



BARCO DP-2000 DLP Projector Installation Guide

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Electrical Setup

Electrical Safety

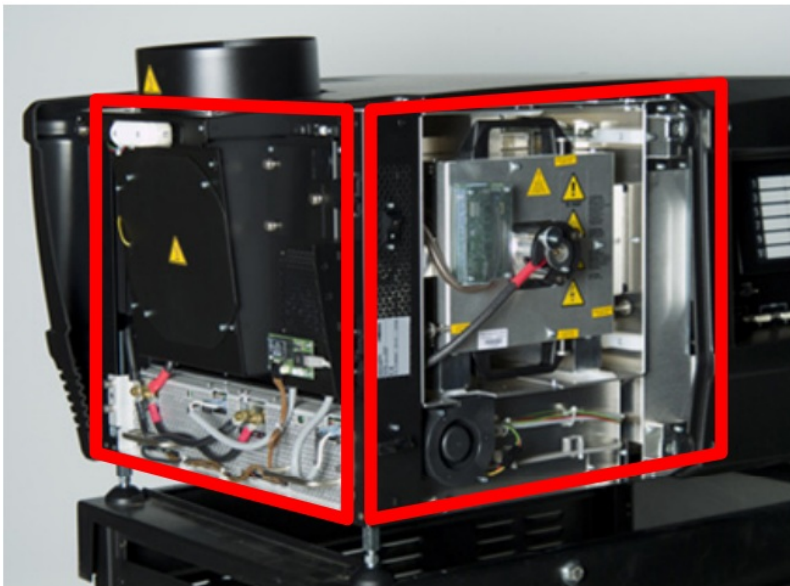
- Projector requires adequate grounding
- Equipment must be installed by qualified electrician
- Equipment must be installed to local electrical codes
- Ensure proper electrical connection prior to boot up

Electrical Requirements

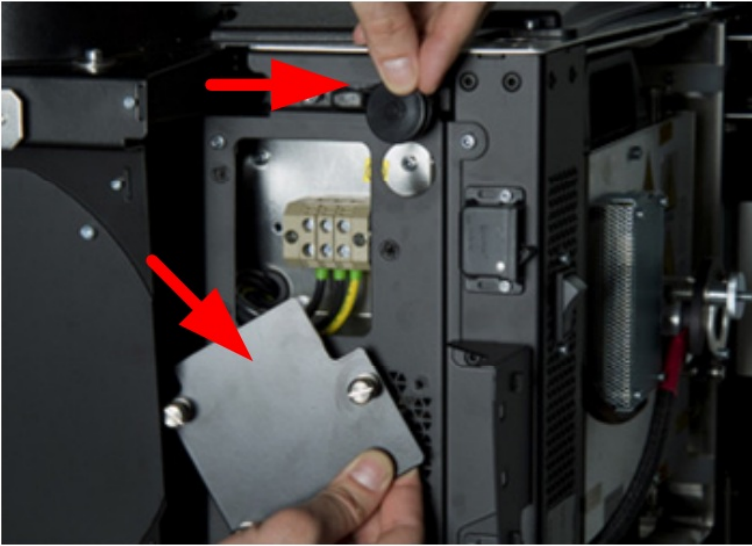


- **Wire type:** 10 AWG / 4mm² 300V
- **Power:** Mono phase electrical
- **Voltage:** 200 – 240 VAC
- **Frequency:** 50/60 Hz
- **Current Rating:** 26 Amps
- **Breaker:** 30 Amp breaker required

Procedure



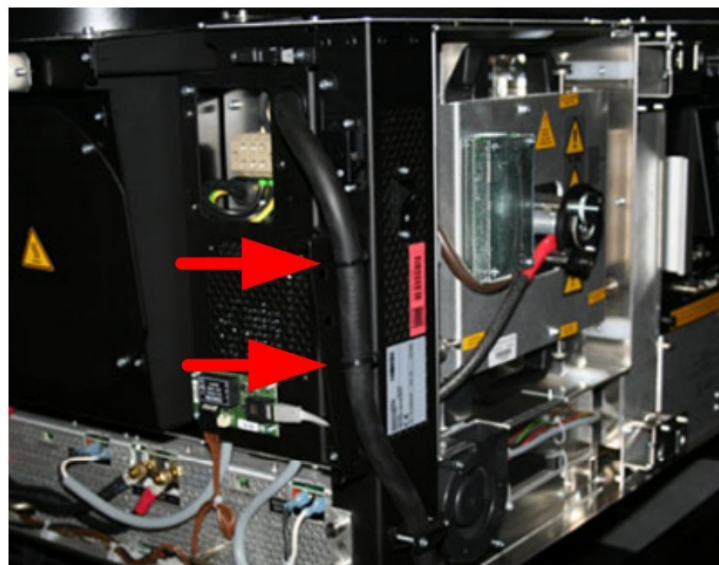
1. Remove projector side and back panels.



2. Remove the main AC compartment cover and the wire hole cover.
3. Cut a hole in the wire hole cover, large enough to fit the AC cable
4. Run the AC cable through the hole cover, then carefully thread the cable into the AC compartment.



5. Terminate cables to AC terminal block.
Remember that the green cable = ground.



6. Check connections for proper termination.
7. Route the power cable down, then secure cable to projector using the clamp. Use supplied screws and zip ties (if needed).

8. Re-install the main AC compartment cover, side panels and back panel. 8
9. Connect the power cable to the AC outlet.

Touch panel Installation

Notes

- The Touchpanel can be installed on a swivel arm that is provided with the unit.
- At the default login level, projectionists can use the Touchpanel for numerous operational parameters.
However, most setup features are only accessible via the “Service Technician Login Level,” which requires a username and password that is only given to service technicians.

Procedure

1. Screw the swivel arm to the threaded bolt at the rear center of the mounting plate.



2. At the top rear of the projector, attach the swivel arm by screwing the bolt into the threaded mounting hole. Two holes are provided, one on each side of the projector.



3. Place the Touch panel on the mounting plate, and tighten the two wingnuts (no more than 1 full turn) until tension is felt.
4. Attach the multi-cable to the circular plug on the projector rear, then attach the other side of the cable to the Touch panel connectors.

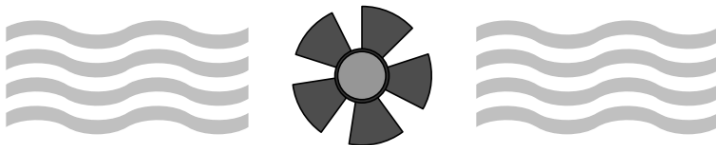
Exhaust Setup



Warning

- Do not block the exhaust opening
- Do not allow liquids to enter the exhaust opening
- Always let the lamp cool for 10 minutes before turning the projector off
- Ambient room temperature must stay within range of 10°C (50°F) to 35°C (95°F)

Requirements



- Extraction Vent Size: 8 inch (200mm) diameter duct
- **Airflow:** Exhaust blower must be capable of removing 235 CFM (6.65 m³) min.

Procedure

1. Check the extraction system for proper CFM measurement, as required for the projector.
2. Mount and secure the ducting hose to the projector.



Lens Installation

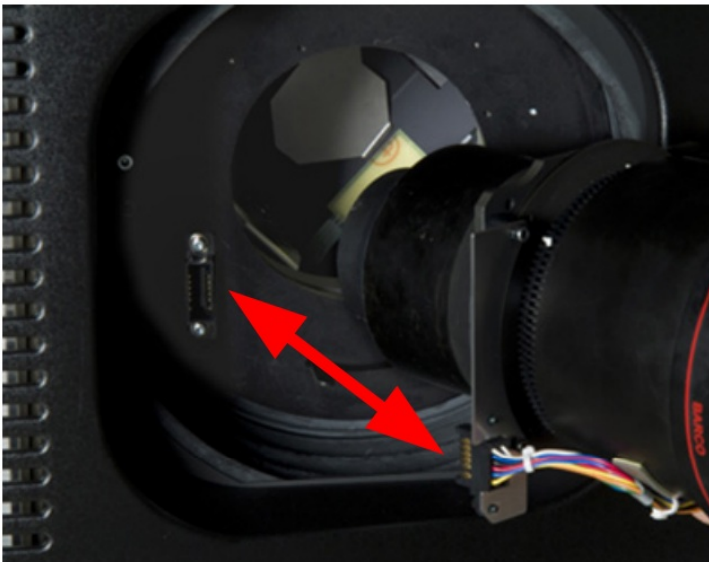
Procedure



1. Remove the foam rubber that is inserted in the lens opening.
2. Remove the lens caps (or the lens covers).



3. Move the lens locking lever to the unlocked position (left).



4. Align the plug socket on the lens with the connector on the projector.
5. Insert the lens, and ensure that it is not tilted or angled inside the lens holder.
6. Move the lens locking lever to the locked position (right).
7. Ensure that the lens is locked in position, and that there is no movement when you attempt to wiggle the lens.

Lamp Alignment

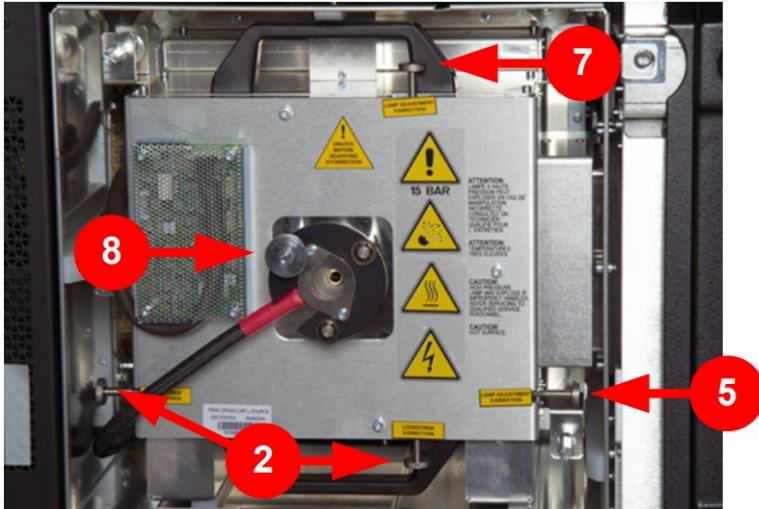
Requirements

- Lamp alignment requires a Touchpanel or a PC with the Barco Communicator Software installed on it.
- Prior to starting the lamp alignment procedure, always allow the lamp to warm up and stabilize for 5 – 10 minutes.

Procedure

1. Remove the lamp compartment cover to gain access to the Lamp house.
2. Loosen the X & Y axis locking screws at the rear bottom and rear left of the Lamphouse.

3. On the Touchpanel or Communicator, navigate to the “Control Tab,” and then to the “Service” page.
4. Locate the “Current Light Output” box, and note the window labeled “Footlambert Measured.” The value as listed is used to calibrate your lamp to the lamp reflector.
5. On the Lamphouse, adjust the X axis point until the value reaches its peak. As you adjust, if the value decreases, turn the adjustment point in the other direction until the number peaks — and then decreases.
6. When the value peaks and starts to decrease, stop the adjustment for that point.



7. Repeat steps 5 and 6 for the Y axis.
8. Repeat steps 5 and 6 for the Z axis.
9. Once all axis points are adjusted to the maximum value, alignment is complete. Tighten the X & Y locking screws to secure the bulb in place.

Lamp Installation



Warning

- DP-1500, DP-2000 and DP-3000 projectors are not shipped with a lamp installed. The xenon bulb is shipped separately and must be installed by a qualified service technician.
- Xenon compact arc lamps are highly pressurized and explosive. Whenever you dismantle a lamphouse with a xenon bulb installed, authorized protective clothing must be worn!

Procedure

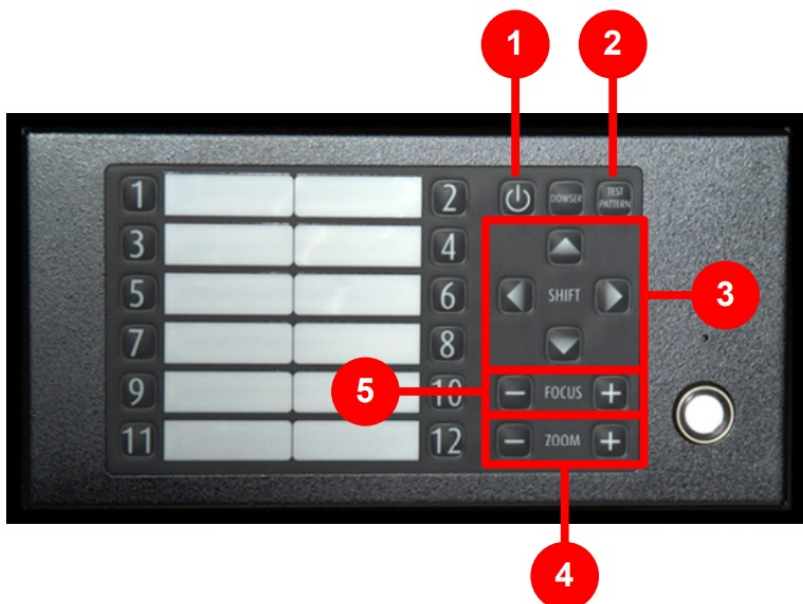
1. For a detailed bulb installation procedure, refer to page 33 of the Barco Projector Installation Manual, or view the Lamp Installation Video.



Lens Alignment

Procedure

1. Turn on the Power switch on the side of the projector, then strike the lamp using the Lamp button on the keypad.
2. Press Test Pattern until the “DCI_XYZ_White_12bit” test pattern appears.
Align the image to fill the screen masking using the following functions:
3. **Lens Shift:** Use the four “Lens Shift” keys (or the “Lens” section on the Touch panel) to move the image up, down, left or right.
4. **Zoom:** Use the “Zoom” keys on the keypad (or use the Touch panel) to increase or decrease image size.



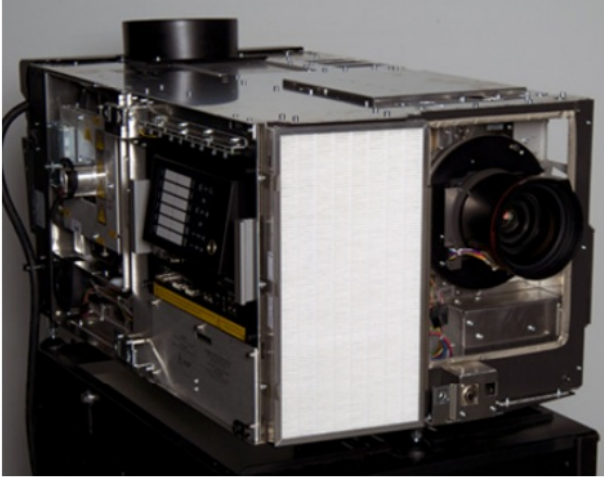
5. **Focus:** Use the “Focus” keys on the keypad (or use the Touch panel) to adjust the main overall focus of the image.

Back Focus

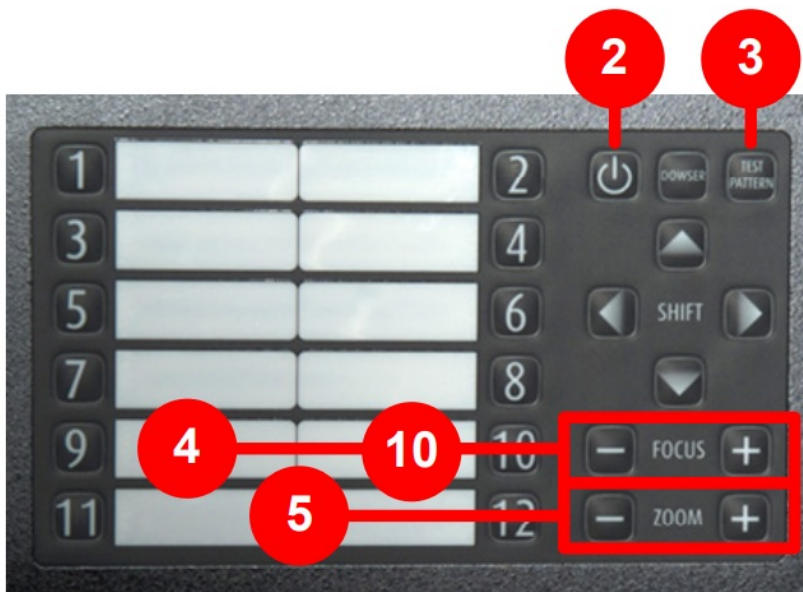


- Use the Back Focus procedure only when proper focus cannot be achieved with main focus controls.
- If the Back Focus procedure is not required, please continue with the Scheimpflug procedure.
- Never adjust Back Focus and Scheimpflug at same time. First perform one procedure, then perform the other.
- While performing the Back Focus procedure, when the lock screws are loosened, support the lens with one hand to ensure that the lens does not fall.

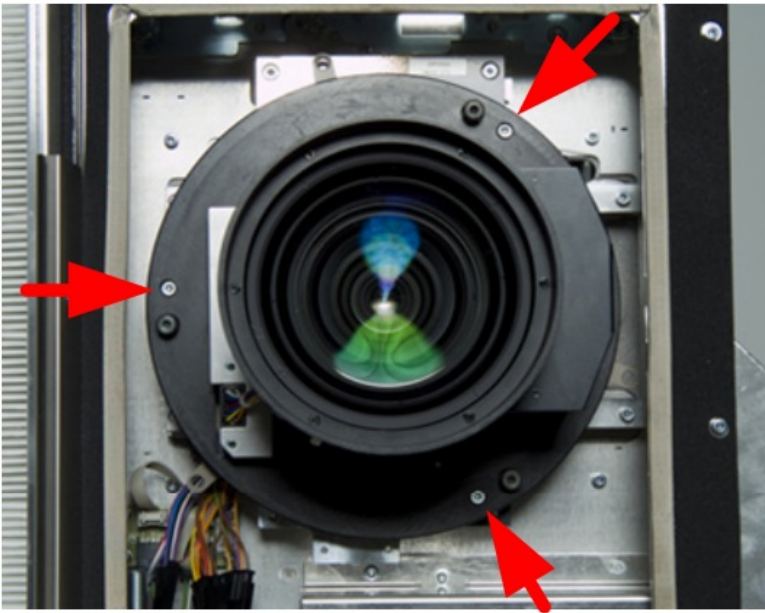
Procedure



1. Remove both side panels, the top panel, and the front panel.



2. If it is not already on, strike the lamp using the Lamp button on the keypad.
3. Bring up the "Green Focus" test pattern.
4. Zoom the lens so that the image is at its widest setting.
5. Using the keypad, run the lens focus in and out, until the focus is in the middle (appx. 50%).



6. Loosen the three small locking screws on the focus shift plate.



7. Using the tabs, rotate the shift plate until an optimum center focus is achieved.

8. Tighten the locking screws on the focus shift plate.

9. Zoom the lens so that the image is at its narrowest setting.

10. Repeat steps 6 through 8.

11. Verify that focus remains perfect throughout the entire focal range. If not, repeat the procedure from step 4.

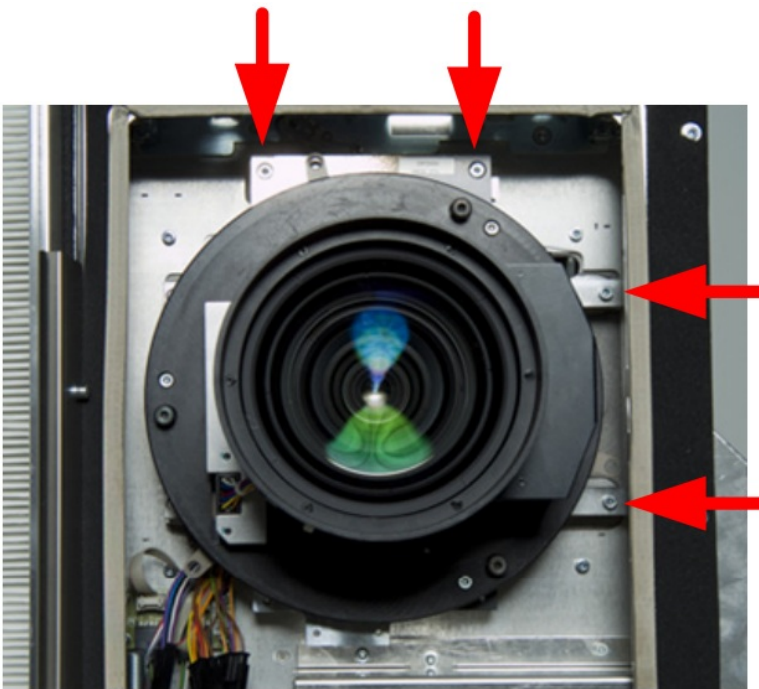
Scheimpflug

Scheimpflug corrects focus uniformity, if the projector is not perpendicular to the screen.

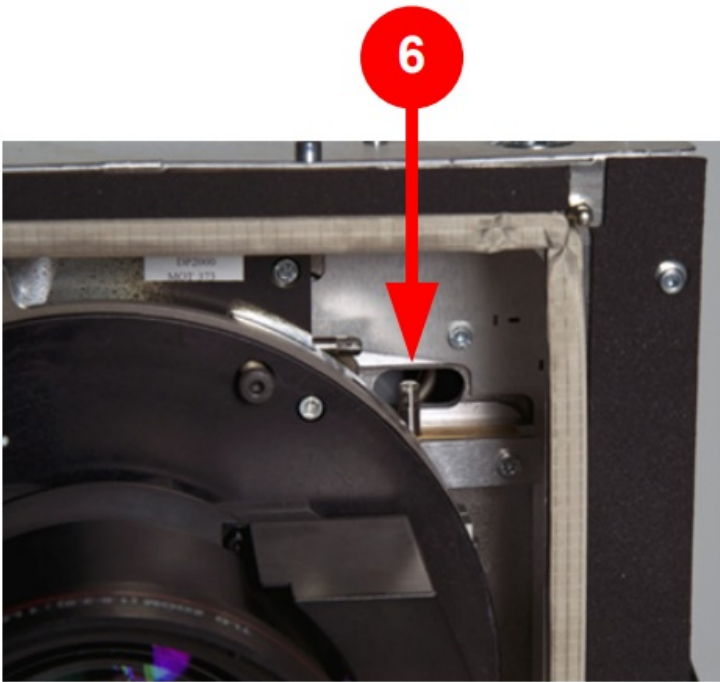
Procedure



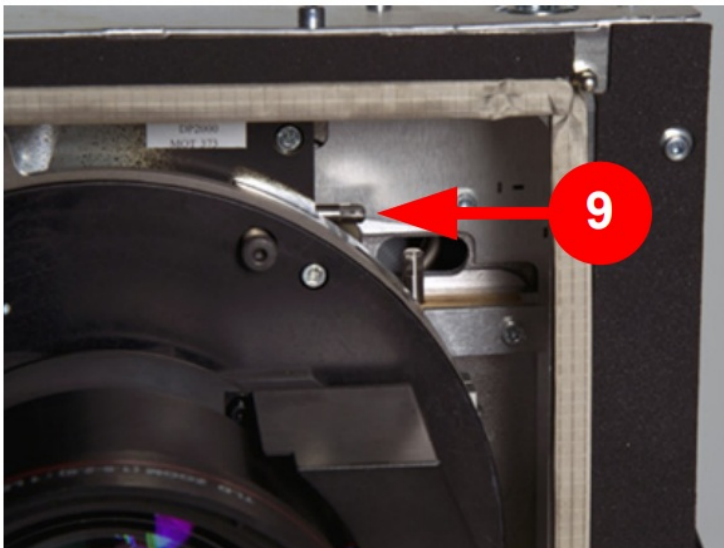
1. Ensure that both side panels, the top panel, and the front panel are removed.
2. If it is not already on, strike the lamp using the Lamp button on the keypad.
3. Bring up the "Green Focus" test pattern.
4. Run the main focus in and out until a perfect center focus is achieved.



5. Behind the shift plate, locate and loosen two screws on the right side and two at the top.

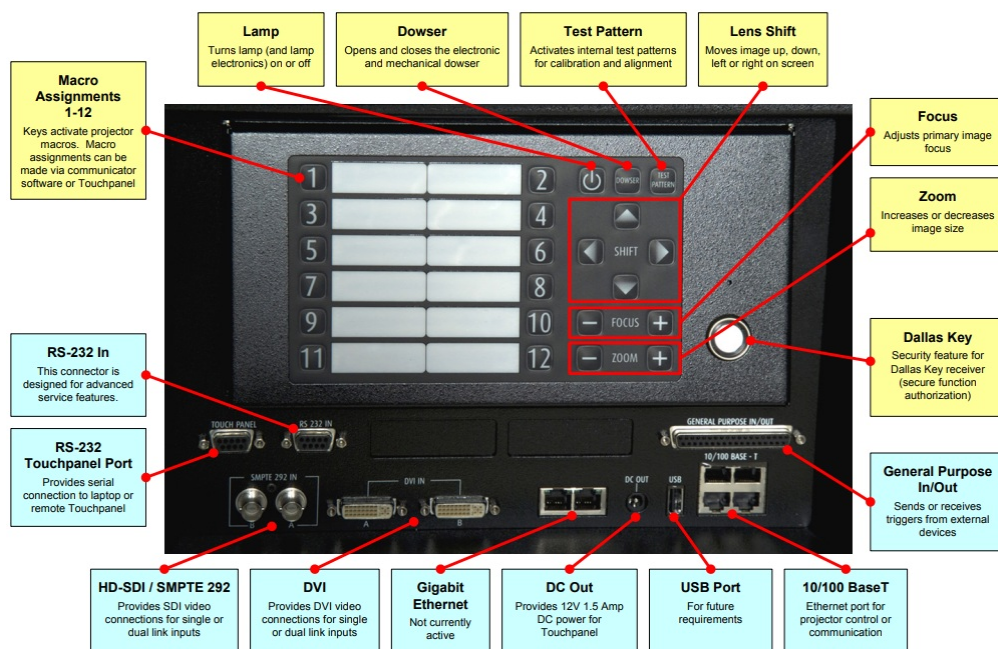


6. On the right side of the lens, locate the adjustment point for left-to-right focus alignment.
7. Adjust that point with a flathead screwdriver until the right and left image sides are in focus.
8. Re-adjust main focus.



9. Locate the adjustment point for topto-bottom focus alignment.
10. Adjust that point with a flathead screwdriver until the top and bottom portions of the image are in focus.
11. Re-adjust main focus.
12. When the image is focused across the entire image area, tighten the locking screws. As you tighten the locking screws, watch the screen to ensure that focus remains perfect. If focus goes out, you will need to repeat all previous steps.

Keypad



Documents / Resources

	<p>BARCO DP-2000 DLP Projector [pdf] Installation Guide DP-2000 DLP Projector, DP-2000, DLP Projector, Projector</p>
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References

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