



Balder

Quick reference guide

Balder / Balder CS

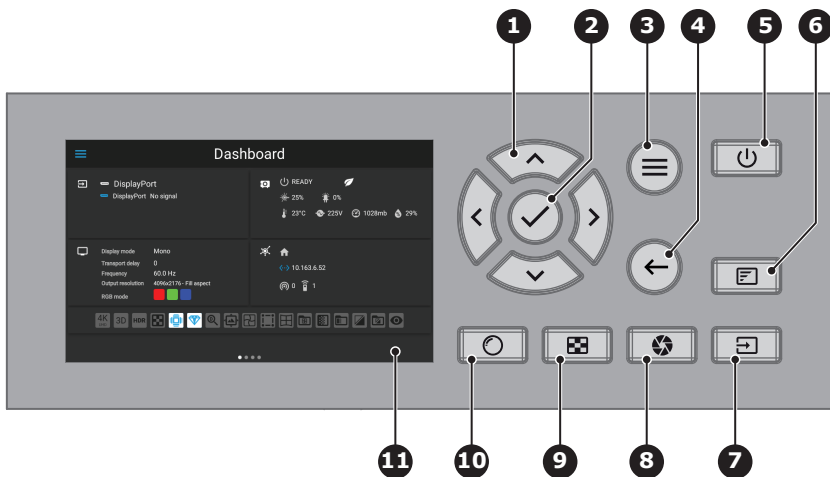


CAUTION: It is important to read the installation instructions before connecting the equipment to the mains power supply.





Download Product Manual: Product manuals and documentation are available online at <https://www.barco.com/support>. The QR code at the bottom of this page leads directly to the BALDER product page on the Barco website. Registration may be required; follow the instructions given on the website.

Local keypad



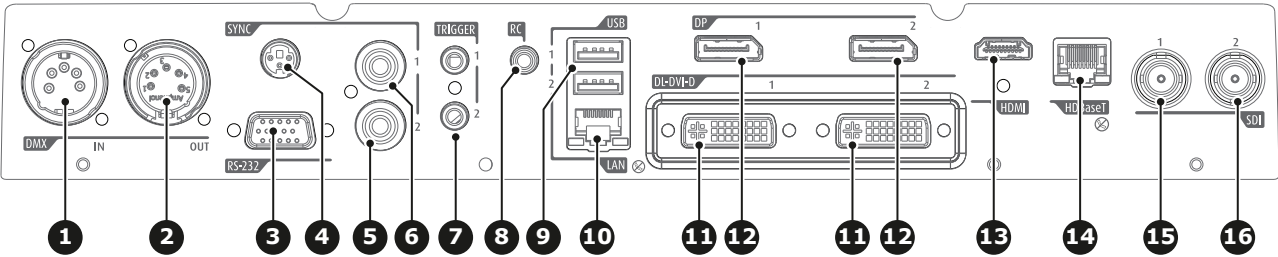
- 1 Menu Navigation
- 2 Menu Selection
- 3 Open Menu
- 4 Menu Back
- 5 Power On/Off
- 6 OSD On/Off
- 7 Input Selection
- 8 Shutter Open/Close
- 9 Test Patterns
- 10 Lens Menu
- 11 LCD Panel

Button backlight status

Button	Color status	Description
	Blinking WHITE (slow)	Projector starts up (Booting).
	Blinking WHITE (fast)	Projector is upgrading firmware.
	Solid WHITE	Projector is in Ready mode.
	Blinking BLUE	Projector goes to ON mode.
	Solid BLUE	Projector is ON.
	Blinking RED	Error condition.
	Off	Projector is OFF, starts up, or is in Standby mode.
	Solid WHITE	Projector is ON, shutter is open.
	Solid RED	Projector is ON, shutter is closed.



Input and communication panel



- 1

DMX input for projector control
- 2

DMX output for projector control
- 3

Projector serial communication port (RS-232)
- 4

Sync input/output port (mini DIN)
- 5

Sync input/output port 2 (BNC)
- 6

Sync input/output port 1 (BNC)
- 7

Two trigger ports for controlling peripherals
- 8

Wired remote control
- 9

Two USB 2.0 ports, type A
- 10

LAN connection (Standard RJ45 socket)
- 11

Dual DVI input port (DVI-I 1.0)
- 12

DP input port (DisplayPort)
- 13

HDMI input port (HDMI 2.0)
- 14

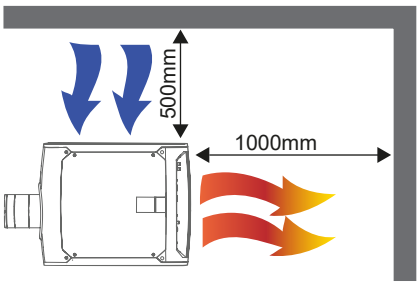
HDBaseT port
- 15

SDI input port (BNC)
- 16

SDI pass through port (BNC)

Installation conditions

Requirement	Value
Operation temperature	10 - 45°C (Altitude 0 - 500m) 10 - 40°C (Altitude 500 -1500m) 10 - 35°C (Altitude 1500 - 3000m)
Humidity	10 - 80% RH
Power	100 - 240V 50 -60Hz
Dimensions (without lens)	475 x 593 x 286mm (W x L x H)
Weight (without lens)	37 kg



The projector must be installed with minimum free air space of 1000 mm at the hot output (rear) side, and minimum 500mm at the inlet (right) side.

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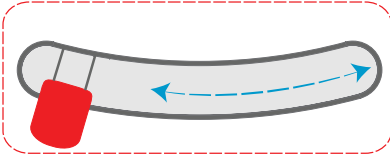
WARNING: Do not place heat sensitive objects or materials in the area of the hot air output. (Orange arrows).
- 📄

The operating conditions will change when dust or pollution filters are installed. Refer to filter installation manual for correct data
- !

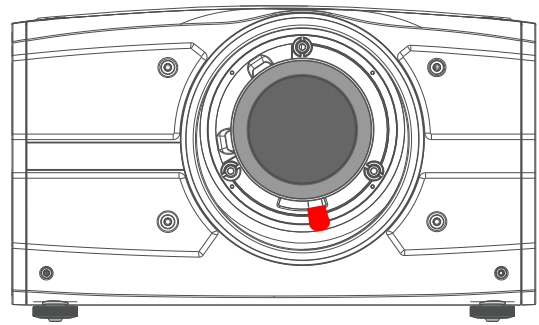
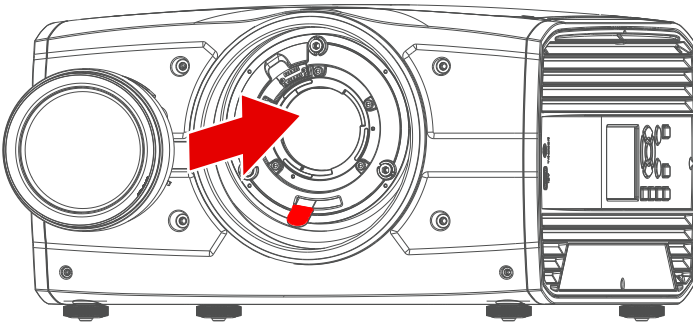
WARNING: This projector is Risk Group 2 (RG2) according to IEC EN 62471-5.
This projector may become Risk Group 3 (RG3) when an interchangeable lens with throw ratio greater than 4.7 is installed.
Refer to user manual before operating.
Do not attempt to disassemble or modify this projector.

Installing the lens

1. When handling lens in or out, always close shutter, see keypad explanation. Press Shutter keypad, and verify that the shutter keypad turn in to red illumination. This indicate that the shutter is closed. When the lens is installed, open shutter by pressing the shutter key. Shutter open state is verified when the shutter key illuminates white.
2. Verify that the lens release lever is in it's default position, at the far left of the slide, as illustrated



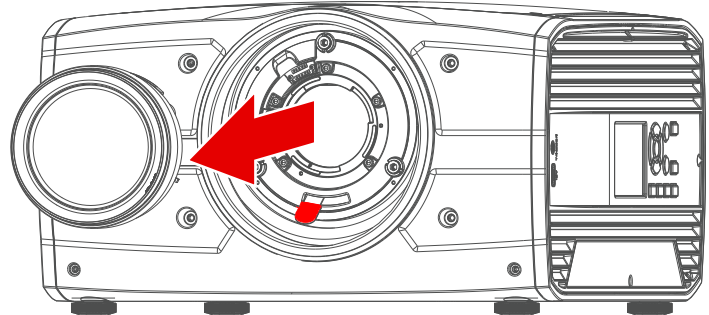
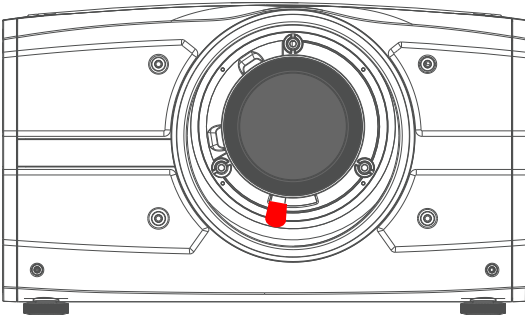
3. Remove the protective cap at the lens bayonet end
4. Align the lens so that the red marking on the bayonet end is facing upwards.
5. Install the lens bayonet into the lens mount, and then move the lever to the right. Check that the lever is firmly in position



WARNING: Always keep shutter closed when installing or removing the lens.

Remove the lens

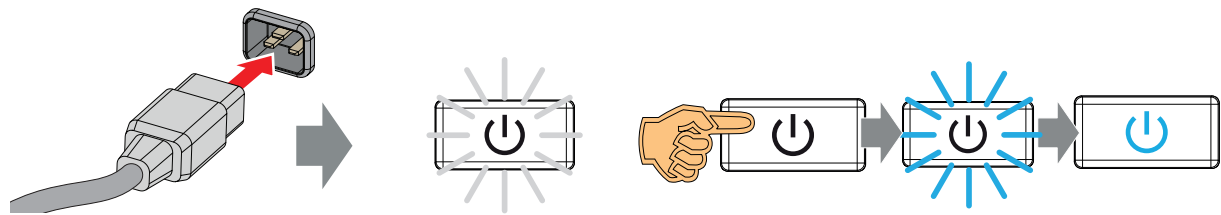
1. When removing the lens, always close the shutter, see keypad explanation. Press Shutter keypad, and verify that the shutter keypad turn in to red illumination. This indicate that the shutter is closed. When new lens is installed, open shutter by pressing the shutter key again. Shutter open state is verified when the shutter key illuminates white.
2. Support the lens with one hand.
3. Use the other hand to slide the lens release lever to the far left position.
4. 3. Pull the lens straight out of the lens mount.



To prevent damage to the lens, and dust contamination in the projector light processor, always replace the lens bayonet cap, lens front cap and projector lens cap immediately after removing the lens.

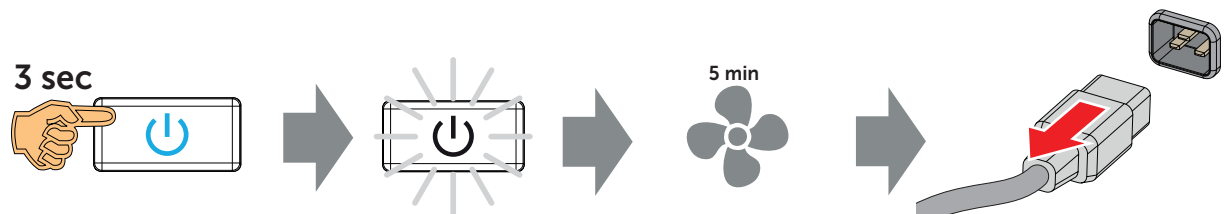
Power up the projector

1. Plug in the mains cord
 - The projector will run a start up procedure.
 - When completed, the standby button illuminates white.
2. Press the power button again to bring the projector in ON mode.
When the power button backlight is steady blue, the projector is ready for use.



Power down the projector

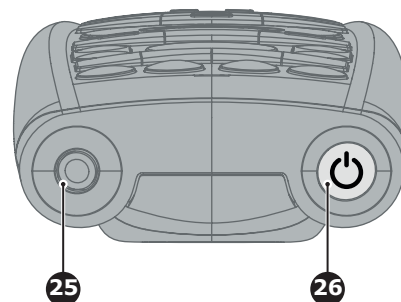
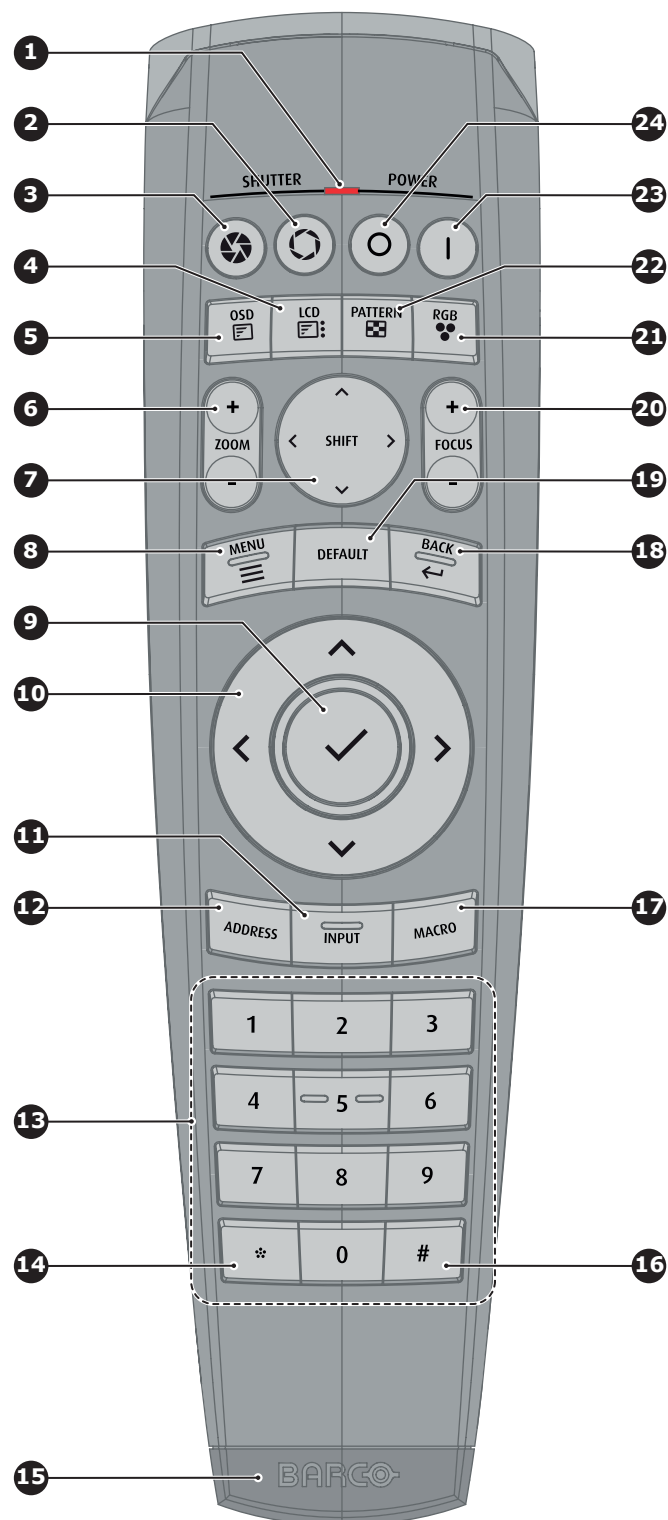
1. Press the power button for 3 seconds.
 - The power button will illuminate white, and the projector enters the cooling down process.
 - Wait until the cooling down process are completed before removing the main power cord from the projector.



Basic Remote Control Unit

Image	Nr	Description
	1	Close shutter
	2	Open shutter
	3	Button pressed indicator
	4	Open <i>Lens</i> menu
	5	Menu navigation keys
	6	Move back one level in menu system
	7	Open <i>Source</i> menu
	8	Power on / Power off Note: Only shifts power between Ready and ON mode.
	9	OSD menu on / off
	10	Menu confirmation
	11	Activate or deactivate the GUI menu. Note: If pressed while the projector is in stand-by mode, this will also power up the projector.
	12	Open <i>Test pattern</i> menu

Pulse Remote Control Unit



- 1 Button pressed indicator
- 2 Shutter open
- 3 Shutter close
- 4 LCD panel on / off
- 5 Project OSD on / off
- 6 Lens zoom
- 7 Lens shift
- 8 Menu open / close
- 9 Menu selection, OK button
- 10 Menu navigation
- 11 Input selection
- 12 Address button
- 13 Numeric buttons
- 14 Backspace (while entering values)
- 15 XLR connector
- 16 Decimal mark (while entering values)
- 17 Macro button
- 18 Menu back
- 19 Default value button
- 20 Lens focus
- 21 RGB filter
- 22 Test patterns
- 23 Power on
- 24 Power off
- 25 3.5 mm jack
- 26 RCU on / off



CAUTION: Replace batteries with the correct battery type. Use AAA size batteries for the basic RCU and AA size batteries for the Pulse RCU. There is a risk of explosion if the battery is replaced with an incorrect type. Use alkaline batteries for optimum range and life time. Make sure the polarities match the + and - marks, as depicted on the inside of the battery compartment. There is a risk of explosion if the batteries are installed incorrectly.



Replacing batteries will reset the broadcast address of the Pulse RCU to its default value '0'. Replacing batteries of the Pulse RCU switches on the Pulse RCU automatically.



In order to make sure you can control your projector remotely, Barco has provided a basic remote control unit in case the Pulse RCU is not available to you. While the basic remote control has a more limited amount of available features, it will be able to help you out with basic controls.



Do NOT turn off, power down, or remove mains power supply to the projector when an upgrade is in progress

Software upgrade

1. Go to www.barco.com and select your product. All available firmware downloads are filed under the Technical Downloads tab
2. Download the firmware. Extract and save the file to a USB Stick with FAT file system. Use the eject function on your PC to safely remove the device from your computer.
3. Place the projector in Standby mode (status indicator is steady white).
4. Insert the USB stick into one of the projector's rear USB ports.
 - After a few seconds, the status indicator will flash. (Rate: 3 Hz/180 FPM). This signals that the upgrade is in progress
 - If the upgrade file is corrupt or invalid, the status indicator will turn red and the upgrade process will stop.
 - Note! The upgrade will not be installed in this instance, and the upgrade process must be restarted with a full and correct file.
 - The projector may restart several times during the upgrade process
5. The LCD display will show the progress of the update procedure, and also when the USB stick must be removed. The projector will return to standby mode (status indicator is steady) once the upgrade is completed successfully.

The projector is now ready for normal operation.