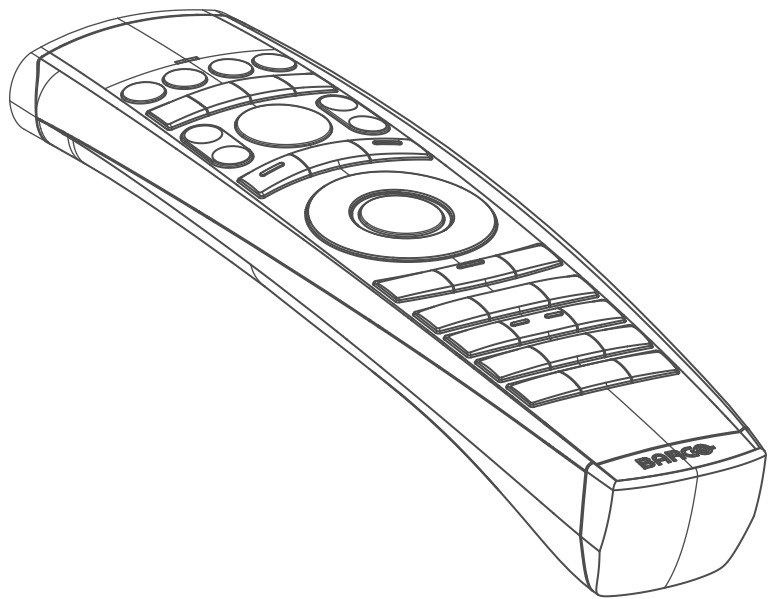


# Pulse Remote Control Unit



User Guide

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■ This symbol on the product indicates that, under the European Directive 2012/19/EU governing waste from electrical and electronic equipment, this product must not be disposed of with other municipal waste. Please dispose of your waste equipment by handing it over to a designated collection point for the recycling of waste electrical and electronic equipment. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate these items from other types of waste and recycle them responsibly to promote the sustainable reuse of material resources.

For more information about recycling of this product, please contact your local city office or your municipal waste disposal service.

For details, please visit the Barco website at: <http://www.barco.com/AboutBarco/weee>

## Disposal of batteries in the product



This product contains batteries covered by the Directive 2006/66/EC which must be collected and disposed of separately from municipal waste.

If the battery contains more than the specified values of lead (Pb), mercury (Hg) or cadmium (Cd), these chemical symbols will appear below the crossed-out wheeled bin symbol.

By participating in separate collection of batteries, you will help to ensure proper disposal and to prevent potential negative effects on the environment and human health.

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# Pulse Remote Control Unit

# 1

## Overview

- Remote control, battery installation
- Remote control, protocol setup
- Remote control, on/off button
- Functionality overview
- Functions of the “button pressed indicator”
- Function of the RGB filter button
- Displaying and Programming addresses into the RCU
- Using the XLR connector of the RCU
- Using the mini-jack connector of the RCU
- Silicone protection sleeve for the RCU (optional)

## 1.1 Remote control, battery installation

### Where to find the batteries for the remote control ?

The batteries are not placed in the remote control unit to avoid control operation in its package, resulting in a shorter battery life time. At delivery the batteries can be found in a separated bag attached to the remote control unit. Before using your remote control, install the batteries first.

### How to install

1. Push the battery cover tab with the fingernail a little backwards (1) and pull, at the same time, the cover upwards (2).

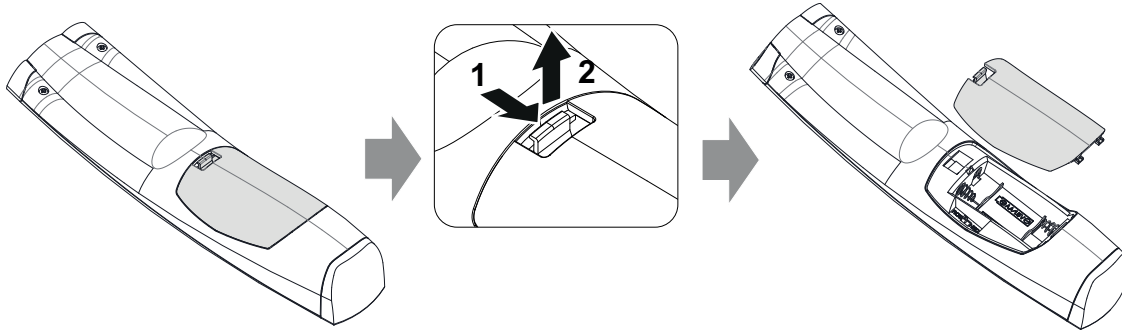


Image 1-1

2. Insert the two AA size batteries, making sure the polarities match the + and - marks inside the battery compartment.



*Tip:* Use alkaline batteries for optimum range and life time.

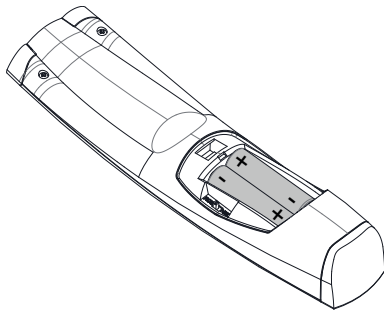


Image 1-2

3. Insert (1) both lower tabs of the battery cover in the gaps at the bottom of the remote control, and press (2) the cover until it clicks in place.

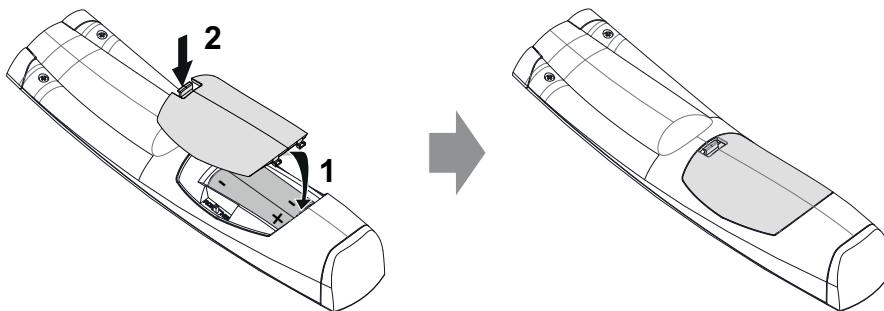


Image 1-3



When replacing batteries, the broadcast address of the RCU will be reset to its default value '0'.



**CAUTION:** Replace with the correct battery type. Use two AA size batteries. There is a risk of explosion if the battery is replaced with an incorrect type.



**CAUTION:** Replace the battery as explained above. There is a risk of explosion if the battery is incorrectly installed.

## 1.2 Remote control, protocol setup

### About the used protocol

The protocol is the code send out by the remote control when a button is pressed. Depending on this code, the projector can decode the signals. The remote control can be used with two different protocols: RC5 and NEC. Depending on the projector to control the remote control can be switched between these protocols.

### Which protocol to use

- The **NEC** protocol has to be used for Barco projectors based on the Pulse platform: F70, F80, F90, HDX 4K, UDX, XDL, etc.
- The **RC5** protocol has to be used all legacy Barco projectors: HDQ 2k40, HDF, HDX W, etc.

### How to set

1. Remove the cover. For more info on how to remove, see “Remote control, battery installation”, page 6.
2. Place the switch in the desired position.

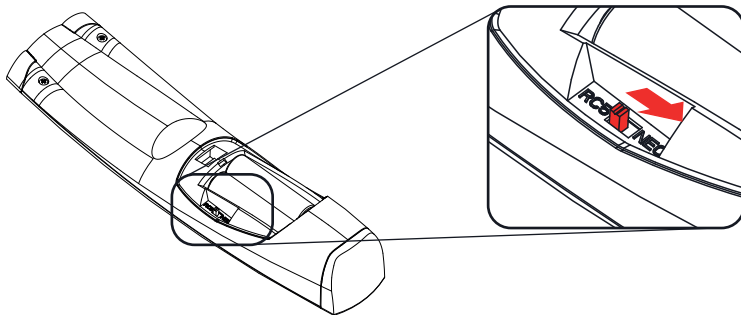


Image 1-4

### Remarks when using the RC5 protocol

Due to new or updated functionality not all buttons of the Pulse RCU are one-to-one compatible with the legacy Barco RCU and projectors. Take the following limitations into account:

- Buttons **Shutter open** and **Shutter close** emit the same code when in RC5 mode. This because the legacy RCU's only had 1 button for Shutter functionality.
- Buttons **Power on** and **Power off** emit the same code when in RC5 mode. This because the legacy RCU's only had 1 button for Power functionality.
- The **RGB filter** button is not supported.
- The **Input selection** button is not supported.
- The **Default value** button is not supported.
- The **Macro** button is not supported.

## 1.3 Remote control, on/off button

### Purpose of the remote control on/off button

The Pulse remote control unit has at the front side an on/off switch (reference 1 Image 1-5). Switching off the remote control prevents that unwanted commands are send due to an accidental key press. Furthermore, switching the RCU off will extend the battery life time of the remote control.

To activate the remote control press the on/off button.

To deactivate the remote control press the on/off button again.

Default when (re)placing batteries, is "ON".

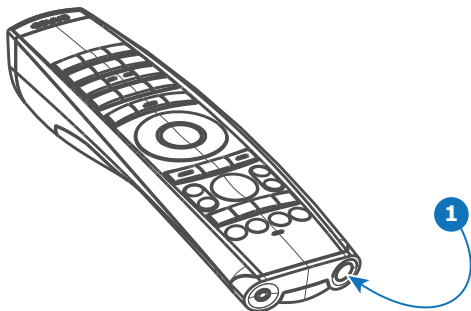


Image 1-5

## 1.4 Functionality overview

### Remote Control Unit buttons

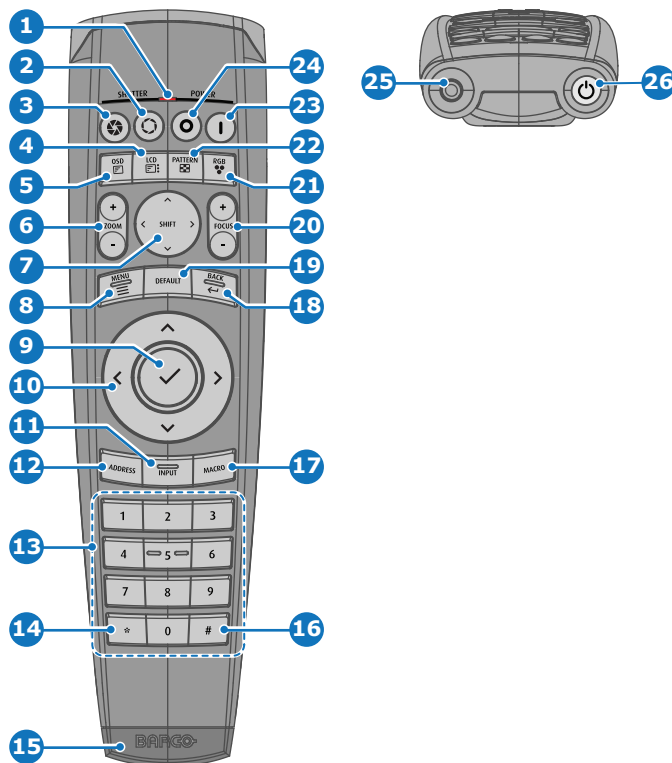


Image 1-6

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



## 1.5 Functions of the “button pressed indicator”

### Functions button pressed indicator

- Rapidly flashes when commands are sent, this is the normal “button pressed” indication.
- 1 Short flash when remote control is switched ON by means of the on/off button.
- Continuously lit (up to 5 seconds) when address digits are expected after pressing the ADDR button.
- Slowly flashes (2 times a second) when the battery level is becoming low; typically when more than 85% of the useful life is past.

## 1.6 Function of the RGB filter button

### Filtering the color of the projected image

By pressing the RGB filter button on the RCU you can place a color filter on the output of the projector. This feature can be useful during the installation and configuration of a multi-projector or multi-channel setup. By having one projector project a red image and another project a green image, it is easier to spot and adjust the overlap section.

By pressing this button multiple times, you will have different active filters, in the following cycle:

- Red + Green + Blue (default)
- Red only
- Green only
- Blue only
- Red + Green
- Green + Blue
- Red + Blue
- Red + Green + Blue
- etc



After powering up, the colors will always revert back to full RGB.

## 1.7 Displaying and Programming addresses into the RCU

### Displaying the Projector Address on the Screen.

1. If the projector is on, press the menu key and navigate to the Status page. The projector address and the broadcast address can be seen under the Communication heading.

The projector's address is displayed on the LCD status screen and / or the OSD.

### How to Program an Address into the RCU?

1. Press the **Address** button until the *Button pressed indicator* lights up continuously (proximately 5 seconds).
2. Enter the address with the digit buttons within the time the indicator lights up (also proximately 5 seconds).



**Note:** That address can be any value between 0 and 31.

*Tip:* A few examples:

To enter address 3, press "3" digit button on the RCU to set the RCU's address to 3 and wait until the *button pressed indicator* is out. Alternatively, you can also press "0" and "3". This way, the *button pressed indicator* goes out immediately.



To enter address 31, then press "3" and "1" on the digit button on the RCU and the *button pressed indicator* goes out immediately.

## 1.8 Using the XLR connector of the RCU



Connecting a cable with the XLR connector will reset the broadcast address of the RCU to its default value '0'.

### How to use the XLR connector

1. Remove the XLR cover by pulling it backwards.



Image 1-7

2. Connect a cable with XLR plug into the XLR connector of the RCU.
3. Connect the other end of the cable with the XLR input of the projector.



*Note:* While the XLR cable is connected, the IR beam of the RCU is switched off.

## 1.9 Using the mini-jack connector of the RCU



Connecting a cable with the mini-jack connector will reset the broadcast address of the RCU to its default value '0'.

### How to use the mini-jack connector

1. Connect a cable with the mini-jack connector (reference 2 Image 1-8) of the RCU.
2. Connect the other end of the cable with the mini-jack input of the projector.

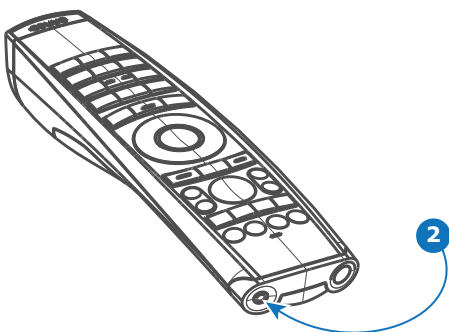


Image 1-8



*Note:* While the mini-jack cable is connected, the IR beam of the RCU is switched off.

## 1.10 Silicone protection sleeve for the RCU (optional)

### Introduction

Barco offers a silicone form fitting protection sleeve for the Pulse RCU. The silicone material keeps it comfortably, non slip and soft touch. All buttons and holes remain accessible. The sleeve is quick and easy installed. For ordering information see Barco website.

### How to install

1. Pull off the rubber XLR-lid from the RCU.



Image 1-9

2. Place back side (XLR side) of the RCU into the sleeve and pull the other side of the sleeve over the front side of the RCU.

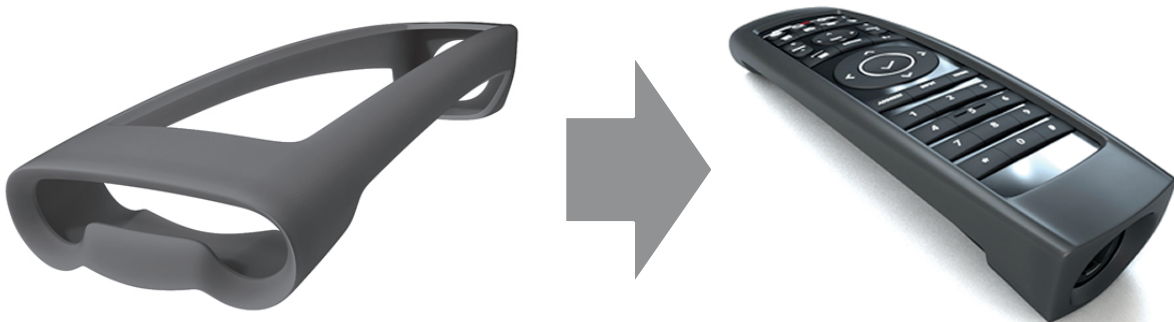


Image 1-10

