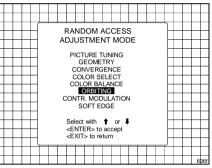
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The Random Access Adjustment Mode menu will be displayed. Highlight *ORBITING* with the control disk and press **ENTER**.

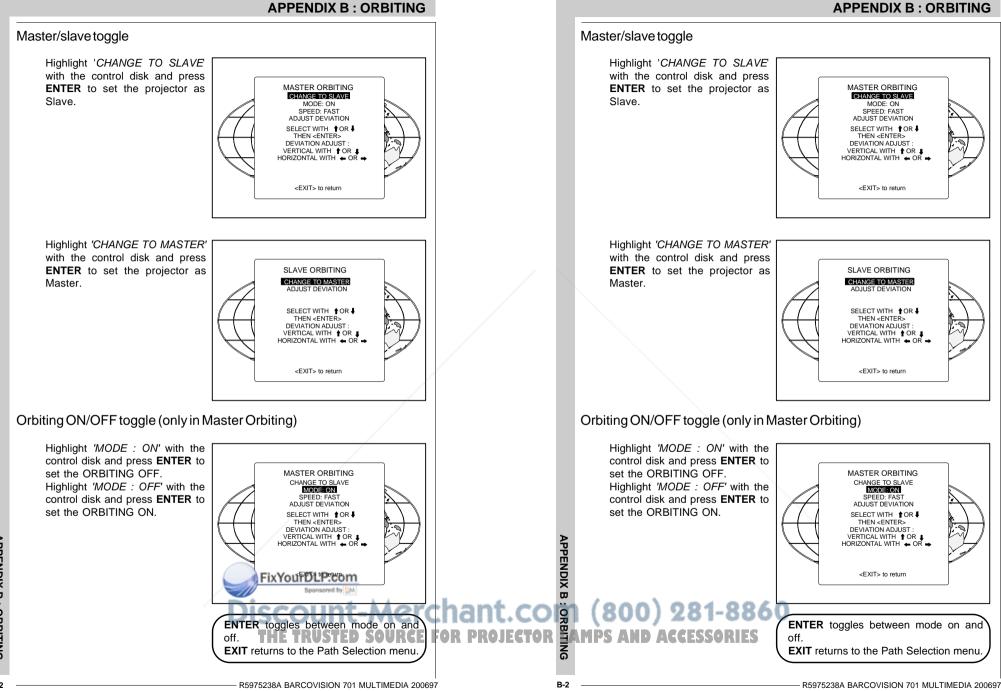


ENTER continues to the Master Orbiting menu. EXIT returns to the Operational mode. ADJUST returns to the Operational mode.

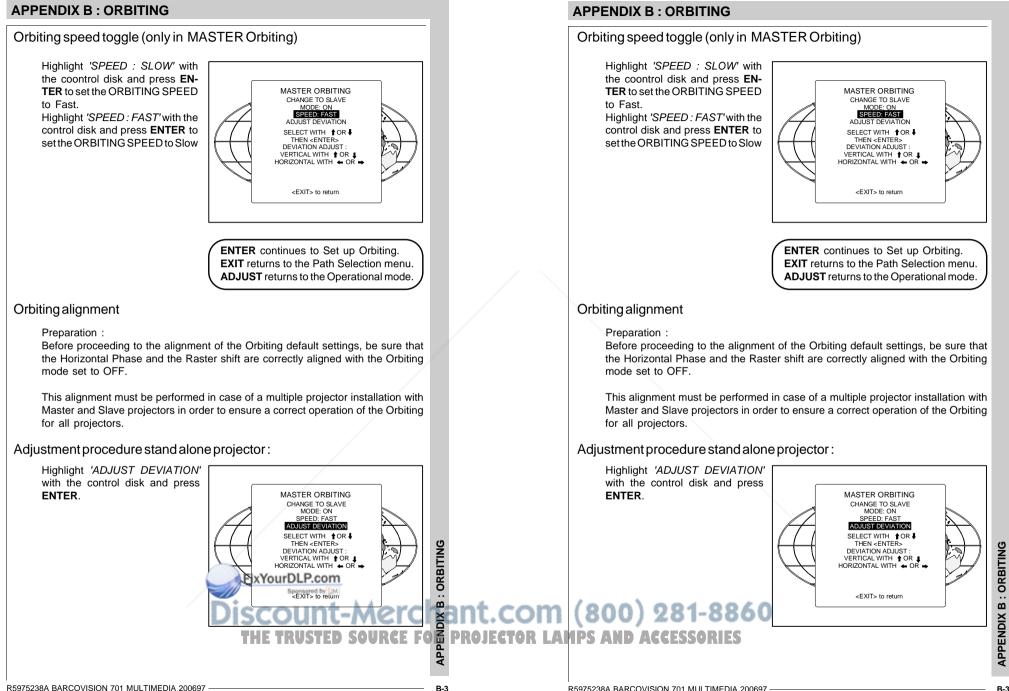
### Orbiting mode toggle switches

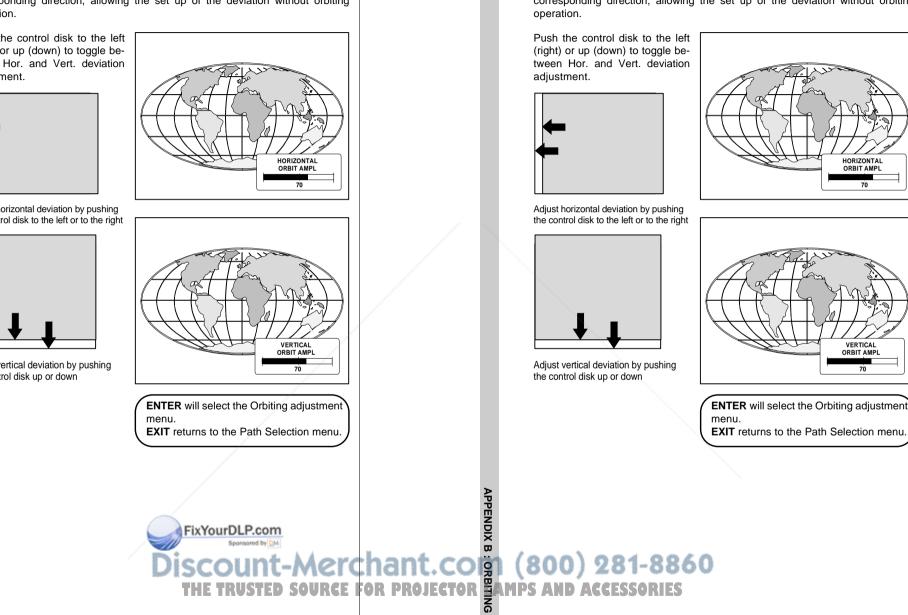
The orbiting module is provided with a three pin connector for connection with the BARCO's BCI link option module, used in multiple projector installations. For Orbiting, one projector operates as master whereas the others operate as slave.

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B-2

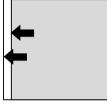




### **APPENDIX B : ORBITING**

When adjusting the horizontal and the vertical deviation, the picture moves in the corresponding direction, allowing the set up of the deviation without orbiting operation.

Push the control disk to the left (right) or up (down) to toggle between Hor. and Vert. deviation adjustment.



Adjust horizontal deviation by pushing the control disk to the left or to the right



Adjust vertical deviation by pushing the control disk up or down

**APPENDIX B : ORBITING** 

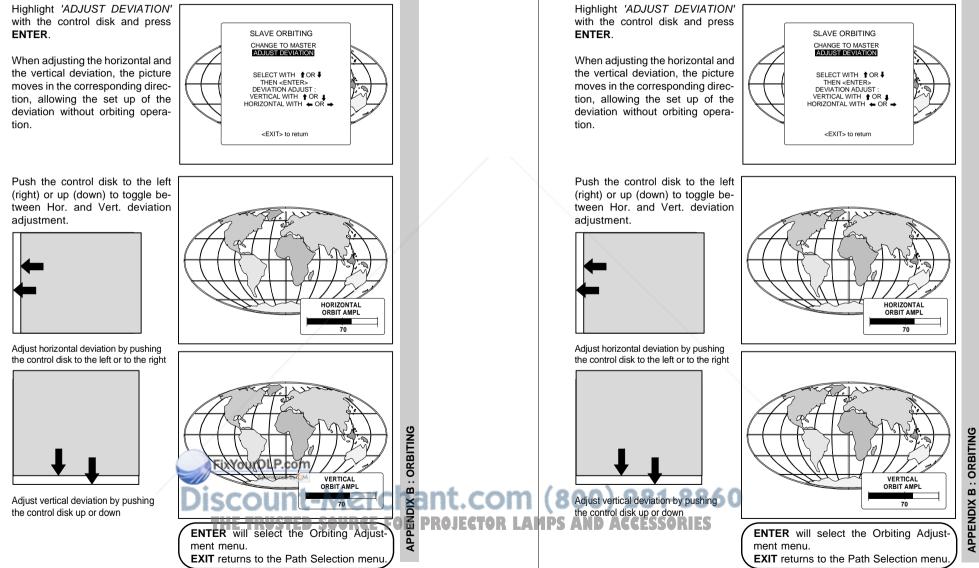
B-4

When adjusting the horizontal and the vertical deviation, the picture moves in the corresponding direction, allowing the set up of the deviation without orbiting



Important : to allow corrections in the deviation alignments of the slave projectors, never adjust the deviations of the master projector to its maximum.

Default setting of the Master projector see 'Stand alone projector'.



B-5

**APPENDIX B : ORBITING** 

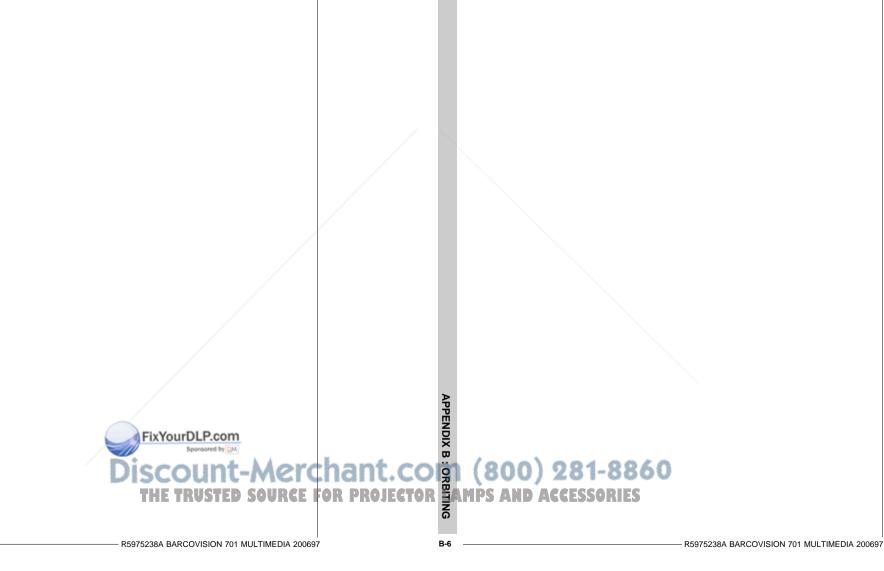
R5975238A BARCOVISION 701 MULTIMEDIA 200697

Adjustment procedure multiple projector installations :

Important : to allow corrections in the deviation alignments of the slave projectors,

never adjust the deviations of the master projector to its maximum.

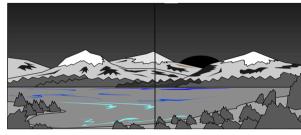
Default setting of the Master projector see 'Stand alone projector'.



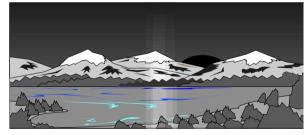
### Soft edge matching (option)

Multi-screens are popular for many applications. In these installations, the goal is to obtain a contiguous matched image, forming one homogenous view. The soft edge matching feature provides a solution to the annoying side effects when adjusting two or more projected images next to each other. To improve this junction, both images must be overlapping within a certain percentage of the total screen width. During the overlapping period, both video signals are modulated by appropriate waveforms so that the resulting light output equals the rest of the image.

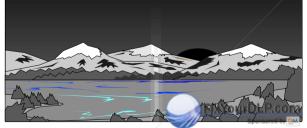
### Picture with hard edging



Picture with overlapping



Picture with soft edging



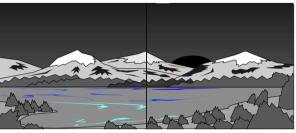
# ENDIX C : SOFT EDGE MATCHING

### **APPENDIX C : SOFT EDGE MATCHING**

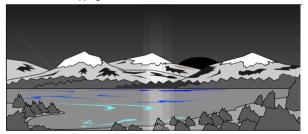
### Soft edge matching (option)

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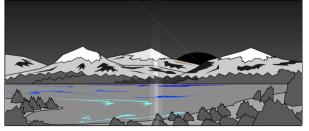
Picture with hard edging



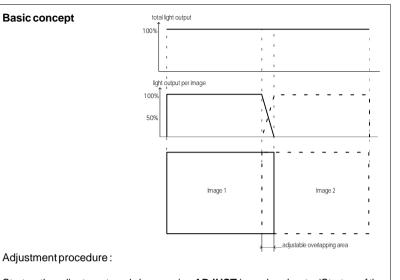
Picture with overlapping



Picture with soft edging



iscount-Merchent.com (800) 281-8860 THE TRUSTED SOURCE FOR PROJECTOR LAMPS AND ACCESSORIES **APPENDIX C: SOFT EDGE MATCHING** 



Start up the adjustment mode by pressing ADJUST (see also chapter 'Start up of the adjustment mode')

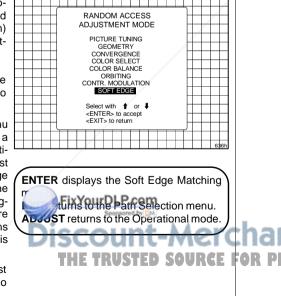
Highlight Random access with the control disk and press ENTER to start up the Random Access Adjustment mode (see also chapter Random Access Adjustment mode). The Random Access Adjustment Mode main menu will be displayed.

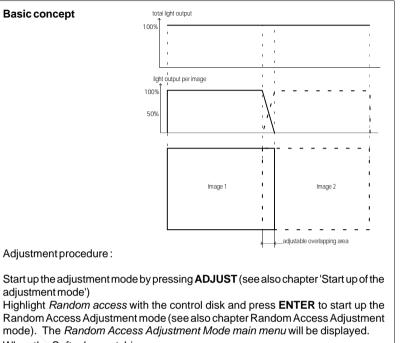
When the Soft edge matching option is installed, the projector automatically detects this option and displays the selection (activation) line in the Random Access Adjustment Mode main menu.

Highlight SOFT EDGE with the control disk and press ENTER to select.

The Soft Edge Correction menu offers the possibility to display a horizontal test pattern and a vertical test pattern. When the test patterns are ON, the 'real' soft edge is disabled, marking lines for the start and stop position of soft edging and the overlapping area are displayed. When the test patterns are OFF, the 'real' soft edge is enabled again.

Note : blanking corrections must be set to display a normal video image.





APPENDIX C : SOFT EDGE MATCHING

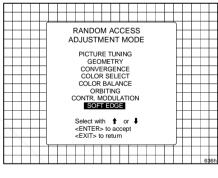
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Note : blanking corrections must

be set to display a normal video



ENTER displays the Soft Edge Matching menu. **EXIT** returns to the Path Selection menu. ADJUST returns to the Operational mode.

C-2

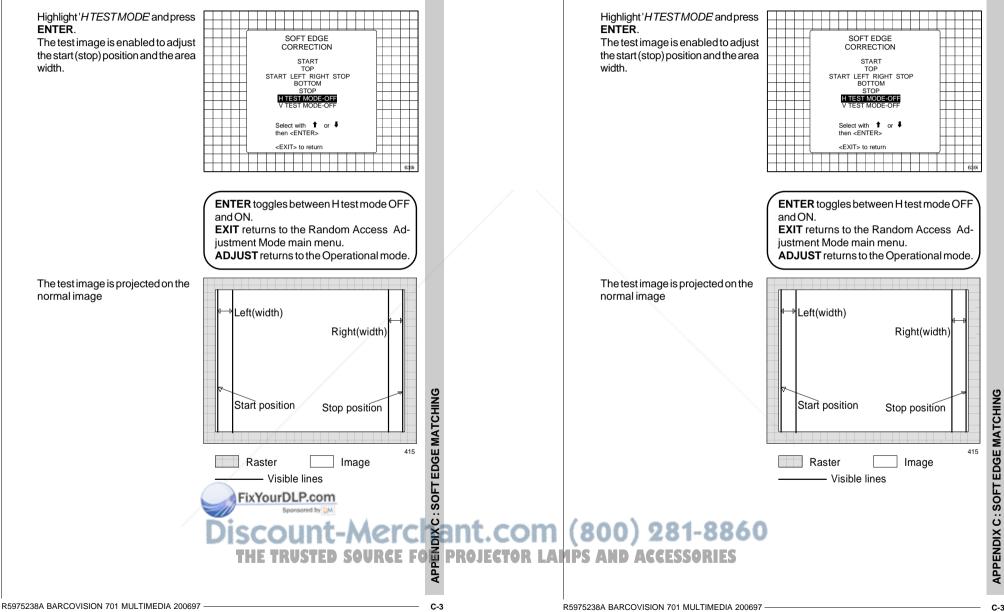
image.

S

**APPENDIX C : SOFT EDGE** 

Each overlap area (left and right) is determined by a start (stop) position and an area width.

The start (stop) position for the top (bottom) overlap area is determined by the blanking adjustment.



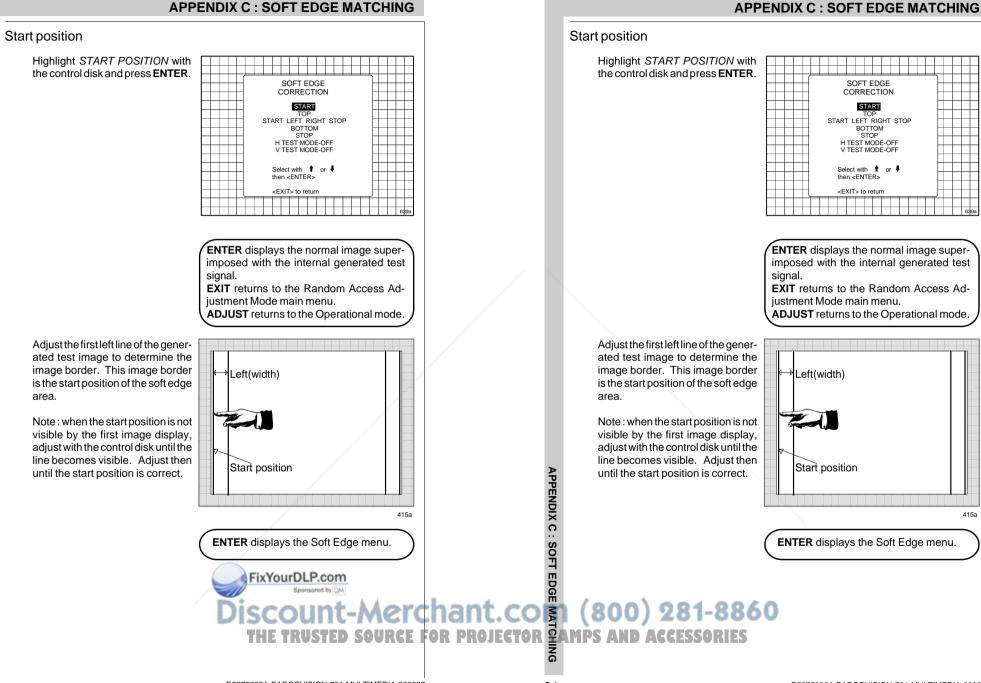
**APPENDIX C : SOFT EDGE MATCHING** 

width.

blanking adjustment.

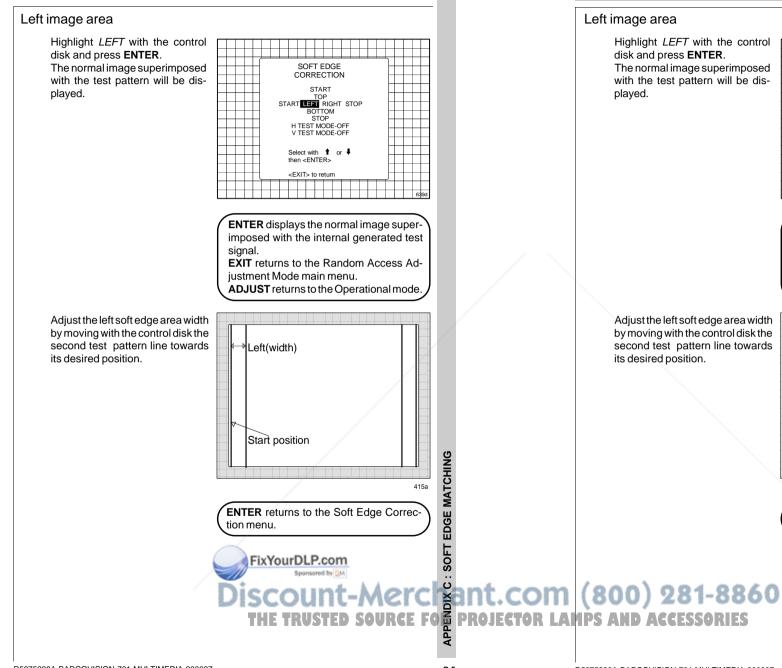
Each overlap area (left and right) is determined by a start (stop) position and an area

The start (stop) position for the top (bottom) overlap area is determined by the



C-4

415a



**APPENDIX C : SOFT EDGE MATCHING** 

SOFT EDGE

CORRECTION

START

TOP START LEFT RIGHT STOP BOTTOM

STOP H TEST MODE-OFF V TEST MODE-OFF

Select with 1 or 4

ENTER displays the normal image super-

imposed with the internal generated test

EXIT returns to the Random Access Ad-

ADJUST returns to the Operational mode.

ENTER returns to the Soft Edge Correc-

iustment Mode main menu.

Left(width)

Start position

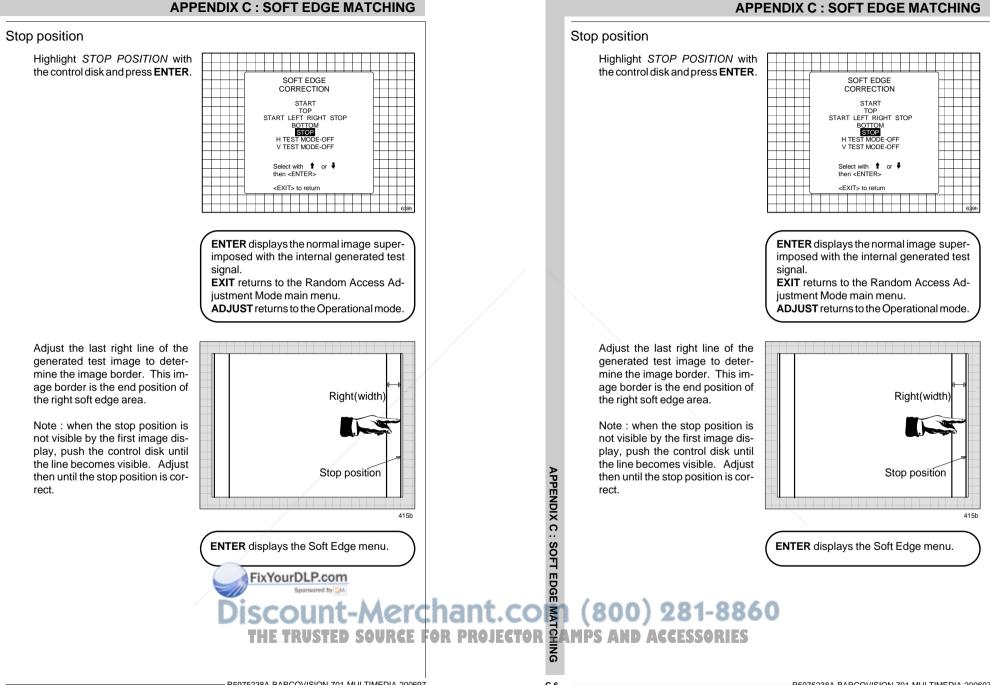
tion menu.

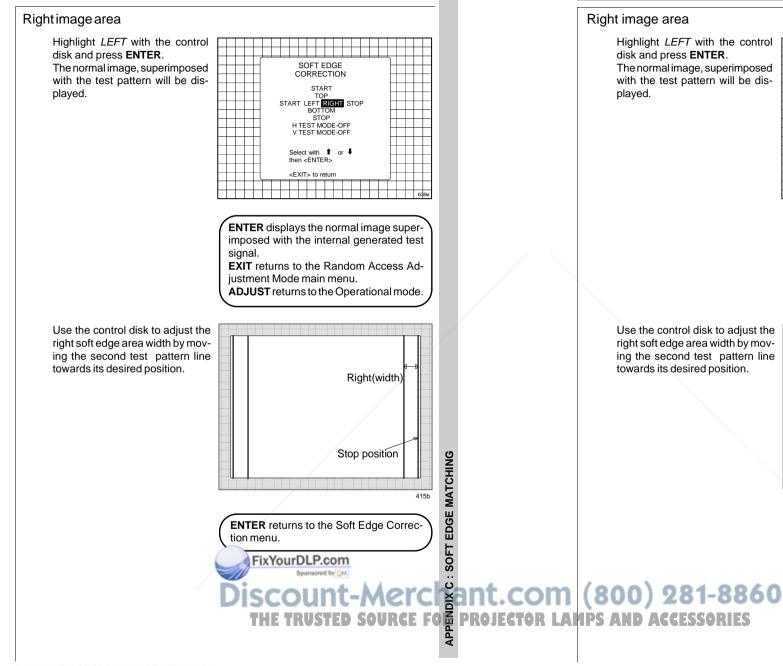
then <ENTER>

<EXIT> to return

signal.

415a





415b

### **APPENDIX C : SOFT EDGE MATCHING**

SOFT EDGE

CORRECTION

START

TOP START LEFT RIGHT STOP

> STOP H TEST MODE-OFF V TEST MODE-OFF

Select with 1 or 4

ENTER displays the normal image super-

imposed with the internal generated test

EXIT returns to the Random Access Ad-

**ADJUST** returns to the Operational mode.

ENTER returns to the Soft Edge Correc-

Right(width

Stop position

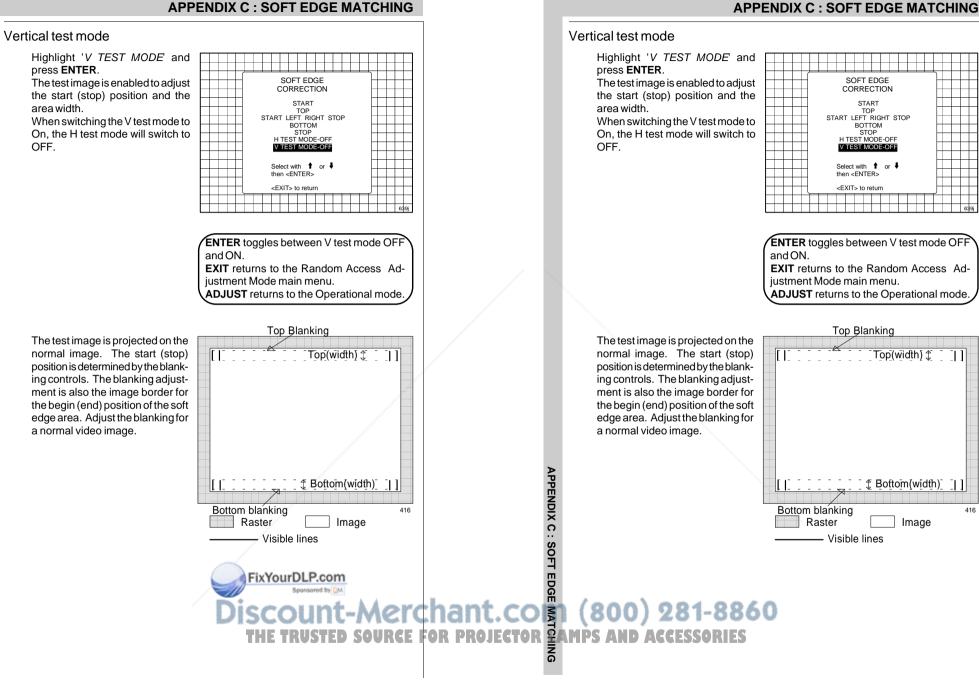
justment Mode main menu.

then <FNTER>

<EXIT> to return

signal.

tion menu.



**APPENDIX C : SOFT EDGE MATCHING** 

C-8

Top(width) 1

Image

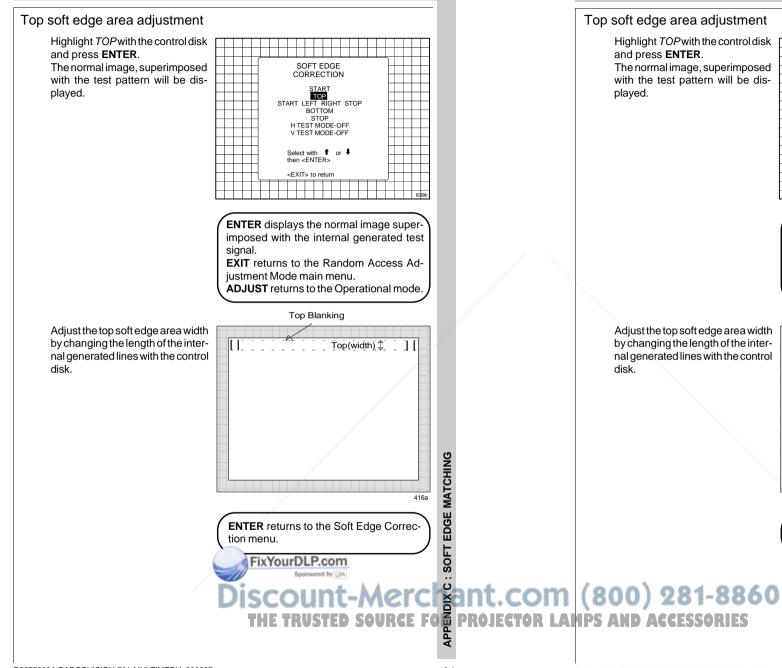
- - 11

416

START

BOTTOM

# **APPENDIX C : SOFT EDGE MATCHING**



**APPENDIX C : SOFT EDGE MATCHING** 

SOFT EDGE

CORRECTION

START TOP START LEFT RIGHT STOP BOTTOM

STOP

H TEST MODE-OFF

V TEST MODE-OFF

Select with 1 or 4

ENTER displays the normal image super-

imposed with the internal generated test

EXIT returns to the Random Access Ad-

ADJUST returns to the Operational mode.

ENTER returns to the Soft Edge Correc-

Top(width) 🗘

1 [

Top Blanking

iustment Mode main menu.

then <ENTER>

<EXIT> to return

signal.

1 1-

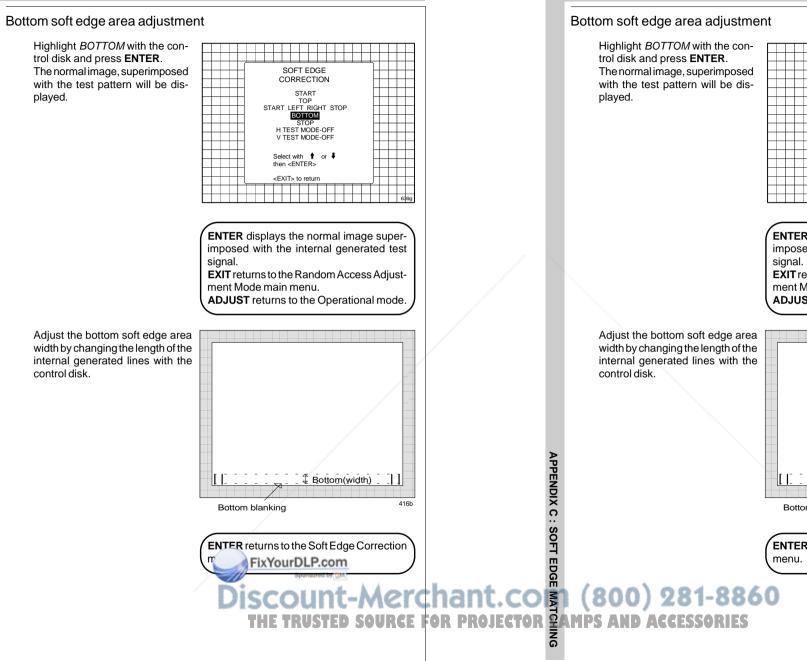
tion menu.

# APPENDIX C : SOFT EDGE

MATCHING

416a

# **APPENDIX C : SOFT EDGE MATCHING**



# **APPENDIX C : SOFT EDGE MATCHING**

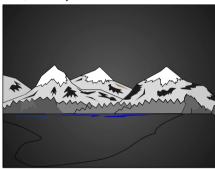
SOFT EDGE CORRECTION START TOP START LEFT RIGHT STOP BOTTOM H TEST MODE-OFF V TEST MODE-OFF Select with 1 or 4 then <FNTFR> <EXIT> to return ENTER displays the normal image superimposed with the internal generated test signal. EXIT returns to the Random Access Adjustment Mode main menu. ADJUST returns to the Operational mode. Bottom(width) 11 416b Bottom blanking **ENTER** returns to the Soft Edge Correction

C-10

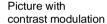
# **Contrast modulation (option)**

Today multi-screens are very popular for many applications e.g. simulation business. In these installations, the goal is to obtain a continuous matched image, forming one homogeneous view. The viewer wants to see an overall light output uniformity.

The laws of physics applied to projection optics dictate that the center of the projected image will be brighter than the corners; this phenomenon is normally referred to as 'corner fall off'. Secondly, due to the normal off-axis projection of the red and blue images, CRT projection displays a phenomenon referred to as 'color shift', whereby one side of the screen is reddish an the other blueish.



Picture without contrast modulation

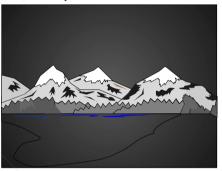


# **APPENDIX D : CONTRAST MODULATION**

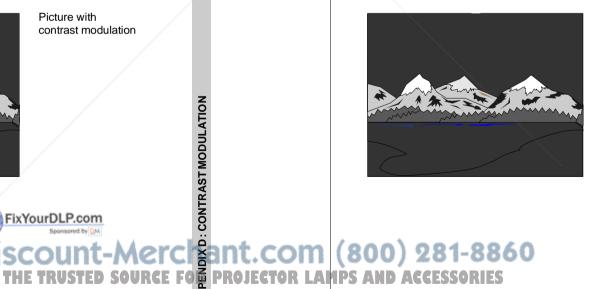
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Picture without contrast modulation

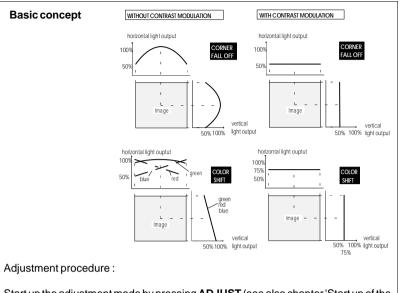


Picture with contrast modulation



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D-1



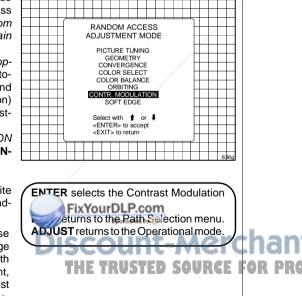
Start up the adjustment mode by pressing ADJUST (see also chapter 'Start up of the adjustment mode')

Highlight Random Access with the control disk and press ENTER to start up the

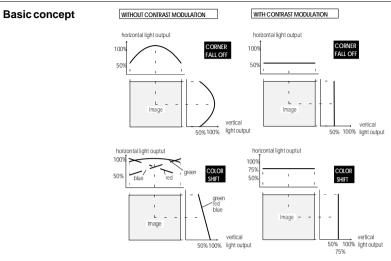
Random Access Adjustment mode (see also chapter Random Access Adjustment mode). The Random Access Adjustment Mode main menu will be displayed. When the Contrast Modulation option is installed, the projector automatically detects this option and displays the selection (activation) line in the Random Access Adjustment Mode main menu. Highlight CONTR. MODULATION with the control disk and press EN-TER to select.

Note : An external generated white image will be useful during the adjustment.

Note: be sure the horizontal phase is correctly adjusted. The image must be centered on the raster with the horizontal phase adjustment, otherwise it is not possible to adjust the contrast modulation correctly.







#### Adjustment procedure :

Start up the adjustment mode by pressing ADJUST (see also chapter 'Start up of the adjustment mode')

Highlight Random Access with the control disk and press ENTER to start up the

menu.

Random Access Adjustment mode (see also chapter Random Access Adjustment mode). The Random Access Adjustment Mode main menu will be displayed. When the Contrast Modulation option is installed, the projector automatically detects this option and displays the selection (activation) line in the Random Access Adjustment Mode main menu. Highlight CONTR. MODULATION with the control disk and press EN-TER to select.

RANDOM ACCESS ADJUSTMENT MODE PICTURE TUNING GEOMETRY CONVERGENCE COLOR SELECT COLOR BALANCE ORBITING CONTR. MODULATION SOFT EDGE Select with ↑ or ↓ <ENTER> to accept <EXIT> to return

**ENTER** selects the Contrast Modulation

**EXIT** returns to the Path Selection menu.

ADJUST returns to the Operational mode.

Note: An external generated white image will be useful during the adiustment.

Note: be sure the horizontal phase is correctly adjusted. The image must be centered on the raster with the horizontal phase adjustment. otherwise it is not possible to adjust

the contrast modulation correctly.



D-2

E/

**APPENDIX D: CONTRAST MODUL.** 

The first 3 adjustments (horizontal red, green and blue) are used for horizontal light equalisation for the three specific colors separately. This compensates the error due to the different horizontal position of the picture tubes. One side of the image is reddish and the other side is blueish. This phenomenon is called *Color shift*.

CONTRAST EQUALISATION RED HORIZONTAL GREEN HORIZONTAL BLUE HORIZONTAL VERTICAL																
CONTRAST EDGE CORRECTION LEFT-RIGHT TOP-BOTTOM																
Select with													F			
-																

The VERTICAL adjustment affects the three colors at the same time and corrects the vertical error in light output due to the projection angle (10.5 degrees).

Left-right (horizontally) and topbottom (vertically) adjustments improve the 'hot spot' in the center of the screen.

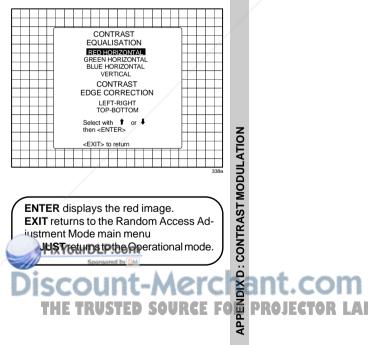
# Contrast equalisation ('Color Shift')

Highlight *RED HORIZONTAL* with the control disk and press **ENTER**. Only a red image is displayed. Use the control disk to equalise the light output on the left and right side of the image. The best result is obtained on a white image by looking on the left and the right side until both or equal, or by using a very sensitive light meter.

**ENTER** returns to the Contrast Modulation menu.

Repeat this adjustment for green and blue by selecting first Green horizontal and then Blue horizontal.

Remark : When the end of adjustment range is reached for red and blue, the green image will be displayed too, to give you the message 'end of adjustment range'. The green image remains active until a new selection is made.



# **APPENDIX D : CONTRAST MODULATION**

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Left-right (horizontally) and topbottom (vertically) adjustments improve the 'hot spot' in the center of the screen.

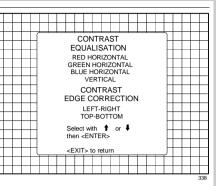
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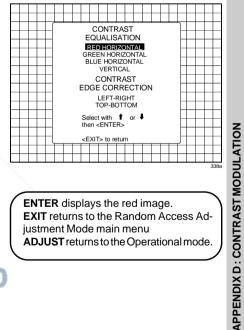
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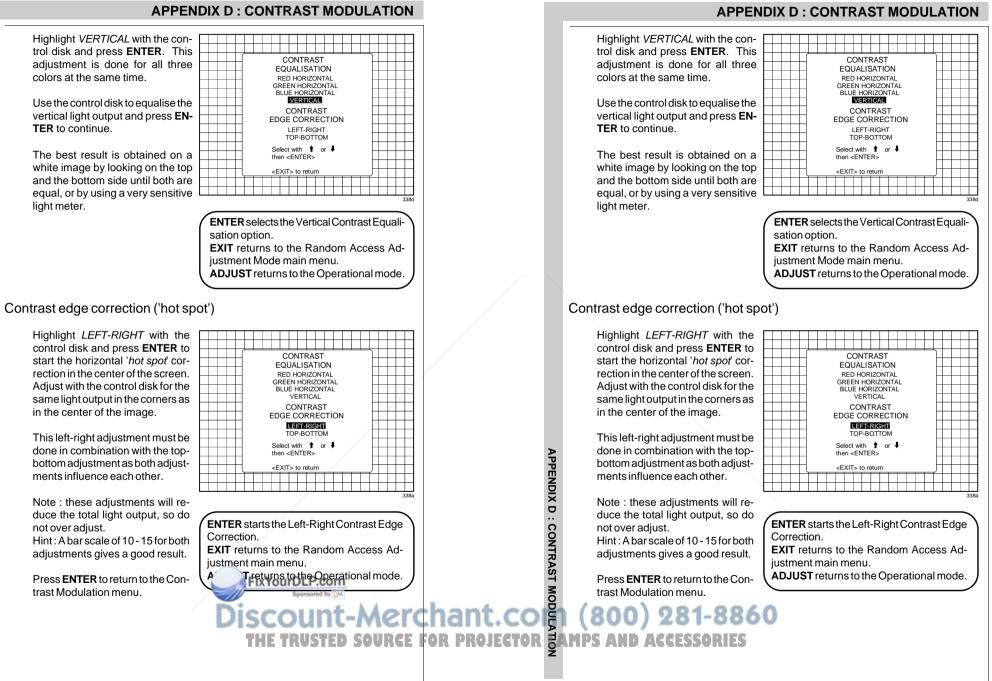
**ENTER** returns to the Contrast Modulation menu.

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Remark : When the end of adjustment range is reached for red and blue, the green image will be displayed too, to give you the message 'end of adjustment range'. The green image remains active until a new selection is made.





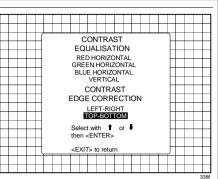


Highlight *TOP-BOTTOM* with the control disk and press **ENTER** to start the vertical '*hot spot*' correction in the center of the screen. Adjust with the control disk for the same light output in the corners as in the center of the image.

This top-bottom adjustment must be done in combination with the left-right adjustments as both adjustments influence each other.

Note : these adjustments will reduce the total light output, so do not over adjust. Hint : A bar scale of 10 - 15 for both adjustments gives a good result.

Press **ENTER** to return to the Contrast Modulation menu.



ENTER starts the Top-Bottom Contrast Edge Correction. EXIT returns to the Random Access Adjustment Mode main menu. ADJUST returns to the Operational mode.

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# **APPENDIX D : CONTRAST MODULATION**

Highlight *TOP-BOTTOM* with the control disk and press **ENTER** to start the vertical '*hot spot*' correction in the center of the screen. Adjust with the control disk for the same light output in the corners as in the center of the image.

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Note : these adjustments will reduce the total light output, so do not over adjust. Hint : A bar scale of 10 - 15 for both adjustments gives a good result. CONTRAST EQUALISATION RED HORIZONTAL GREEN HORIZONTAL BLUE HORIZONTAL VERTICAL CONTRAST EDGE CORRECTION LEFT-RIGHT COPSTOCM Select with 1 or 1 then <ENTERs <EXIT> to return

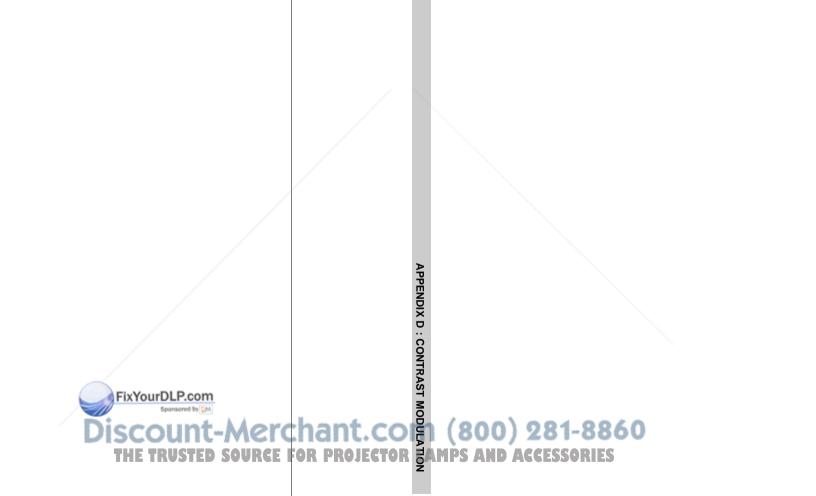
ENTER starts the Top-Bottom Contrast Edge Correction. EXIT returns to the Random Access Adjustment Mode main menu. ADJUST returns to the Operational mode.

Press **ENTER** to return to the Contrast Modulation menu.

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MODULATION

# APPENDIX D : CONTRAST MODULATION



**APPENDIX D : CONTRAST MODULATION** 

# **APPENDIX E : ADJUSTMENT BLOCKS**

# Adjustment Blocks (memory blocks)

As the BARCOVISION 701 MULTIMEDIA is digitally controlled, all geometry and convergence adjustments are stored in the projector's memory as numeric values. These numeric values are used to control digital potentiometers which in turn, control the projector. Each source connected to the projector has a unique set of adjustment data which is automatically downloaded into the projector's digital potentiometers as the source is selected. This set of adjustment data is referred to as an "adjustment block".

An adjustment table is automatically created for a source when the source is first connected to the projector and the adjust mode is entered. If other sources have already been connected to the projector and geometry and convergence adjustments have been performed on these sources, the projector will use Linear Digital Interpolation to create a new block for the new source. This block will provide an initial set of adjustments for the new source that have been calculated by the projector from "previous experience".

The projector's memory has the capacity to store 32 adjustment blocks. The adjustment block consists of two parts, the block header and the data representing the convergence and geometry adjustments of the source the block corresponds to. The block header contains the basic characteristics of the source and the projector configuration used to display the source.

Block Header	example of block header		
Block number	01		
Source number	01		
Horizontal frequency	15.6 kHz		
Vertical frequency	50 Hz		
Input type	video	S	
Scan inversion switch configuration	front/ceiling	BLOCKS	
The data representing the geometry and conv follows the block header.	ADJUSTMENT B		
The 32 adjustment blocks A. Projector without any peripheral co 800 port' Connect a new source to the projector. Due to	DIX E :	ANT.COM PROJECTOR LAN	
		APPEN	

# **APPENDIX E : ADJUSTMENT BLOCKS**

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Block Header	example of block header
Block number	01
Sourcenumber	01
Horizontal frequency	15.6 kHz
Vertical frequency	50 Hz
Inputtype	video
Scan inversion switch configuration	front/ceiling

The data representing the geometry and convergence adjustments for the source follows the block header.

The 32 adjustment blocks are in use. What to do? A. Projector without any peripheral connected to the 'peripheral 800 port'

Connect a new source to the projector. Due to the fact that there are no adjustment

APPENDIX E : ADJUSTMENT BLOCKS

# **APPENDIX E : ADJUSTMENT BLOCKS**

blocks available, the projector displays a warning.

Press **ENTER** to continue and start up the adjustment mode to delete a block.

It will be necessary to delete an existing block to create adjustment space for the new source.

WARNING All memory blocks are used. Please, go to the service mode, delete a block and reselect the source or return to an existing source. ATTENTION	
All memory blocks are used. Please, go to the service mode, delete a block and reselect the source or return to an existing source.	
All memory blocks are used. Please, go to the service mode, delete a block and reselect the source or return to an existing source.	
used.         Please, go to the           service mode, delete a         block and reselect the source           or return to an         existing source.	
used.         Please, go to the           service mode, delete a         block and reselect the source           or return to an         existing source.	
service mode, delete a block and reselect the source or return to an existing source.	
block and reselect the source or return to an existing source.	-
or return to an existing source.	-
existing source.	-
	-
Any adjustment will	
corrupt he latest used	
block.	
	_
<enter> to continue</enter>	

When **ENTER** is pressed, the warning disappears. Press **ADJUST** to start up the 'adjustment mode' and select 'Service' with the arrow keys. Follow the procedure as described in 'Deletion of blocks'.

Reselect the new source with the numeric keys on the RCU or the local keypad even when the new source is already displayed on the screen.

By reselecting this new source, you force the projector to write the source header in the free space created by the previous deletion action. The new source can now be adjusted, the settings will be stored for future use.

#### Attention :

When the warning is displayed by pressing ENTER, you will see the normal image. Do not forget to start the 'deletion of a block' procedure, otherwise the image settings of the last selected source will be overwritten with the new adjustments.

B. projector equipped with RCVDS or VS05.

When a new source is connected :

a) the projector looks for the most corresponding adjustment block. If such a block is present, the settings will be used to display the connected source.

b) the projector does not find a matching block. The warning is displayed. Follow the procedure as in A.

# **APPENDIX E : ADJUSTMENT BLOCKS**

blocks available, the projector d plays a warning.

Press ENTER to continue and st up the adjustment mode to delete block.

It will be necessary to delete existing block to create adjustme space for the new source.

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эа				Please, go to the service mode, delete a block and reselect the source																
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				or return to an existing source.														Г		
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				Any adjustment will corrupt he latest used block. <enter> to continue</enter>																
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When **ENTER** is pressed, the warning disappears. Press **ADJUST** to start up the 'adjustment mode' and select 'Service' with the arrow keys. Follow the procedure as described in 'Deletion of blocks'.

Reselect the new source with the numeric keys on the RCU or the local keypad even when the new source is already displayed on the screen.

By reselecting this new source, you force the projector to write the source header in the free space created by the previous deletion action. The new source can now be adjusted, the settings will be stored for future use.

#### Attention :

When the warning is displayed by pressing **ENTER**, you will see the normal image. Do not forget to start the 'deletion of a block' procedure, otherwise the image settings of the last selected source will be overwritten with the new adjustments.

### B. projector equipped with RCVDS or VS05.

When a new source is connected :

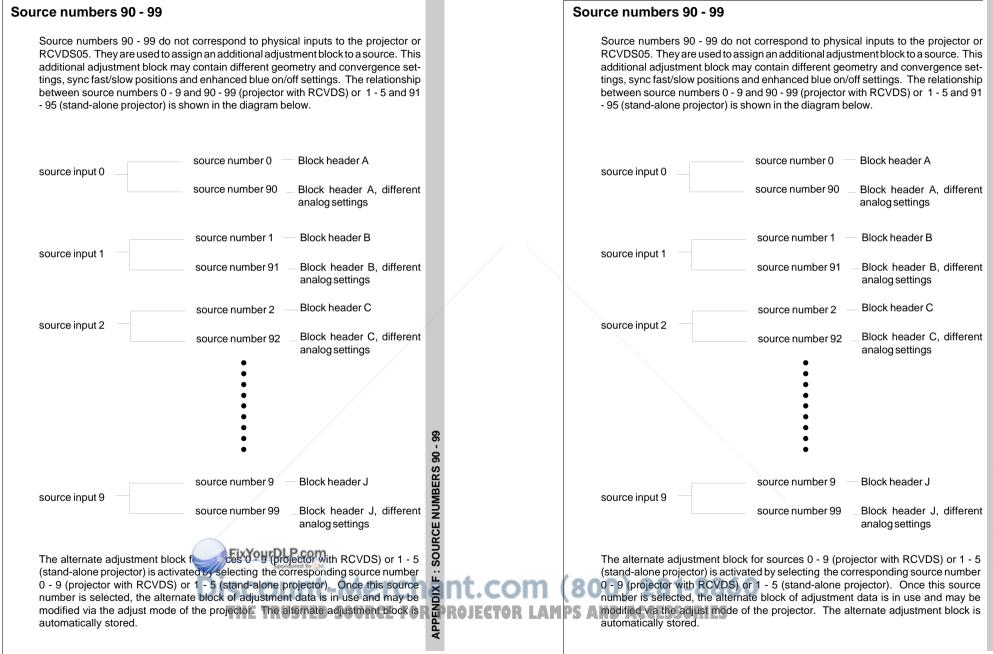
a) the projector looks for the most corresponding adjustment block. If such a block is present, the settings will be used to display the connected source.

b) the projector does not find a matching block. The warning is displayed. Follow

A the projector looks for the most co block is present, the settings will be u b) the projector does not find a matchin the procedure as in A. Š

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# **APPENDIX F : SOURCE NUMBERS 90 - 99**



**APPENDIX F: SOURCE NUMBERS 90 - 99** 

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# **APPENDIX F : SOURCE NUMBERS 90 - 99**

Follow the steps below to create a second adjustment block for a source between 0 and 9.

- 1. Select the source between 0 and 9 that the second adjustment block is to be created for.
- 2. Select the corresponding source number between 90 and 99. The adjustment block for the source number between 0 and 9 is copied to the corresponding source number between 90 and 99.
- 3. Enter the adjust mode and make any desired changes (geometry, convergence, sync fast/slow, enhanced blue on/off) to the second adjustment block.
- 4. Exit the adjust mode.

Note : the above also applies to source number 1 - 5 and 91 - 95 of a stand alone projector (no RCVDS).

# **APPENDIX F: SOURCE NUMBERS 90 - 99**

Follow the steps below to create a second adjustment block for a source between 0 and 9.

- 1. Select the source between 0 and 9 that the second adjustment block is to be created for.
- 2. Select the corresponding source number between 90 and 99. The adjustment block for the source number between 0 and 9 is copied to the corresponding source number between 90 and 99.
- 3. Enter the adjust mode and make any desired changes (geometry, convergence, sync fast/slow, enhanced blue on/off) to the second adjustment block.

4. Exit the adjust mode.

Note : the above also applies to source number 1 - 5 and 91 - 95 of a stand alone projector (no RCVDS).

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FOR PROJECTOR LAMPS AND ACCESSORIES





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