DP2K E-series Quick Start Guide - Trained projectionist
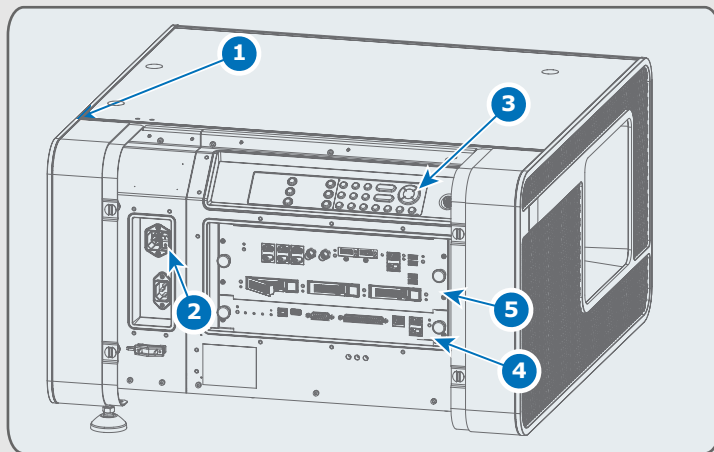
General

⚠️ **Caution !**

High voltage and strong UV radiation is present in the projector. To prevent personal injury, electrical shock, exposure to UV radiation and fire hazard, always refer to the "Safety manual" of the projector.

Projector Components

1 **Projector status light:** shows the status of the projector. Can be green, yellow, red or blue.

2 **Mains power switch:** powers projector on and off. Shuts off all electrical connections.
Important: the lamp must be cooled down for 5 minutes before switching off.

3 **Keypad:** Used for local operations on the projector such as switching the lamp on-off, dowser, selecting a macro or test pattern or switching the projector to standby or sleep mode.

4 **Barco Cinema Controller.**

5 **ICMP**

Projector Status Light

Projector is booting up.

Projector is running correctly.

Projector in sleep mode without errors, warnings and notifications.

Projector is running with warnings. Event can go on but a technical intervention will be necessary in the near future to prevent a complete stop of the projector.

Projector in sleep mode with warnings.

Projector is in error state. Problem could prevent normal operation. Solve the problem before continuing with the projector.
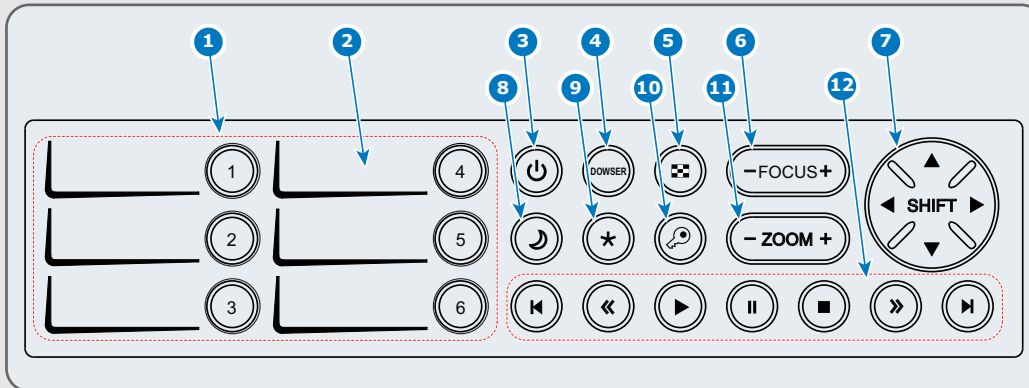
Projector in sleep mode with errors.

Projector runs in notification state. Maintenance action required. Lamp run time is exceeded, filters needs to be cleaned, etc.

Projector in sleep mode with notifications.

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General

Local keypad

1. **Numeric buttons** or macro buttons (1 to 6) to start up a specific macro that setup the projector for a specific show.

2. **Marker area** for macro name.

3. **Standby button:** switch the lamp on or off.
Important: The lamp cooling fans remain active for about 5 minutes.

4. **Dowser button:** opens or closes the electronic dowser.

5. **Test pattern button:** opens directly the internal test patterns. Press again to scroll to next pattern.

6. **Lens focus button** to focus the image on the screen.

7. **Lens shift button** to shift the image up/down or left/right.

8. **Sleep button:** press 3 seconds to put projector in sleep mode. Press sleep again to put projector in standby. This function can be part of a predefined macro.

9. **Star button:** user defined button.

10. **Key button** is used in the authorization procedure after servicing. Not used in normal operation.

11. **Lens zoom** to zoom the projected image in or out.

12. **Media buttons** to navigate through the content on the integrated media server.

ICMP connections
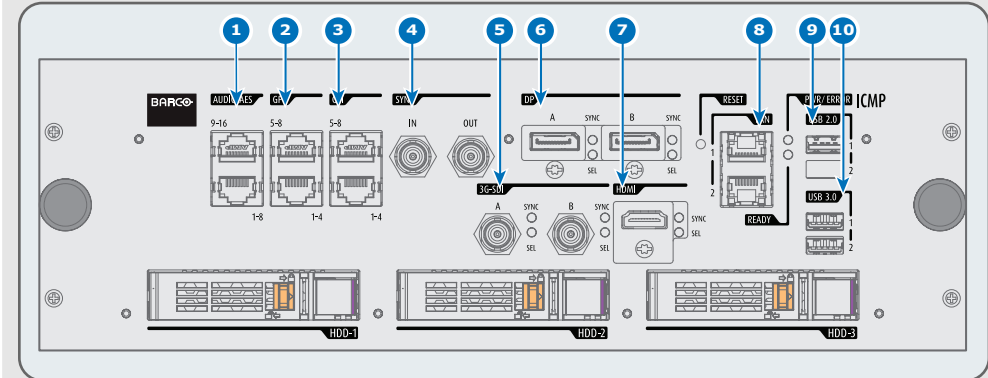
1. **Audio-AES:** ICMP outputs sixteen audio signals equitably distributed over these two RJ45 connectors, which can be configured independently.

2. **GPO 1-4 (5-8):** These RJ45 connectors can be used to send trigger signals to other devices.

3. **GPI 1-4 (5-8):** These RJ45 connectors can be used to receive trigger signals from other devices.

4. **Sync in/out:** Reserved for multiple-projector projection.

5. **3G-SDI A (B):** SDI connector to connect a video source.

6. **Display port A (B):** DisplayPort connector to connect a video source.

7. **HDMI:** HDMI connector to connect a video source.

8. **LAN 1 (2):** The ICMP can be connected to a LAN using one of the Ethernet ports. These LAN ports are used for 'content' transfer.

9. **USB 2.0:** The USB port can be used to load content (DCP) or keys (KDM) or reverse USB tethering.

10. **USB 3.0:** The USB port can be used to load content (DCP), or keys (KDM), or software update or reverse USB tethering. (recommended port).

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General

Communication connections
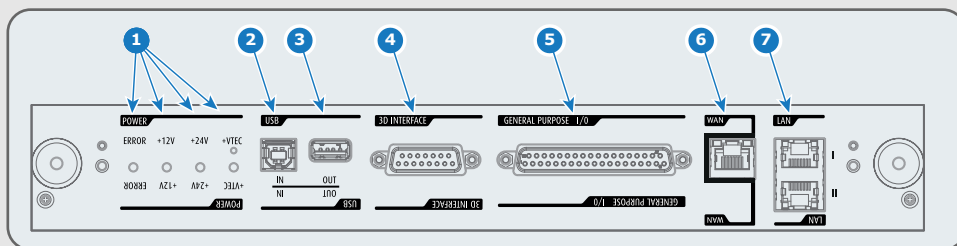
1 **Diagnostic LEDs**: to display the status of the power supply.

2 **USB in port**: used to communicate with the projector via RS232 commands (Virtual comport). Remains operational in Sleep mode.

3 **USB out port**: for future expansions.

4 **3D interface**: Can be used to connect external 3D devices to the projector.

5 **General purpose input/output (GPIO)**: can be programmed by macros. Remains operational in Sleep mode.

6 **Wide Area Network** (WAN: 10/100/1000 base-T): network connection to DHCP server.

7 **Local Area Network** (LAN: 10/100/1000 base-T) with build in Ethernet switch. Only for as projector interface, not for content.
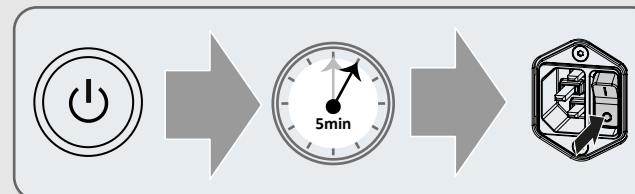
Put in Sleep mode

1 Press **Standby** button or switch off lamp with Communicator. Lamp is switched off and cool down starts.

2 Press **Sleep** button for 3 seconds. When the lamp is still too hot, the projector will finish first the cool down process. Then it goes into sleep mode. Power consuption is less than 15W. No fans are turning and lamp power supply is switched off completely.

Power up
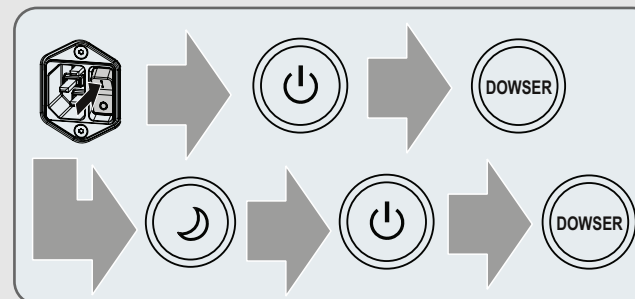
1 Press the Power Switch to switch the projector ON. Allow up to one minute for the projector to finish the boot-up sequence.
Note: projector starts up in the same state as it was switched off. When switched off in sleep mode, it starts up in sleep mode, when switched off in standby, it starts up in standby.
Projector status light turns green or flash green. If the status ligth turns or flashes red, yellow or blue, refer to the troubleshooting section.

2 When it starts up in sleep mode, press **Sleep** button for 3 seconds or wake up projector via Communicator. Projector goes in standby. Press **Standby** button or activate lamp via Communicator.

3 When it starts up in standby mode, press **Standby** button or activate lamp via Communicator.

4 Press **Dowser** button or open dowser via Communicator.

Power down

1 Press **Standby** button or switch off lamp with Communicator. Lamp is switched off and cool down starts.

2 Allow the projector to cool down for at least 5 minutes until the speed of the fans decreases.

3 Switch off the projector.

Important! Damage will result if you do not allow the lamp to cool down.

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General

Play a movie controlled by the ICMP

1 Play the movie from the ICMP.

2 Check if the **Standby** button turns green.

3 Check if the **Dowser** button turns green.

4 Check that the appropriate macro is selected.

5 Check the image on screen for proper alignment and color.

Optional: if the image is not aligned with the screen masking, use the Lens adjustment buttons to correct the image on screen. Be sure to notify the theatre technician.

Play a movie manually

1 During normal operations, the TMS server should start the projector automatically. If it does not start automatically, use the following steps.

2 Press **Standby** button. Check if button turns green.

3 Select the appropriate macro for the next show. Allow a moment for the lens to move into position

4 Press **Dowser** button if required.

5 Play the movie from the ICMP.

6 Check the image on screen for proper alignment and color. Optional: if the image is not aligned with the screen masking, use the Lens adjustment buttons to correct the image on screen. Be sure to notify the theatre technician.

Using Commander or Web Commander on PC

1 Default IP address: 192.168.100.2

2 Login user accounts:

Operator: proj; Password: Proj1234
Show director: Show; Password: Show1234

Commander interface
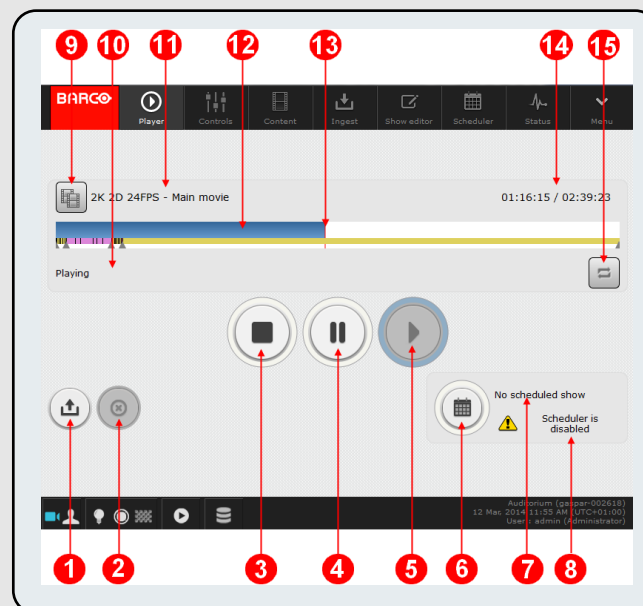
For more information about Commander or Web Commander, consult the Commander's or Web Commander's user guide.

1 Open show or clip: to select a show or clip in the Clip selection panel.

2 **Clear player**: to remove the current show (player should be stopped).

3 **Stop**: stops the show but retains the position.

4 **Pause**: playback is paused.

5 **Play**: start playback of show or resume show after pause.

6 **Scheduler on/off**: to activate or deactivate the schedule mode.

7 Field to display the name and start date of the next scheduled show.

8 Scheduler status.

9 Open playlist: to show the detailed content of the playlist.

10 The status of the current show or clip.

11 The name of the current show or clip.

12 Progress bar: displays the progress of the show or clip.

13 Playback position/position button.

14 Current time code and duration of the show.

15 **Loop on/off:** used to activate or deactivate the repeat mode.

Maintenance

Smart maintenance

Maintenance type A = monthly maintenance

1. Check dust filters for dust and grease. See cleaning the dust filters.

2. Check the surface of the lens for dust. Only clean if necessary.

3. Check the porthole for dust.

Maintenance type B = 3 monthly maintenance

1. Clean the housing of your projector.

2. Check the date and time of the pojrector, ICMP.

Cleaning

Lens

1. Always wipe lenses with a CLEAN Toraysee cloth.

2. Wipe lens in a single direction.
   Do not leave the cleaning cloth in either an open room, do not use liquid cleaners on the cloth, as doing so can contaminate the cloth.

Exterior of the projector

1. Switch off the projector and unplug from the mains power net.

2. Clean projector's outside housing with a clamp cloth. Stubborn stains may be removed with a cloth that is lightly dampened with a mild detergent solution.

Vacuum cleaning dust filters

1. Lightly tap the filter on its dusty side to expel heavy dust contamination

2. Carefully vacuum the air inlet side of the dust filter. Use a vacuum cleaner with a soft brush suction nuzzle. The air inlet side of the dust filter is the side which is surrounded with a silicon edge.

Dust filter replacement (large filter next to the lens)
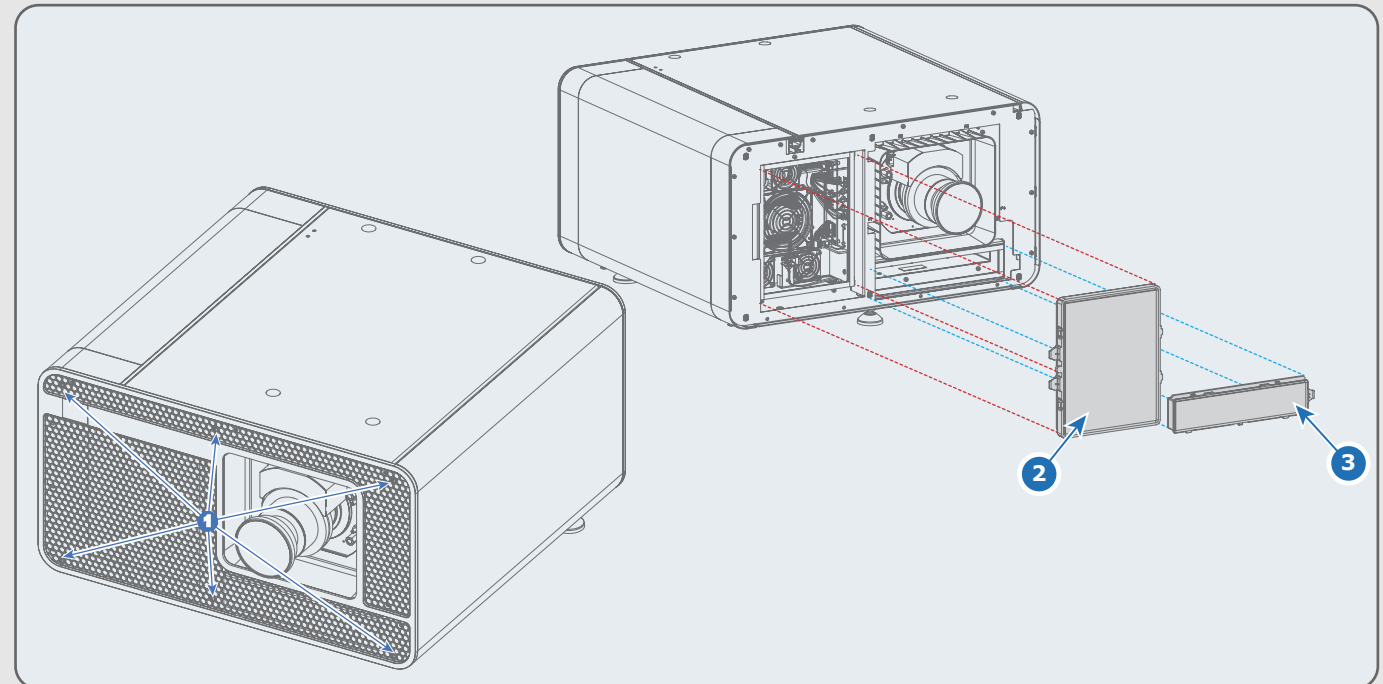
1. Loosen the six captive screws (7 mm flat screwdriver). Remove the front cover.

2. Take out the big dust filter.

3. Take out the small dust filter.

4. Check the "air in" side of the dust filter for dust and/or grease.
   In case the filter is contaminated with grease wash and dry the dust filter.
   In case the filter contains dust but doesn't feel greasy then vacuum clean the dust filter.

5. Insert the big & the small dust filter.

6. Mount the front cover and fixate the six captive screws.

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Maintenance

Washing and drying a dust filter

1 Make a solution with a ratio of 30 gram (handful) sodium carbonate to 1 liter hot water.

2 Soak the dust filters in the solution for 30 to 60 minutes. The grease should be dissolved after 1 hour.

3 If the dust filter is still clogged repeat this procedure.

4 Rinse the dust filters with clean water to flush all grease residue away.

5 Shake out all excess liquid by repeatedly swinging the filter to-and-fro in a centrifugal action.

6 Then allow the filters to dry thoroughly. Typically this can take up to 24h and more, depending on the drying conditions.

⚠ UNDER NO CIRCUMSTANCES SHOULD WET FILTERS BE INSTALLED BACK INTO THE PROJECTOR. THIS CAN HAVE SERIOUS SAFETY CONSEQUENCES AS WELL AS JEOPARDIZE THE INTERNAL OPTICS OF THE SYSTEM.

☞ It's recommended to have a second set of dust filters which can be used while cleaning the first set.

Optical System Maintenance

1 When needed, clean the lens with a CLEAN Toraysee cloth. See cleaning lens.

2 When needed, clean the Port window.

3 Replace the lamp when the maximum lamp run time is reached and the Status light turns blue or when the projector's light output falls below optimum requirements.

Replacing a lamp module
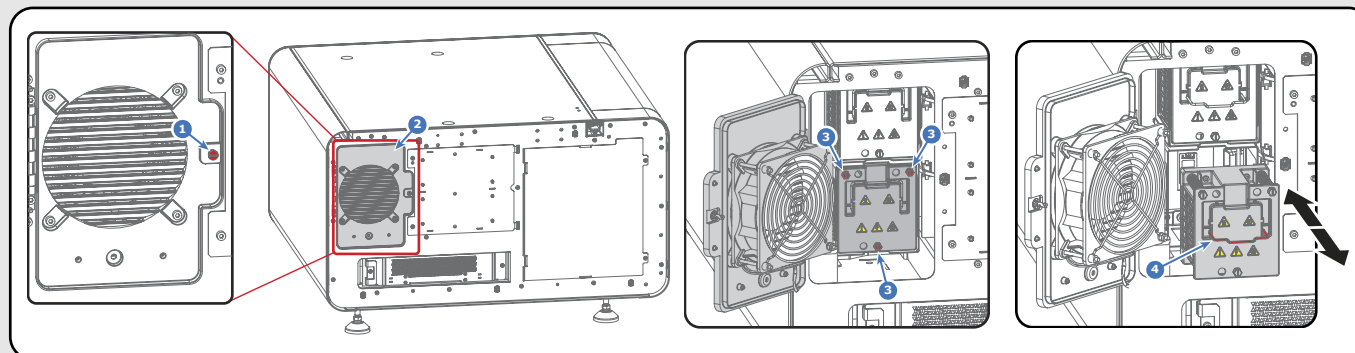
⚠ Ensure the projector is switched off and cooled down.

1 Remove the rear cover of the projector.

2 Loosen the retaining screw of the fan door.

3 Open the door.

4 Release the three retaining screws of the Lamp House. Use a 7mm nut driver or a flat screw driver.

5 Grip the Lamp House by the handle and slide it out half way of the lamp compartment. Support the Lamp House at the bottom with the other hand and remove it from the lamp compartment.

6 Grip the Lamp House by the handle and support it at the bottom with the other hand. Slide the Lamp House in the lamp compartment. Make sure the positioning pins match the holes in the projector.

7 Tighten the three retaining screws of the Lamp House. Use a 7mm nut driver or a flat screw driver.

8 Close the fan door and tighten the retaining screw (1) of the fan door.

9 If warranty is applicable, click **Get service code**. Add this code to the lamp module when sending back under warranty.

10 Reset the lamp parameters with Communicator. Go to **Installaton** --> **Lamp** --> **Lamp information** --> Change lamp and fill out the
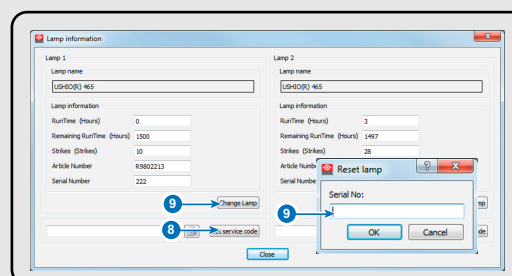
Communicator

Use of the Communicator on PC

1 Make sure your PC and projector are connected to the same LAN.

2 Install Communicator on the PC, no registration is necessary. You only have to fill out your name and company.

3 Start up the Communicator.

4 If your projector is visible in Environment selection, dubble click on the icon to make a connection, otherwise fill out the IP address and click Connect.

The Communicator window opens with the Control functions accessible.
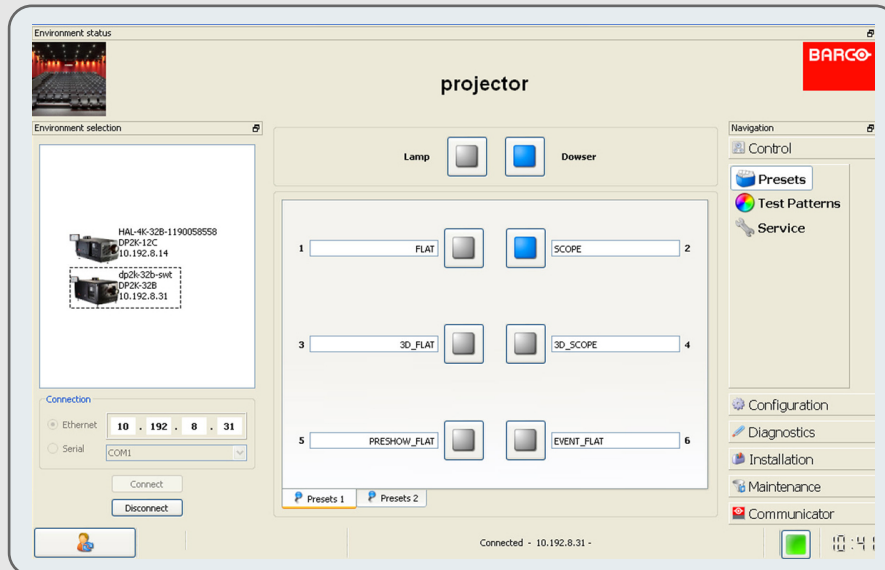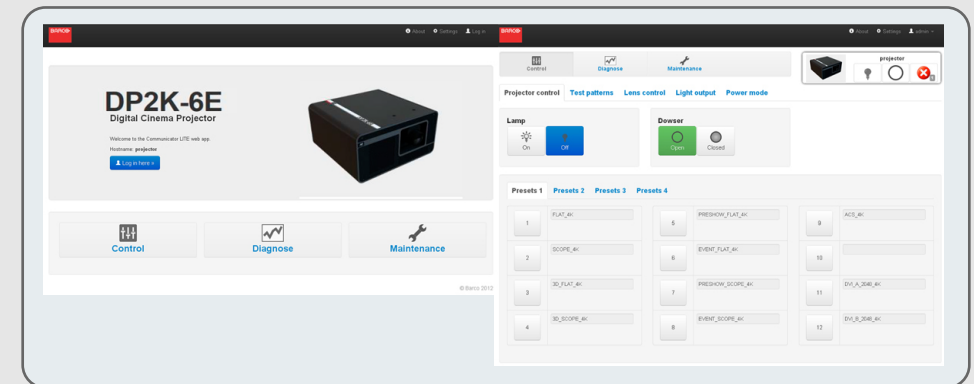

To start projection:

1 Click Lamp button to strike the lamp.

2 Select the appropriate Macro for the next show.

3 Click Dowser button if required to open the dowser.

4 Play the movie from the server.

5 Check the image on screen for the proper alignment and color.
Optional: if the image is not aligned with the screen masking, use Configuration - Lens - Lens settings to correct the image on screen. Be sure to notify the theatre technician.

Use of Communicator Lite

1 No extra software installation required.

2 Make sure your PC and projector are connected to the same LAN.

3 Open your webbrowser and type in the hostname or IP address of the projector.
The startup page opens. Login to control the projector.

To start projection:

1 Click Control.

2 Click Lamp On to strike the lamp.

3 Select the appropriate Macro for the next show.

4 Click Dowser Open if required to open the dowser.

5 Play the movie from the server.

6 Check the image on screen for the proper alignment and color.
Optional: if the image is not aligned with the screen masking, use Lens control to correct the image on screen. Be sure to notify the theatre technician.

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DP2K E-series   Quick Start Guide

Trained projectionist

Troubleshooting

The Lamp does not strike

1 Press **Standby** button. Between each strike attempt, allow 10 seconds (if lamp is cold) or 2 minute (if lamp is hot).

2 If after te third attempt the lamp does not strike, check with communicator for errors, then contact the theatre's technician.

Content is distorted or not playing with the correct color

1 Reselect the proper **Macro** button on the projector for the current movie.

2 Use the **Test Pattern** button to select color bars. Check that red, green and blue can all be seen.

3 Reselect the current **Macro** button again for the current movie.

4 Restart the projector and TMS server and try to replay the movie. Let the lamp cool down for at least 1 minute prior to restarting

There is no image on the screen

1 Check to see if the lamp is on and the dowser is open.
2 Check that the lens cap is removed.
3 Verify that the correct macro is selected.
4 Verify that the server is playing.
5 Verify the operation of the projector with a Test pattern.
6 Check all connection between projector and server. Try playing different content.
7 Restart projector and TMS server. Try to play the movie again. Let the projector lamp cool down for at least one minute prior to restarting.

The image appears dim

1 In Communicator or on the Touch panel, select Control tab and press Service button.
2 Check the Current Light Output reading. If the light output does not indicate at least 11 Fl, contact the theater technician

The projector indicates an overheating error

1 Check the booth's ambient temperature. These must be between:

* 50 - 95 degrees Fahrenheit
* 10 - 35 degrees Celsius

2 Check that the filters are clean.
3 Check that nothing is blocking the air inlet.
4 Contact the theater technician.

The projector status light is solid red, yellow or blue
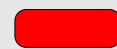
Red = Error condition. Restart the projector if the status light turns green, problem is resolved. Check Communicator or Touch panel for 'red' marked error messages. If you find an error, report it ot the theatre technician.

Yellow = Warning condition. Check Communicator or Touch panel for 'yellow' marked warning messages and take action accordingly.

Blue = Maintenance notification. Check Communicator or Touch panel for 'blue' marked messages and perform the suggested maintenance.

Creating a Diagnostic Package

1 In Communicator, press Diagnostic tab and click Package.
2 Click on Create diagnostics package.
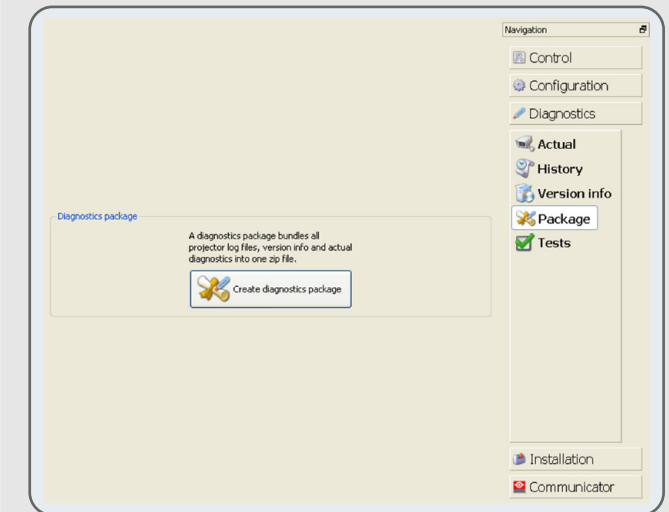
3 Browse to the storage location, accept the proposed file name or change the name.

4 Click Save to create the diagnostics package. Once finished, send this package to a technician for analyse purposes.

Button backlight colors

Button enabled. Default backlight color.

Button pressed. Request is ongoing.

Standby, **Sleep**, **Macro** = function is activated
Dowser = dowser open, Test pattern = no pattern selected.

Standby = lamp is off, Dowser = dowser closed
Test pattern = test pattern selected
Shift, **Zoom**, **Focus** = end of range
Macro = error in at least one step

Numeric buttons = **Key** button pressed.

8

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