BARCO DATA 3300DLC

R9001459

INSTALLATION MANUAL

BARCO

BARCO PROJECTION SYSTEMS

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INSTALLATION MANUAL

Date :
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Art. No. :
R5975129A

Federal communication commission (FCC statement)

This equipment has been tested and found to comply with the limits for a class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This 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 in which case the user will be required to correct the interference at his own expense.

Instructions to the user :

if this equipment does cause interference to radio or television reception, the user may try to correct the interference by one or more of the following measures :

- Re-orientation of the receiving antenna for the radio or television.
- Relocate the equipment with respect to the receiver.
- Plug the equipment into a different outlet so that the equipment and receiver are on different branch circuits.
- Fasten cables connectors to the equipment by mounting screws.

Note :
The use of shielded cables is required to comply within the limits of Part15 of FCC rules and EN55022.

Due to constant research, the information in this manual is subject to change without notice.

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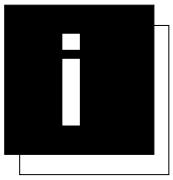

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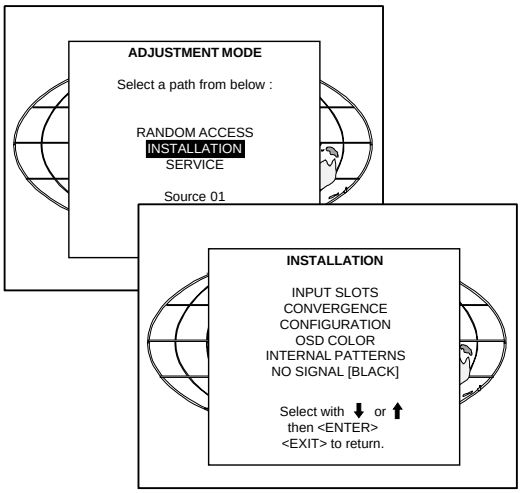
1 INSTALLATION MODE

Starting up the Installation Mode

Push the control disc up or down to highlight Installation and then press **ENTER**.

ENTER continues to the Installation mode selection menu.
EXIT returns to operational mode.



The following item can be selected in the Installation mode :

Input slots : to set up the input for a specific source. See 'Connections' for the different source types.
Convergence : to adjust the convergence of the LCD panels. For more information contact an authorised BARCO service technician.
Configuration : to set up the projector position.
OSD color : to change the color of the highlighted item.
Internal Patterns :
- outline
- color bars
- multiburst
- checker board
- purity
- Page Char
- Alpha-numeric Char
- gray bars

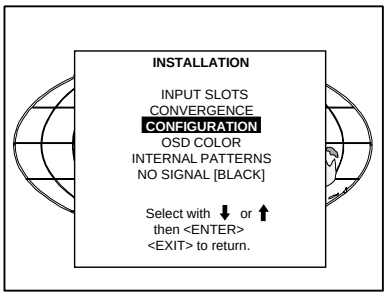
No signal : to display a black or blue screen when no source is connected to the projector.

Only the items used during the physical installation will be explained hereafter. The other items are explained in the owners manual.

Configuration

Highlight "Configuration" by pushing the control disc up or down and press **ENTER** to select.

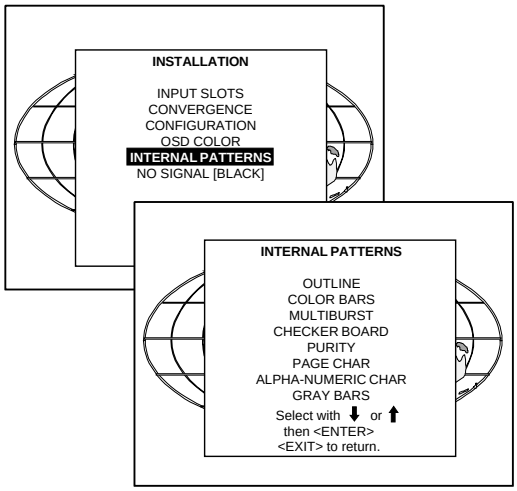
For more information, see Projector configuration in chapter Installation Set Up.



Internal Patterns

The projector is equipped with different internal patterns which can be used for measurment purposes.
Highlight "Internal Patterns" by pushing the control disc up or down and press **ENTER** to display the Internal Pattern selection menu.
The following test pattern are available :
- Outline
- Color Bars
- Multiburst
- Checker Board
- Purity
- Page Char
- Alpha-numeric Char
- Gray bars

Each pattern (except Purity) can be inverted by pressing **ENTER**.
To return to the normal pattern, press **EXIT**.



Convergence adjustment of the LCD panels.

Every LCD panel has 6 adjustment screws. By turning these screws you change the relative position of the panels and converge the image.
Always start with the adjustment of the green panel. When the green image is correctly focused, it will later on be used as the reference image to converge the red and blue image.

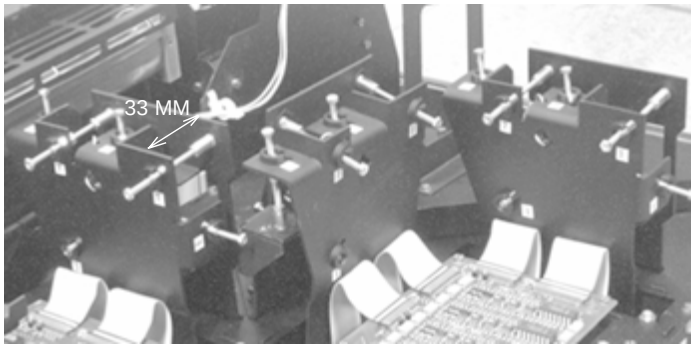
Next alignments have to be done :

You have to adjust the green panel until the indicated lines on the screen are focused (sharp lines). Continue with the blue panel and adjust until the blue lines coincide with the green lines. Than continue with the red panel until the red lines coincide with the green lines.

Follow the next procedure to adjust the LCD panels.

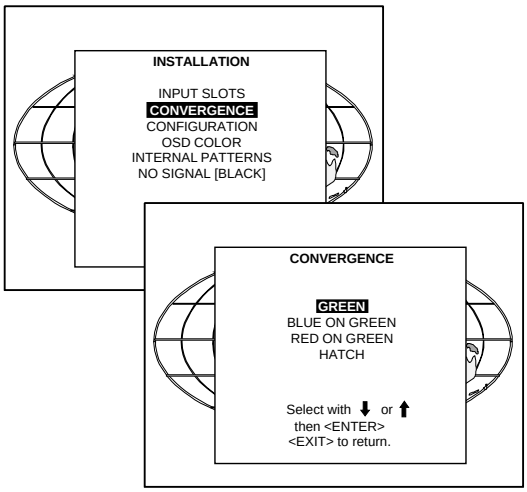
* Open the top cover as described in *Gaining access to the DIP switches* under *Connecting to a computer* in chapter *Connections*.

The three mounting parts for the LCD's (two are shown on the drawing below) are located on the black metal cover. The screws are indicated from 1 to 6 for each color.

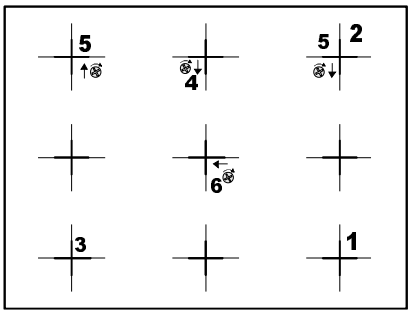


To adjust the convergence, there are test patterns provided in the service menu.

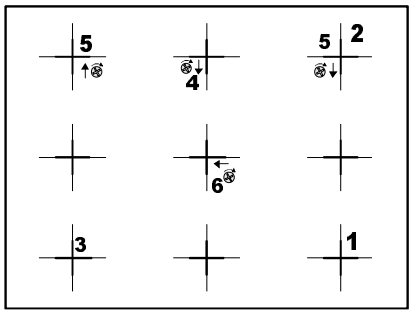
Push the control stick forward or backward to hightlight *Convergence* and press **ENTER** to display the *Convergence* menu.
Start with the Green test pattern and continue with the Blue on green and finish with the Red on green.



The pattern shows lines of one pixel.
Near six lines on the displayed pattern, a screw is drawn with a number next to it (e.g. if displayed in green = corresponding with the screws and numbers on the green LCD panel).
When turning a screw in the direction marked by the arrow above the displayed screw on the screen, the line on the screen moves in the direction of the straight arrow.



Green focusing



a. Insure all convergence screws are adjusted to a length of about 33 mm (1.3") between the two plates.

b. Adjust the projection lens until optimal focus for point 1 is obtained.

c. Turn screw 2 for optimal focus of the corresponding green line 2 on the screen.

d. This alignment influences the other, so repeat if necessary steps b. and c. until points 1 and 2 are focused.

e. Turn screw 3 for optimal focus of the corresponding green line 3 on the screen.

f. Repeat if necessary the steps b. to e. until the complet screen is focused.

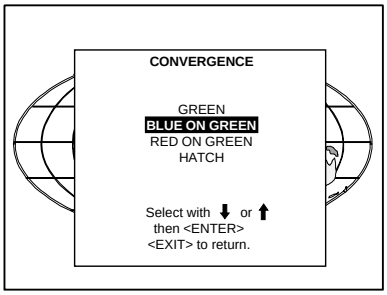
g. Secure the projection lens by turning the fastener ring clockwise.

Green position

a. If necessary turn screw 5 until the two horizontal lines 5 on the screen are on one horizontal line.

When the green pattern is correctly focused, press **EXIT** to return to the *Test pattern* menu.

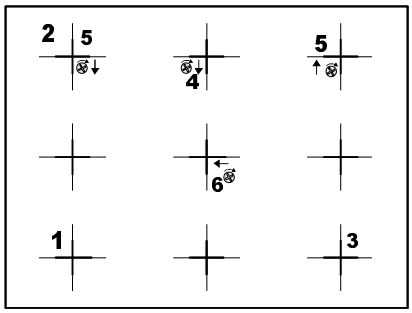
Blue on green convergence.



Push the control disc up or down to hightlight *Blue on green* and press **ENTER** to display the Blue on green test pattern.
The longest lines are the blue lines. These lines must be converged with the green lines.
The drawn screws and numbers are displayed in blue.

Follow next steps :

Blue focusing



a. Insure all convergence screws are adjusted to a length of about 33 mm (1.3") between the two plates.

b. Turn screw 1 for optimal focus of the corresponding point 1 on the screen.

c. Turn screw 2 for optimal focus of the corresponding point 2 on the screen.

d. Due to interaction, it may be necessary to repeat step b. and c. until point 1 and 2 are focused.

e. Turn screw 3 for optimal focus of the corresponding point 3 on the screen.

f. Due to interaction, it may be necessary to repeat steps b. to d. until point 1, 2 and 3 are correctly focused.

Blue position

g. Turn screw 4 until the red horizontal line coincide with the green horizontal line in point 4 on the screen.

h. Turn screw 5 until both horizontal lines marked with 5 are on one horizontal line.

i. Repeat step g. and h. until the horizontal lines are converged.

j. Adjust screw 6 for optimal convergence of the vertical lines.

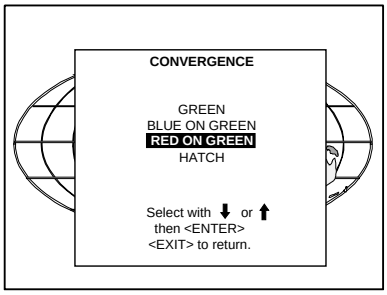
k. Repeat step i. and j. until a optimal convergence in horizontal and vertical direction is obtained.

I. Due to interaction, turning on screw 4, 5 and 6 can influence the focus of the image. If necessary, repeat procedure from step b. .

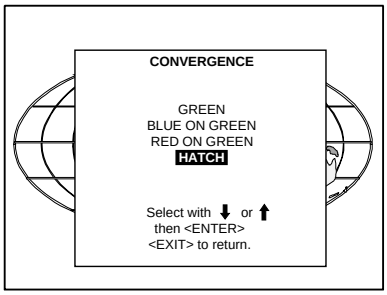
Red on green convergence.

Push the control disc up or down to highlight *Red on green* and press **ENTER** to display the Red on green test pattern.

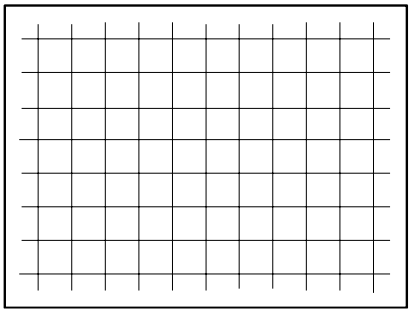
Repeat the same procedure as for Blue on green lines but read red when blue is indicated.



To check the result of the convergence adjustments, highlight *Hatch* and press **ENTER**. A hatch pattern will be displayed on the screen.
ENTER : displays a hatch pattern.
EXIT : returns to the service menu.

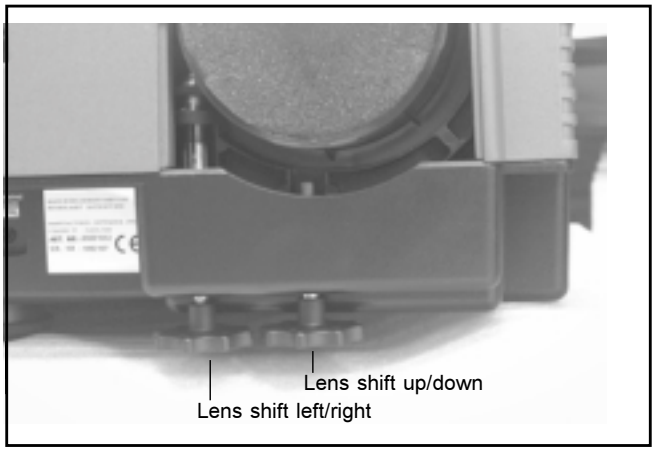


All lines must be displayed in white, if not so repeat the convergence adjustment procedure.

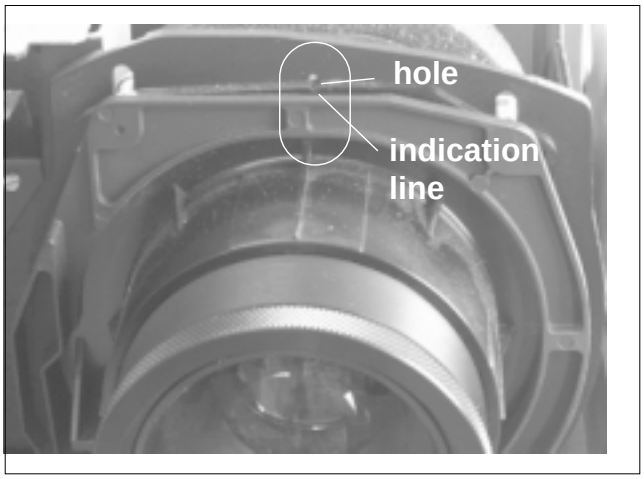


How to use the built-in adjustable lensholder.

With the lensholder, it is possible to shift the displayed image up or down on the screen without moving the projector from its normal positioin and without any geometric picture distortion. This built-in feature is particularly useful for use in dual projector configurations or for applications when the projector cannot be installed in its standard position.
Features :
- Vertical and horizontal shift of the lens without removing the top cover,
  5 mm left and 5 mm right
  15 mm up and 15 mm down.
- Makes it possible to project a geometric non-distored image from a non-standard position.
- The shift of the lensholder is not determined by the lens but depends on the screen width.
- Can be used with all available lenses.

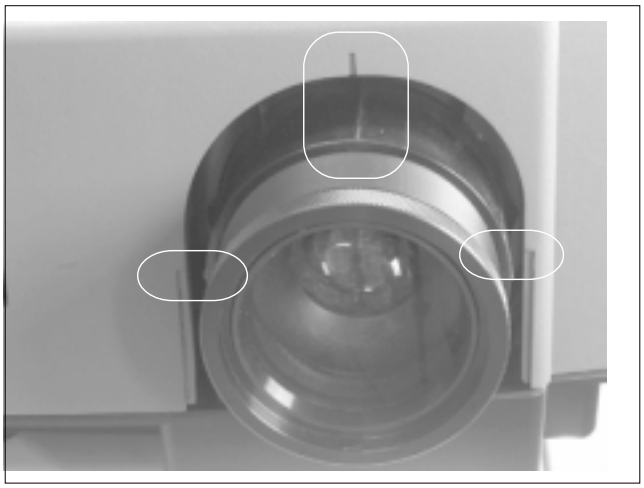


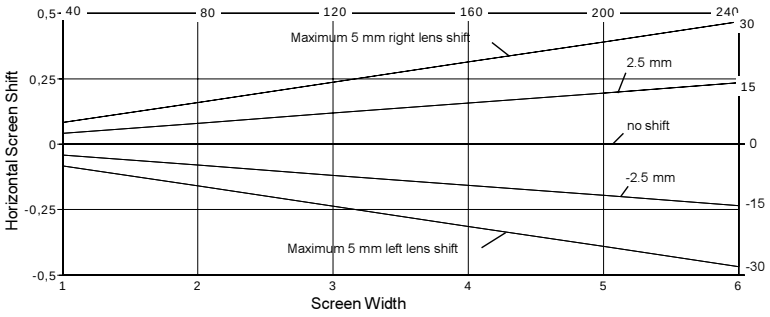
How to shift the image :
- First shift the image left or right until the correct horizontal position



is obtained. Turn clockwise to shift the image to the right, turn counter clockwise to shift to the left. Use the hand screw.
- Shift the image up or down until the correct vertical position of the image is obtained. Turn clockwise to shift the image up, turn counter clockwise to shift down. Use the hand screw.

Midposition of the adjustable lensholder.
-If the top cover is opened, the lensholder indication line has to match with the center of the hole in the plate behind the lensholder.
- If the top cover is closed, the 3 indication lines on the lensholder has to match with indication on the top cover.





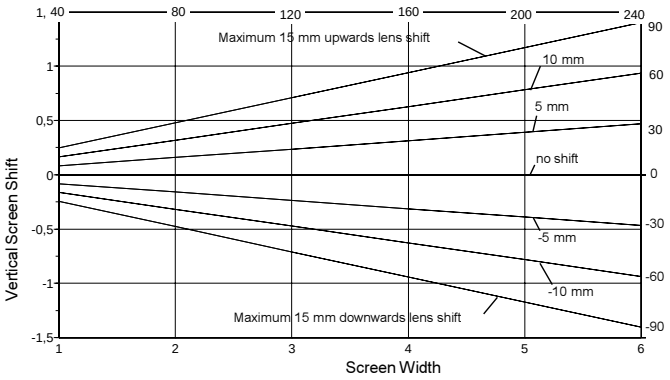
Horizontal shift is function of the Screen Width for various lens shifts.

Vertical shift is function of the Screen Width for various lens shifts.

Both the vertical and horizontal shift of the displayed picture can be calculated as follows :

Screen shift = lens shift x 1 + (Screen width / LCD panel width)

LCD panel width for 3200 series : 0,06480 m (2.551 inch)



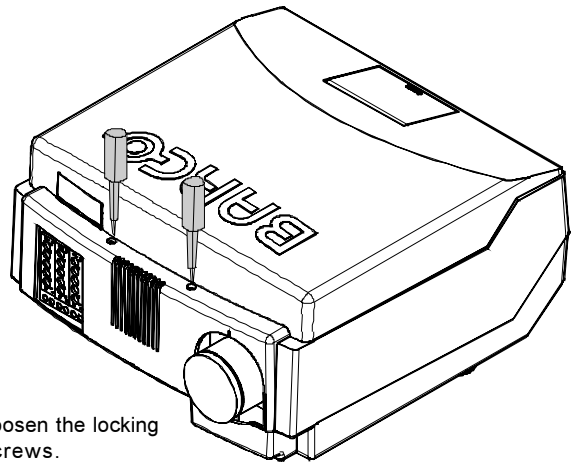
2 HARDWARE SET UP

How to activate the password function?

The password function can be hardware set with a DIP switch on the CPU module. To change the position of this DIP switch, it is necessary to open first the top cover.

Gaining access to the DIP switch

Power down the projector and unplug the power cord from the wall outlet.
Turn both lock screws with a screwdriver or coin counter clockwise.
Lift up and pivot the top cover. Attention : the cover is not secured with an incorporated support. When opening, turn it over slowly.
The processor module with the DIP switches is located on the front side.



Loosen the locking screws.

Open the top cover

When DIP switch 1 is in the :
- ON position, password is activated.

-OFF position, password not activated, service mode is free accessible.