



RPM DEVICE CONFIGURATION GUIDE

NXB-CCG NETLINX CLEAR CONNECT™ GATEWAY

The screenshot shows the AMX web interface configuration page. At the top, it says "AMX logged in as admin" with a "Logout" button and "v2.1.2" in the corner. Below the header are navigation tabs: "Configure", "Add Devices", and "Program". Under "Configure", there are sub-tabs: "Settings", "Web Logins", "Integration Logins", "Firmware Update", and "Support File".

The main content area is divided into three sections:

- Network:** Contains DHCP (Enabled/Disabled), CCT IP Address (192.168.108.112), Subnet Mask (255.255.252.0), Gateway (192.168.108.2), DNS Server 1 (192.168.20.6), DNS Server 2 (192.168.20.5), Host Name (prodman.amx.internal), and Zero Configuration (Enabled/Disabled).
- Security:** Contains Telnet (Enabled/Disabled), Telnet Port (23), and HTTPS Only (Enabled/Disabled).
- Language:** A dropdown menu with options: English, Français, Español, and Deutsche.

At the bottom, there is a LUTRON logo on the left, a copyright notice "Copyright © 2012-2013 Lutron Electronics Co., Inc. All rights reserved. Licenses and Software Notices" in the center, and a "Clear Connect Enabled" badge on the right.

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Configuring Lighting Systems

Overview

RPM uses macros to configure Lighting devices. Lighting macros are based on *Scene Names* defined in the *Lighting - Device Details* page, as described below. Note that this page is only accessible if a Lighting device is included in your RPM project (as indicated in the *Devices* page (FIG. 1):



FIG. 1 Devices page

NOTE: You can access the *Lighting - Device Details* page by clicking on the *Lighting* icon in the *Devices* page.

Select a Lighting Control Device and Configure Lighting Scenes

1. The *Lighting - Device Details* page has two tabs: *Information* and *Configuration*. The initial view is of the *Information* tab. Use this tab to select a Lighting Device by *Manufacturer* and *Model*, and enter the required connection information. The example below shows that the NXB-CCG has been selected (FIG. 2):

Model	Control Method	Created By	Created Date
NXB-CCG	IP	AMX	09/05/2012 at 3:06:02 AM

IP Address/DNS Name: * 192.168.222.333

Username: * amx

Password: * clearconnect

FIG. 2 Lighting - Device Details page: Information tab

2. Open the *Configuration* tab to view and configure up to six lighting scenes (FIG. 3):

Scene Names

Scene 1: 20% Scene 2: 40% Scene 3: 60%

Scene 4: 80% Scene 5: All On Scene 6: All Off

FIG. 3 Lighting - Device Details page: Configuration tab (default settings for Scenes 1-6)

These scenes represent the presets that will be accessible to the end user via the touch panel's lighting control page. As indicated in FIG. 3, each of the scenes has a default name that indicates its functionality.

3. Optionally, edit the *Scene Names* as desired. FIG. 4 shows an example of edited Scene Names (see Scenes 1-4 below):

The screenshot shows a web interface titled "Lighting - Device Details" with two tabs: "Information" and "Configuration". Under the "Configuration" tab, there is a section labeled "Scene Names" containing six input fields arranged in two rows. The first row contains "Scene 1: 20% Dim", "Scene 2: 40% Low", and "Scene 3: 60% Medium". The second row contains "Scene 4: 80% High", "Scene 5: All On", and "Scene 6: All Off".

FIG. 4 Lighting - Device Details page: Configuration tab (Scenes Names 1-4 edited)

NOTE: If a Scene Name is left blank, then that Lighting Scene will not be included in the finished project. To "delete" a scene, delete its' Scene Name.

4. Click **Next** to save changes.

NOTE: The six lighting scenes must be programmed on the NXB-CCG (NetLinx® Clear Connect™ Gateway). See the Configuring the NXB-CCG section on page 6 for details.

Configuring the NXB-CCG

Overview

In order for the NXB-CCG NetLinx Clear Connect Gateway to work with the settings specified in RPM, there are settings that need to be configured on the NXB-CCG. The settings described in this section are configured via the setup pages in the NXB-CCG's online WebConsole.

NOTE: Refer to the *NXB-CCG Operation/Reference Guide* (available online at www.amx.com) for details on installing the NXB-CCG.

Accessing the NXB-CCG WebConsole

Accessing the NXB-CCG's WebConsole requires that the NXB-CCG is connected to a NetLinx Master and is powered on. Use the NetLinx Studio software application (available online at www.amx.com) to access the WebConsole as described below:

Use the *Zero Configuration Bar* in RPMLoader to access the WebConsole as described below:

1. In RPMLoader, select **View > Zero Configuration Bar** to display the Zero Configuration Bar (initially empty).
2. Right-click inside the Zero-Configuration Bar and select **Refresh Zero Config List**. This will generate list of all Zero-Configuration enabled devices connected to the Master. An example is shown in FIG. 5:

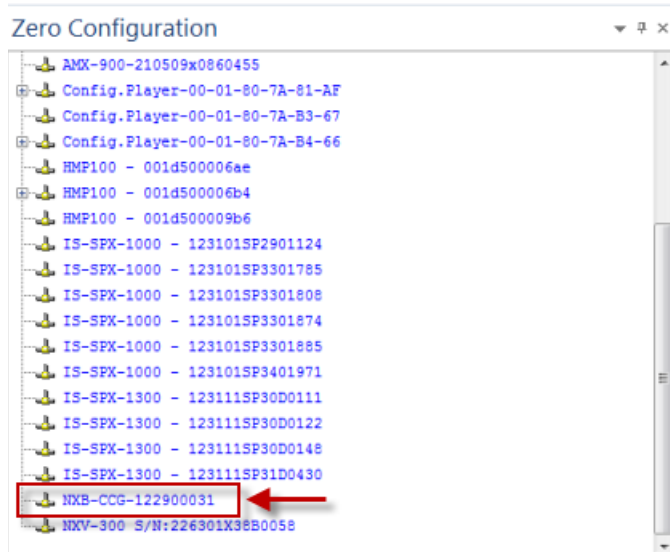


FIG. 5 RPMLoader - Example Zero Configuration Device List with NXB-CCG

3. Right-click on the NXB-CCG in the Zero-Config devices list and select **Launch Web Configuration Page via Default Browser**.
4. Enter the default login information (FIG. 6):



FIG. 6 NXB-CCG WebConsole - Login page

- default Username = **Admin**
 - default Password = **1988**
5. Press **LOGIN** to open the NXB-CCG's WebConsole to its initial view - the *Configure* page.
 6. Open the **Add Devices** page (FIG. 7):



FIG. 7 NXB-CCG WebConsole - Add Devices page

NOTE: Alternatively, the NetLinx Studio software application (available online at www.amx.com) can be used to access the WebConsole as described above. Refer to the online help for details on using NetLinx Studio.

Configuring the NXB-CCG to Use a Static IP Address

By default, the NXB-CCG uses DHCP for network addressing. However, the option to manually assign a static IP address is available via the **Configure** page - **Settings** tab (FIG. 8):

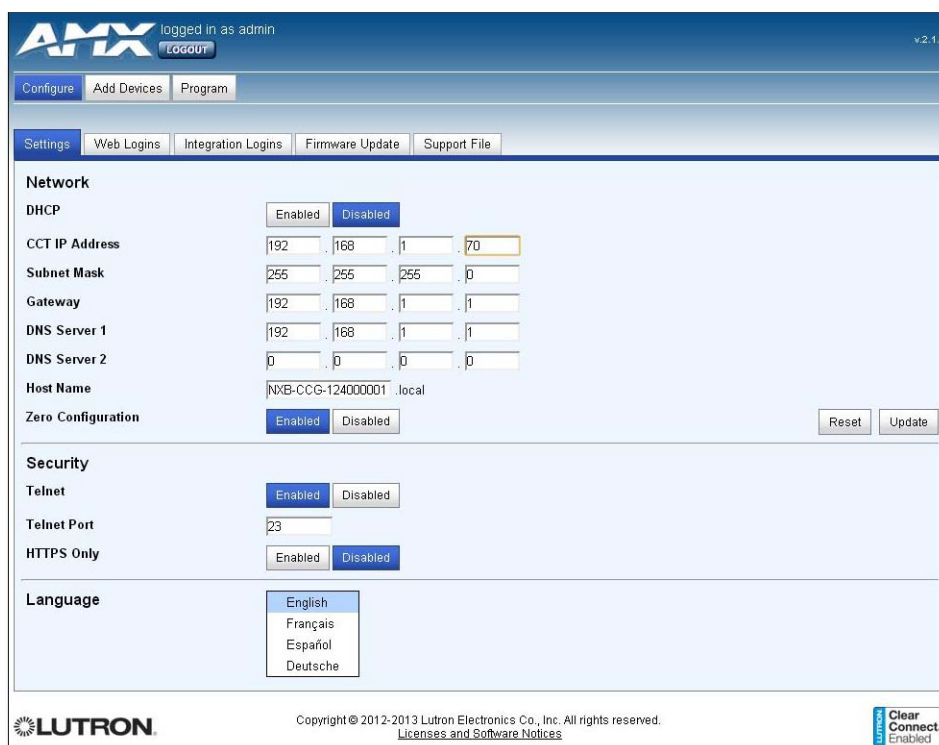


FIG. 8 Configure - Settings tab

Refer to the *NXB-CCG Operation/Reference Guide* for details on using the Gateway's WebConsole to configure the device.

Adding Devices

Each lighting device (keypads, sensor and switches and dimmers) in your RPM project must be added to the device list on the NXB-CCG, via the NXB-CCG's WebConsole (*Settings* page). The devices settings made in the NXB-CCG's WebConsole must match the device settings indicated in the RPM project report.

NOTE: Before adding devices, generate the RPM project report (in RPM, click View Report) and keep it handy for reference.

Supported RPM Clear Connect Lighting Controls

The NXB-CCG supports a specific set of RPM lighting controls:

Supported Clear Connect Lighting Controls	
Keypad:	CCD-W6BRL-WH, Clear Connect Wall Keypad - 6 button with Raise/Lower (FG2606-61-WH) Note: See <i>Adding a Clear Connect Wall Keypad</i> on page 8.
Occupancy Sensor:	CCD-OCRB-P-WH, Clear Connect Radio Powr Savr™ Ceiling Mount Occupancy/Vacancy Sensor (FG2606-41-WH) Note: See <i>Adding a Clear Connect Occupancy Sensor</i> on page 10.
Dimmers:	<ul style="list-style-type: none"> • CCD-F6AN-DV-WH, Clear Connect 6A Fluorescent Dimmer (FG2606-12-WH) • CCD-RD-WH, Clear Connect 120V Accessory Dimmer (FG2606-31-WH) • CCD-6NA-WH Clear Connect Phase Adaptive Dimmer (FG2606-13-WH) • CCD-6D-WH, Clear Connect 600W Incandescent/MLV Dimmer (FG2606-11-WH) Note: See <i>Adding a Dimmer</i> on page 11.
Switches:	<ul style="list-style-type: none"> • CCD-RS-WH, Clear Connect 120V Accessory Switch (FG2606-32-WH) • CCD-RS-277-WH, Clear Connect 277V Accessory Switch (FG2606-33-WH) • CCD-15APS-1-WH, Clear Connect Switching Plug in Device - 15 A Softswitch (FG2606-51-WH) • CCD-8S-WH, Clear Connect 120/277V Switch (FG2606-21-WH) Note: See <i>Adding a Switch</i> on page 13.

Adding a Clear Connect Wall Keypad

RPM supports the CCD-W6BRL Clear Connect Wall Keypad. This keypad features six pushbuttons with status LEDs, and two ramping (Raise/Lower) buttons (FIG. 9):

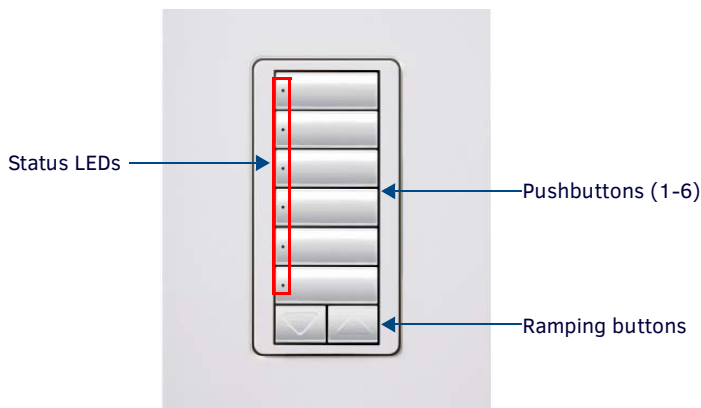


FIG. 9 CCD-W6BRL Clear Connect Wall Keypad

1. In the NXB-CCG's WebConsole *Add Devices* page, click **Add/Remove Devices** to enter "add/remove devices mode" (FIG. 10):



FIG. 10 NXB-CCG WebConsole - Add Devices page (Add/Remove Devices button)

- The program will indicate that it is entering "add/remove devices mode" (FIG. 11):

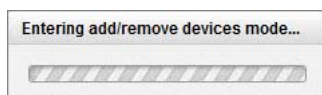


FIG. 11 NXB-CCG WebConsole - Entering add/remove devices mode

- In this mode, the NXB-CCG will wait for a device to be identified.
- When "add/remove devices mode" is active, the WebConsole will prompt you to press and hold a button on the keypad (FIG. 12):



FIG. 12 NXB-CCG WebConsole - Add/remove devices mode active

NOTE: The keypad that you wish to activate should have all LEDs blinking slowly (two seconds on, one seconds off). If the LEDs are not blinking, triple-tap-hold-triple tap any button to restore it to factory defaults, and then wait a minute until it indicates activation mode feedback (slow blink)

2. To add the keypad, press and hold any one of the buttons for approximately 4 seconds, until the *Device Heard* popup appears in the WebConsole (FIG. 13) indicating the type of device that reported itself (in this case a keypad):



FIG. 13 NXB-CCG WebConsole - Device Heard popup (Wall Keypad)

3. Enter a unique name for the keypad and click the **Add** button. This closes the *Device Heard* popup and returns to the *Add Devices* page, still in "add/remove devices mode".
4. Click **Done** to exit "add/remove devices mode" (FIG. 14):



FIG. 14 NXB-CCG WebConsole - Exiting "add/remove devices mode"

5. Note that the keypad is now indicated in the *Devices* list. In the example shown in FIG. 15, the keypad added was named "Keypad":

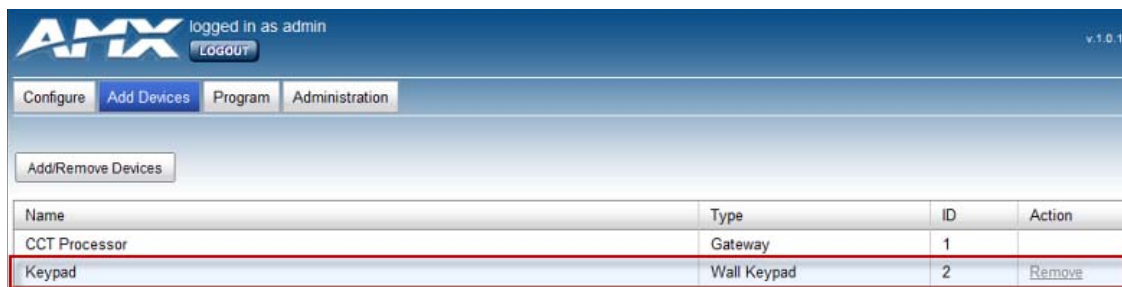


FIG. 15 NXB-CCG WebConsole - "Keypad" added

6. Change the **ID** for this keypad to match the *Integration ID* indicated in the RPM Project report. FIG. 16 provides an example RPM Report entry for the CCD-W6BRL Keypad, indicating that the keypad's Integration ID is "10":

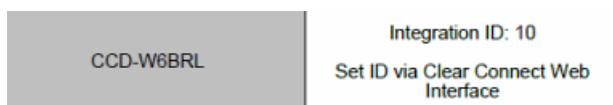


FIG. 16 RPM Project Report - CCD-W6BRL Keypad

In this case, the ID in the WebConsole must be changed from the default value of 2 to match the Integration ID value (10):

- a. Click in the ID cell of the keypad to open an edit window (FIG. 17):



FIG. 17 NXB-CCG WebConsole - Device ID popup (Keypad)

- b. Enter the Integration ID that is indicated for the keypad in the RPM Project report.
- c. Press **Save** to assign the new ID.

Adding a Clear Connect Occupancy Sensor

RPM supports the CCD-OCRB-P (-WH) Ceiling Mount Occupancy Sensor (FIG. 18):



FIG. 18 CCD-OCRB-P (-WH) Ceiling Mount Occupancy Sensor

1. In the NXB-CCG's WebConsole *Add Devices* page, click **Add/Remove Devices** to enter "add/remove devices mode" (FIG. 19):



FIG. 19 NXB-CCG WebConsole - Add Devices page (Add/Remove Devices button)

- The program will indicate that it is entering "add/remove devices mode" (FIG. 20):

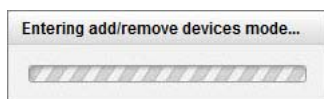


FIG. 20 NXB-CCG WebConsole - Entering add/remove devices mode

- In this mode, the NXB-CCG will wait for a device to be identified.
- When "add/remove devices mode" is active, the WebConsole will prompt you to press and hold a button on the sensor (FIG. 21):



FIG. 21 NXB-CCG WebConsole - Add/remove devices mode active

2. To add the sensor, press and hold the *Lights Off* button (see FIG. 18) for approximately 4 seconds, until the *Device Heard* popup appears in the WebConsole (FIG. 13) indicating the type of device that reported itself (in this case, an Occupancy Sensor):

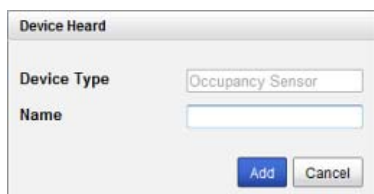


FIG. 22 NXB-CCG WebConsole - Device Heard popup (Occupancy Sensor)

3. Enter a unique name for the sensor and click the **Add** button. This closes the *Device Heard* popup and returns to the *Add Devices* page, still in "add/remove devices mode".
4. Click **Done** to exit "add/remove devices mode" (FIG. 14):



FIG. 23 NXB-CCG WebConsole - Exiting "add/remove devices mode"

5. Note that the Occupancy Sensor is now indicated in the *Devices* list. In the example shown in FIG. 24, the sensor added was named "Sensor":

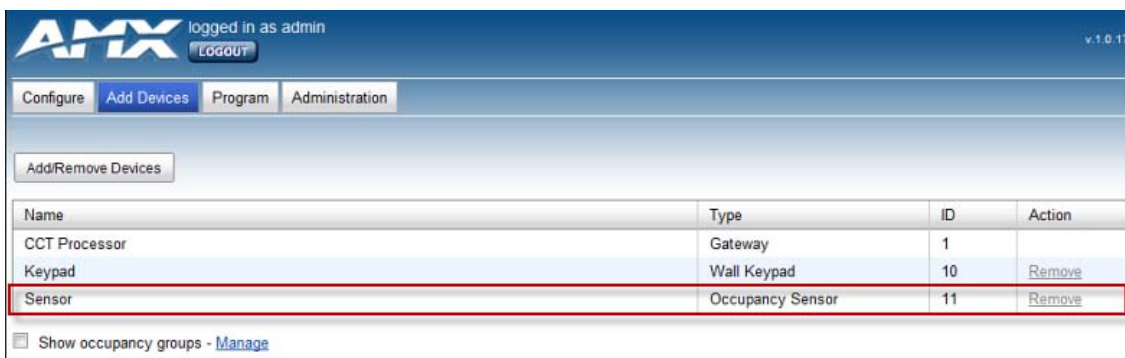


FIG. 24 NXB-CCG WebConsole - "Sensor" added

6. Change the ID for this sensor to match the Integration ID indicated in the RPM Project report.

FIG. 25 provides an example RPM Report entry for the CCD-OCRB-P Occupancy Sensor, indicating that the sensor's Integration ID is "12":

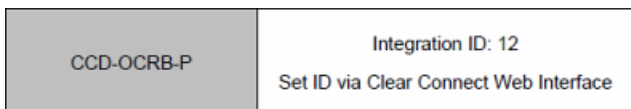


FIG. 25 RPM Project Report - CCD-OCRB-P Occupancy Sensor,

In this case, the ID in the WebConsole must be changed from the default value of 11 to match the Integration ID value (12):

a. Click in the ID cell of the keypad to open an edit window (FIG. 17):



FIG. 26 NXB-CCG WebConsole - Device ID popup (Sensor)

- b. Enter the Integration ID that is indicated for the keypad in the RPM Project report.
- c. Press **Save** to assign the new ID.

Adding a Dimmer

RPM supports the CCD-6NA dimmer (FIG. 27):

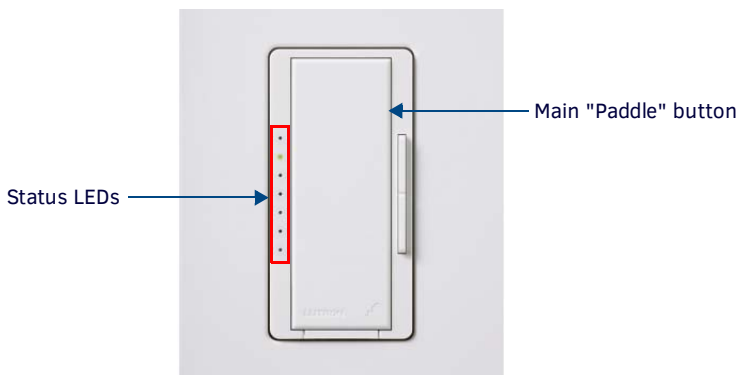


FIG. 27 CCD-6NA dimmer

1. In the NXB-CCG's WebConsole *Add Devices* page, click **Add/Remove Devices** to enter "add/remove devices mode" (FIG. 28):



FIG. 28 NXB-CCG WebConsole - Add Devices page (Add/Remove Devices button)

- The program will indicate that it is entering "add/remove devices mode" (FIG. 29):

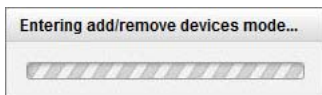


FIG. 29 NXB-CCG WebConsole - Entering add/remove devices mode

- In this mode, the NXB-CCG will wait for a device to be identified.
- When "add/remove devices mode" is active, the WebConsole will prompt you to press and hold a button on the sensor (FIG. 30):



FIG. 30 NXB-CCG WebConsole - Add/remove devices mode active

- To add the dimmer, press and hold the main paddle button (see FIG. 27) for approximately 4 seconds, until the *Device Heard* popup appears in the WebConsole (FIG. 31) indicating the type of device that reported itself (in this case, a Wall Dimmer):



FIG. 31 NXB-CCG WebConsole - Device Heard popup (Wall Dimmer)

- Enter a unique name for the dimmer and click the **Add** button. This closes the *Device Heard* popup and returns to the *Add Devices* page, still in "add/remove devices mode".
- Click **Done** to exit "add/remove devices mode" (FIG. 32):



FIG. 32 NXB-CCG WebConsole - Exiting "add/remove devices mode"

- Note that the dimmer is now indicated in the *Devices* list. In the example shown in FIG. 33, the dimmer added was named "Dimmer":



FIG. 33 NXB-CCG WebConsole - "Dimmer" added

NOTE: Unlike Keypads and Occupancy Sensors, Dimmers and Switches do not utilize the Device Integration ID value.

Adding a Switch

RPM supports the CCD-RS switch (FIG. 34):

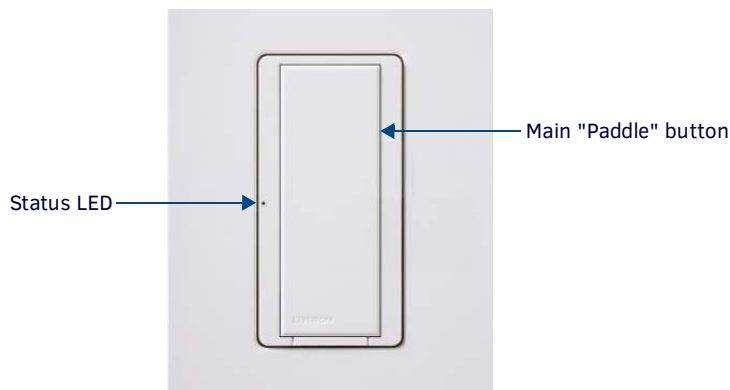


FIG. 34 CCD-RS switch

1. In the NXB-CCG's WebConsole *Add Devices* page, click **Add/Remove Devices** to enter "add/remove devices mode" (FIG. 35):



FIG. 35 NXB-CCG WebConsole - Add Devices page (Add/Remove Devices button)

- The program will indicate that it is entering "add/remove devices mode" (FIG. 36):

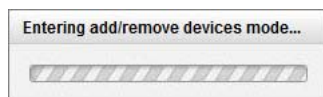


FIG. 36 NXB-CCG WebConsole - Entering add/remove devices mode

- In this mode, the NXB-CCG will wait for a device to be identified.
- When "add/remove devices mode" is active, the WebConsole will prompt you to press and hold a button on the sensor (FIG. 37):



FIG. 37 NXB-CCG WebConsole - Add/remove devices mode active

2. To add the switch, press and hold the main paddle button (see FIG. 34 on page 13) for approximately 4 seconds, until the *Device Heard* popup appears in the WebConsole (FIG. 38) indicating the type of device that reported itself (in this case, a 2-Wire Wall Switch):

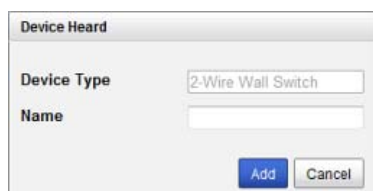


FIG. 38 NXB-CCG WebConsole - Device Heard popup (2-Wire Wall Switch)

3. Enter a unique name for the switch and click the **Add** button. This closes the *Device Heard* popup and returns to the *Add Devices* page, still in "add/remove devices mode".
4. Click **Done** to exit "add/remove devices mode" (FIG. 39):

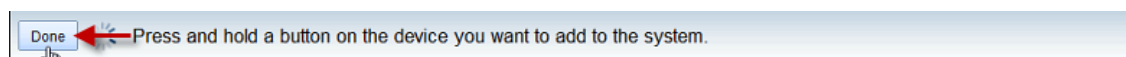


FIG. 39 NXB-CCG WebConsole - Exiting "add/remove devices mode"

5. Note that the switch is now indicated in the *Devices* list. In the example shown in FIG. 40, the switch added was named "Switch":



AMX logged in as admin v.1.0.17

Configure Add Devices Program Administration

Add/Remove Devices

Name	Type	ID	Action
CCT Processor	Gateway	1	
Keypad	Wall Keypad	10	Remove
Sensor	Occupancy Sensor	12	Remove
Dimmer	Wall Dimmer	14	Remove
Switch	2-Wire Wall Switch	15	Remove

FIG. 40 NXB-CCG WebConsole - "Switch" added

NOTE: Unlike Keypads and Occupancy Sensors, Dimmers and Switches do not utilize the Device Integration ID value.

Programming the NXB-CCG (for Clear Connect Dimmers and Switches)

Overview

RPM Projects that include a NXB-CCG (Clear Connect Gateway) use six Lighting Scenes. In RPM, the pre-configured Lighting Scenes are indicated in the **Devices > Lighting Configuration** page (FIG. 41):

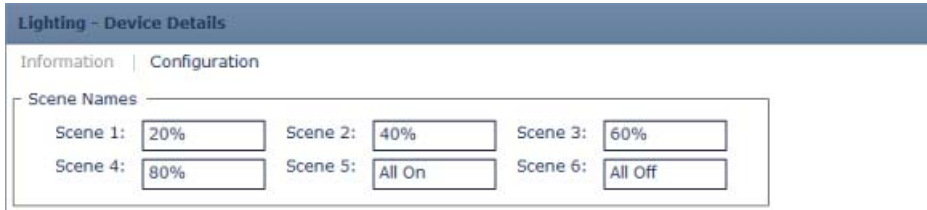


FIG. 41 RPM - Devices > Lighting Configuration page

Note that Lighting Scenes are essentially dim level settings: 0%-All Off, 20%, 40%, 60%, 80% and 100% (All On).

These Lighting Scenes must be programmed on the NXB-CCG. This configuration determines how the six Lighting buttons on the RPM-generated touch panel will function.

FIG. 42 provides an example of an RPM-generated Touch Panel showing the six Lighting Control buttons:

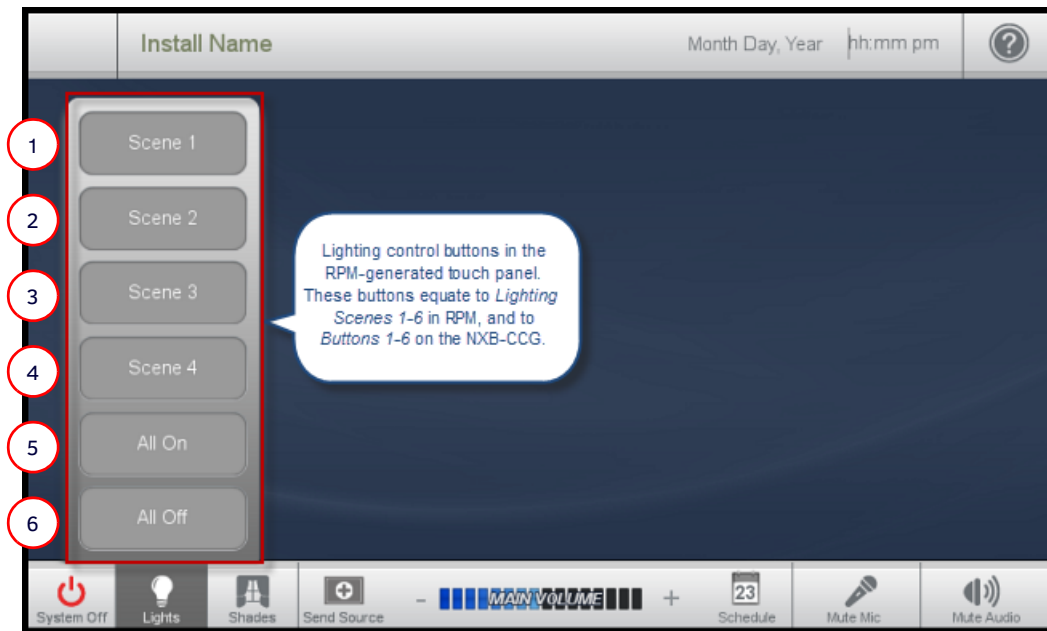


FIG. 42 RPM-generated Touch Panel (Lighting Control buttons)

These six RPM Lighting Scenes are also indicated in the RPM Project Report (FIG. 43):


 Lighting	NXB-CCG	IP: 192.220.168.33 Password: clearconnect User Name: amx Scene 1: 20% Scene 2: 40% Scene 3: 60% Scene 4: 80% Scene 5: All On Scene 6: All Off
---	---------	---

FIG. 43 RPM Project Report - NXB-CCG device page (indicating six "Lighting Scenes")

The following table lists the six RPM Lighting Scenes, provides their default dim level values, and indicates the one-to-one correlation between Lighting Scenes 1-6 in RMP and Buttons 1-6 in the NXB-CCG WebConsole:

Lighting Scenes 1-6 (in RPM)	Default dim level value (in RPM)	Associated CCT Processor Button (in NXB-CCG WebConsole)
• Lighting Scene 1	20%	Button 1
• Lighting Scene 2	40%	Button 2
• Lighting Scene 3	60%	Button 3
• Lighting Scene 4	80%	Button 4
• Lighting Scene 5	All On (100%)	Button 5
• Lighting Scene 6	All Off (0%)	Button 6

Fundamentally, the *RPM Lighting Scenes* equate to *Buttons 1-6* (under CCT Processor) in the NXB-CCG's WebConsole. As an example, since *RPM Lighting Scene 1* has a default dim level value of 20%, it is necessary to program Button 1 in the NXB-CCG WebConsole to also have a dim level value of 20%.

To program Buttons 1 - 6 on the NXB-CCG:

1. In the WebConsole, open the **Program** page.
2. Click to expand the **CCT Processor** entry in the *Devices* window.
 - The "CCT Processor" indicated here represents the NXB-CCG.
 - Under *OCC Processor*, note the listing of buttons 1-10 (FIG. 44):

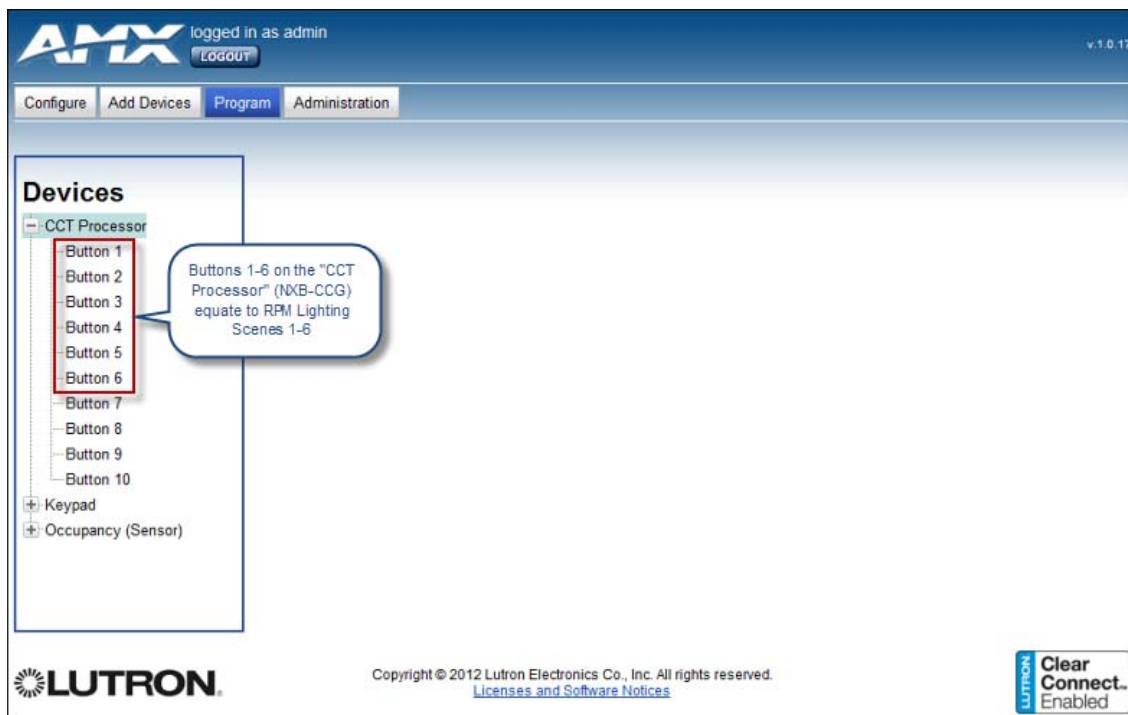


FIG. 44 NXB-CCG WebConsole - Program page (CCT Processor expanded)

- **Buttons 1 - 6** equate to the six Lighting Scenes defined in the RPM project. They must be configured to match the 6 dim values associated with Lighting Scenes 1-6 in RPM, since by default they are all set to 100% (all on). This configuration is done in the Button Details pages, as described below:
- **Buttons 7 - 10** are not applicable in this case.

You can add a Dimmer function and/or a Switch function to Buttons 1 - 6 under *CCT Processor*.

- *Dimmer Functions* specify a dim level (as well as fade time) to each button. These six dim levels equate to the six Lighting Scenes provided by RPM. When you add a Dimmer to a button, it associates the button with the specified dim level (and fade time).
- *Switch Functions* specify On or Off.

NOTE: You can add both a Dimmer and a Switch to a button. In this case, both functions will be activated when that button is pressed on the touch panel. For example, Button 1 can be configured to place the dimmer at 20% as well as turn the switch to Off.

Configuring Buttons 1-6: Adding Dimmer Functions

To configure the Lighting Control Buttons 1-6 on the touch panel (see FIG. 42 on page 15) to match RPM Lighting Scenes 1-6:

1. In the *Program* page, click on **Button 1** (under *CCT Processor* in the *Devices* window) to open the *Button 1 Details* page (FIG. 45).

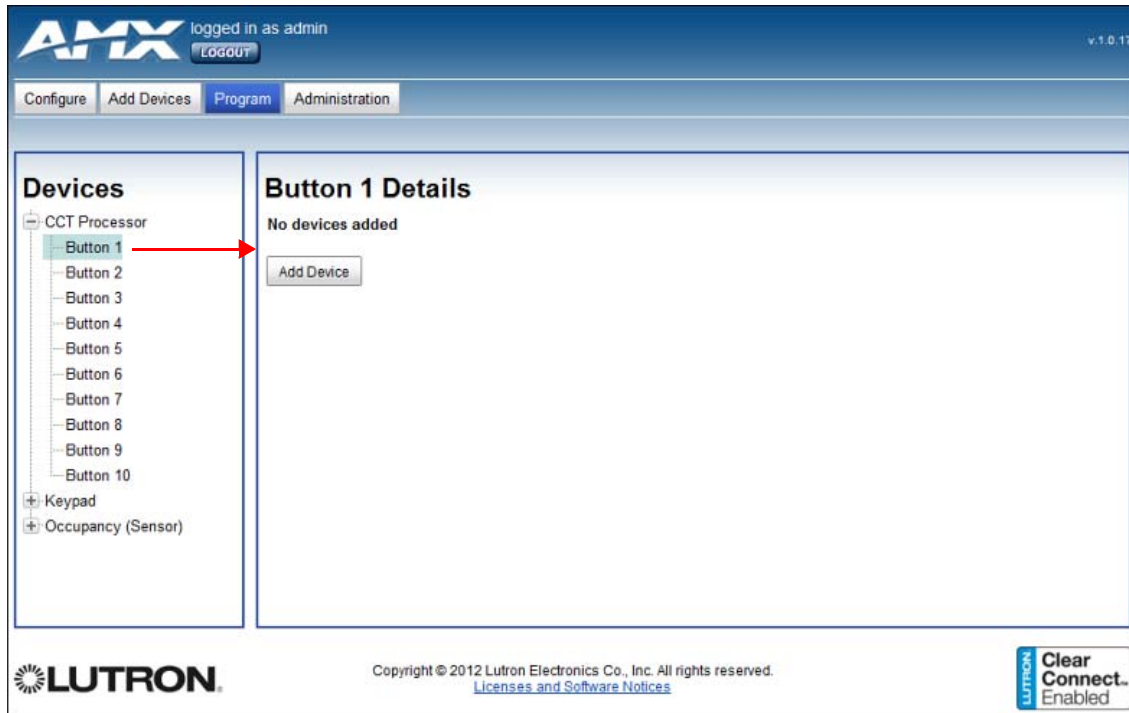


FIG. 45 NXB-CCG WebConsole - CCT Processor: Button 1 Details page

2. In the *Button 1 Details* page, click **Add Device** to open the *Add Devices To Button* popup (FIG. 46):



FIG. 46 Add Devices To Button popup

3. Select *Dimmer* to add a dim level setting to Button 1.
4. Click **Add** to add the Dimmer to Button 1. This action closes the popup and adds the **Dimmer Programming** table to the *Button 1 Details* page (FIG. 47):

Dimmer Programming

Device Name	Level	Fade	
Dimmer	100%	2.00 s	Remove

FIG. 47 Button Details page - Dimmer Programming table

The *Dimmer Programming* table consists of four columns:

- **Device Name:** The name of the device (Dimmer). The Device Name is read-only.
 - **Level:** This is the dim level setting for this button. By default, Level is set to 100%. Click inside this cell to edit: the dim level value for Button 1 should match the dim level value of Lighting Scene 1 in RPM (which by default is 20%).
 - **Fade:** This is the fade time for this button (in seconds). By default, Fade is set to 2 seconds.
 - **Remove:** Click to remove the Dimmer from this Button.
5. Click in the *Level* cell to edit the Level value (FIG. 48) . Note that the default (Dimmer) *Level* setting for all buttons is 100% (all on). For Button 1, change the value to "20%", to match Lighting Scene 1, which is 20%.
 6. Optionally, click in the *Fade* cell to edit the *Fade* value (in seconds). Note that the default Fade setting for all buttons is 2.00 s (2 seconds).

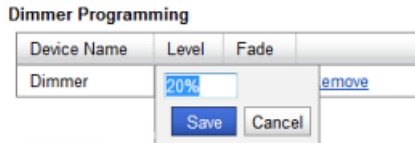


FIG. 48 Dimmer Programming table - Editing the Level value

- Click **Save** to save changes.
- Repeat steps 1-6 for Buttons 2, 3, 4, 5 and 6 (i.e. select and configure "Button 2" under CCT Processor, then repeat for Buttons 3-6):
 - Button 2's *Level* value should be set to **40%**
 - Button 3's *Level* value should be set to **60%**
 - Button 4's *Level* value should be set to **80%**
 - Button 5's *Level* value should be set to **100%** (all on)
 - Button 6's *Level* value should be set to **0%** (all off)

Once a Dimmer has been configured for Buttons 1 - 6, the dim (and fade) value specified for each Button will be activated via the RPM touch panel.

Configuring Buttons 1-6: Adding Switch Functions

Unlike Dimmers, Switches only use two levels: *On* and *Off*. Use the **Add Device** function in the Button Details pages to add a Switch to Buttons 1-6 if necessary. Once a Switch has been added to a Button, activating the Lighting Scene associated with each button will turn the switch On or Off:

- In the *Program* page, click on **Button 1** (under *CCT Processor* in the *Devices* window) to open the *Button 1 Details* page (see FIG. 45 on page 17).
- In the *Button 1 Details* page, click **Add Device** to open the *Add Devices To Button* popup (FIG. 49):



FIG. 49 Add Devices To Button popup

- Select *Switch* to associate a switch level (*On* or *Off*) to Button 1. This setting will cause a press of button 1 on the touch panel to turn the switch either *On* or *Off*.
- Click **Add** to add the Switch to Button 1. This action closes the popup and adds the **Switch Programming** table to the *Button Details* page (FIG. 50):

Switch Programming

Device Name	Level
Switch	On Remove

FIG. 50 Button Details page - Switch Programming table

The *Switch Programming* table consists of three columns:

- Device Name:** The name of the device (Switch). The Device Name is read-only.
- Level:** This is the switch level setting for this button. By default, Level is set to *On*. Click inside this cell to edit the switch level value (*On* or *Off*) for Button 1.
- Remove:** Click to remove the Switch from this Button.

- Click in the *Level* cell to edit the Level value (FIG. 51):

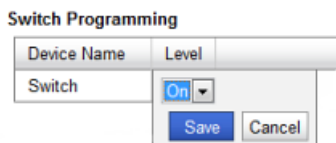


FIG. 51 Switch Programming table - Editing the Level value

Note that the default (Switch) Level setting for all buttons is *On*. Select either *On* or *Off*.

- Repeat steps 1-5 for Buttons 2, 3, 4, 5 and 6 (select and configure "Button 2" under CCT Processor, then repeat for Buttons 3-6).

Once a Switch setting has been configured for Buttons 1 - 6, the *On* or *Off* value specified for each Button can be activated either via the RPM touch panel or by the Switch.

Programming the CCD-W6BRL Clear Connect Keypad

Overview

If the RPM Project includes a CCD-W6BRL Clear Connect Keypad, then the keypad buttons must each be programmed to activate RPM-generated Lighting Scenes (1-6). Keypads also include a *Raise* button and a *Lower* button for ramping functions (see FIG. 9 on page 8).

Keypad buttons are configured via the NXB-CCG WebConsole. Keypad buttons are represented in the *Program* page, under **Keypad** in the *Devices* window (FIG. 52):

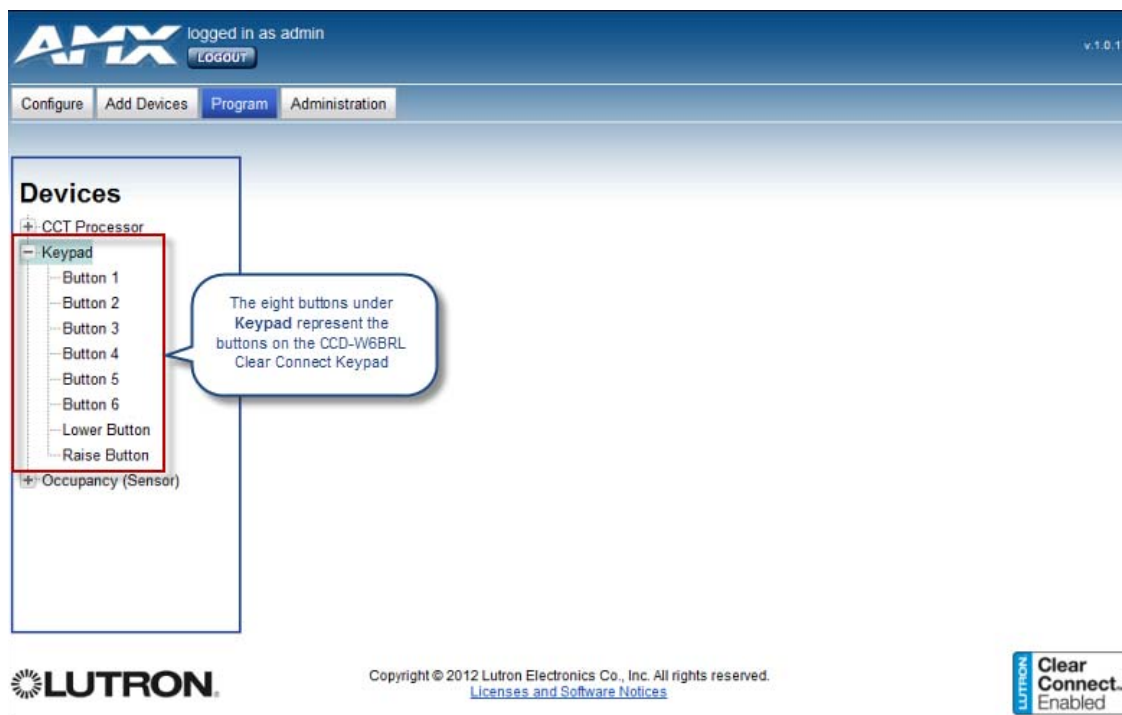


FIG. 52 NXB-CCG WebConsole (Program page) - Keypad buttons

Fundamentally, the *Lighting Scenes 1-6* that are included with the RPM project equate to *Buttons 1-6* under *Keypad* in the NXB-CCG's WebConsole.

You can add a Dimmer function and/or a Switch function to Button 1, 2, 3, 4, 5 and 6 under *Keypad*.

- *Dimmer Functions* specify a dim level (as well as fade time) to each button. These six dim levels equate to the six Lighting Scenes provided by RPM. When you add a Dimmer to a Keypad button, it associates the button with the specified dim level (and fade time).
- *Switch Functions* specify On or Off

To configure Buttons 1-6 on the CCD-W6BRL Keypad (see FIG. 9 on page 8) to match RPM Lighting Scenes 1-6:

1. In the *Program* page, click on **Button 1** (under *Keypad* in the *Devices* window) to open the *Button 1 Details* page (FIG. 53).



FIG. 53 NXB-CCG WebConsole - Keypad: Button 1 Details page

2. In the *Button 1 Details* page, click **Add Device** to open the *Add Devices To Button* popup (FIG. 54):

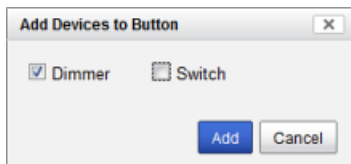


FIG. 54 Add Devices To Button popup

3. Select *Dimmer* to add a dim level setting to Button 1.
4. Click **Add** to add the Dimmer to Button 1. This action closes the popup and adds the **Dimmer Programming** table to the *Button 1 Details* page (FIG. 55):

Dimmer Programming

Device Name	Level	Fade	
Dimmer	100%	2.00 s	Remove

FIG. 55 Button Details page - Dimmer Programming table

The *Dimmer Programming* table consists of four columns:

- **Device Name:** The name of the device (Dimmer). The Device Name is read-only.
- **Level:** This is the dim level setting for this button. By default, Level is set to 100%. Click inside this cell to edit.
- **Fade:** This is the fade time for this button (in seconds). By default, Fade is set to 2 seconds.
- **Remove:** Click to remove the Dimmer from this Button.

5. Click in the *Level* cell to edit the Level value (FIG. 56): .

Dimmer Programming

Device Name	Level	Fade	
Dimmer	20%		remove

Save Cancel

FIG. 56 Dimmer Programming table - Editing the Level value

Note that the default (Dimmer) *Level* setting for all buttons is 100% (all on).

6. Optionally, click in the *Fade* cell to edit the *Fade* value (in seconds). Note that the default Fade setting for all buttons is 2.00 s (2 seconds).

7. Click **Save** to save changes.
8. Repeat steps 1-6 for Buttons 2, 3, 4, 5 and 6 (i.e. select and configure "Button 2" under *CCT Processor*, then repeat for Buttons 3-6):
9. Select the **Button press will send press/release events for integration** option (FIG. 57), only if you intend to assign an RPM Macro to this button: :

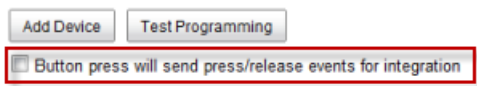


FIG. 57 Dimmer Programming - select

- By default, this option is de-selected.
- Note that if you associate an RPM Macro with this button, then pressing this button will activate the Lighting Scene, as well as trigger the Macro. See the *Assigning Lighting Scenes to Macros* section on page 24 for details on working with Macros in RPM.

Once a Dimmer has been configured for Buttons 1 - 6, the dim (and fade) value specified for each Button will be activated via the Keypad.

10. Add Switches to Buttons 1-6 as necessary. See *Configuring Buttons 1-6: Adding Switch Functions* section on page 18 for details.
11. Click on **Lower Button** (under *Keypad* in the *Devices* window) to open the *Lower Button Details* page.
12. Click **Add Device** to open the *Add Devices To a Button* popup. Note that for *Lower Button* and *Raise Button*, the only option is *Dimmer* (FIG. 58): .



FIG. 58 Add Devices To a Button popup (for Lower Button and Raise Buttons)

13. Click **Add** to add the Dimmer to the Lower Button. This action closes the popup and adds the **Device Programming** table to the *Lower Button Details* page (FIG. 59):

Device Programming

Device Name	Action	
Dimmer	Lower	Remove

FIG. 59 Lower Button Details page - Device Programming table

The *Device Programming* table consists of three columns:

- Device Name: The name of the device (Dimmer). The Device Name is read-only.
- Action: This is the ramp action (*Lower*) for the Lower Button (read-only).
- Remove: Click to remove the Action from the Lower Button.

14. Click on **Raise Button** (under *Keypad* in the *Devices* window) to open the *Raise Button Details* page.
15. Click **Add Device** to open the *Add Devices To a Button* popup. Note that for *Lower Button* and *Raise Button*, the only option is *Dimmer*.
16. Click **Add** to add the Dimmer to the Raise Button. This action closes the popup and adds the **Device Programming** table to the *Raise Button Details* page (FIG. 59):

Device Programming

Device Name	Action	
Dimmer	Raise	Remove

FIG. 60 Raise Button Details page - Device Programming table

The *Device Programming* table consists of three columns:

- Device Name: The name of the device (Dimmer). The Device Name is read-only.
- Action: This is the ramp action (*Raise*) for the Raise Button (read-only).
- Remove: Click to remove the Action from the Raise Button.

Programming the CCD-OCRB-P (-WH) Clear Connect Occupancy Sensor

Overview

CCD-OCRB-P (-WH) Clear Connect Occupancy Sensors report two states: Occupied (if it detects people in the room) and Unoccupied (if it detects that the room is empty). If the RPM Project includes an Occupancy Sensor, then the Occupied and Unoccupied actions can be programmed to activate specific RPM-generated Lighting Scenes.

Occupancy Sensor Actions are configured via the NXB-CCG WebConsole. Occupancy Sensor Actions are represented in the *Program* page, under **Occupancy (Sensor)** in the *Devices* window (FIG. 61):



FIG. 61 NXB-CCG WebConsole (Program page) - Occupancy (Sensor) Actions

Configuring Sensor Actions: Adding Dimmer Functions

1. In the *Program* page, click on **Occupied Action** (under *Occupancy (Sensor)* in the *Devices* window) to open the *Occupied Action Details* page (FIG. 62):



FIG. 62 NXB-CCG WebConsole - Occupancy (Sensor): Occupied Action Details page

2. In the *Occupied Action Details* page, click **Add Device** to open the *Add Devices To Button* popup (FIG. 63):



FIG. 63 Add Devices To Button popup

3. Select *Dimmer* to add a dim level setting to the Occupied Action.
4. Click **Add** to add the Dimmer to Button 1. This action closes the popup and adds the **Dimmer Programming** table to the *Occupied Action Details* page (FIG. 64):

Dimmer Programming

Device Name	Level	Fade	
Dimmer	100%	2.00 s	Remove

FIG. 64 Occupied Action Details - Dimmer Programming table

The *Dimmer Programming* table consists of four columns:

- **Device Name:** The name of the device (Dimmer). The Device Name is read-only.
- **Level:** This is the dim level setting for this action. By default, Level is set to 100%. Click inside this cell to edit.
- **Fade:** This is the fade time for this action (in seconds). By default, Fade is set to 2 seconds.
- **Remove:** Click to remove the Dimmer from this action.

5. Click in the *Level* cell to edit the Level value (FIG. 65) .

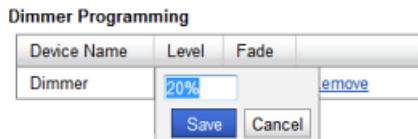


FIG. 65 Dimmer Programming table - Editing the Level value

6. Click **Save** to save changes.
7. Repeat steps 1-6 for *Unoccupied Action*.

Configuring Sensor Actions: Adding Switch Functions

Unlike Dimmers, Switches only use two levels: *On* and *Off*. Use the **Add Device** function in the Button Details pages to add a Switch to Sensor Actions if necessary. Once a Switch has been added to an action, activating the Lighting Scene associated with the action will turn the switch On or Off:

1. In the *Program* page, click on **Occupied Action** (under *Occupancy (Sensor)* in the *Devices* window) to open the *Occupied Action Details* page (see FIG. 62 on page 22).
2. In the *Occupied Action Details* page, click **Add Device** to open the *Add Devices To Button* popup (FIG. 66):



FIG. 66 Add Devices To Button popup

3. Select *Switch* to associate a switch level (*On* or *Off*) to *Occupied Action* . This setting will turn the switch either On or Off, when the Sensor detects that the room is occupied.
4. Click **Add** to add the Switch to *Occupied Action*. This closes the popup and adds the **Switch Programming** table to the *Occupied Action Details* page (FIG. 67):

Switch Programming		
Device Name	Level	
Switch	On	Remove

FIG. 67 Occupied Action Details page - Switch Programming table

The *Switch Programming* table consists of three columns:

- **Device Name:** The name of the device (Switch). The Device Name is read-only.
- **Level:** This is the switch level setting for this button. By default, Level is set to On. Click inside this cell to edit the switch level value (*On* or *Off*) for *Occupied Action*.
- **Remove:** Click to remove the Switch from this action.

5. Click in the *Level* cell to edit the Level value (FIG. 68):

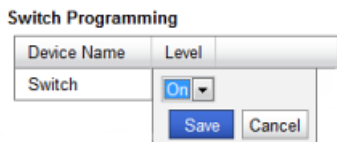


FIG. 68 Switch Programming table - Editing the Level value

Note that the default (Switch) Level setting for all actions is *On*. Select either On or Off.

6. Repeat steps 1-5 for *Unoccupied Action*.

Once a Switch setting has been configured for both actions, the On or Off value specified for each action will be activated by the Sensor.

Assigning Lighting Scenes to Macros

Overview

Each Lighting Scene can be added to a new or existing macro. The following instructions describe creating a new macro and adding a Lighting Scene as a macro item:

1. Click *Macros* in the menu bar to open the **Macros** page (FIG. 69):



FIG. 69 Macros page

2. Click **Add Macro** to access the *Macro Details* page, where you will configure a new macro.
3. In the **Macro Name** text box, enter a descriptive name for a lighting macro (required).
Since this macro will be associated with one of the Lighting Scenes configured in the *Lighting - Device Details* page (see FIG. 70), the macro name should relate to the Lighting Scene to which the macro will be associated. For example, if Scene 1 was named "20% Dim" (as shown in FIG. 70), then a logical Macro Name would be along the lines of "Dim Lights".
4. Select a **Macro Icon** (required). Since this macro is for Lighting, select the *Lighting* icon from the drop-down list.
5. If there is a specific touch panel page on which you want to place the button for this macro, then select the desired page from the **Touch Panel Navigation** drop-down (optional, default = *not used*).
6. Under **Select a Device**, select *Lighting* from the drop-down menu.
7. Under **Select a Function**, select the function to associate with this macro from the drop-down menu. Note that the items in this menu represent the Scene Names that were configured in the *Lighting - Device Details* page (*Configuration* tab).
8. Under **Add Macro Item**, click **Add** to add the new macro to the *Macro Items* list (FIG. 70):

Sequence	Macro Item
1	Lighting:20% Dim

FIG. 70 Macros Details page - Example macro item added (Dim Lights)

- Use the **Move Up** and **Move Down** buttons to arrange macro items into the desired sequence. Note that these buttons are only enabled if there is more than one macro item in the list.
 - Use the **Delete Item** button to delete a selected Macro Item from the list.
9. Click **Save** (at the bottom of this page) to save the new macro, close the *Macro Details* page and return to the main *Macros* page. Note that the new macro is now indicated in the *Macros* window (FIG. 71):



FIG. 71 Macros page - Example (Dim Lights) macro item added

- Click on any macro in this window to edit it in the *Macro Details* page.
- Click **Add Macro** to repeat the process, to assign a new macro to each of the remaining Lighting Scenes.

Adding Lighting Scenes to an Existing Macro

Lighting scenes can also be added to existing macros, as macro items:

1. Click *Macros* in the menu bar to open the **Macros** page.
2. Click the Macro to which you want to add a Lighting Scene. This opens the *Macro Details* page for the selected macro. For example, FIG. 72 shows the *Macro Details* page for a macro called *View Blu-ray /DVD*:

Sequence	Macro Item
1	Blu-ray/DVD:Power On
2	TV/LCD/Plasma:Power On
3	A/V Switcher:Switch Video-Blu-ray/DVD to TV/LCD/Plasma
4	TV/LCD/Plasma:Input-HDMI 1
5	A/V Switcher:Switch Audio-Blu-ray/DVD to Line Level

FIG. 72 Macros page - Example macro (View Blu-ray/DVD) selected to edit

The options in the Macro Details page allow you to edit all aspects of the selected macro, but in this case we will simply edit the *Macro Items* list to add a Lighting Scene:

3. Under **Select a Device**, select *Lighting* from the drop-down menu.
4. Under **Select a Function**, select the function to associate with this macro from the drop-down menu. Note that the items in this menu represent the Scene Names that were configured in the *Lighting - Device Details* page (*Configuration* tab). The example below shows that the Lighting function "20% Dim" was selected (FIG. 73):

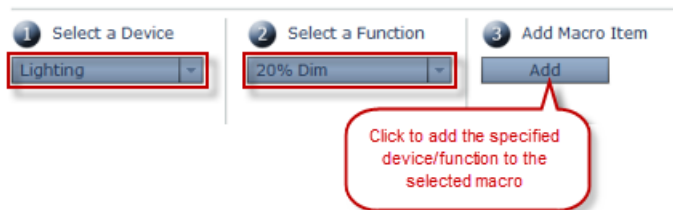


FIG. 73 Macro Details page - Example selections for adding a function to the selected macro

5. Under **Add Macro Item**, click **Add** to add the selected Function (Lighting Scene) to the *Macro Items* list (FIG. 70):



FIG. 74 Macros Details page - Example function (Lighting:20% Dim) added to the selected macro

6. Note the function is added to the bottom of the *Macro Items* list. Use the **Move Up** and **Move Down** buttons to move the function up or down in the macro items list, to specify the sequence of events for this macro.

For example, FIG. 75 shows that the new function (Lighting:20% Dim) has been moved to the first position and therefore will occur first when this macro is triggered:



FIG. 75 Macros Details page - Lighting:20% Dim) macro item moved to top of the macro sequence

7. Click **Save** to save your changes, close the *Macro Details* page and return to the main *Macros* page.



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