

# BARCO RESIDENTIAL PROJECTOR DRIVER

Revision: 2.00

Date: 28 May 2025

## MODULE DESCRIPTION

The Barco Residential module supports the following functionality:

- ✿ IP connection (only) (fixed IP address required)
- ✿ Discrete Power Control
- ✿ Support for both Eco (via Wake-on-LAN) and non-Eco modes
- ✿ Power Feedback
- ✿ Discrete Input Selection
- ✿ Input Feedback
- ✿ Custom Commands
  - DCI filter In/Out
  - Barco Preset 1-10
  - Auto Mode
  - Manual Mode
  - Aspect Mode
  - Aspect 16:9 (automatically selects Aspect Mode)
  - Aspect 1.85:1
  - Aspect 2.0:1
  - Aspect 2.2:1
  - Aspect 2.35:1
  - Aspect 2.37:1
  - Aspect 2.39:1

Even though the unit may support additional functionality, this may not be exposed within Crestron Home. Manufacturers should contact Ultamation on [support@ultamation.com](mailto:support@ultamation.com) if they wish additional feature support.

**Please note:** When this module is controlling your projector, it assumes exclusive control over the projector. If the projector is placed into a different power state, the driver will resend the power commands based on the drivers Crestron Home state. For this reason, we recommend that no other device or controller attempt to control the projector.

**Please Note:** The driver includes inputs that span the full range of Barco products; however, not all inputs are compatible with every projector model. Please ensure you check your specific projector model and connect the correct input in the driver accordingly.

## PROJECTOR POWER MODEL VERSIONS

Barco models come in two different versions

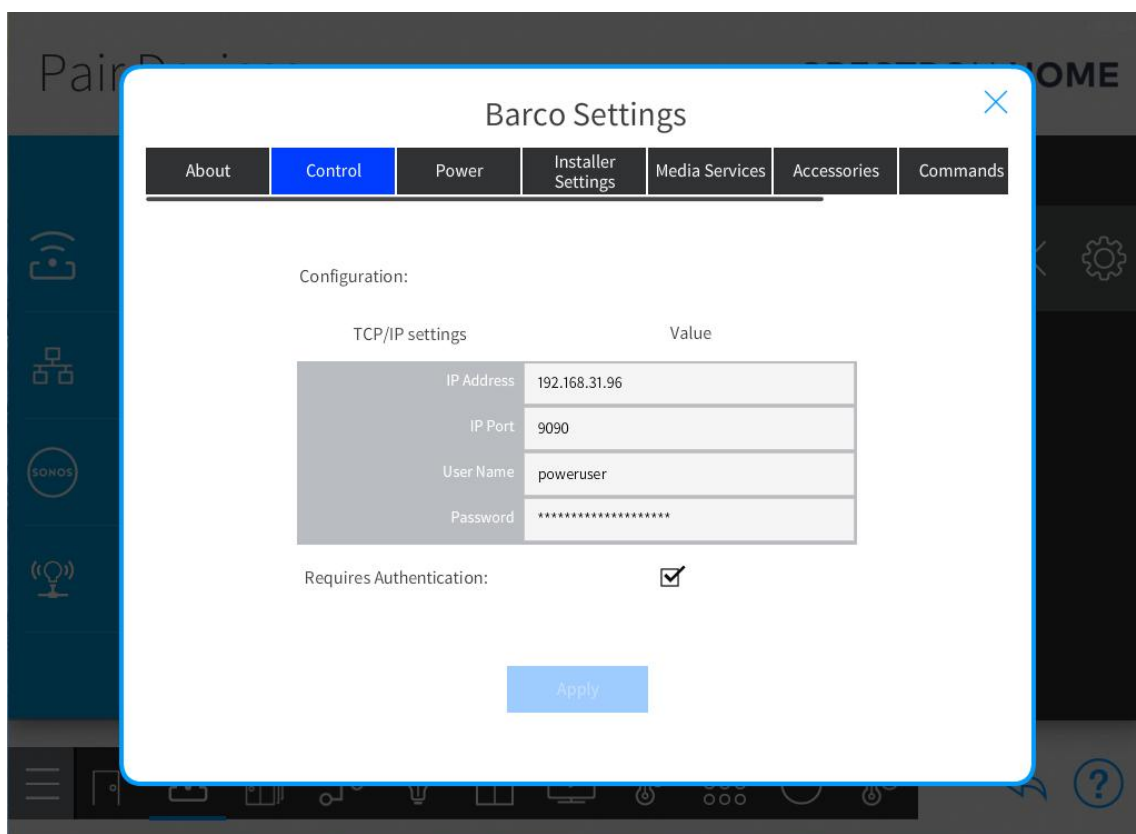
- **1 Chip Models - (I600, Medea, Bragi, Balder, Heimdall, Loki)** These projectors require WOL (Wake-on-LAN) client to wake the projector from Eco mode.
  - **Please note:** The chipset used by Barco for WOL requires a 10 Mbps connection. For this reason, the switch connected to the projector needs to be compatible with 10 Mbps. (some new switches do not support 10 Mbps).
  - **Please note:** For Wake On LAN to work, ensure the switch is connected to LAN Ethernet adapter, not the HDBaseT Ethernet adapter. Additionally make sure you have entered the MAC Address and IP address of this adapter into the Crestron driver control settings page.
- **3 Chip Models – (Hodr, Njord, Wodan)** These projectors do not require WOL packets to wake from a sleeping state.

## ATTRIBUTES – CONTROL

**IP Address** – Please enter the IP Address of the Barco projector.

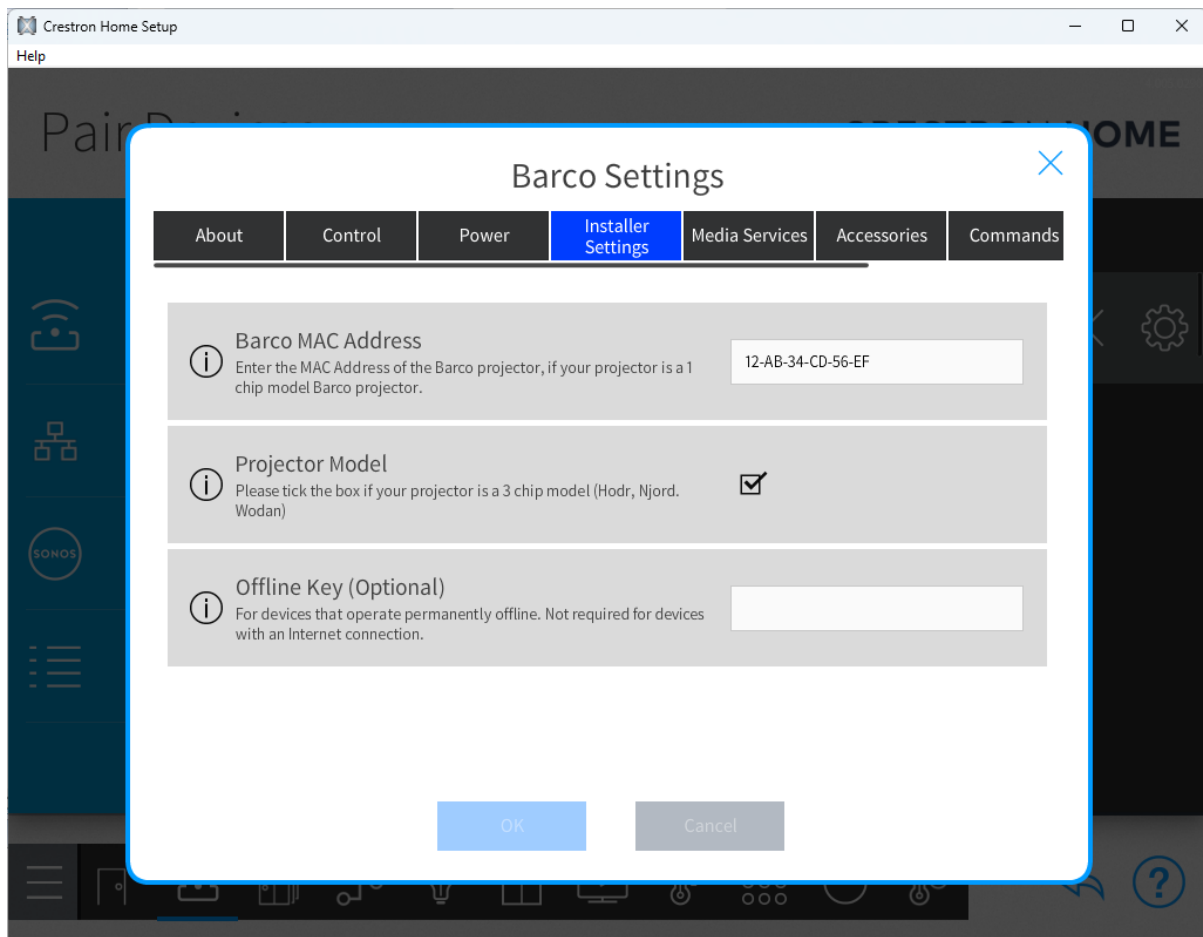
**IP Port** – Please leave the port set to 9090.

From Barco firmware **version 2.10** (Hodr, Njord & Wodan) or **version 2.11** (for all other products), authentication is required for control of the projector. If your projector is using these firmware versions or higher; you will be required to enter the username and password for the projector. If you are not yet on one of these versions, please untick the "Requires Authentication" checkbox, this will hide the username and password section.



## ATTRIBUTES - INSTALLER SETTINGS

**Barco MAC Address** - If you are using a one-chip model projector (I600, Media, Bragi, Balder, Loki or Heimdall), then you will need to enter the MAC Address of the Barco projector. If you have a three-chip model (Hodr, Njord, Wodan), this parameter is not used and can be left as default.



### Projector Model (1-chip or 3-chip Barco model):

- If you are using a **3-chip Barco projector**, please **tick this box**.
- If you are using a **1-chip Barco projector**, **leave the box unticked**.

**Offline Key (Optional)** - The final parameter is an optional "offline" key which can be requested under special circumstances. Please **FIRST** refer to the "Licencing" section below and then contact [support@ultamation.com](mailto:support@ultamation.com) if you **REQUIRE** offline activation. The same offline key can be used for multiple driver instances in the same system. The same key should be used for each instance of the driver in the system (though different Crestron Home systems will require different licence keys). If you do not have a cloud licence and do not enter a valid offline key, the system will function for 1 hour and then control will be suspended. The offline key can be entered at any time after initial setup without having to reconfigure each tile.

## FAQ

1. *My Barco projector is not turning on when I select a source from Crestron Home. What should I check?*
  - a. Double-check that you have the correct IP Address.
  - b. If you are using firmware **version 2.10** (Hodr & Njord) or **version 2.11** (for all other products), please ensure that the correct username and password are entered in the driver settings.
  - c. If you are using a 1 chip model projector,
    - i. Ensure you are connected to the LAN Ethernet adapter, not the HDBaseT Ethernet adapter.
    - ii. Within the driver's Installer Settings, verify that you are using the correct MAC Address for the projector's LAN adapter.
    - iii. Check that the switch connected to the projector supports 10 Mbps.
  
2. *How do I check if the driver is licenced?*
  - a. For cloud licences, you can check the licence status using the following link <https://portal.ultamation.com/licensing>
  - b. Alternatively, you can check the status of the licence by reviewing the error log after a reboot.
    - i. If the driver is licenced, you will see one of the following.
      1. "CloudStatus: Cloud licence status is Valid."
      2. "ApplyOfflineKey: Offline key applied successfully!"
    - ii. If the driver is unlicenced, you will see the following lines.
      1. "CloudStatus: Cloud licence status is LicenceInvalid."
      2. "ApplyOfflineKey : Invalid offline key entered [ <LICENCE\_KEY> ] for MAC Address : <MAC\_ADDRESS>"
  
3. *Can I test the driver before purchasing a licence?*
  - a. Yes, the driver will operate for 1 hour in trial mode. You can restart the trial by rebooting the Crestron processor. We recommend using this trial period to ensure you are satisfied with driver before purchasing a licence.
  
4. *I have had to replace my Crestron processor; how do I transfer my licence to the new processor?*
  - a. Please send an e-mail to [support@ultamation.com](mailto:support@ultamation.com), with the following information. We will look into the request and depending on the circumstances, may proceed with transferring the licence to the new processor.
    - i. Old MAC Address
    - ii. New MAC Address
    - iii. Order Number (This can be found in the e-mail you received, when you purchased the licence).

5. *My Barco projector is not switching to the correct Input. How can I fix this?*
- a. There are two common reasons why this may happen.
    - i. **Input not supported by your projector:** Not all Barco projectors support the same input options. Make sure the input you're trying to select is available on your specific projector model.
    - ii. **Incorrect projector model setting:** Barco projectors come in 1-chip and 3-chip models, each of which uses different input commands. If the driver is set to the wrong model type, it may send incompatible commands, preventing the input from changing correctly. In the "Source Routes" section of Crestron Home, the input name includes C1, C3, or both at the end. These indicate whether the source is a 1-Chip Input (C1), a 3-Chip Input (C3), or compatible with both.

Input Number	1 Chip Model	3 Chip Model
Input-1	HDMI	HDMI
Input-2	DVI 1	
Input-3	DVI 2	
Input-4	DisplayPort 1	DisplayPort
Input-5	DisplayPort 2	DisplayPort A
Input-6	Dual DVI	
Input-7	Dual DisplayPort	Dual DP - AB
Input-8	Dual Head DVI	
Input-9	Dual Head DisplayPort	Dual Head DP - A C
Input-10	HDBaseT	HDBaseT 1
Input-11	SDI	SDI A
Input-12	Dual DVI Sequential	
Input-13	Dual DisplayPort Sequential	
Input-14	Dual DVI columns	
Input-15	Dual DisplayPort Columns	Quad Column DP
Input-16		HDBaseT 2
Input-17		SDI B
Input-18		SDI C
Input-19		SDI-D
Input-20		Quad SDI
Input-21		DisplayPort B
Input-22		DisplayPort C
Input-23		DisplayPort D
Input-24		Dual Head DP - B D
Input-25		Dual Head Dual DP - AB CD
Input-26		Quad DP
Input-27		Dual DP - AC
Input-28		Dual DP - BD
Input-29		Dual DP - CD

## SUPPORT

If you have any issues with a driver or installation please let us know by contacting Ultamation support on [support@ultamation.com](mailto:support@ultamation.com) and please include as much detail about your issue as possible, such a recent processor error log.

Licence verification messages are posted to the error log, so please ensure you have checked this.

## LICENCE

This driver (including software, images and all other associated assets distributed as part of the purchased download package) is licenced on a PER PROCESSOR basis.

A purchase should not be completed without correct information as refunds cannot be issued for errors or changes made to details following purchase.

This is an electronic product and there is no physical delivery.

The driver is provided without any warranty with respect to the reliability of the controlled device or changes to device protocol. We will endeavour, through best efforts, to maintain the driver's functionality and any bug fixes will be provided free-of-charge. Additional functionality may be released as a variation of this driver and this will be a separate, purchasable, product.

## CLOUD LICENCE

This driver contacts Ultamation's licencing server at startup. If the server finds a matching licence for the driver and processor then the driver will be licenced. Otherwise, the driver will check the offline licence key. If you purchase a licence AFTER you have loaded the driver, please reboot the system to see changes take effect.

If you purchased a licence before it was migrated to the cloud service, i.e. you have a licence key already, you must enter this into the Offline Key user attribute. If you purchased the driver after it was migrated, and you don't have a licence key, no further action is required.

If no licence exists for the product/processor the driver will enter a short trial period (ONE HOUR) to allow for verification of correct control or evaluation.

To request an OFFLINE key, please contact [support@ultamation.com](mailto:support@ultamation.com) with your order details and a brief explanation why you REQUIRE offline activation. Ultamation reserve the right to refuse offline activation.

**NOTE:** Once an offline key has been issued no further licence changes will be granted. Moving the product to a new processor will require an additional licence purchase.