

# ControlSpace® Remote Builder 2.0

## User's Guide



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# Introduction

## Product Overview

### Bose® ControlSpace® Remote builder software

Bose ControlSpace Remote builder software is a graphical user interface tool used to design, test and deploy mobile control panels for the Bose ControlSpace Remote app.

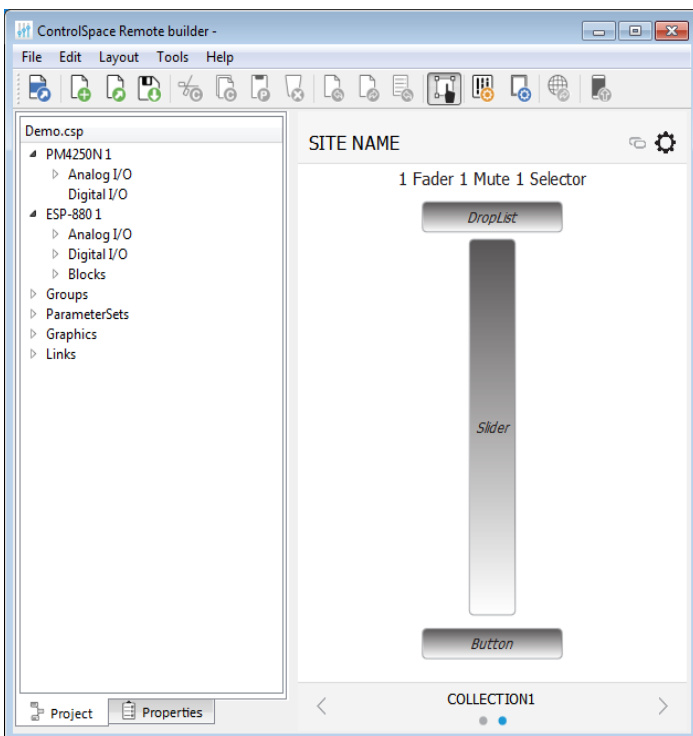
Bose ControlSpace Remote builder is used by system integrators to configure control panels that are sent to the ControlSpace Remote app. Using control panel templates from within ControlSpace Remote builder, integrators are able to quickly create unique interfaces for wireless control of Bose networked pro audio systems.

System designs created in ControlSpace Designer™ software are easily imported into ControlSpace Remote builder. Defined system control elements such as volume, mute, source selection, tone EQ, and parameter sets are assigned to end-user friendly templates. Multiple app designs – each personalized for a specific user's control needs – can be created and tested from ControlSpace Remote builder and sent wirelessly to mobile devices on the network.

You can create control panels either using the built-in templates, or using the graphical elements available in the layout mode to design customized layouts and control buttons.

For designing with templates, see "Creating Control Panels" on page 11.

For designing customized panels, see "Creating Custom Layouts" on page 22 and "Creating Custom Controls" on page 30.



*ControlSpace Remote Builder Window Example*

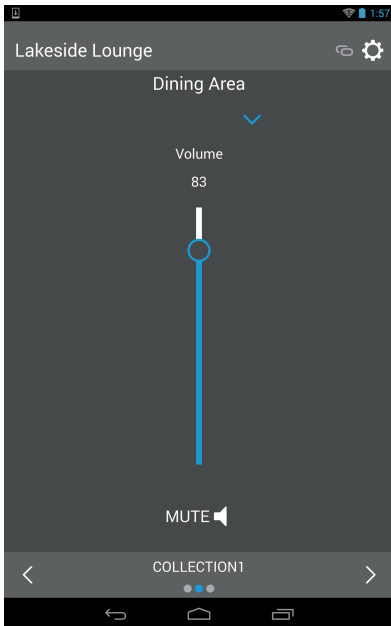
### Bose ControlSpace Remote app

Bose ControlSpace Remote app is a mobile device application for Android™ and iOS devices that provides wireless control of networked Bose Professional system components. Personalized for each end user's

mobile device, various functions of the system can be adjusted:

- Volume levels and mute state
- Source selection
- Tone EQ settings
- Parameter set recall

ControlSpace Remote app is available as a free download on the App Store or Google Play™ store.



*ControlSpace Remote App Control Panel Example*

### To get started

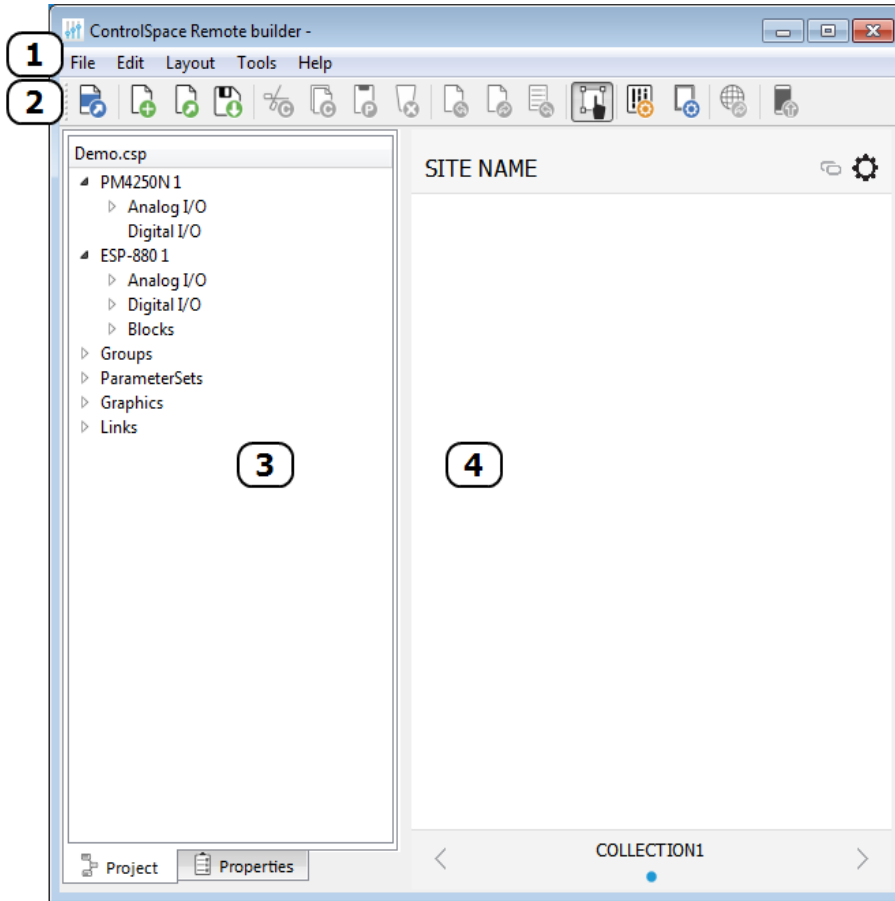
1. From **pro.Bose.com**, download and install the ControlSpace Remote builder desktop app to your computer.
2. From the Google Play™ or App Store, download and install the ControlSpace Remote app to your mobile device.
3. Ensure that your Android™ or iOS device is connected to the same Wi-Fi® network as your ControlSpace/PowerMatch devices.

Android and Google Play are trademarks of Google Inc.

App Store is a service mark of Apple Inc.

Wi-Fi is a registered mark of the Wi-Fi Alliance.

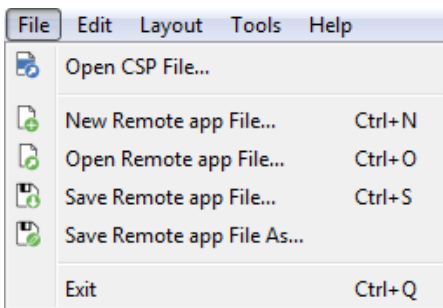
## Remote Builder Window



*Remote builder window elements*

### 1 Menus

#### File Menu



**Open CSP file...** opens a window for browsing to an existing ControlSpace® Designer™ software project file.

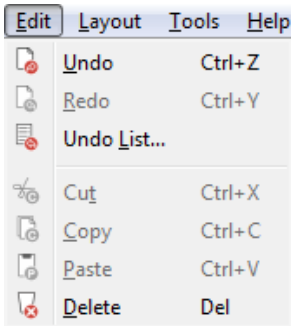
**New Remote app File...** opens a window in which you can select a template or blank panel to use for building a new Remote app control panel.

**Open Remote app File...** opens a window for browsing to an existing Remote app file.

**Save Remote app File...** initially opens a window for naming the current Remote app file and browsing to a location to save it. Subsequent selections of this menu option will immediately save changes directly to the previously selected file location.

**Save Remote app File As...** opens a window for renaming current Remote app file and browsing to a location to save it.

## Edit Menu



**Undo...** erases the last change and reverts to the previous state.

**Redo...** reverts the effects of the undo action.

**Undo List...** opens the Undo/Redo window

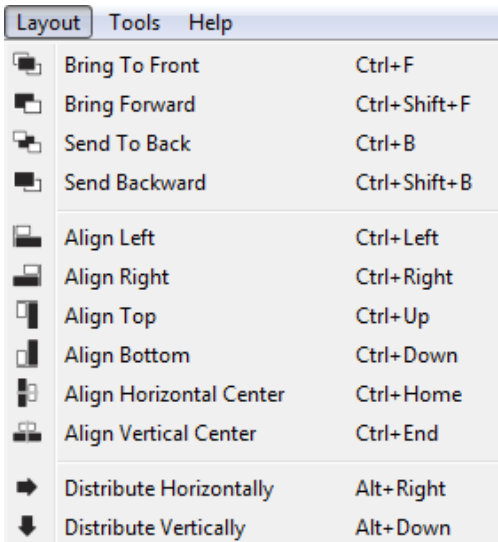
**Cut...** removes the selected item and copies it to the clipboard (standard Windows editing function).

**Copy...** copies the selected item to the clipboard (standard Windows editing function).

**Paste...** pastes the contents of the clipboard (standard Windows editing function).

**Delete...** removes the selected item.

## Layout Menu



**Bring to Front...** moves the selected object to the top layer.

**Bring Forward...** moves the selected object one layer toward the top.

**Send to Back...** moves the selected object to the bottom layer.

**Send Backward...** moves the selected object one layer toward the bottom.

**Align Left...** aligns selected objects relative to their left edges.

**Align Right...** aligns selected objects relative to their right edges.

**Align Top...** aligns selected objects relative to their top edges.

**Align Bottom...** aligns selected objects relative to their bottom edges.

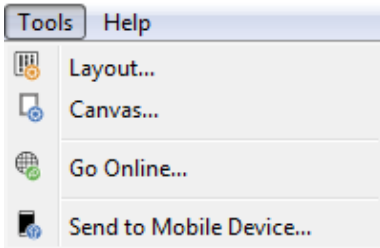
**Align Horizontal Center...** aligns selected objects relative to their horizontal centers.

**Align Vertical Center...** aligns selected objects relative to their vertical centers.

**Distribute Horizontally...** distributes selected objects evenly along the horizontal axis

**Distribute Vertically...** distributes selected objects evenly along the vertical axis

## Tools Menu



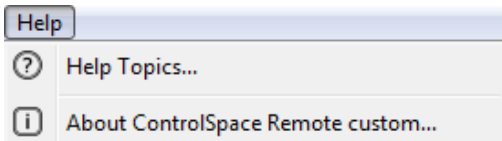
**Layout...** opens the Layout dialog which allows you to add/delete collections and panels.

**Canvas...** opens the canvas setup dialog.

**Go Online...** connects to a ControlSpace network.

**Send to Mobile Device...** transmits the control panel file to a mobile device.

## Help Menu



















**Help Topics...** Opens online Help.

**About ControlSpace Remote builder...** opens a dialog which reveals the software version number.

## 2

### Toolbar

-  Open CSP file - Opens a window for browsing to an existing ControlSpace® Designer™ software project file
-  New Remote app file - Opens a window in which you can select a template or blank panel to use for building a new Remote app control panel
-  Open Remote app file - Opens a window for browsing to an existing Remote app file
-  Save Remote app file - Initially opens a window for naming the current Remote app file and browsing to a location to save it. Subsequent selections of this tool will immediately save changes directly to the previously selected file location
-  Cut
-  Copy

-  Paste
-  Delete
-  Redo
-  Undo
-  Opens Undo list window
-  Enables/disables Edit mode
-  Opens "Layout Tool" on the next page
-  Opens "Canvas Setup Properties" below
-  Go Online
-  Sends file to mobile device

### 3 Project/Properties Panel

Selecting the **Project** tab displays a tree view of devices and controls in the opened project file. Selecting the **Properties** tab displays properties for a selected object on the canvas.

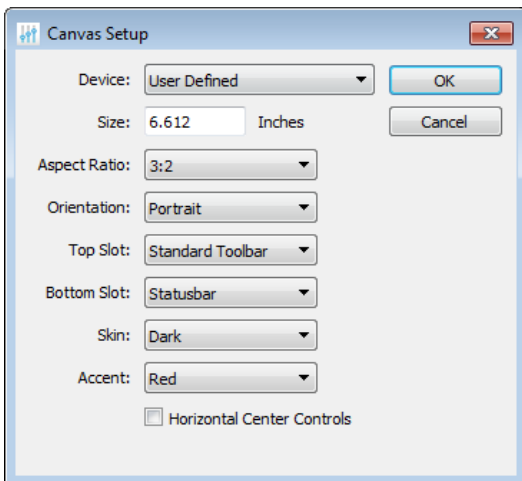
### 4 Control Panel Canvas

This canvas is the workspace for creating control panels. The size, shape, orientation, and other properties of the Canvas is set using the Canvas Setup properties tool in the toolbar.

See "Canvas Setup Properties" below for more details.

## Canvas Setup Properties

The Canvas Setup window allows you to define the size and features of the control panel you are creating



The **Canvas Setup** includes the following properties:

**Device** – Determines the canvas Size and Aspect Ratio for the selected device.



**NOTE: Size and Aspect Ratio can only be adjusted manually when "User Defined" is selected as the device.**

**Size** – Diagonal screen dimension of the selected device.

**Aspect Ratio** – The proportional relationship between the width and height of the screen on the selected device.

**Orientation** – Changes the orientation of the screen between portrait and landscape.

**Top Slot/Bottom Slot** – Places the Standard Toolbar, Minimum Toolbar, Statusbar, or no toolbar (None) in the top/bottom border of the Canvas.

**Standard Toolbar:** The left-hand end of the toolbar has a field for naming the site where the panel will be used. The SITE NAME is entered using the Layout setup window. The right-hand end of the toolbar includes an Online/Offline link indicator and a setup information button.



**Minimum Toolbar:** The Minimum Toolbar only has the Online/Offline link indicator and the setup information button.



**Statusbar:** The Statusbar indicates which collection of panels has been selected. The dots indicate how many panels are in the collection (there is always one blank panel). Click the left/right arrows to view other panels – the highlighted dot will move left/right accordingly. Click on "COLLECTION" to open a list of panel collections and select a different one.



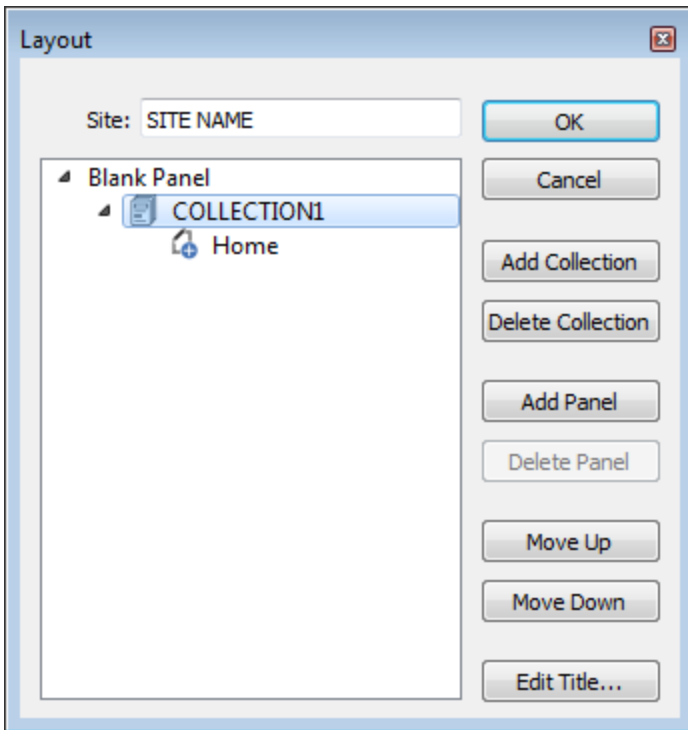
**Skin** – Selects a Light or Dark Skin for the panel.

**Accent** – Selects an accent color (Blue, Green, Pink, Red, or Yellow) for the controls dragged into the panel.

**Horizontal Center Controls** – When checked, centers controls in the workspace. Applies only when creating custom control panels.

## Layout Tool

The Layout tool manages the collections and control panels being created in ControlSpace® Remote builder software. Initially, the Layout tool always provides one collection (COLLECTION1) with one blank panel (Home). For creating custom layouts you can add additional blank panels from the template list.



#### *Initial Layout tool content*

The Layout tool provides the following control buttons:

**OK** – Stores changes made and closes the tool.

**Cancel** – Closes the tool without making any changes.

**Add Collection** – Adds another collection to the list.

**Delete Collection** – Removes the selected collection from the list.

**Add Panel** – Adds another control panel to the list

**Delete Panel** – Removes the selected control panel from the list

**Move Up** – Moves the selected item up one line in the list.

**Move Down** – Moves the selected item down one line in the list.

**Edit Title** – Allows changing the title of the selected collection or control panel.

## File Types

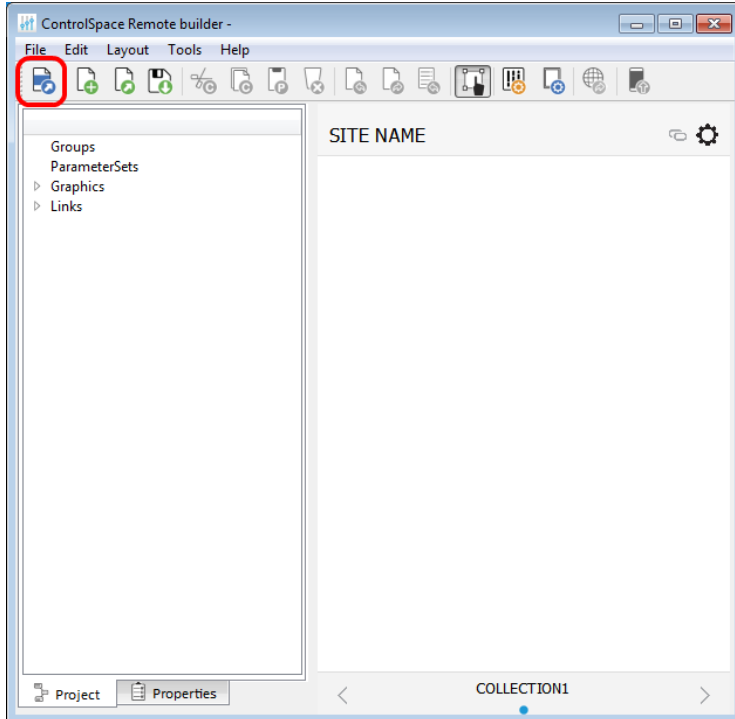
This application is compatible with the following file types.

File Type	Description
.csp	ControlSpace® Designer™ project file.
.cpf	Custom control panel file.
.cpz	A packaged file that includes data from a control panel file (.cpf) and its associated ControlSpace Designer project file (.csp).

# Creating Panels Using Templates

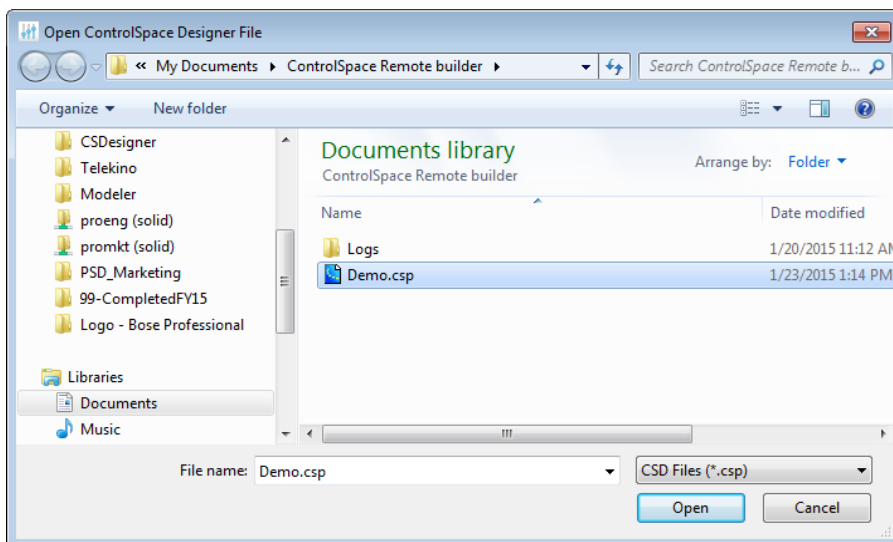
## Creating Control Panels

1. Open the Remote builder app on your computer using the desktop icon.
2. In the Remote builder Window, click the **Open CSP File** tool.



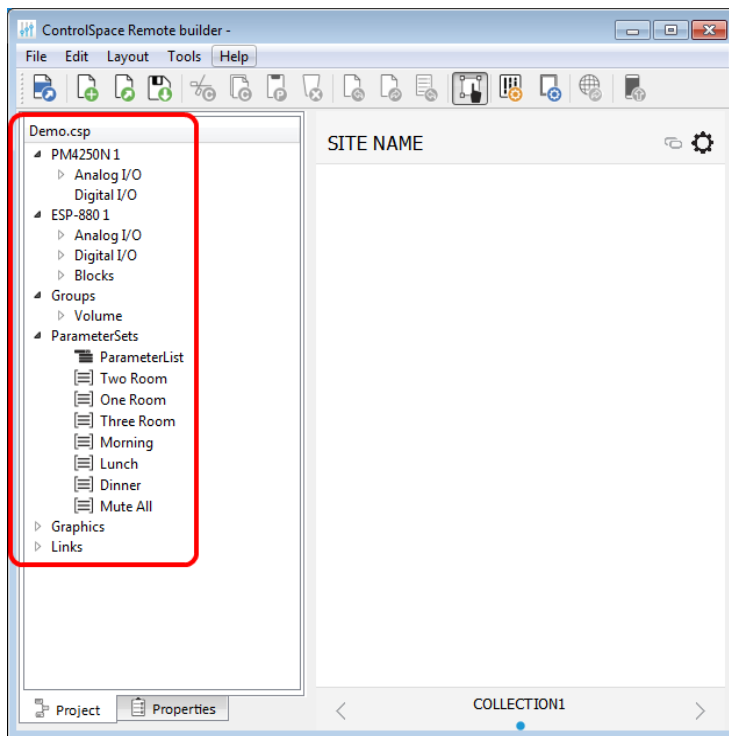
*Open CSP File tool*

3. From the dialog window, select the ControlSpace Designer project file you created and click **Open**.



*Selecting a Project File*

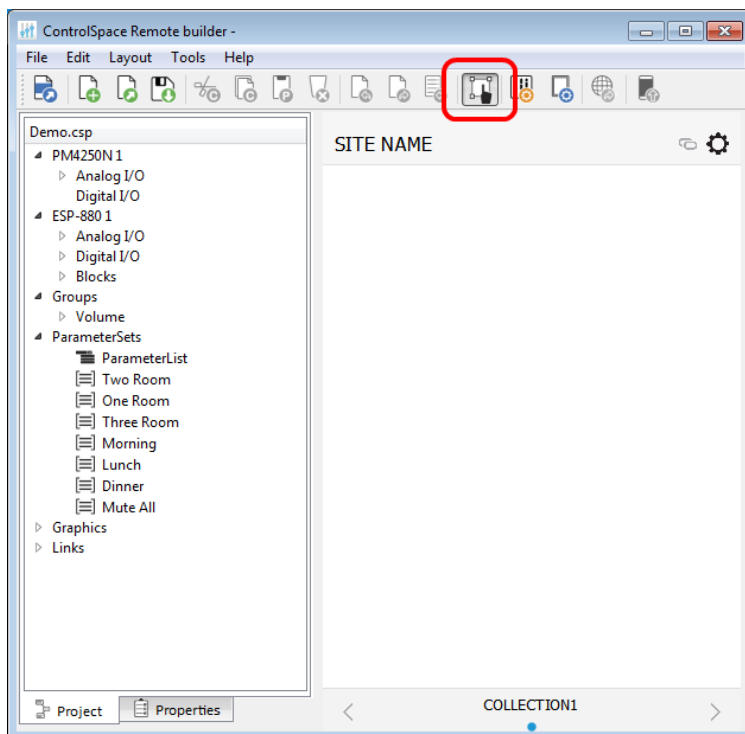
4. Check that all the devices and controls in that project are listed in the window.



### Project File Devices and Controls

- Before you start creating a control panel, make sure the **Edit** mode is selected.

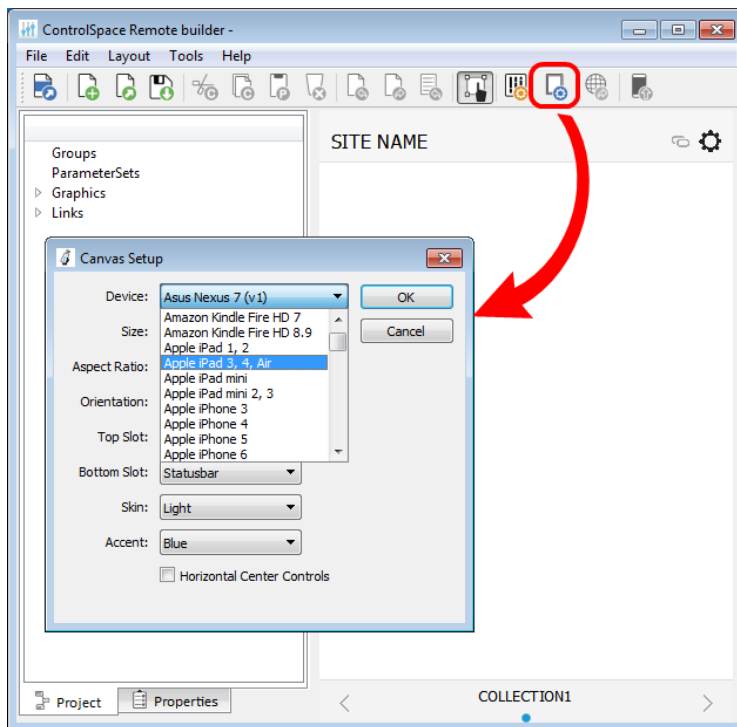
**NOTE: The Edit mode must be enabled in order to create a control panel.**



### Edit Mode Selected

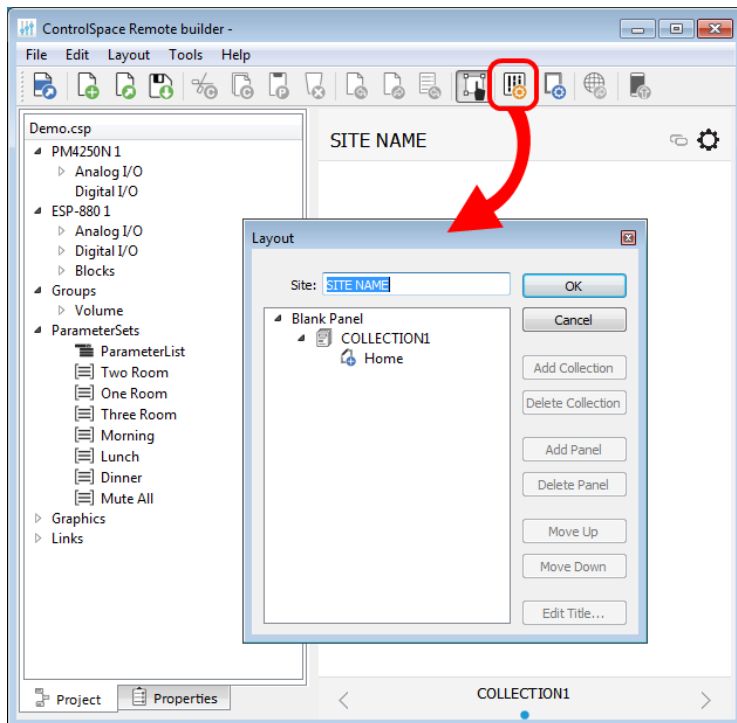
- In the toolbar, click the **Canvas Setup** tool. Make your selections and click **OK**.

**NOTE: See "Canvas Setup Properties" on page 8 for more information.**



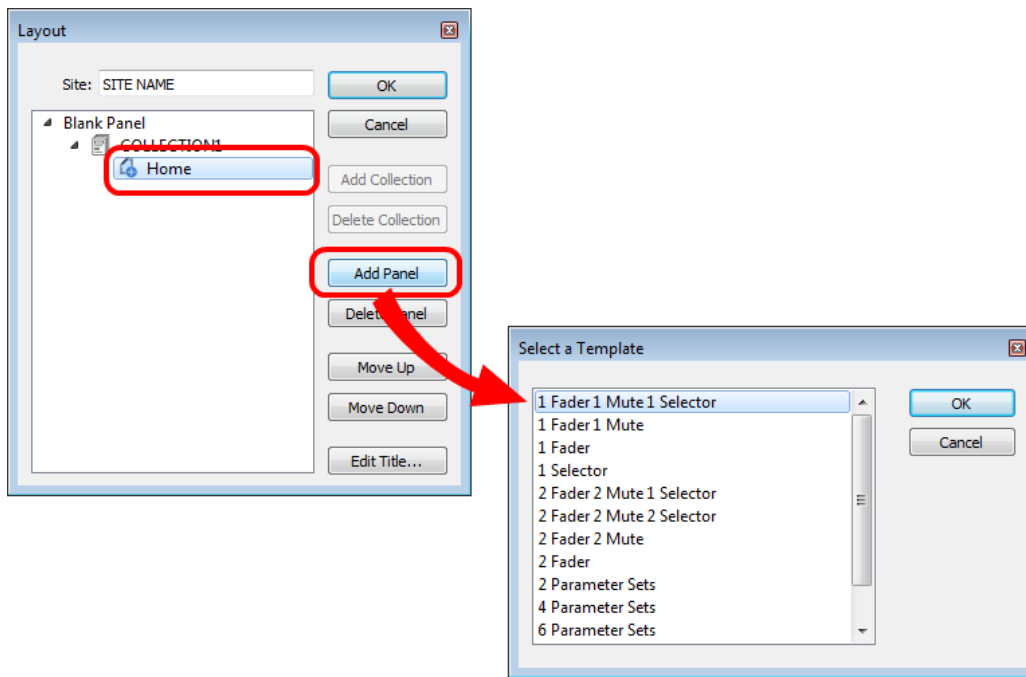
*Selecting canvas size for your device*

7. In the toolbar, click the **Layout** tool.

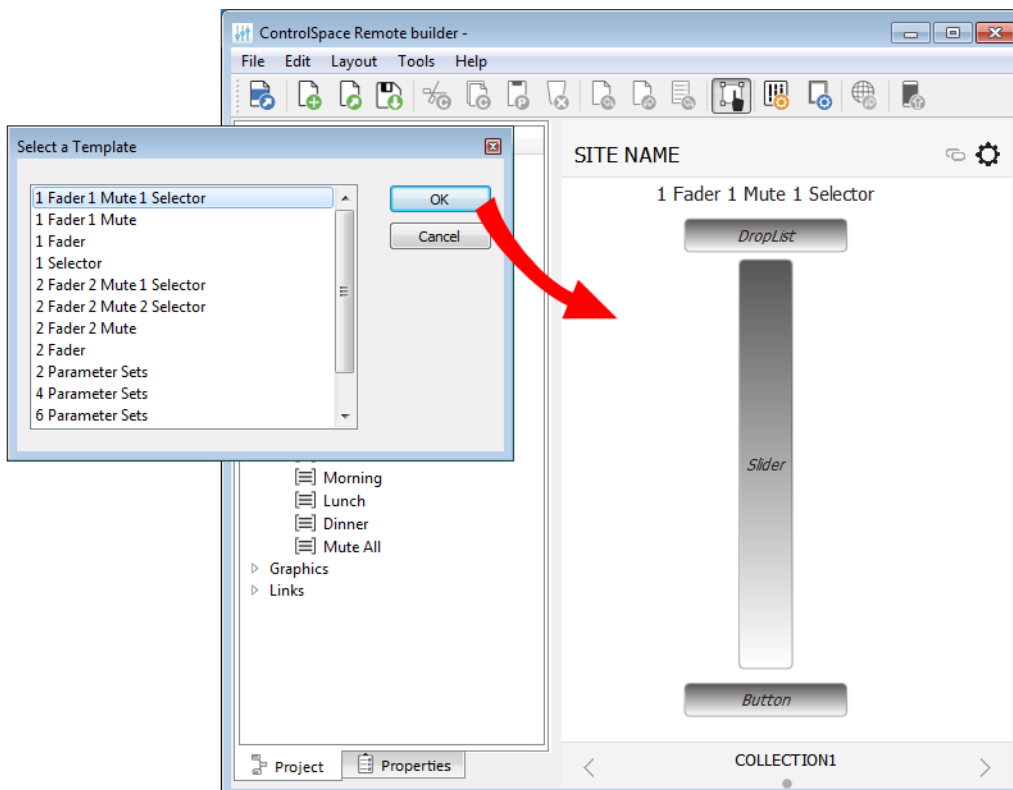


*Clicking the Layout tool*

8. Using the Layout window, add a template to the workspace. For example, click **Home** below **COLLECTION1**. Click **Add Panel**, select a template and click **OK**.



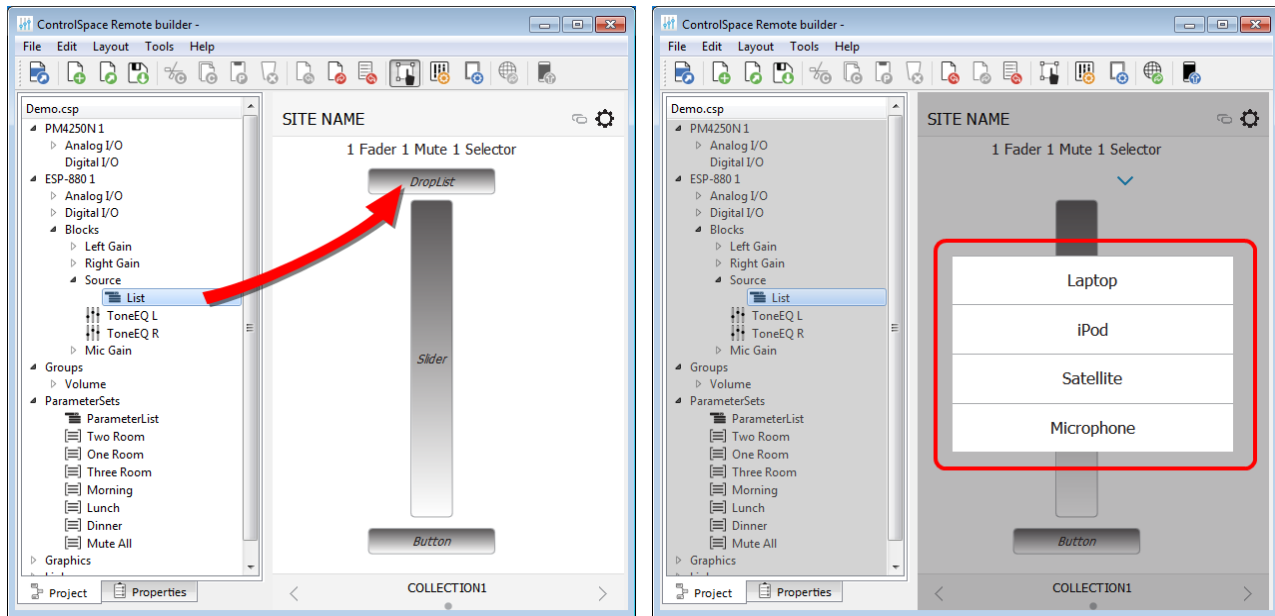
*Selecting a control panel template*



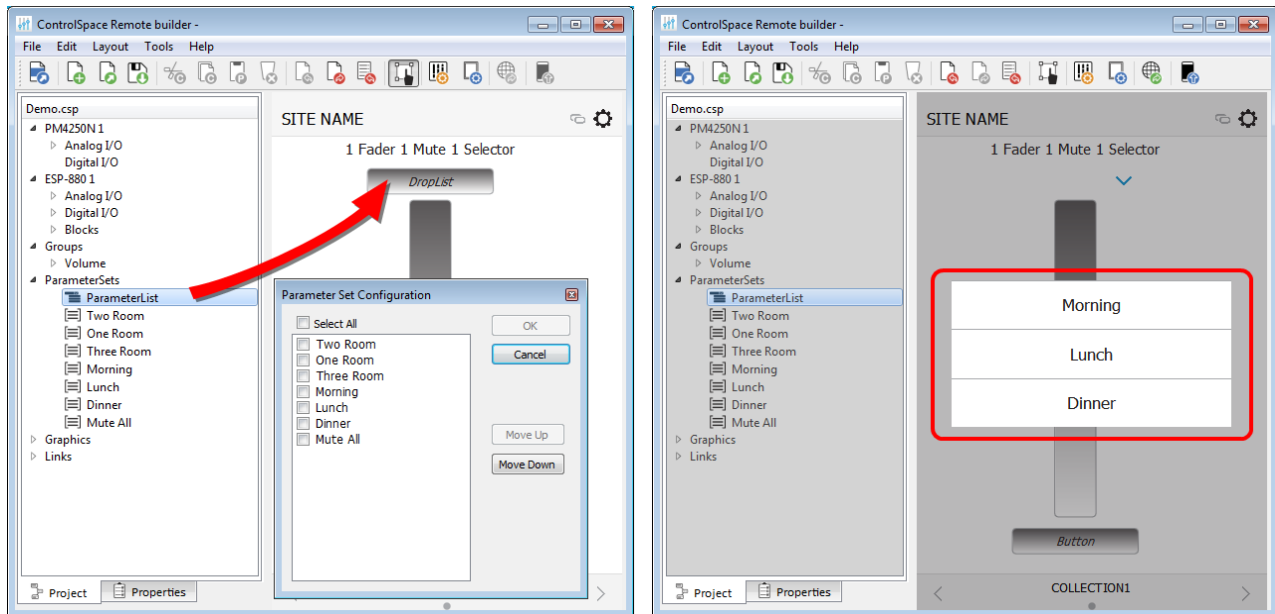
*Placing the template in the workspace*

9. Drag controls to the pre-defined locations on the control panel template. See the following examples.

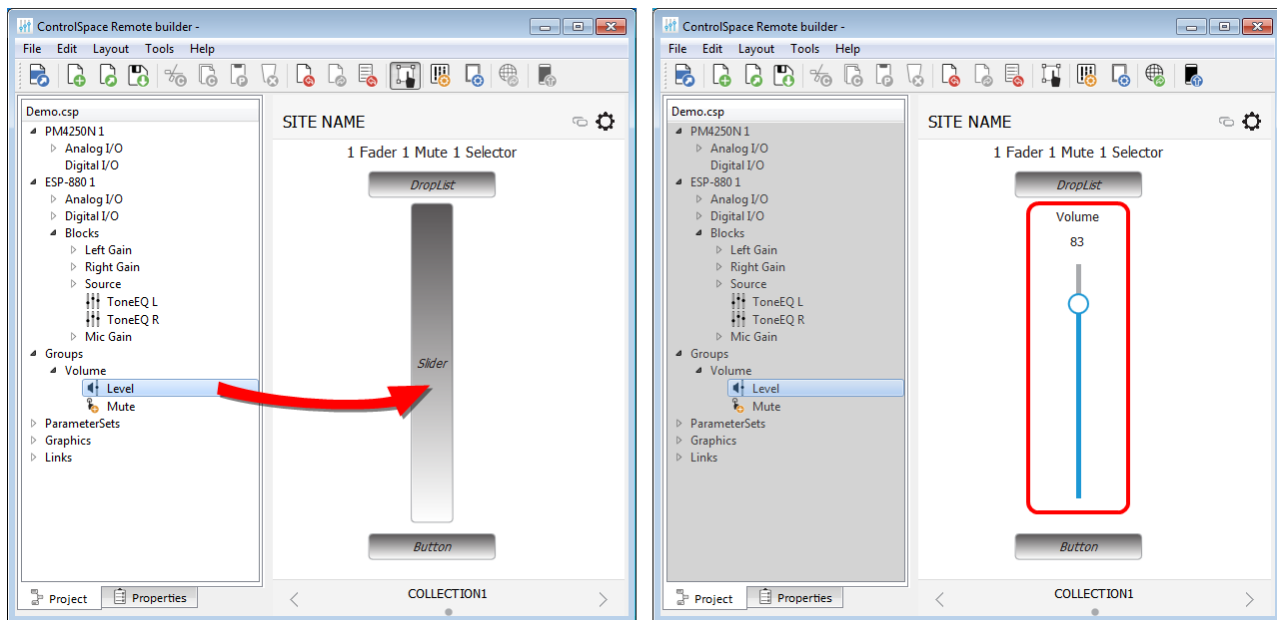
**NOTE:** To verify the operation of any control panel feature such as a slider or drop list, be sure to disable the Edit mode.



*Dragging a Source list to the Drop List*

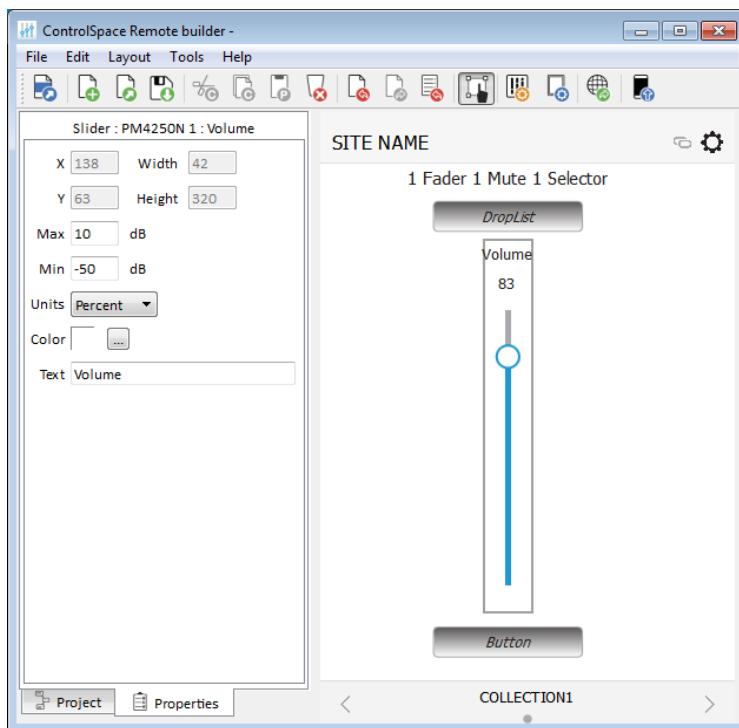


*Dragging a Parameter Set List to the Drop List*



*Dragging the group volume gain to the slider*

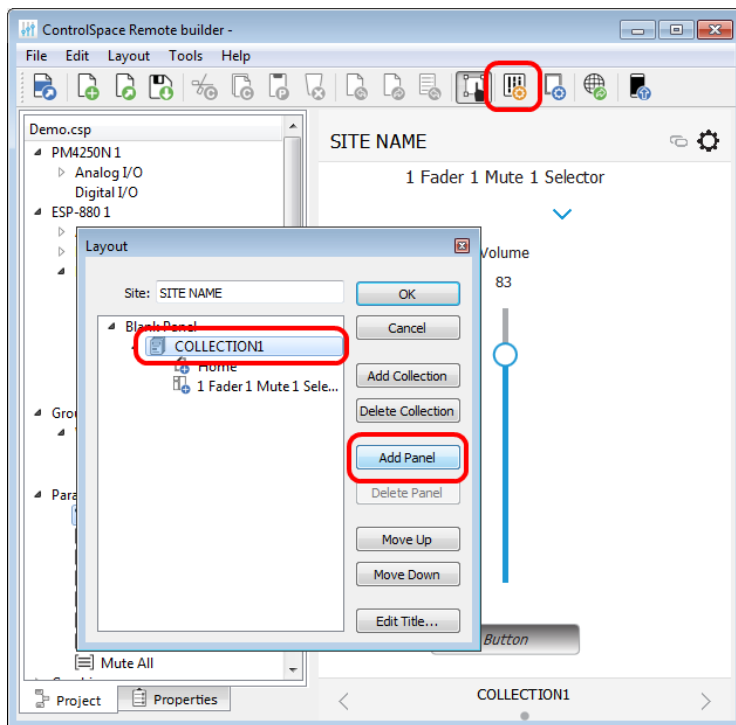
To change volume limits on a slider, select the slider and click the properties tab. In this pane you can set the maximum and minimum limits and select Percent or dB for units.



*Volume Properties*

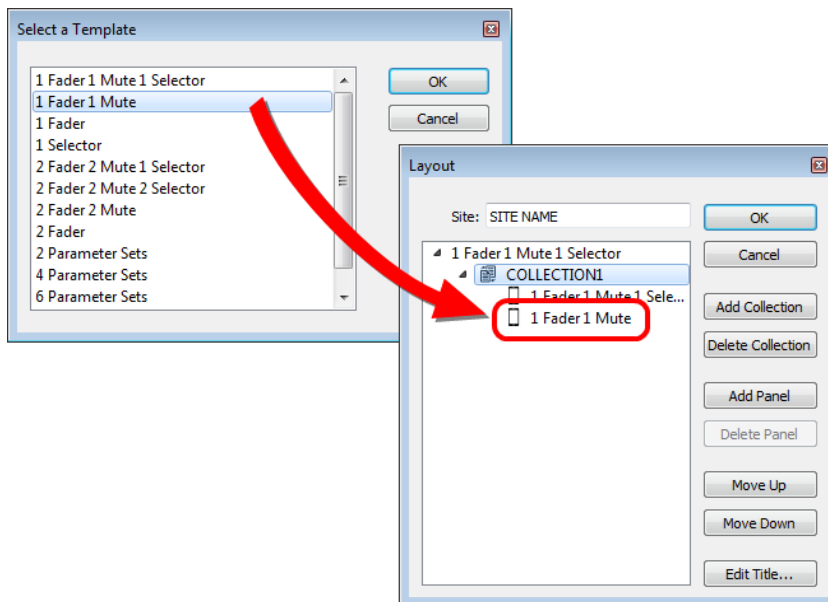
10. To add another panel, click the **Layout** button, select **COLLECTION1** and click **Add Panel**.



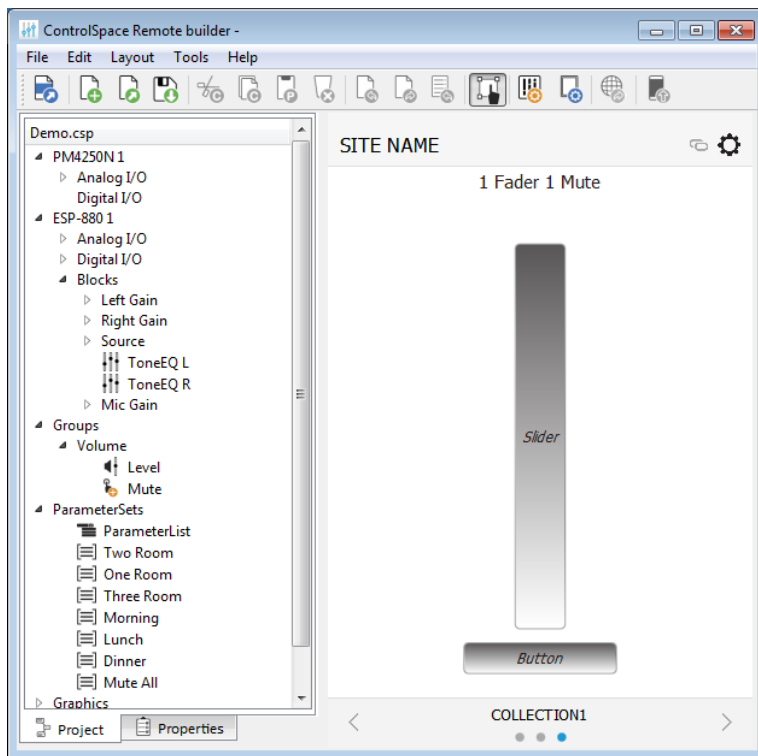


### Locating the Add Panel button

11. Select a panel template and click **OK**. Repeat this to add as many panels as needed. Click the left and right arrows in the Statubar to scroll through the panels.

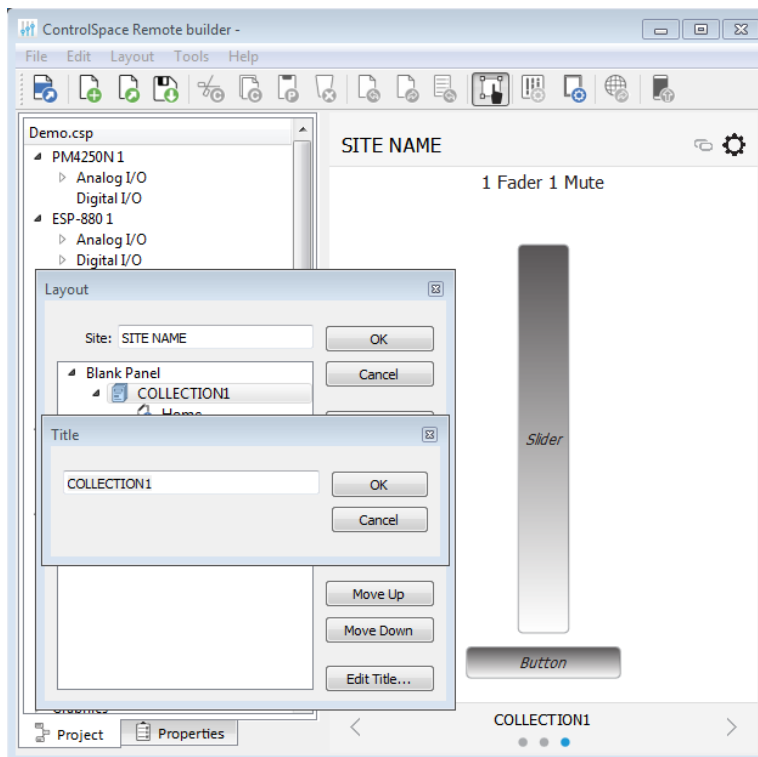


### Adding another panel template to the Layout



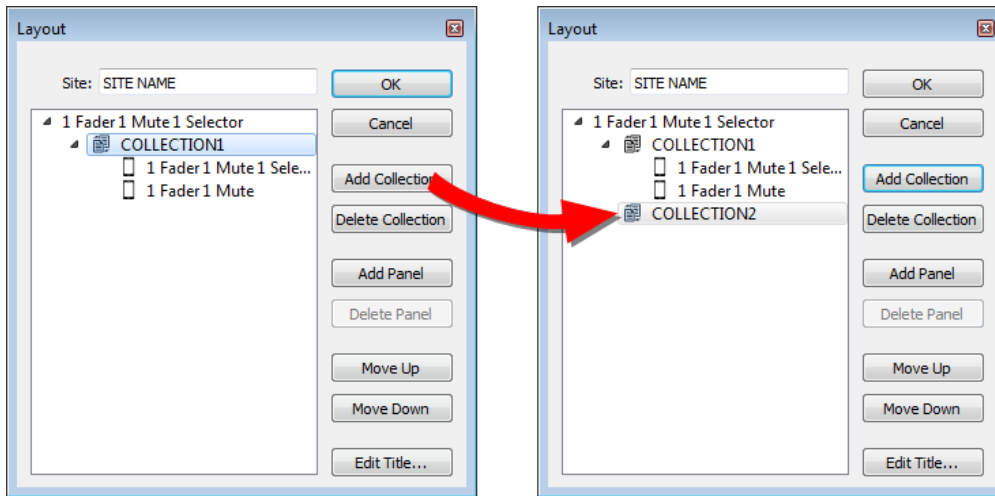
*COLLECTION1 with one blank panel and two templates*

**NOTE:** To change the **COLLECTION1** Name, select **COLLECTION1** and click **Edit Title**. Enter the new name and click **OK**.



*Changing Name of COLLECTION1.*

12. To add another collection, select **COLLECTION1** again and click **Add Collection**. **COLLECTION2** is added to the Layout.



13. To create more panels, add more templates or blank panels and drag-and-drop controls to them.
14. When you are done, click **Save Remote app File**.

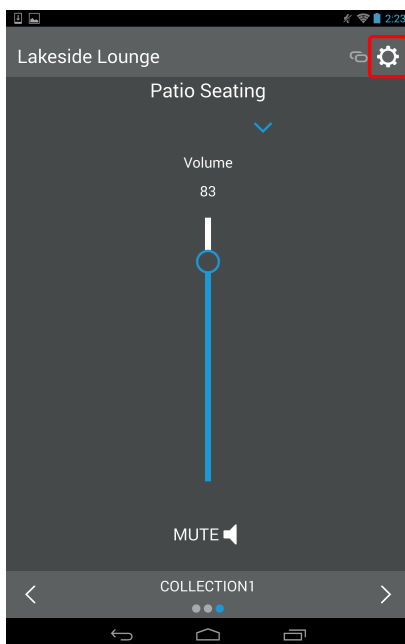


*Save Remote app File button*

## Sending to a Mobile Device

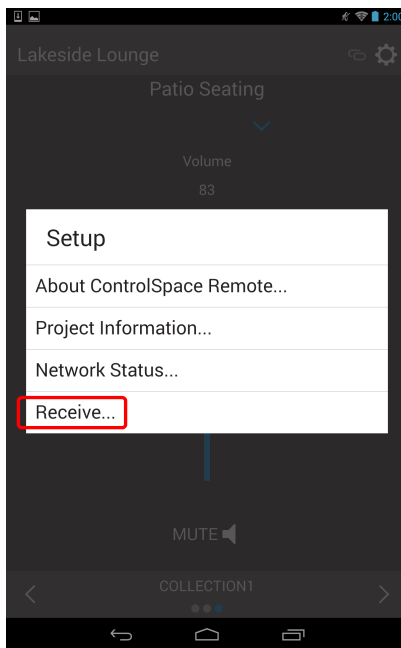
To send a panel to your mobile device, make sure your PC and mobile device are connected to the same Wi-Fi® router.

1. Launch the Remote app on your mobile device.
2. Touch the Settings icon.



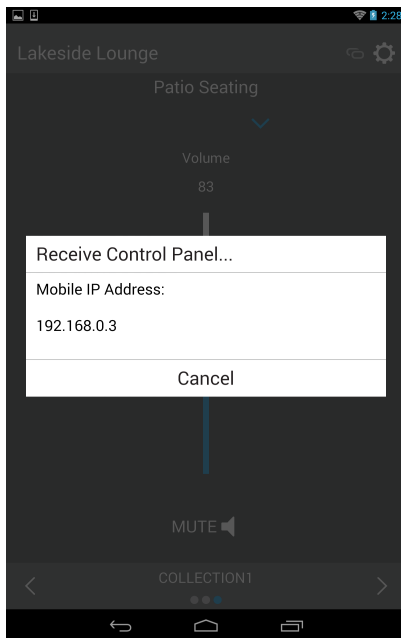
*Remote App Settings icon*

3. In the pop-up menu, touch **Receive**.



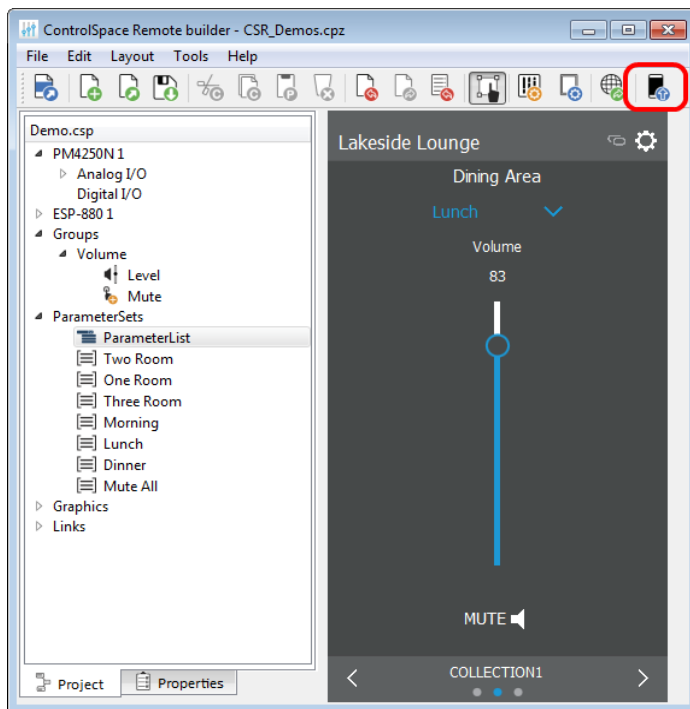
*Selecting Receive in the Remote app*

The Receive Control Panel dialog appears and reveals the IP address used in Step 5.

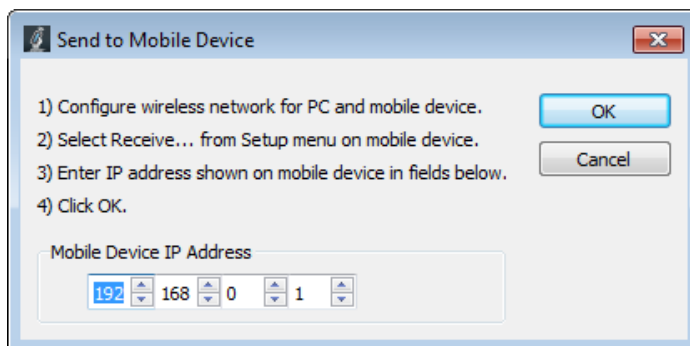


*Receive Control Panel Dialog*

4. On your computer in the Remote builder window toolbar, click the **Send to Mobile Device** icon.



5. In the Send to Mobile Device dialog box, enter the IP address shown in the Receive Control Panel dialog on the mobile device and click **OK**.

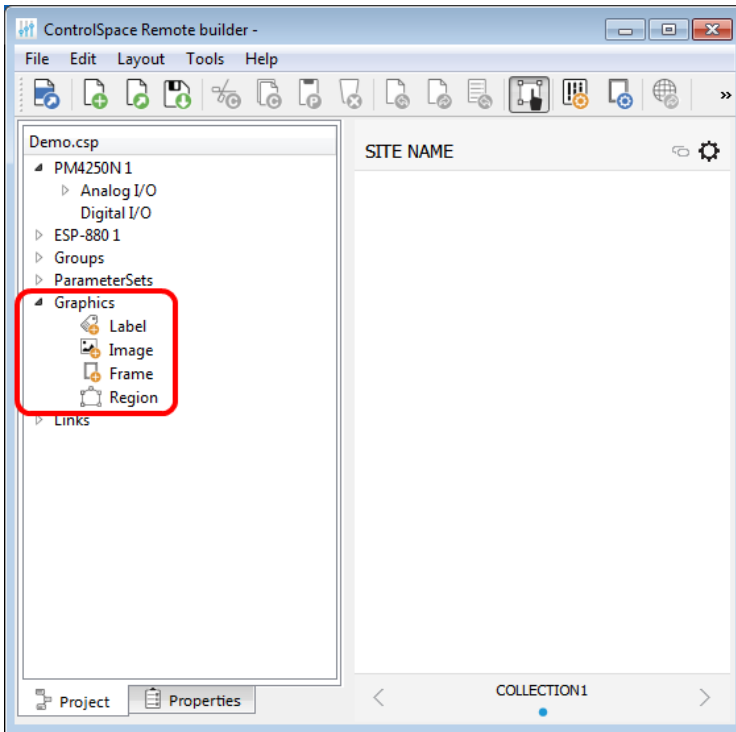


The control panel file will be transferred to the mobile device.

# Creating Custom Panels

## Creating Custom Layouts

Using the tools and options available in ControlSpace® Remote builder you can create your own customized control panels. From the Project tab you can combine labels, images, frames, and regions to create a customized layout. The Layout menu functions can help you position the objects you placed on the canvas.



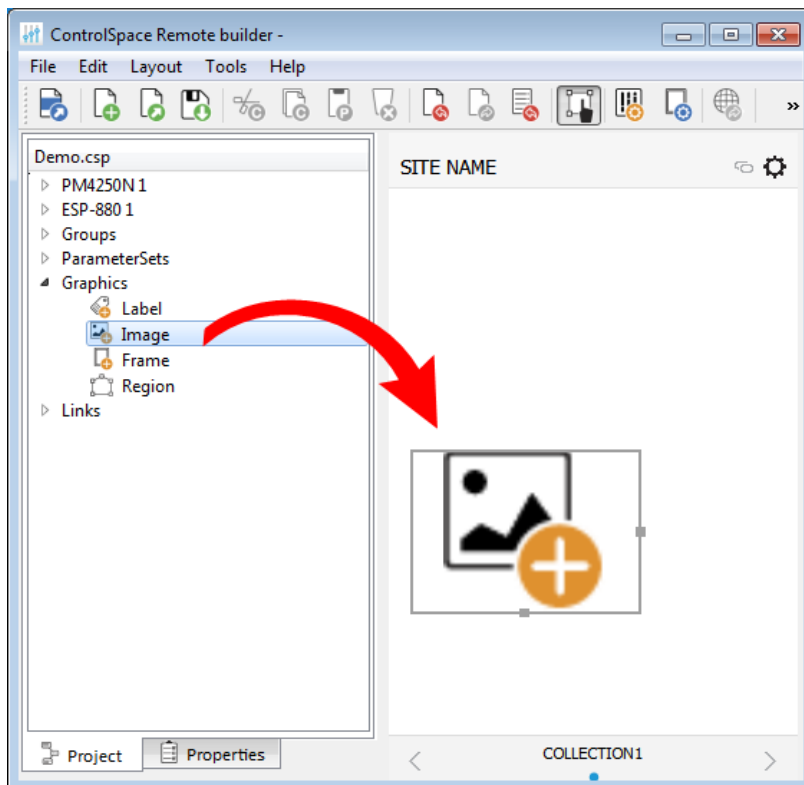
### Locating Graphics

#### Importing backgrounds

Placing map, floor plan, or other graphic of a venue in the workspace.

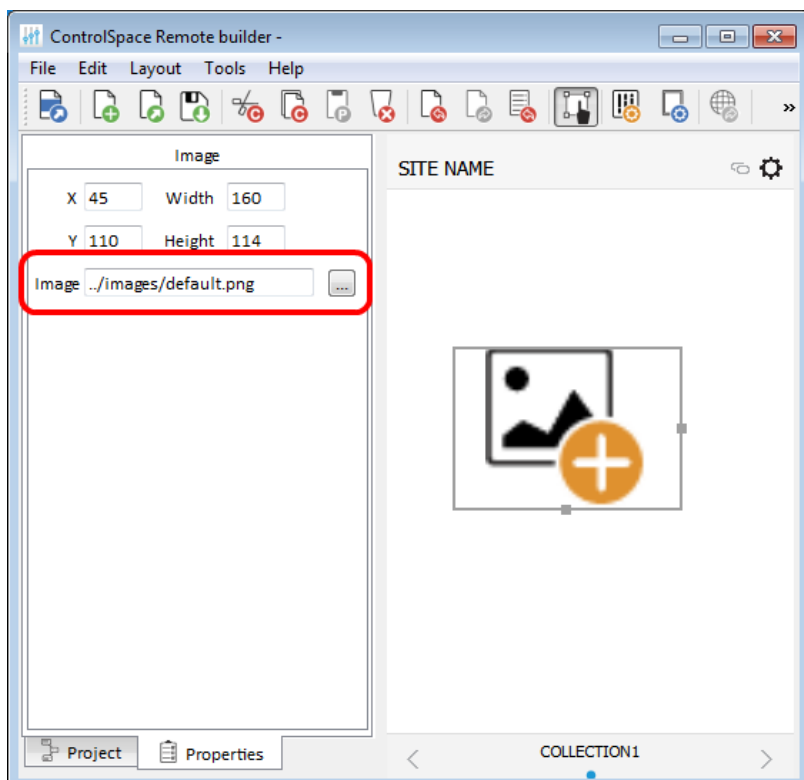
To place a floor plan or map on the canvas:

1. In the **Project** tab, expand the **Graphics** group.
2. Drag the **Image** icon into the canvas.



*Dragging Image icon into the Canvas*

3. In the canvas, double click the **Image** icon. The **Properties** tab will automatically be selected.
4. In the **Properties** tab, navigate to the file you want to import from your computer and click **Open**. The file will appear on the canvas.



*Searching for an Image*

- Re-size the image by dragging the handles on the right side and bottom of the image frame.

### Adding images

ControlSpace Remote builder software includes an image library of sources and zones that may be used to create your custom control panel.



### Source Image Library

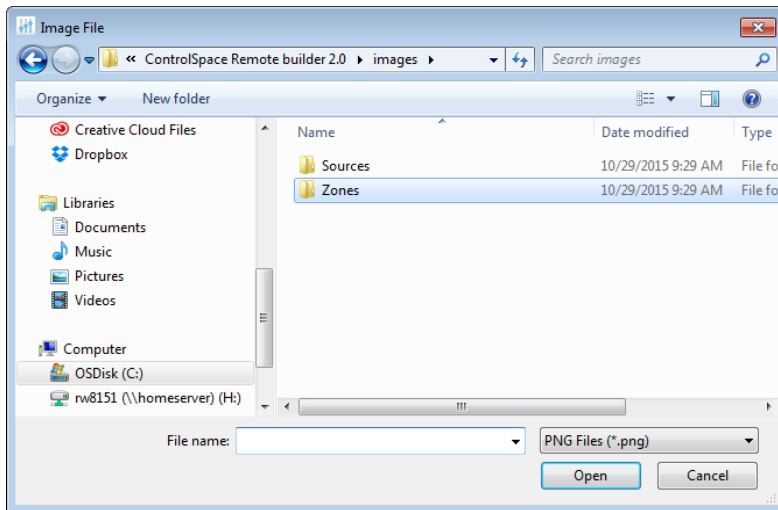


### Zone Image Library

To place a library image on the canvas,

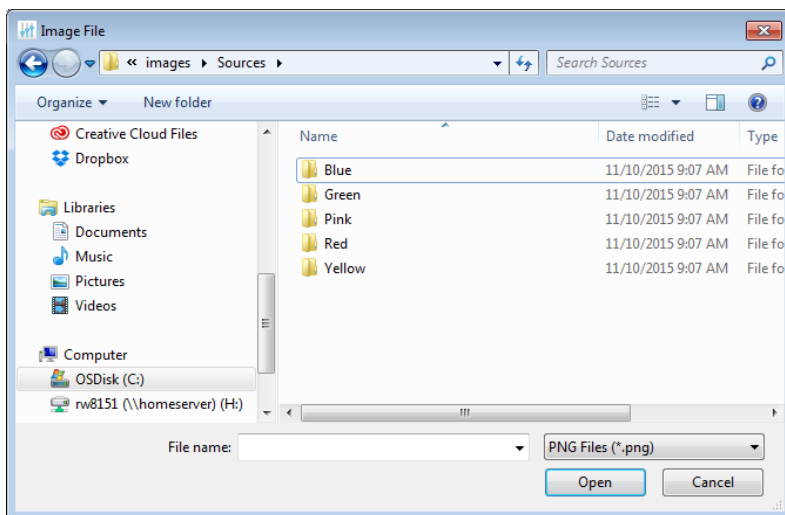
- Follow the steps 1-3 above and drag the image icon into the canvas.
- In the **Properties** tab, navigate to the directory for the Sources and Zones folders.





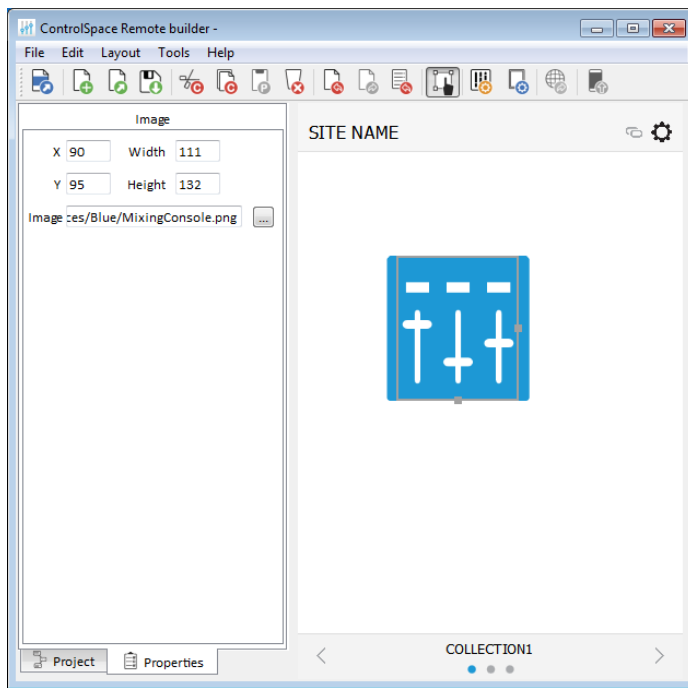
### *Locating Sources and Zones images*

3. Open one of the folders to find the available images. Library images are available in five colors.



### *Choosing colored images*

4. Open the folder for the color you want, select an image and click **Open**. The image will appear on the canvas.



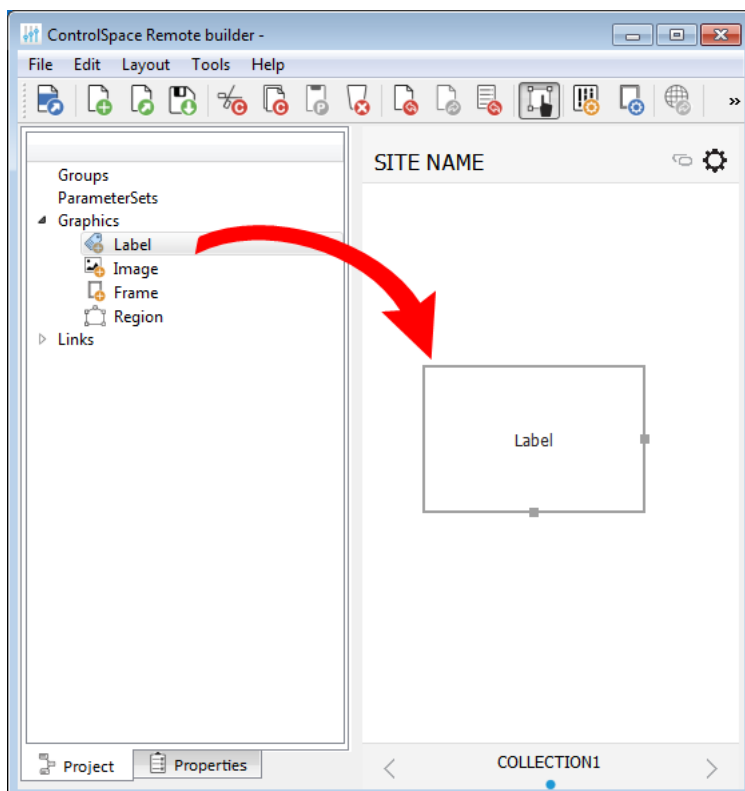
*Selected Blue Image on Canvas*

**NOTE: Image colors match the Skin accent colors selected in the Canvas Setup properties.**

5. Re-size the image by dragging the handles on the right and bottom edges of the image frame.

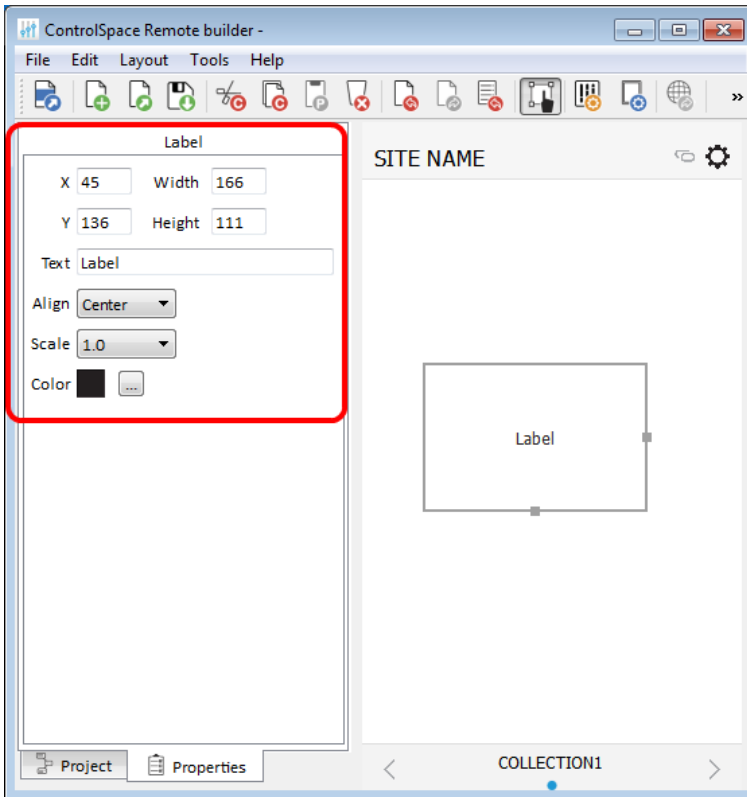
### Adding text frames and labels

Using the **Label** graphic you can place a text field on other graphics creating labels or text strings. Labels can be re-sized by dragging the handles on the right and bottom edges of the frame.



*Dragging a Label into the Canvas*

Double-clicking the Label in the canvas or clicking the **Properties** tab reveals the Label properties.



### *Label Properties*

Label Properties are defined as follows:

**X/Y** – X/Y coordinates of the upper left corner of the frame.

**Width/Height** – width and height of the frame.

**Text** – text field for the label.

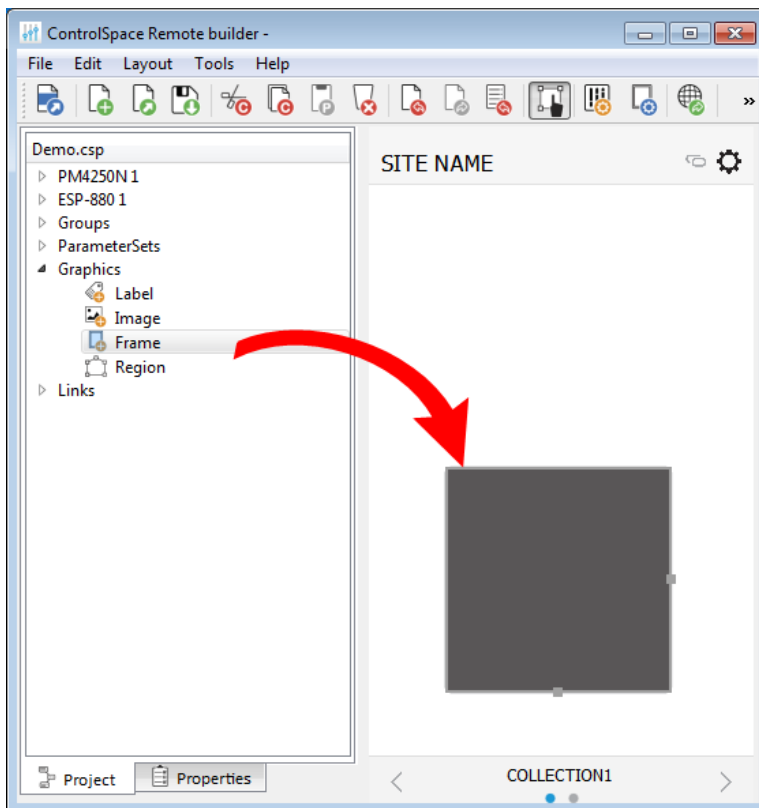
**Align** – positions the text left, right, or center.

**Scale** – changes the size of the text.

**Color** – changes the color of the text.

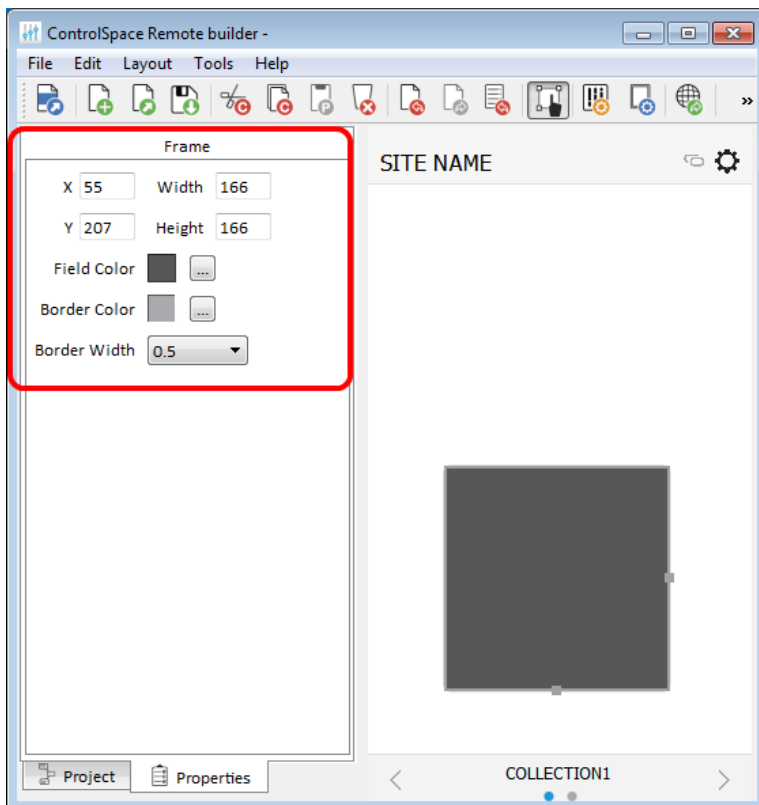
### **Adding a Frame**

Using the **Frame** graphic you can add a rectangular shape to your design. Frames can be re-sized by dragging the handles on the right and bottom edges of the frame.



*Dragging a Frame into the canvas*

Double-clicking the Frame in the canvas or clicking the **Properties** tab reveals the Frame properties.



*Frame Properties*

Frame Properties are defined as follows:

**X/Y** – X/Y coordinates of the upper left corner of the frame.

**Width/Height** – width and height of the frame.

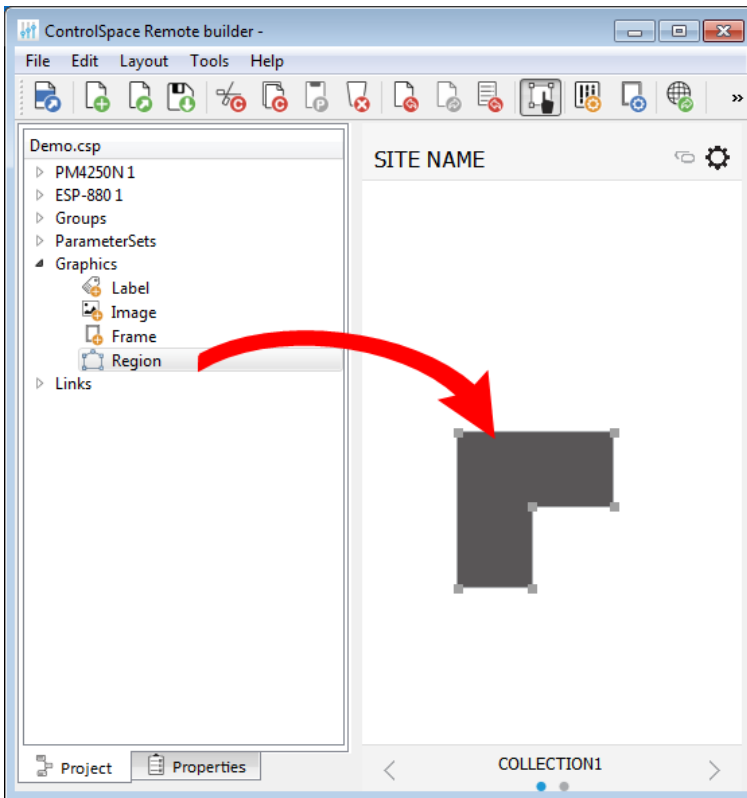
**Field Color** – changes the fill color.

**Border Color** – changes the color of the border.

**Border Width** – changes the line weight of the border.

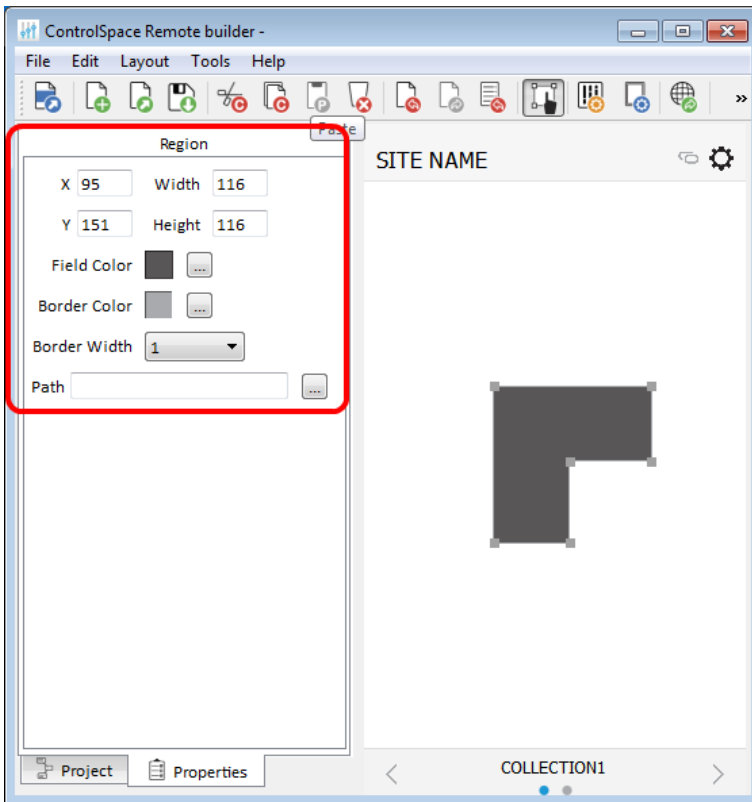
### Adding a region

Using the **Region** graphic you can add a customizable polygon to the canvas. A Region can be linked to an existing control panel. Regions can be re-shaped by dragging the handles on the edges of the frame. To add another handle, press and hold **Ctrl** on your keyboard, place the cursor where you want the handle, and click. To remove a handle, press and hold **Ctrl+Shift** and click on the handle.



### *Dragging a Region into the canvas*

Double-clicking the Region in the canvas or clicking the **Properties** tab reveals the Region properties.



### *Region Properties*

Region Properties are defined as follows:

**X/Y** – X/Y coordinates of the upper left corner of the frame.

**Width/Height** – width and height of the region.

**Field Color** – changes the fill color.

**Border Color** – changes the color of the border.

**Border Width** – changes the line weight of the border.

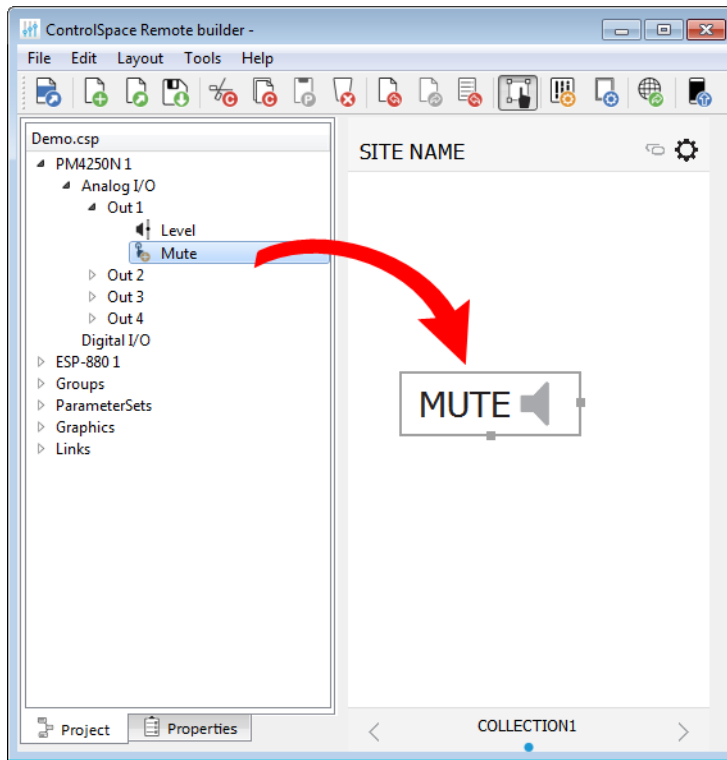
**Path** – links the region to an existing control panel.

## Creating Custom Controls

Project controls listed in the tree view can be dragged into a custom panel design. The appearance of buttons, sliders, and drop-lists can be changed using their individual properties.

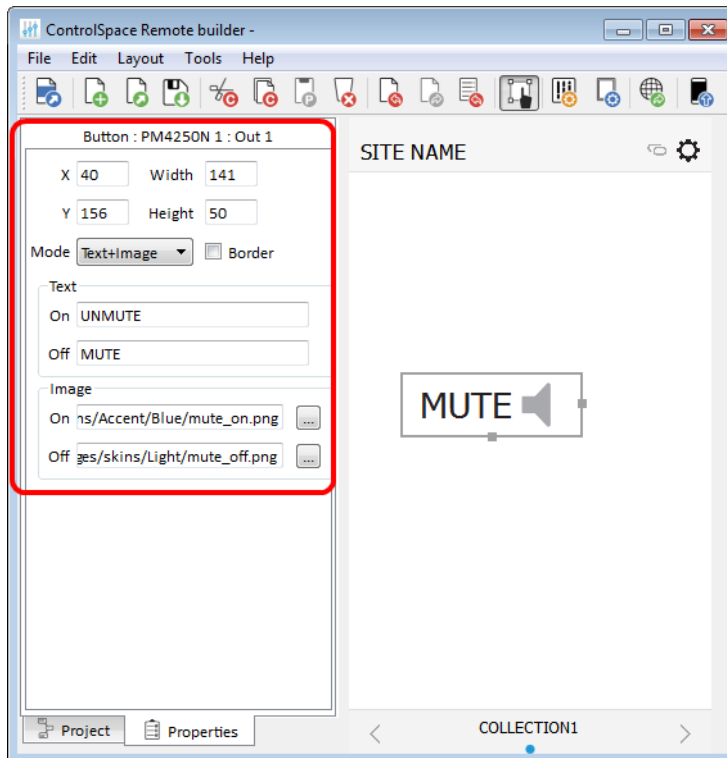
### Custom Buttons

1. From the **Project** tab, drag a button into the canvas.
2. Using the handles on the right and bottom edges, re-size the button.



### Dragging a Button into the Canvas

- To access the button properties, double-click the button or click the **Properties** tab.



### Viewing the Mute Button Properties

- Adjust the properties as desired:  
**X/Y** – X/Y coordinates of the upper left corner of the frame.  
**Width/Height** – width and height of the button.

**Mode** – selects how the button appears: text, image, or text+image.

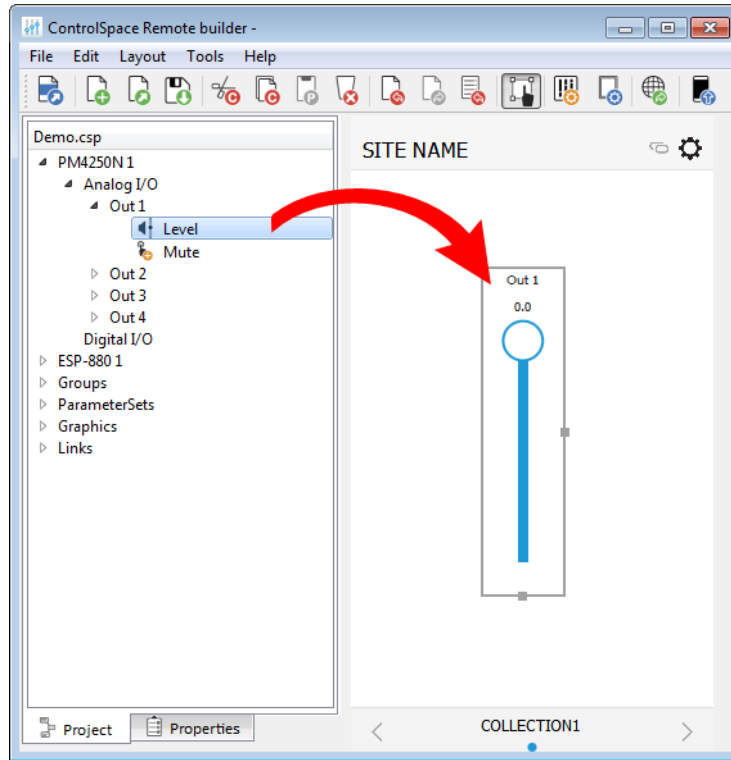
**Border** – when checked, places a border around the button.

**Text** – allows text entry for both on/off states of the button.

**Image** – allows an image selection for both on/off states of the button.

### Custom Sliders

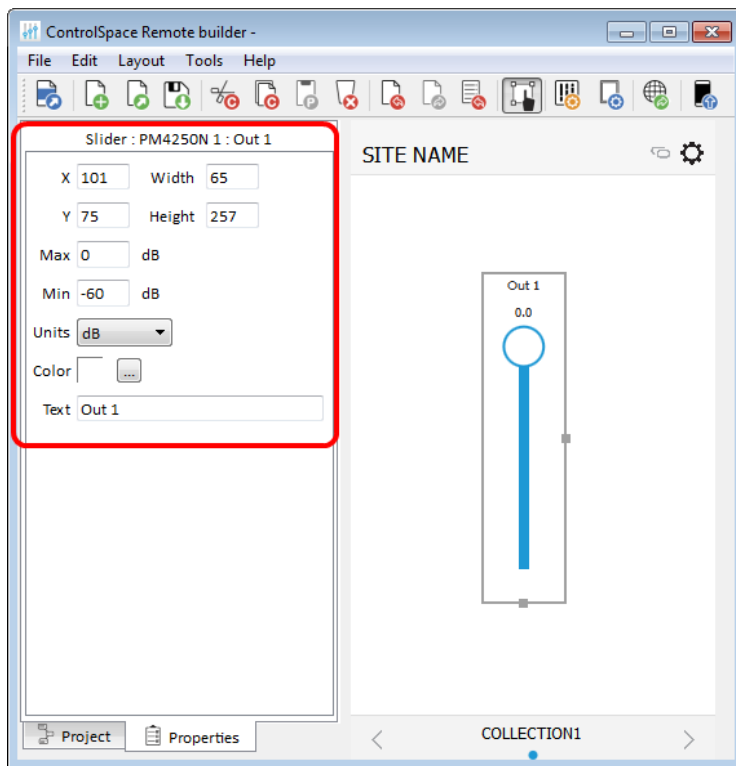
1. From the **Project** tab, drag a slider into the canvas.
2. Using the handles on the right and bottom edges, re-size the slider.



#### *Dragging a Slider into the Canvas*

3. To access the slider properties, double-click the slider or click the **Properties** tab





#### *Viewing the Slider Properties*

4. Adjust the properties as desired:

**X/Y** – X/Y coordinates of the upper left corner of the frame.

**Width/Height** – width and height of the slider.

**Max** – selects the maximum value on the slider.

**Min** – selects the minimum value on the slider.

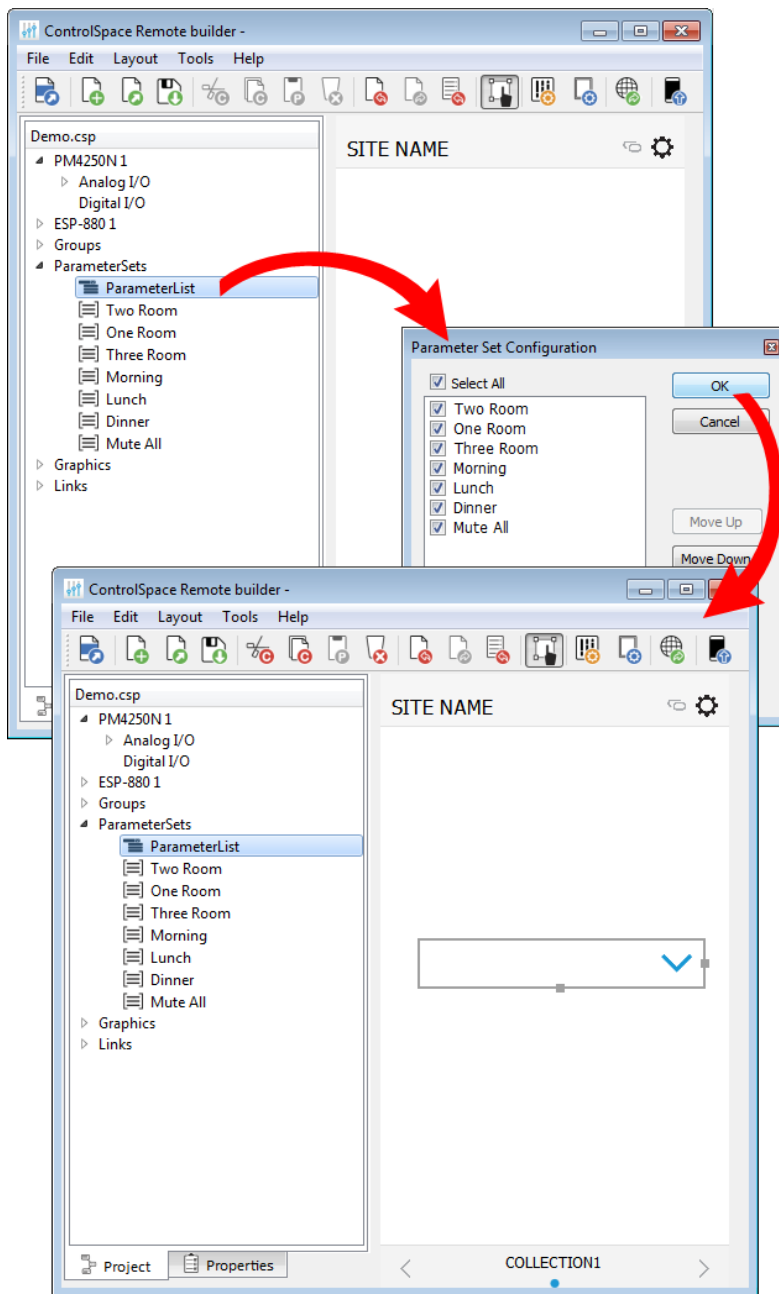
**Units** – selects dB or Percent.

**Color** – selects the color of the slider.

**Text** – allows entry of a label for the slider.

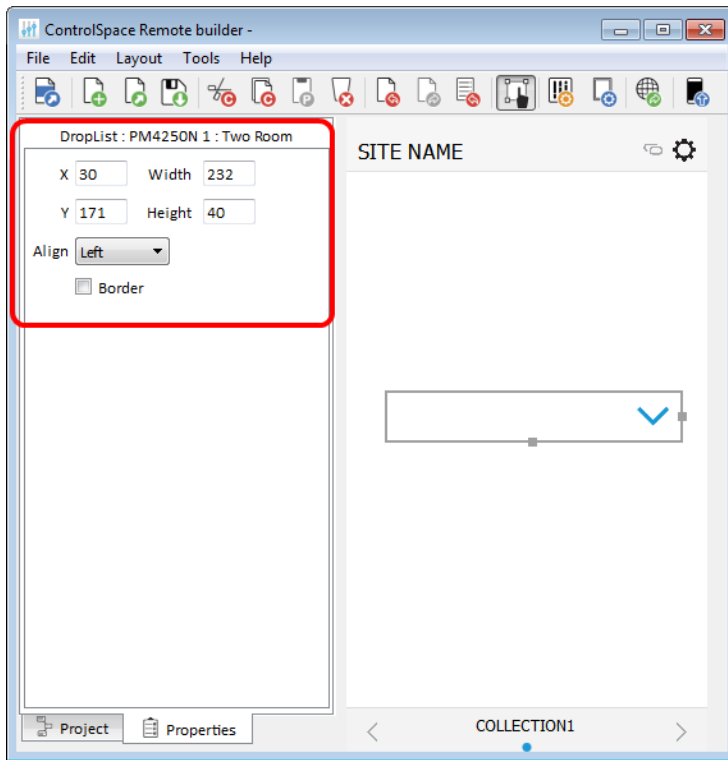
#### **Custom Drop-lists**

1. From the **Project** tab, drag a list into the canvas.
2. Select the items you want in the list and click **OK**.



### *Dragging a Drop List into the Canvas*

3. Using the handles on the right and bottom edges, re-size the drop-list.
4. To access the drop-list properties, double-click the list or click the **Properties** tab.



#### *Viewing the Drop List Properties*

5. Adjust the properties as desired:

**X/Y** – X/Y coordinates of the upper left corner of the frame.

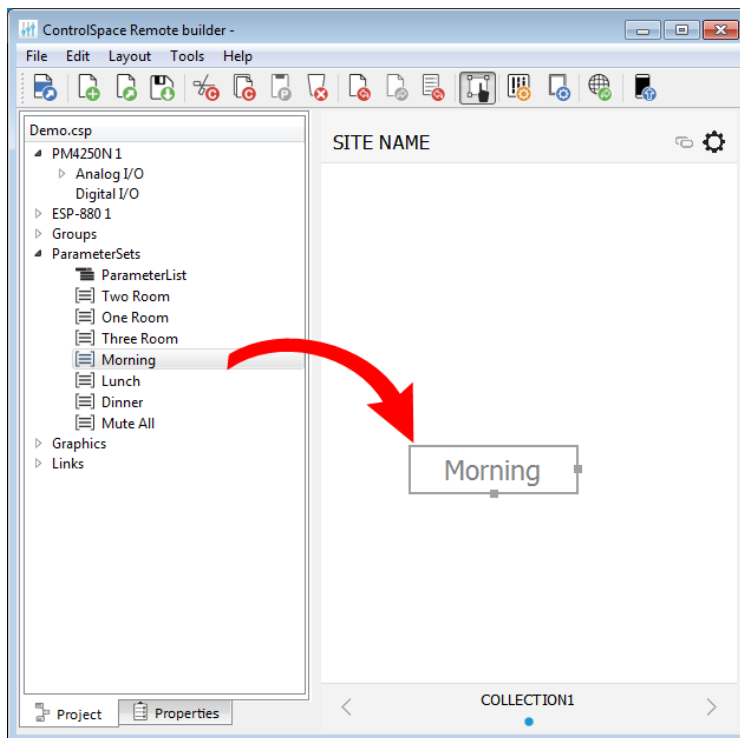
**Width/Height** – width and height of the slider.

**Align** – positions the list Left, Center, or Right

**Border** – when checked, places a border around the button.

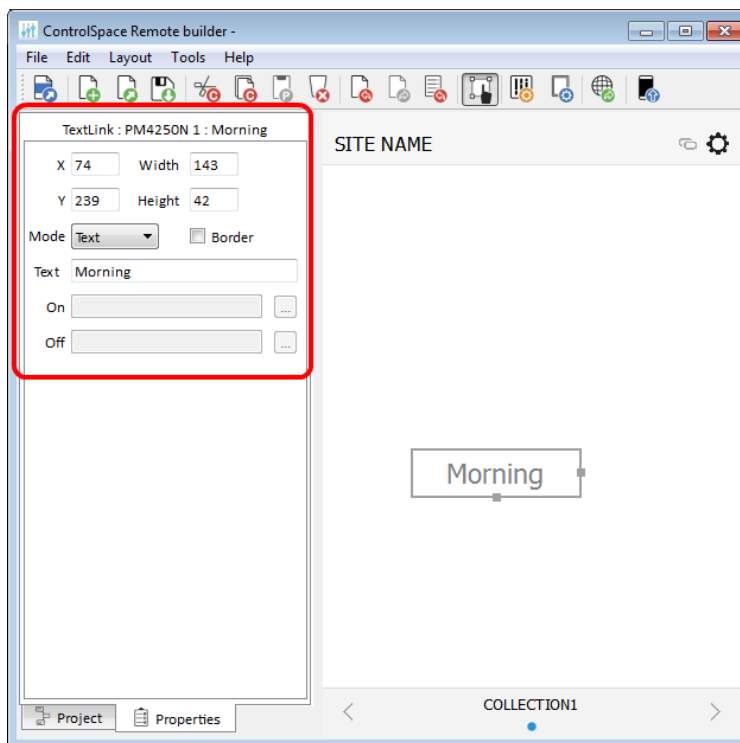
#### **Custom Parameter Sets**

1. From the **Project** tab, drag a Parameter Set into the canvas.



#### *Dragging a Parameter Set into the Canvas*

2. Using the handles on the right and bottom edges, re-size the button.
3. To access the properties, double-click the button or click the **Properties** tab.



#### *Viewing the Parameter Set Button Properties*

4. Adjust the properties as desired:
  - X/Y** – X/Y coordinates of the upper left corner of the frame.
  - Width/Height** – width and height of the button.

**Mode** – selects how the button appears: text, or text+image.

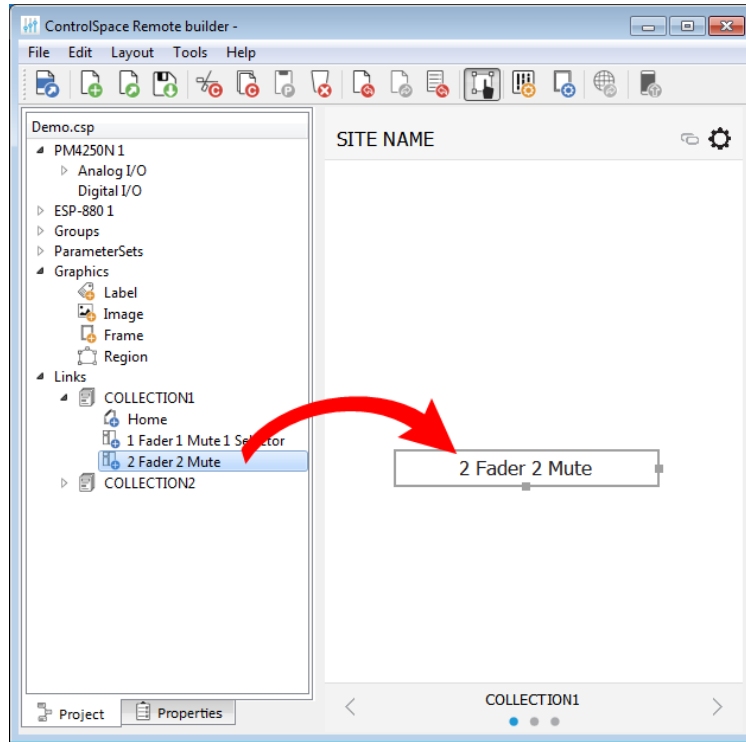
**Border** – when checked, places a border around the button.

**Text** – in Text Mode, allows text entry for a button label.

**On/Off** – in Image Mode, allows an image selection for both on/off states of the button

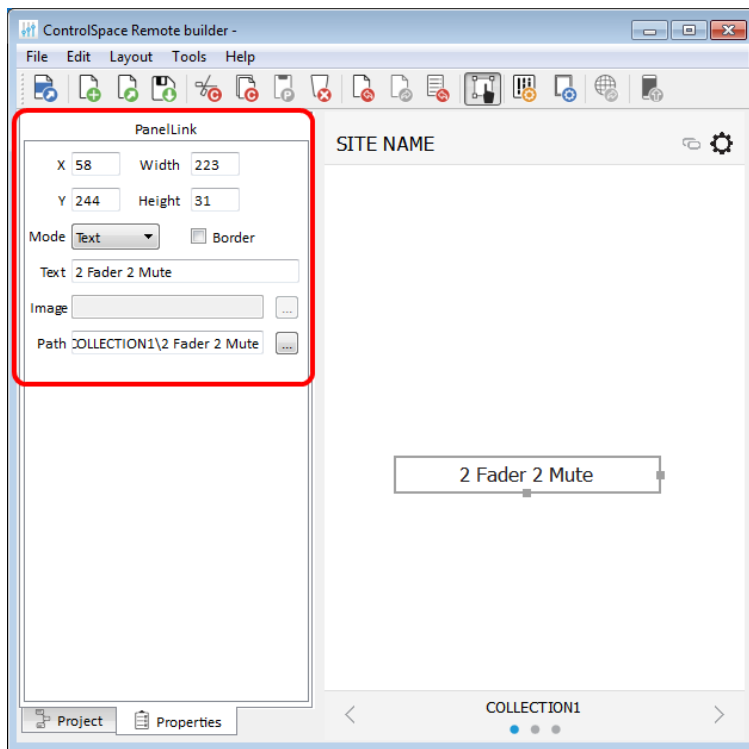
## Custom Links

1. From the **Project** tab, drag a control panel from Links into the canvas.



*Dragging a Link into the Canvas*

2. Using the handles on the right and bottom edges, re-size the button.
3. To access the properties, double-click the button or click the **Properties** tab.



#### *Viewing the Panel Link Properties*

4. Adjust the properties as desired:

**X/Y** – X/Y coordinates of the upper left corner of the frame.

**Width/Height** – width and height of the button.

**Mode** – selects how the button appears: text or image.

**Border** – when checked, places a border around the button.

**Text** – in Text Mode, allows text entry for a button label.

**Image** – in Image Mode, allows selection of an image to use on the button.

**Path** – links the button to an existing control panel.