

Echo/Metropolitan Wireless Configurable Keypad with Basic DMX Control Deployment Guide

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Document Supports: da Vinci 10.0 and higher

This document outlines the process of adding Savant's Wireless Configurable Keypad with Basic DMX Control into Savant's ecosystem. Details of this document includes:

- How to manually add the keypad into a Blueprint Configuration.
- Check and verify settings in the OLA server.
- Create groups and add keypads to them.

The following products are supported in this document:

- WPX-xxLV06 - Echo Styled Keypad
- WIX-xxLV06 - Metropolitan Styled Keypad

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Important Safety Information - Read First

Before installing, configuring, or operating any equipment, Savant recommends that each dealer, integrator, or installer, access and read all the relevant technical documentation. Savant technical documentation can be located by visiting the [Savant Customer Community](#). Vendor documentation is supplied with the equipment.


Read and understand all safety instructions, cautions, and warnings in this document and the labels on the equipment.

Safety Classifications In this Document


NOTE:	Provides special information for installing, configuring, and operating the equipment.
 IMPORTANT!	Provides special information that is critical to installing, configuring, and operating the equipment.
 CAUTION!	Provides special information for avoiding situations that may cause damage to equipment.
 WARNING!	Provides special information for avoiding situations that may cause physical danger to the installer, end user, etc.

Electric Shock Prevention

 **ELECTRIC SHOCK!** The source power poses an electric shock hazard that has the potential to cause serious injury to installers and end users.

 **ELECTRICAL DISCONNECT:** The source power outlet and power supply input power sockets should be easily accessible to disconnect power in the event of an electrical hazard or malfunction.

Weight Injury Prevention

 **WEIGHT INJURY!** Installing some of the Savant equipment requires two installers to ensure safe handling during installation. Failure to use two installers may result in injury.

Safety Statements

All safety instructions below should be read, understood, and applied under all relevant circumstances when working with this equipment.

1. Follow all input power ratings marked on product near the power input.
2. If fuse replacement is required, replacement fuse should match fuse rating marked on the product.
3. Do not use equipment near water.
4. Clean only with dry cloth.
5. Do not block any ventilation openings or install near any heat sources such as heat registers, stoves, radiators, amplifiers, etc.
6. Refer all servicing to qualified service personnel. Servicing is required when any part of the apparatus has been damaged in any way, or fails to operate normally for any reason.
7. Use only attachments/accessories specified by the manufacturer, following all relevant safety precautions for any such attachments/accessories.
8. For applicable equipment, use the included power cord with the grounding prong intact to insure proper grounding of the device.
9. If the provided plug does not fit the desired outlet, contact a licensed electrician to replace the obsolete outlet.
10. Protect any power cord from being walked on, pinched, strained, or otherwise potentially damaged, especially at the outlet or device connections.
11. Disconnect any outlet powered apparatus from its power source during lightning storms or when unused for long periods of time.
12. To completely disconnect equipment from AC mains power, disconnect the power supply cord plug from the AC receptacle on the device.
13. For any hardwired or fixed in-wall apparatus, carefully follow all wiring diagrams and instructions. All electrical wiring and servicing should be performed by a properly licensed electrician.

1. Before You Begin

Read through this document in its entirety and ensure that the following required items are available:

- Savant Control System running da Vinci release version 10.0 or higher
- DMX Keypad wired to a DMX lighting load (Wiring Diagrams are available in the DMX Low Voltage Keypad QRG).....
- Unique ID (UID) of the Keypad with DMX Control
- Savant Development Environment (SDE/MacBook®)
RacePoint Blueprint da Vinci 10.0 or higher
- Ethernet network meeting Savant requirements.....
See [Appendix B: Network Requirements](#)

2. Blueprint Configuration - Lighting and Shade Device Manager

The instructions below describe how to add a Wireless Configurable Keypad with DMX Control to an existing Blueprint configuration.


HELPFUL! (READ BEFORE PROCEEDING)

- Ensure the DMX controlled keypad along with the DMX driver and power supply are installed, wired, and powered.
- Close the rpmEmbeddedScanner application if open. The Lighting and Shades Device Manager will not function properly with this application open.

Configure Blueprint to Group by Device Type

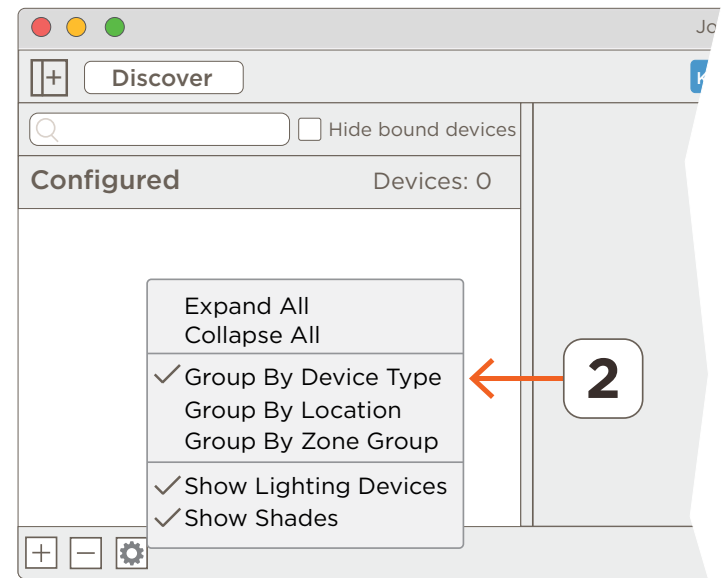
The devices in the Lighting and Shades Manager can be listed By Device Type, By Location, or By Zone Group. Grouping BY Device is the easiest to view and understand.

1. From the Blueprint menu-bar, open the Lighting and Shades Device Manager:
 - **Tools > Savant Lighting and Shades Device Manager**

 **HELPFUL!** In existing configurations, when the Savant Lighting and Shades Device Manager field is grayed out (inactive), this indicates a change to the Blueprint configuration was made and these services need to be generated. Select the **Generate Services** icon in the Blueprint toolbar to activate this field.
When building a new Blueprint configuration and the Lighting and Shades Device Manager field is grayed out, the easiest way to activate is to do the following.

- Add a network switch to the Blueprint layout window.
- Make an Ethernet connection from the network switch to the system Host.
- Select Generate Services

2. Select the gear icon at the bottom of the Configured window and choose **Group By Device Type**.



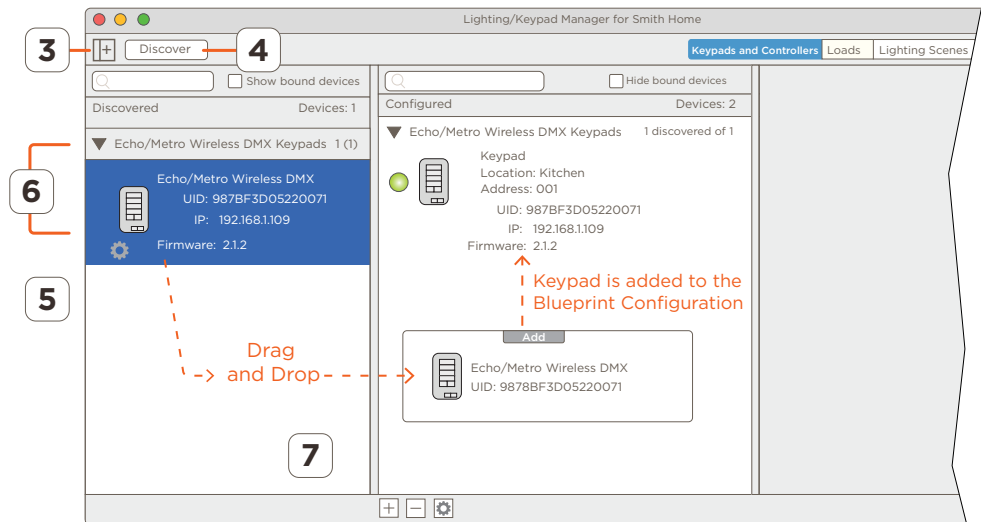
Discover and Add a Keypads to the Configuration

Before proceeding, ensure the DMX keypad is provisioned to the local network and contains an IP Address. Provisioning information is available in the [Wireless Keypad Provisioning Guide](#), located on the [Savant Customer Community](#).

The Lighting and Shades Device Manager scan the local network, locate any provisioned DMX keypads and add the keypads to a Blueprint configuration. This process is described below.

⚠ IMPORTANT! The SDE/MacBook that Blueprint is running on must be connected to the same network the DMX keypad was provisioned to.

3. From within the Lighting and Shades manager, select the Expand icon to open the Discovered column (Only if Discovered column is not already open).
4. Select the Discover button to discover any provisioned DMX keypads. Select the **Stop Discover** button once the keypads are listed.
5. Drag and drop the keypad into the Configured column. Moving the keypad into the Configured column adds and binds the keypad to the configuration running in Blueprint.



? HELPFUL HINTS!

- When a keypad is bound, an LED appears next to it in the **Configured** window. The LED's color indicates the status of the binding. A green LED indicates the keypad was bound to the configuration with no errors.
- The **Show bound devices** checkbox in the Discovered column is, by default, unchecked, and only unbound devices will appear in this window. Add a check to this box to show both the bound and unbound devices. A link icon beside the keypad indicates the keypad is bound to a configuration.
- Highlighting a bound keypad listed in the Discovered column causes the DMX keypad button LEDs to begin blinking. This function only occurs if the lighting and shades manager is connected to the DMX keypad. This feature makes it easy to identify which hardware belongs to a keypad in the Lighting and Shades Device Manager.

Set Some Basic Keypad Properties

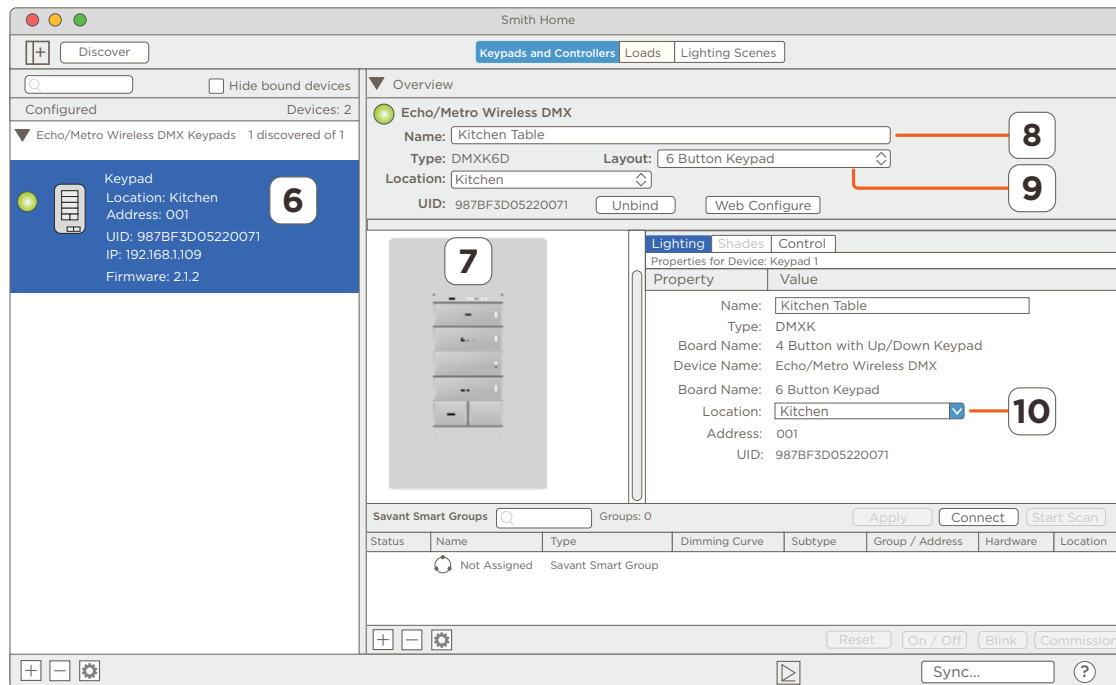
The previous section adds the DMX Keypads to the configuration. Next, a few of the fundamental keypad's property fields can be set. Not all fields need to be configured for the keypad to be deployed. Information regarding any fields not configured in these instructions is considered Advanced Programming and this information can be found in the **Lighting and Keypad Programming Guide - Metropolitan and Echo Keypads** listed in the Lighting Documentation Portal page available on the [Savant Customer Community](#).

6. Highlight the DMX Keypad added in the previous section.

NOTE: The Discovered window does not need to be open to complete the remaining instructions, so the images in the following sections will omit the Discovered column.

7. Select the keypad's body to access the Properties for Device window. See image below
8. Enter a name that identifies the keypad into the **Name** field. **NOTE:** The keypad's name can be updated in either of the two Name fields in this window.
9. Select the proper keypad button layout from the drop-down list in the **Layout** field.
10. Select the room or zone where the keypad is located using the **Location** fields drop-down menu.

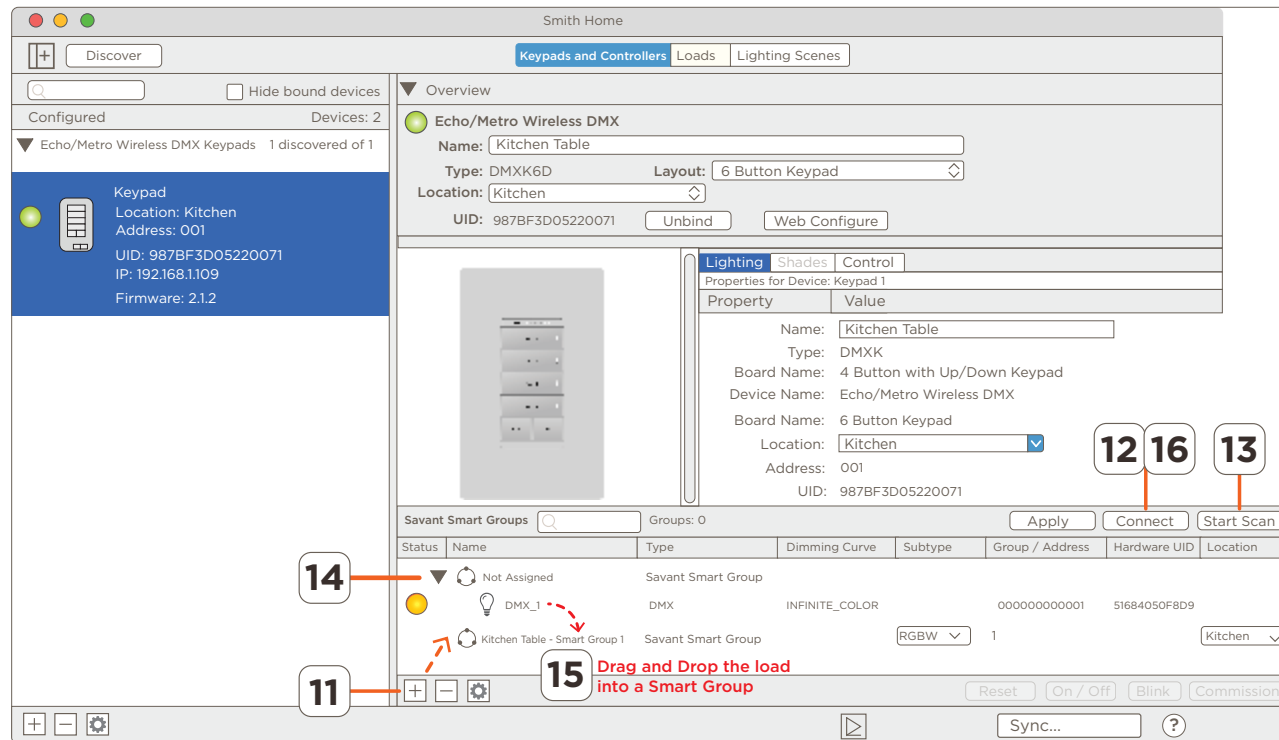
HELPFUL: The Location field in the **Overview** window and the Location field under the Lighting tab can both set the location of the keypad. These two fields are in sync, and modifying one will automatically change the other.



Add Loads to a Smart Group

Each DMX Keypad button should have a load configured to it so when the button on the keypad is pressed, the load reacts accordingly. This process involves discovering the DMX supported loads, adding these loads to a Smart Group, then configuring the Smart Group onto a keypad button. The steps below describe this.

11. Select **ADD** from the Savant Smart Groups window and add a new Smart Group. The smart group created is labeled using the DMX Keypad's name with **-Smart Group x** appended. To modify, double click the name and enter an updated name when prompt.
12. Select the **Connect** button to connect the Lighting and Shades Device Manager to the DMX keypad.



13. Select the **Start Scan** button to scan for any DMX type loads. The discovered loads will populate under the **Not Assigned** group.
14. Select the disclosure arrow to open the list of the discovered DMX supported loads.

HELPFUL HINT: When there is more than one load listed, it is hard to know which entry associates with the installed hardware. Select the load from the list in the Lighting and Shades Device Manager and then select the **Blink** button at the bottom of the Smart Group window. Doing this will blink the hardware that is associated with the highlighted load in Blueprint.

15. Drag and drop the load or loads into the Smart Group created in step 11 above.
16. Select the **Disconnect** button to disconnect the Lighting and Shades Manager from the DMX keypad.

Set Some Basic Keypad Button Properties

This section sets a few of the keypad's fundamental keypad button properties. Not all the keypad button property fields need to be configured for the keypad to be deployed. Information regarding any fields not configured in these instructions is considered **Advanced Programming** and this information can be found in the **Lighting and Keypad Programming Guide - Metropolitan and Echo Keypads** listed in the Lighting Documentation Portal page available on the [Savant Customer Community](#).

17. Select and label a keypad button. The button label should identify the load the button is affecting.
18. Repeat step 16 to add a basic configuration onto each keypad button.
19. Add the Smart Group created in the previous section to the **Scene** field using the drop-down menu.

The screenshot shows the 'Smith Home' web interface. On the left sidebar, under 'Configured Devices: 2', there is a 'Keypad' with details: Location: Kitchen, Address: 001, UID: 987BF3D05220071, IP: 192.168.1.109, and Firmware: 2.1.2. The main area is titled 'Overview' and shows configuration for 'Echo/Metro Wireless DMX'. The 'Name' is 'Kitchen Table', 'Type' is 'DMXK6D', 'Layout' is '6 Button Keypad', and 'Location' is 'Kitchen'. The 'UID' is '987BF3D05220071'. Below this is a keypad image with a red box around the top button, labeled '17'. To the right, the 'Lighting' tab is active, showing 'Properties for Button: Button 1'. The 'Button Label' is 'Table Light On' (labeled '18'), 'Function' is 'Toggle', 'LED Behavior' is 'Any On (Not All Off)', and 'Scene' is 'Kitchen Table - Smart Group 1 Scene' (labeled '19'). At the bottom, the 'Savant Smart Groups' table is visible:

Status	Name	Type	Dimming Curve	Subtype	Group / Address	Hardware UID	Location
Not Assigned		Savant Smart Group					Kitchen
▼	Kitchen Table - Smart Group 1	Savant Smart Group		RGBW	1		
●	DMX_1	DMX	INFINITE_COLOR		000000000001	51684050F8D9	

3. Blueprint Configuration - Update Data Table

Whenever the Lighting and Shades Device Manager is modified, the changes need to be updated in the lighting data table. Updating the lighting data table is described below.

1. Select the **Sync...** button at the bottom of the lighting/ keypad manager.
2. In the drop-down menu that opens, check or un-check the appropriate box or boxes Refer to descriptions below.

Loads, Scenes, Load Scenes, Buttons boxes

Checked - For boxes that are checked:

- An entry for each checked box is added to the lighting data table (Tools > Settings > Lighting)
- If the lighting data table contains an entry for the checked box, the entry gets updated with the new information.

Unchecked - For boxes that are unchecked (Loads, Scenes, Load Scenes, Buttons):

- If an entry for the unchecked box exists in the lighting data table (Tools > Settings > Lighting), that entry is removed.
- No new entries are added to the lighting data table.

Reset any user modifications box:

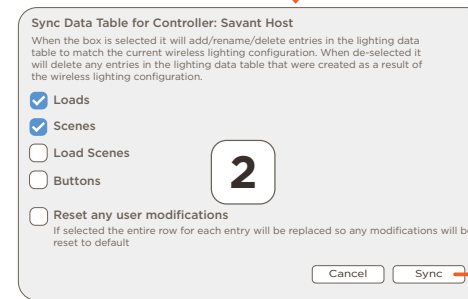
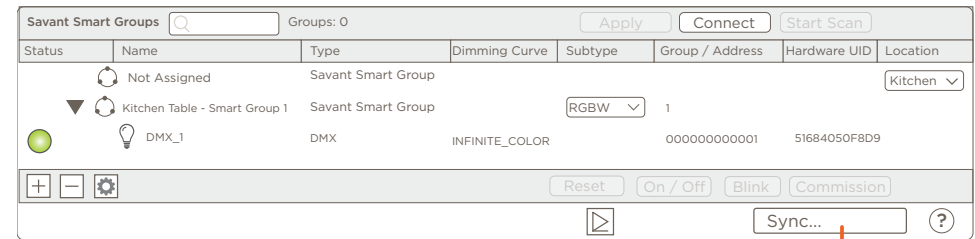
Checked:

- Changes to entries in the lighting data table are returned to their default values.

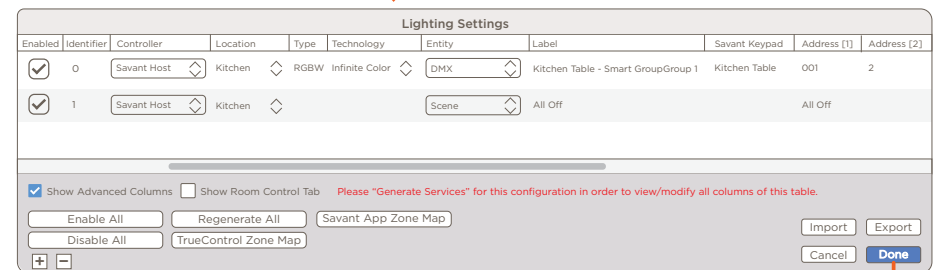
Unchecked (Default):

- Changes to entries in the lighting data table are left alone.
- Changes to the Lighting/Shades Manager are updated in the lighting data table.
- New entries created in the Lighting/Shades Manager are added to the lighting data table.

3. Select the **Sync** button again when satisfied the correct boxes are checked.
4. In the lighting data table that opens, verify the entries are either created or modified. Select **Done** when complete.



Note: Savant recommends checking just the Loads and Scenes box as shown in the image. Adding a check to the Load Scenes or Buttons box increases the number of icons added to the Pro App. The additional icons make the App appear busy and confusing.



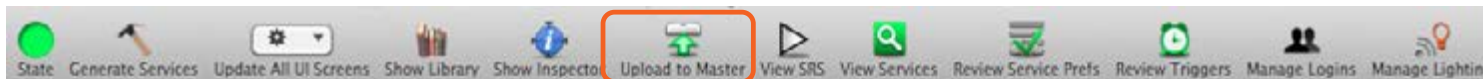
HELPFUL! In the lighting data table, the loads will automatically be added to the same room that the controller is configured to. If desired, the zone that the loads are populated in, can be changed.

4. Blueprint Configuration - Upload Configuration

With the configuration complete, it can now be uploaded to the Savant Pro System Host. Follow steps below to upload.

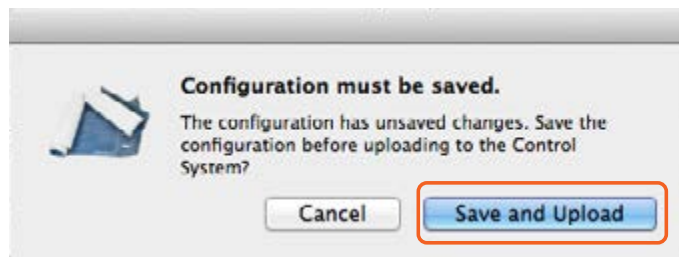
⚠ IMPORTANT! Before uploading, close the OLA Server Web Configure App if open. If the Lighting and Shades Device Manager is communicating with the OLA Server, all control to the Savant Pro System is lost.

1. Select the **Generate Services** icon from the Blueprint tool bar. The State Icon will change to either Blue or Green indicating the services are created.
2. Select **Update All UI Screens > Sync with Services** (only if necessary) to sync the user interfaces such as an iPad to the services created. The State Icon will switch to Green when complete.
3. To upload, select the **Upload to Master** icon from the Blueprint tool bar. See image below.

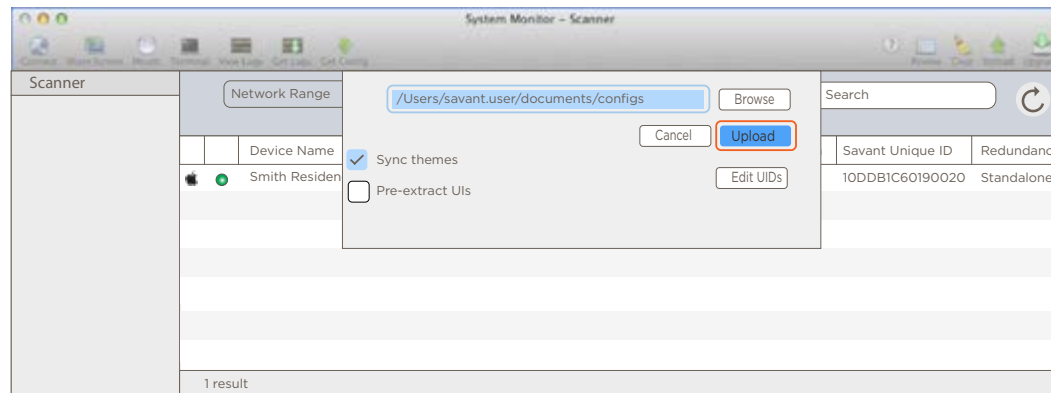


Select Upload to Master

4. In the configuration must be saved dialog box that opens, read the dialog and select Save and Upload.



5. The System Monitor application will open as displayed below. Verify the path to the configuration file is correct. Select **Upload** when satisfied. Configuration will now upload to the Host.



5. Savant Pro App

With the upload complete, the DMX lighting network will create a Lighting Service in the Savant Pro App or get added to an existing Lighting Service. See the Pro App Lighting Service User Guide which is available on the [Savant Customer Community](#).

Appendix A: Open Lighting Architecture Server (OLA)

OLA is the foundation that allows applications and devices to send and receive DMX messaging. The DMX keypads use this platform to communicate in a Savant System. The OLA server is accessed by selecting the Web Configure button in the DMX device window in the Lighting and Shades Device Manager. This web application contains information about the various devices as they pertain to the OLA system. The information below covers each of the tabs in the OLA web application.

HELPFUL! Its important to close the OLA Server's web application before uploading a Blueprint configuration to a Savant Host. When the Lighting and Shades Device Manager is connected to the OLA server, all control in the Savant Pro system is lost.

Open the OLA Server Web Application

Select the **Web Configure** button in the Lighting and Shades Device Manager .
See image to the right.


The screenshot shows the 'Smith Home' interface with tabs for 'Keypads and Controllers', 'Loads', and 'Lighting Scenes'. Under 'Overview', a device named 'Echo/Metro Wireless DMX' is configured with 'Name: Kitchen Table', 'Type: DMXK6D', 'Layout: 6 Button Keypad', and 'Location: Kitchen'. The 'UID' is 987BF3D05220071. A 'Web Configure' button is highlighted with an orange arrow and text: 'Select to open the OLA Server's Web App.' Below this, the 'Lighting' tab is active, showing 'Properties for Button: Button 1' with a table of properties:

Property	Value
Savant Scene:	<input type="checkbox"/>
Button Label:	Table Light On
Function:	Toggle
LED Behavior:	Any On (Not All Off)
Scene:	Kitchen Table - Smart Group 1 Scene
Address:	0

At the bottom, there are buttons for 'Apply', 'Connect', and 'Start Scan', and a table for 'Savant Smart Groups' with columns for Status, Name, Type, Dimming Curve, Subtype, Group / Address, Hardware UID, and Location. The table shows one entry: 'Not Assigned' for 'Savant Smart Group'. There are also buttons for '+', '-', a gear icon, 'Reset', 'On / Off', 'Blink', 'Commission', and 'Sync...'.

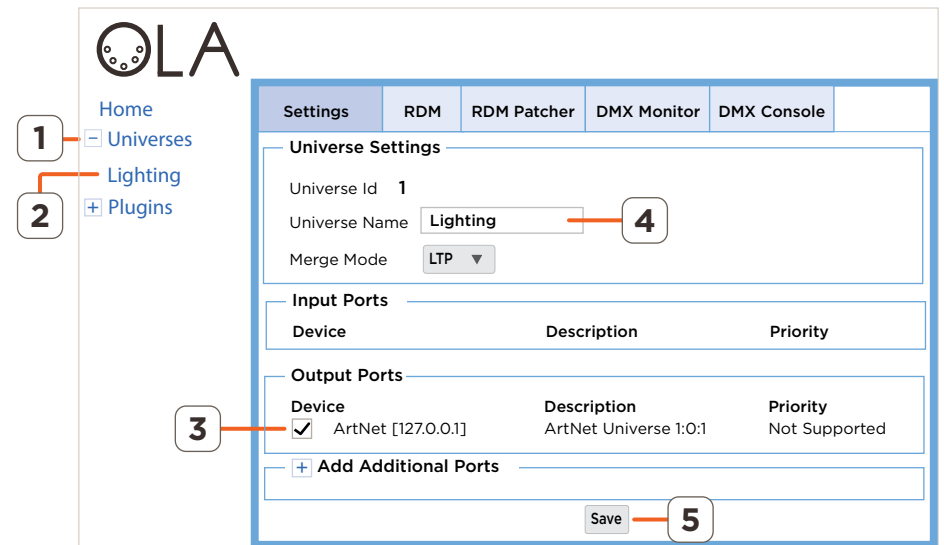
Settings Tab - Set the Universe

The Universe that the Savant DMX products function over must be set from within the OLA web interface. The Universe is a set of channels that the DMX messaging runs over. To set the universe:

1. Select the  icon to expand the Universes field.
2. Select the **Lighting** Universe.
3. Verify the **Art-Net** protocol in the Output Ports section is enabled.
4. If needed, the Universe Name can be changed. Double click this field and enter a different name.
5. Select the **Save** button. If the Universe Name was changed, selecting Save makes the change permanent and the name will update in the left side column.

Additional field descriptions:

- **Universe Id** - The Universe ID is automatically populated and can't be changed.
- **Merge Mode** - Set to LTP (latest takes precedent) and is the recommended setting.
- **Output Ports** - ArtNet [127.0.0.1] is the supported data distribution protocol.



OLA

Home
Universes
Lighting
Plugins

Settings RDM RDM Patcher DMX Monitor DMX Console

Universe Settings

Universe Id 1

Universe Name

Merge Mode LTP

Input Ports


Device	Description	Priority
<input checked="" type="checkbox"/> ArtNet [127.0.0.1]	ArtNet Universe 1:0:1	Not Supported

Output Ports

RDM Tab (Remote Device Management)

RDM enables remote management of each of the DMX devices in the network. The RDM tab lets a user communicate with the devices to perform tasks such as remotely reading the device's internal stats, resetting the device, identifying the device in the network, and a host of other information available on each device. The information below describes how to locate each of the devices and describes all available fields and what functions they perform.

Discover the DMX devices

1. From within the RDM tab, select the search icon . This begins the discovery process. After a few moments, any DMX devices in the network will appear in the left side column.
2. Select the DMX keypad from the left column and the available stats for that device will populate. Each field is described below.

DMX Keypad field Descriptions

DMX Personality

The DMX Personality chosen sets the number of channels available. For the DMX keypad, select DMX_KEYPAD (128)

Device Info

Displays various technical information with respect to the DMX keypad. This info can be used when troubleshooting any issues that might happen.

Device Label

Lists how the device identifies itself to other devices in the system. To modify, double click the Device Label field and enter a new label. After a few seconds, the name change will appear in the left column. **Note:** This change does not affect names appearing in either Blueprint or the Pro App.

Identify Device

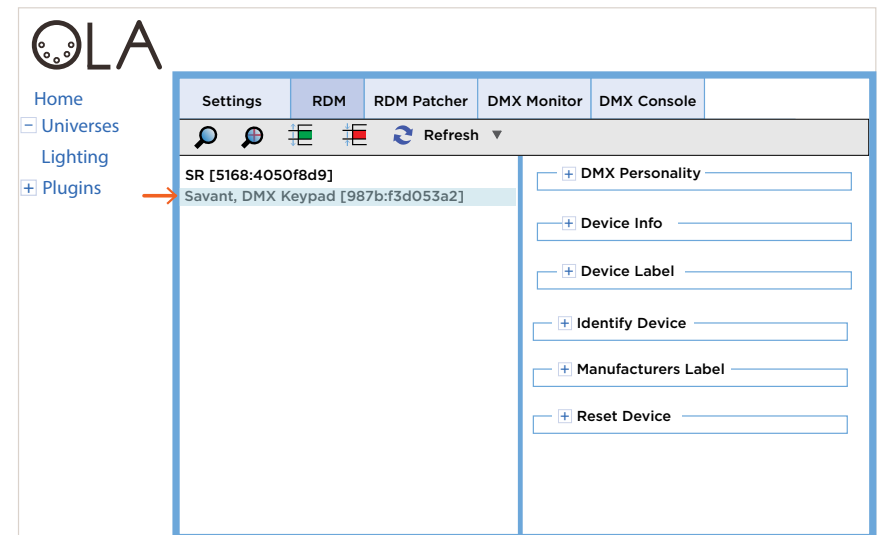
Use the Identify Device field to locate the lighting fixture/load connected to the keypad. To run the identify function, add a check to the **Identify Device** check-box and select **Save**. The lighting fixture connected to that keypad will begin flashing once per second. To stop the flashing, uncheck the same box and select **Save**.

Manufacturers Label

Displays the manufacturer (Savant) of the controller and can't be modified. The label set in this field also appears in the left panel of the OLA Server.

Reset Device - To reset the keypad, select which type of reset to perform.

- **Warm Reset** - Resets device to factory defaults but does not reboot the device.
- **Cold Reset** - Reboots the keypad without making any changes to the configuration. Equivalent to a power cycle.



DMX Load Descriptions (LED Strip)

DMX Personality

Used to modify the color palette model for the lighting fixture. Typically, the OLA recognizes the lighting load and sets the color palette accordingly. To modify, expand the DMX Personality field and select the proper color palette from the list in the drop-down menu.

DMX Start Address

Each lighting fixture requires several addresses to function in a DMX system. The number displayed is the starting address for the lighting fixture selected. To change the start address, double-click the field and enter a different starting address between 1 and 255. However, Savant recommends using the RDM Patcher tab and not the DMX Start address field to change the lighting fixture address. The matrix in the RDM Patcher tab clearly shows which addresses are used and not used. See the [RDM Patcher](#) tab below for more information.

Device Info

Technical Information that can be used when configuring or troubleshooting a lighting fixture is listed.

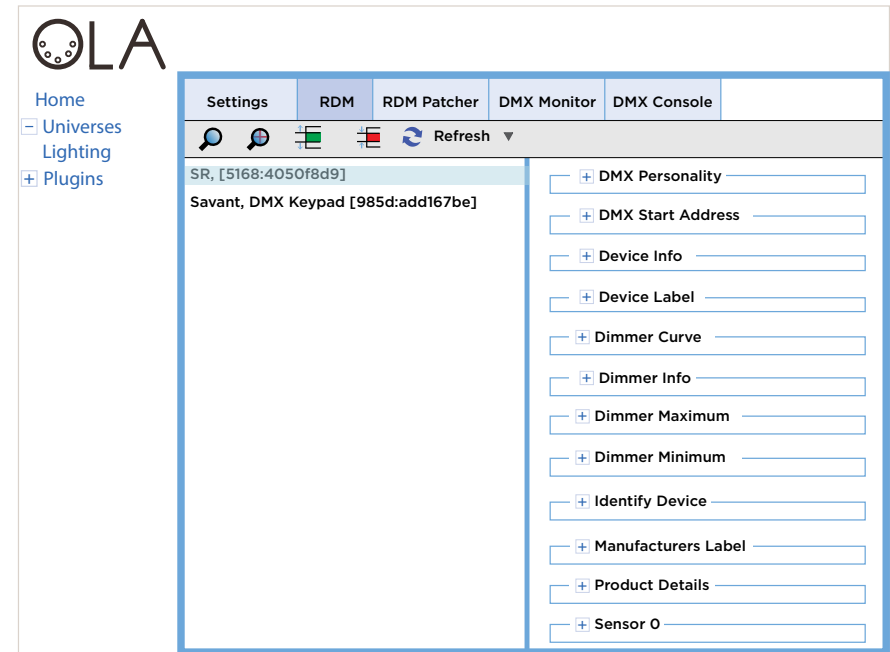
Device Label

The Device Label is how the lighting fixture identifies itself to other devices in the system. To modify, double-click the **Device Label** field and enter a new label. After a few seconds, the name change will appear in the left column. To sync up the name change with the Lighting and Shades Device Manager, do the following:

1. Open Blueprint's Lighting and Shades Manager and select the keypad controlling the load.
2. Select the **Discover** button to connect to the keypad. Select the **Stop Discover** button once the keypad is Connected.
3. Select the **Connect** button in the Savant Smart Groups section. This will make the Start Scan button active.
4. Select the **Start Scan** button to connect to the Lighting Fixture. The Name of the lighting fixture will change to the name entered in the Device Label field in OLA. Verify the name listed is the same name entered in OLA.

Dimmer Curve

The Dimmer Curve adjustment is handled in the Savant Pro App. Configuring the correct dimming curve causes the output of the lighting fixture to appear more linear when moving the dimmer's slider button from low to high intensity.



Dimmer Info

Various information on dimmer levels is displayed. Each is described below.

Minimum Level Lower Limit - Lowest value that the Minimum Level adjustment can be set to. If the device doesn't support this function, 0 is displayed.

Minimum Level Upper Limit - Highest value that Minimum Level can be set to. If the device doesn't support this function, 0 is displayed.

Maximum Level Lower Limit - Lowest value that Maximum Level can be set to. If the device doesn't support this function, 0 is displayed.

Maximum Level Upper Limit - Highest value that Maximum Level can be set to. If the device doesn't support this function, 0 is displayed.

of Supported Curves - Number of dimming curves supported on the device.

Levels Resolution - Number of bits used by the device to output the level of intensity. Savant uses an 8-bit system (0-255 levels).

Split Levels Supported - Are split levels supported (Minimum / Maximum Level Increasing). 00=No, 01=Yes

Dimmer Minimum

Minimum Level Increasing - When increasing power to the output of a dimmer, this field sets the level at which the lighting fixture will switch On. Making adjustments to this field can reduce the likelihood of unintended behaviors such as flickering. Values range from 0-255.

Maximum Level Decreasing - When decreasing power to the output of a dimmer, this field sets the level at which the lighting fixture will switch Off. Making adjustments to this field can reduce the likelihood of unintended behaviors such as flickering. Values range from 0-255.

On Below Minimum - Add a check to this box to provide preheat functionality to bulbs with filaments. When selected, a small amount of power will always be present at the bulb to prevent the bulb from cooling down. On Below Minimum reduces the stress put on bulbs when they are first powered on.

Identify Device

Use the Identify Device field to locate the lighting fixture. To run the identify function, add a check to the **Identify Device** check-box and select **Save**. The lighting fixture connected to that keypad will begin flashing once per second. To stop the flashing, uncheck the same box and select **Save**.

Manufacturers Label

Displays the manufacturer (Savant) of the controller and can't be modified. The label set in this field also appears in the left panel of the OLA Server.

Reset Device

To reset the keypad, select which type of reset to perform.

- **Warm Reset** - Resets device to factory defaults but does not reboot the device.
- **Cold Reset** - Reboots the lighting fixture without making any changes to the configuration. Equivalent to a power cycle.

RDM Patcher Tab - Light Fixture Addressing

Addressing of the lighting fixtures can be viewed and modified using the RDM Patcher tab. Each lighting fixture in a DMX system can utilize between 1 and 5 addresses (footprint). For example:

- **DMX Light Fixture** = Between 1 and 5 addresses dependent on the footprint or color palette of lighting fixture (W, WW, RGB, RGBW, RGBWW).
- **LED Strip** = 2, 3 or 4 addresses (WW, RGB, RGBW)
- **DMX Keypad** = None

A

Each cell is an address. A Universe contains 512 addresses. Each lighting fixture is assigned between one and five addresses. A portion of that address is added to each packet to ensure the packet is sent to the correct device.

B

The blue rectangle covers all the addresses assigned to each device. For example, Lighting Fixture 1 is assigned addresses 1, 2, 3, 4, and 5.

The bottom row gives an indication of how the table is utilized:

C

- **Free Slots: first 6** - The first free address in the table is cell 6.
- **last 512** - The last free address in the table is cell 512.
- **max contiguous** - The largest number of addresses (cells) available that are next to each other in sequence.

D

To move a device to a different address, select, drag, and then drop the device to its new location.

The screenshot shows the OLA software interface with the RDM Patcher tab selected. A grid of 112 addresses (rows 1-11, columns 1-8) is displayed. A blue rectangle highlights addresses 1 through 5 in the first row, labeled 'Lighting Fixture 1 [5168:4050f8d9]'. A hand icon is shown over address 5. A red circle 'B' points to the top of the grid. A red circle 'A' points to address 35. A red circle 'D' points to address 45. A red circle 'C' points to the bottom status bar which reads 'Free slots: first 6, last: 512, max contiguous: 507'. The interface includes a sidebar with 'Home', 'Universes', 'Lighting', and 'Plugins' options, and a top navigation bar with 'Settings', 'RDM', 'RDM Patcher', 'DMX Monitor', and 'DMX Console' tabs.

The addressing scheme set up in OLA can either be accepted or modified. The two techniques to modify are to either drag and drop address to a new location or use the magic wand tool. Both are described below.

Modify Addressing using the Magic Wand

Lighting fixtures are shipped from the factory with address = 1. If all fixtures shipped from factory were not updated, they would all overlap and display as stacked on top of each other in the RDM Patcher matrix. The magic wand utility re-assigns addresses to each fixture so they no longer overlap. Follow the steps below.

1. Select the **RDM Patcher** tab.
2. Select the magic wand icon .
3. Select **Yes** to the **Confirm Auto Patch** dialog that opens. The addresses will automatically update and reorder themselves in the matrix.

Modify Addressing using Drag and Drop

To modify, select a block of addresses corresponding to a lighting fixture and drag and drop these addresses into a new location.

DMX Console Tab

The DMX Console tab is a good tool for troubleshooting a lighting fixture problem. Individual colors (red, green, blue, white) can be sent over specific addresses using this tool. For example, the color red can be sent over address five, and the lighting fixture with address five will illuminate red. The various functions of this tool are described below.

A

Each number above the slider corresponds to an address. There are 512 addresses available in a DMX network. Sixteen addresses are presented at one time. To access the next sixteen addresses, select the blue right-facing arrow. To access the previous sixteen, select the blue left-facing arrow.

B

Adjust the slider to increase or decrease the intensity of the color associated with that address. For example, moving the slider for address five up or down increases or decreases the intensity of the color red to the lighting fixture using address 5. The intensity or brightness of the lighting fixture is tracked in the numbering above the slider and in the table to the right of the sliders. Range = 0-255.

C

Each slider represents a color space to a specific lighting fixture. The lighting fixture installed determines what color space(s) are adjusted. The image to the right addresses 5, 6, 7, and 8 are associated with a fixture that supports RGBW. If the fixture installed supports white, just one address is utilized, and that slider would adjust the white color space.

D

Yellow Bulb - Toggles the lighting fixture of all 512 channels to 255 (full on).
Clear Bulb - Toggles the lighting fixture of all 512 channels to 0 (off).

The screenshot shows the OLA DMX Console interface. At the top, there are navigation tabs: Home, Settings, RDM, RDM Patcher, DMX Monitor, and DMX Console. The RDM tab is active, showing a yellow lightbulb icon. Below the tabs, there are navigation arrows and a list of universes: Savant and Plugins. The main area displays 16 address sliders, numbered 1 to 16. Sliders 5, 6, 7, and 8 are active, with values 50, 40, 0, and 0 respectively. Below the sliders, the colors R, G, B, and W are indicated. A table to the right of the sliders shows the intensity values for each address across 16 channels. A yellow lightbulb icon is positioned above the RDM tab, and a yellow lightbulb icon is positioned above the address 5 slider.

Address	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Channel 1	0	0	0	0	50	0	40	0	0	0	0	0	0	0	0	0
Channel 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Channel 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Channel 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Channel 5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Channel 6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Channel 7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Channel 8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Channel 9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Channel 10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Channel 11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Channel 12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Channel 13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Channel 14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Channel 15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Channel 16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Appendix B: Network Requirements

Savant requires the use of business class/commercial grade network equipment throughout the network to ensure the reliability of communication between devices. These higher quality components also allow for more accurate troubleshooting when needed.

Device Network Connections

Connect all Savant devices to the same local area network (LAN) or subnet as the Host. Savant recommends not implementing any type of traffic or packet shaping in your network topology for the Savant devices as this may interfere with performance.

Managing IP Addresses

To ensure that the IP Address will not change due to a power outage, a static IP Address or DHCP reservation should be configured. Savant recommends using DHCP reservation within the router. By using this method, static IP Addresses for all devices can be managed from a single UI avoiding the need to access devices individually. Setting DHCP reservation varies from router to router. Refer to the documentation for the router to configure DHCP reservation.

Network Changes

Savant recommends refreshing the IP connection after connecting to a new network, changing routers, or if the IP Address range is changed in the current router. To refresh the IP Connection in the DMX Keypad, press and hold the reset button for 10 seconds then release. to initiate a factory reset of the keypad. The reboot will erase the keypad's stored address and removes any assigned IP Addresses. More information on networking guidelines is available in the **Savant Device Networking Guidelines** article on the [Savant Customer Community](#).

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