

NEO SMART BLINDS DRIVER INTEGRATION FOR SAVANT SYSTEM version 2.0

For more details,
visit our help center
help.neosmartblinds.com

Quick Access to Sections

ROOM/GROUP CONFIGURATION

BLIND CONFIGURATION

APP NAVIGATION REFERENCE

TROUBLESHOOTING

Good to Know Only Smart Controller models C-R200 and C-BR300 are supported, with Open, Close, Stop, and Favourite commands available for both individual blinds and rooms. The driver does not support position feedback, setting a specific percentage position, tilt, or top-down/bottom-up (TDBU) blinds, and it does not include auto-discovery or device import. Configuration must be done manually.

Step 1: Access the client's account in the Neo Smart Blinds app

You need an account in the **Neo Smart Blinds app** fully set up to have the IP address and IDs of rooms and blinds necessary to integrate with the Savant System (da Vinci 9.0.2 and later).

The client has the Neo Smart Blinds account all set up

Ask the client access for their account. The options are:

- the **client provides** you with a **mobile device** with the app installed and with **his account logged in**.
- the client temporarily changes his account's password so you can log in to the Neo Smart Blinds app by using the client's email address.

I'll set up the Neo Smart Blinds app for my client

You can use **any device** (including yours), but use the **client's valid email address**, a temporary password and the **setup code provided in the Smart Controller's instructions** to create the account. **Add the Smart Controller and pair the blinds using the app**. For this, you will need physical access to the Smart Controller and blinds' motors and/or blinds' handheld remote control.



First time using Neo Smart Blinds app?

It's highly recommended to make a **test setup** with at least one blind pairing before heading to the client's location. If necessary, please refer to our guide [How to use the app on our website](http://neosmartblinds.com/smartcontroller-help/) <http://neosmartblinds.com/smartcontroller-help/>.



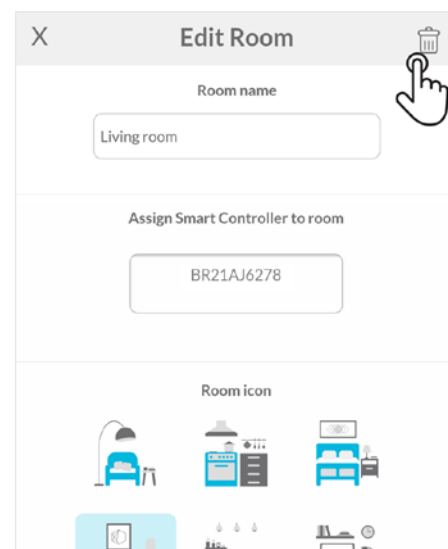
Step 2: Create additional rooms to support your scripts

To **minimize delays** when controlling a large number of blinds **with Savant interface or custom scripts**, prioritize using **group rather than individual blinds** whenever possible. It's not an issue to add the same blind into different rooms in the **Neo Smart Blinds app**. For more information, please refer to the sections **Creating additional rooms for easier automation** and **Custom Scripts**.

Each room has a maximum number of blinds that will vary according to the account's setup code. **Most setup codes support 15 blinds in each room**. If needed to delete blinds to reorganize the room, **it's better to delete the room and start over**. That's a limitation of the RF technology used by this class of motors.

How to delete a room

Access **Menu> Your Rooms**, tap on the room you want to delete, tap on the **pencil icon** located on the right upper corner of the page. In the same location, tap on the **trash icon** and confirm.



Delete room

Menu>Your Rooms> Room>Edit Room

Step 3: Take note of the Smart Controller local IP address

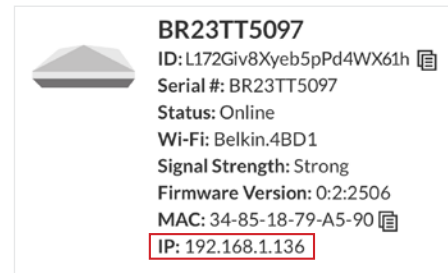
In the Neo Smart Blinds app, access the Smart Controller page (**Menu>Smart Controllers**). Ensure that all Smart Controllers are online and **connected to the same network that the Savant Host** is running and that the **IP address** is set to **DCHP reservation** in the router, and **TCP port 8839** must be open and reachable from the Savant network.

Take note of the local IP address of all the Smart Controllers. This information will be necessary when setting up the driver.

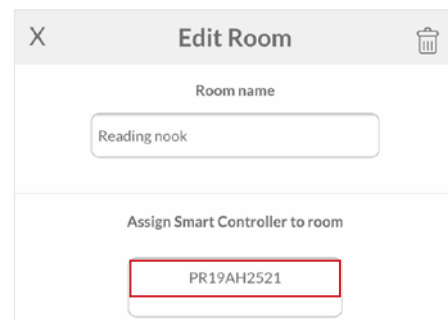
If the account has more than one Smart Controller, you will also need to **take note of the name of the rooms each Smart Controller is assigned**. Access the Edit Room page (**Menu>Room>Tap on the pencil icon**) to see this information.

Same Network and DHCP Reservation

The Smart Controllers and Savant Host must be on the same network, with IP address assigned via **DHCP reservation** on the router, and **TCP port 8839** must be open and reachable from the Savant network.



Smart Controller Information
Menu>Smart Controllers



Edit Room
Menu>Your Rooms> Room>Edit Room

Step 4: Install and Set Up Savant Driver in Blueprint

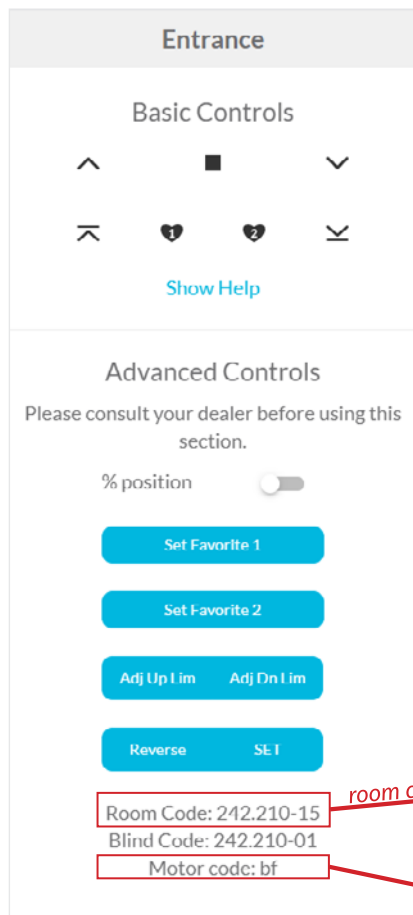
Follow these steps to import and configure the Neo Smart Blinds driver in Savant Blueprint.

1. **Open Savant Blueprint.**
2. **Import** the **custom component profile** from the package's componentProfiles folder.
3. **Add the component "Neo Smart Blinds Smart Controller TCP"** to the configuration.
4. **Set the Smart Controller IP address** in the component's network settings.
5. **Save** the Blueprint configuration.
6. **Repeat** these steps **if there is more than one Smart Controller**.

Step 5: Room Configuration

Using the **Neo Smart Blinds app**, record the exact values shown below **for each individual blind or group/room** that will be added to the Savant system.

A **group/room in Savant** behaves the same way as a room in the Neo Smart Blinds app and as a group channel on the handheld remote. A **single command** from any of these three control methods will change the position of all blinds in that group/room.



Blind advanced page
Menu>Your Rooms>Room>Blind

Command Behaviour Reference Group/Room

The driver sends raw TCP commands on port 8839 with CRLF termination.

Open: Address1.Address2-15-op!Address3

Close: Address1.Address2-15-cl!Address3

Stop: Address1.Address2-15-sp!Address3

Favourite: Address1.Address2-15-gp!Address3

Group/Room

Room Code: 242.210-15

Address1 = 242

Address2 = 210

Address3 = bf

Room code into Savant properties

For each room/group:

Select the appropriate Smart Controller (IP address)

For accounts with more than one Smart Controller, make sure to enter the same Smart Controller assigned to the room.

Address1 (ID1): Enter the first three digits of the room code, including any leading zeros.

Address2 (ID2): Enter the second three digits of the room code, including any leading zeros.

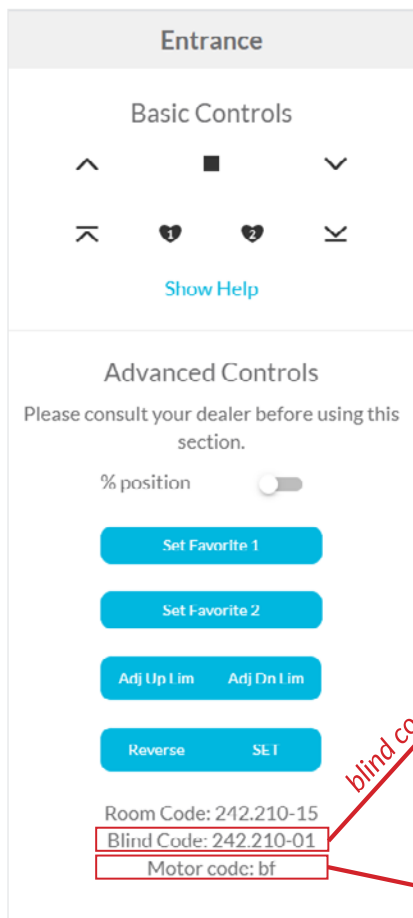
Address3: Must be the exact 2 letters from the motor code.

Address4: Not used.

The room code can be found on the Advanced page of any of its blinds (Menu> Your Rooms> Tap on the room> tap on any blind> Advanced Controls section, the bottom of the page).

Note: The group/room channel is fixed to 15 by the driver.

Step 6: Blind Configuration



Blind advanced page
Menu>Your Rooms>Room>Blind

Command Behaviour Reference

Group/Room

The driver sends raw TCP commands on port 8839 with CRLF termination.

Open:Address1.Address2-Address3-op!Address4

Close: Address1.Address2-Address3-cl!Address4

Stop:Address1.Address2-Address3-sp!Address4

Favourite: Address1.Address2-Address3-gp!Address4

Individual Blind

Blind Code: 242.210-01

Address1 = 242

Address2 = 210

Address3= 01

Address4 = bf

Blind code into Savant properties

For each **individual blind**:

Select the appropriate Smart Controller (IP address)

For accounts with more than one Smart Controller, make sure to enter the same Smart Controller assigned to the blind's room.

Address1 (ID1): Enter the first three digits of the blind code, including any leading zeros.

Address2 (ID2): Enter the second three digits of the blind code, including any leading zeros.

Address3 (Channel): Must be the exact 2 digits after the "-" symbol of the blind code, including any leading zeros.

Address4: Must be the exact 2 letters from the motor code

The blind code can be found on the Advanced page of the blind (Menu> Your Rooms> Tap on the room> Tap on the blind> Advanced Controls section, the bottom of the page).

Step 7: Upload and Validate

1. **Generate services** in Blueprint.
2. **Upload** to the Savant Host.
3. **Validate** at least one individual **blind**: Open, Close, Stop, Favourite.
4. **Validate** at least one **group/room**: Open, Close, Stop, Favourite.

Creating additional rooms for easier automation

Let's say you want to create a script to easily open and close all the blinds on the east side of the house, despite these blinds being in different physical rooms and floors.

One by one, add these blinds (Menu> Add Blind) to a new room called "East wall". You will create this room while adding the first blind.

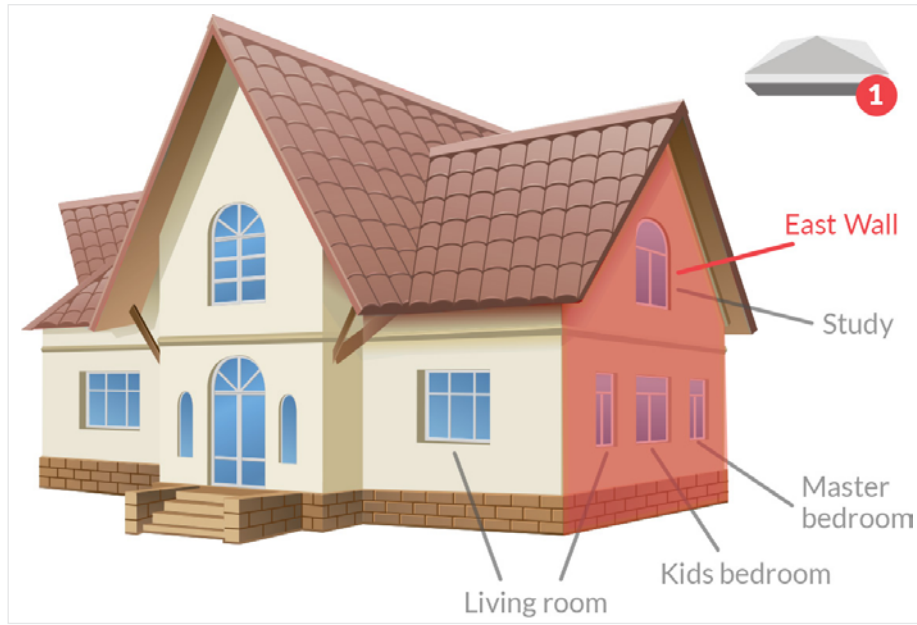
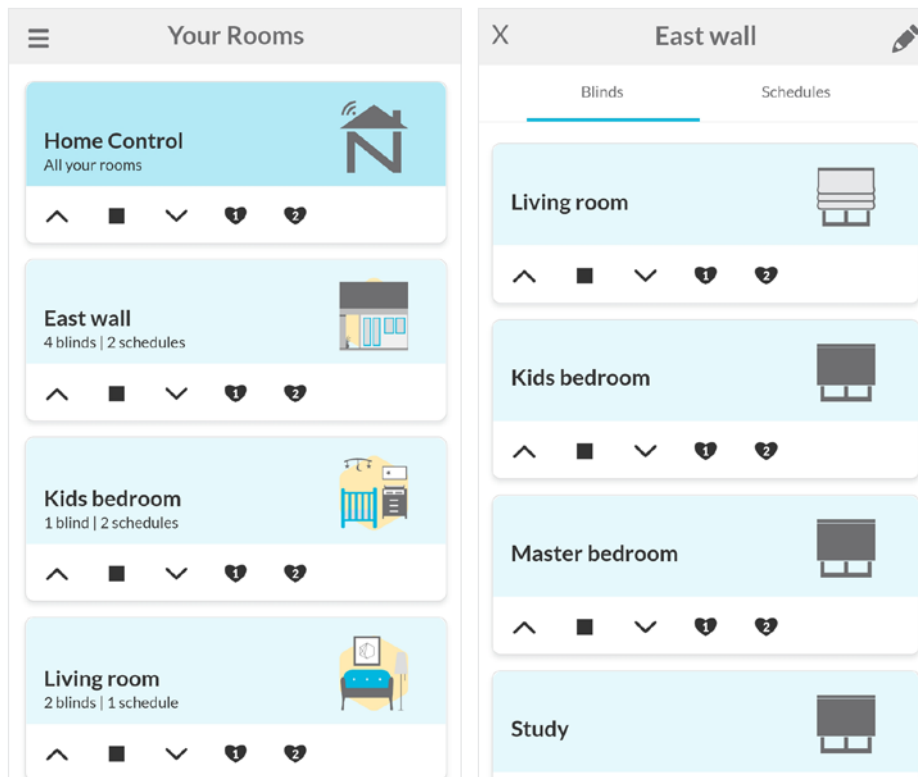


Image 12: Group created only for automation purposes in a house with one Smart Controller



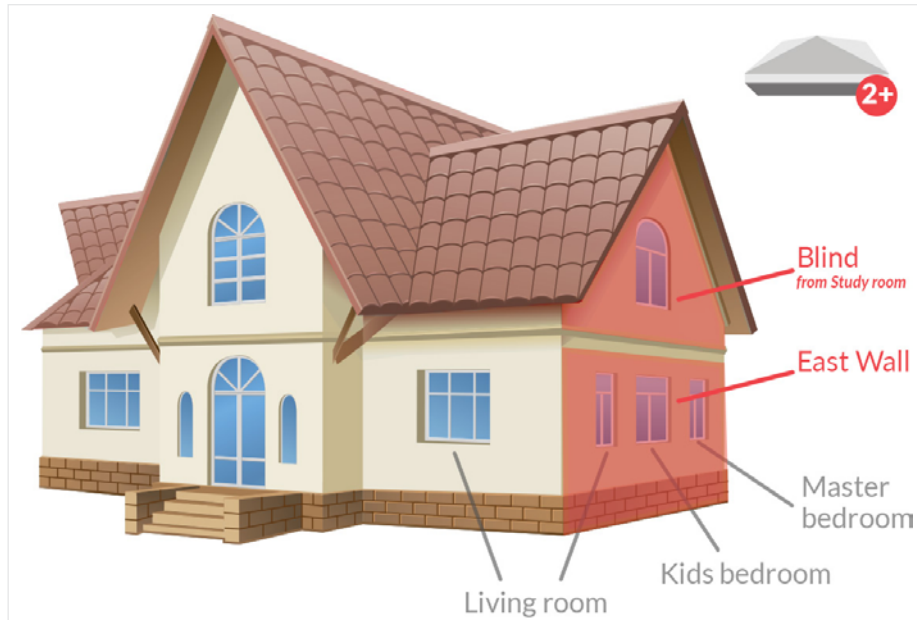
Room "East wall" created in the Neo Smart Blinds app

Creating additional rooms for easier automation *(cont.)*

Houses with more than one Smart Controller

Some houses will have more than one Smart Controller, usually one in each level. If this is the case of your client's home, note that each room may need a different Smart Controller assigned, reflecting their proximity to the physical blinds they control.

In this scenario, you should choose the **serial number** from the correct Smart Controller while creating the room for the first time.



Group/Room created only for automation purposes in a house with two Smart Controllers

Custom Scripts

Each command sent using the driver takes about 500ms to be transmitted. It's necessary to add a minimum delay of 100ms between multiple calls.

When creating custom scripts, it's essential to know that each command sent using the driver takes about 500ms to be transmitted. At this point, there is not a central driver manager to buffer the TCP connection with the Smart Controller. That said, it's necessary to add a minimum delay of 100ms between multiple calls.

Prioritize the use of the **group drivers rather than a long list of individual blinds**, minimizing delays to move larger amounts of blinds. The **available commands** for scripts and scenes are: **up, stop, down, and favorite**.

IMPORTANT: Prioritize the use of the **Group/Room** rather than a long list of individual blinds, **minimizing delays** to move larger amounts of blinds.

App navigation Reference

Smart Controller IP address: Menu> Smart Controllers

Smart Controller Serial number: Menu> Smart Controllers, also written on the bottom label of the Smart Controller case

Smart Controller assigned to a room: Menu>Room>Tap on the pencil icon

Room, Blind and Motor codes:

Menu> Your Rooms> Tap on the room> tap on any blind> Advanced Controls section, at the bottom of the page.

Delete a room: Menu>Your Rooms, tap on the room you want to delete, then tap on the pencil icon located on the right upper corner of the page. In the same location, tap on the trash icon and confirm.

Troubleshooting

The blinds don't move when sending commands

Test connection fails - timeout

Ensure the Smart Controller is online, connected to the same network, with IP address assigned via **DHCP reservation** on the router, and **TCP port 8839** must be open and reachable from the Savant network. Verify LAN routing and firewall rules.

For accounts with more than one Smart Controller, assure you have the Smart Controller's IP address for the Smart Controller assigned to that room/blind. To check, go to Menu>Room>Tap on the pencil icon, take note of the serial number. Go to the Menu>Smart Controllers list and find the corresponding IP address.

Some blinds move, others don't

If the account has more than one Smart Controller, ensure that the Smart Controller's IP address corresponds to the Smart Controller assigned to the room/blind. Also check Address1/Address2/Address3/Address4 values, confirm leading zeroes in motor channel (example 01) and confirm motor code.

Blinds and Group/Rooms do not respond to commands consistently

Avoid burst command sequences. Refer to the topic Custom Scripts for more information. Validate overall network stability and latency.

The preset/favorite 2 command does not work

Next up and next down commands do not work

Tilt commands do not work

The current driver does not support these commands.

The Smart Controller is offline

First, make sure that it's plugged into an outlet and it connects to the internet. After a couple of seconds, you should see the LED in the bottom of the Smart Controller case breathing blue-green.

Model C-R200: Use the refresh button (right upper corner) in the Menu>Smart Controllers page in the Neo Smart Blinds app. The Smart Controller should show up online.

Model C-BR300: Access Menu>Smart Controllers page in the Neo Smart Blinds app. This page always show the current state of the device. The Smart Controller should show up online.

The Smart Controller is offline, and the LED on the Smart Controller is blue or green

Blue or green LED: the Smart Controller is looking for the Wi-Fi SSID or trying to connect to the internet.

If the Smart Controller was previously working, ensure that the router works correctly and reboot the router.

If the router was and/or the password changed. Without deleting the device from the account, tap on "Add Smart Controller", follow the steps and when you reach the Wi-Fi step, choose the appropriate SSID and enter its credentials.