



**SIMPLIFY
ACCESS &
CONTROL**

**Pelco Switcher
Panel Guide**

Intelli-Site

Security Management Software

Pelco Switcher Panel Guide

For Windows 7 Professional and Ultimate,
Windows 8.1 Pro and Enterprise,
Windows 10 Pro and Enterprise,
Server 2008 R2, and
Server 2012 R2

Pelco Switcher Panel Guide

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When calling, please be at the computer prepared to provide the following information:

- Product version number, found by selecting the  **About** button from the Intelli-Site Application Menu.
- The type of computer being used including, operating system, processor type, speed, amount of memory, type of display, etc.
- Exact wording of any messages that appear on the screen.
- What was occurring when the problem was detected?
- What steps have been taken to reproduce the problem?
- It is highly recommended that the user generate a support package for transmission to Intelli-Site technical support staff. To generate the package, run the Intelli-Site Configuration Utility. *Create Support Package...* is the last option in the **Tools** menu.

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1 Introduction

The Pelco Switcher panel is the software representation of the Pelco Cross-Point Matrix Switcher, both the 6800 series and the 9700 series.

This integration was written using the Pelco ASCII Protocol.

This guide explains using the Pelco Switcher with Intelli-Site Security Management Software. For the purposes of this document, panel is synonymous with Pelco Switcher.

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2 Installation Guide

The Pelco Switcher driver in Intelli-Site must be installed. No external software is needed.

If Intelli-Site has been installed without the Pelco Switcher driver, run the Intelli-Site installer again and select **Modify**.

During the installation or modify installation process, you are presented with the **Select the drivers you want to install** window.

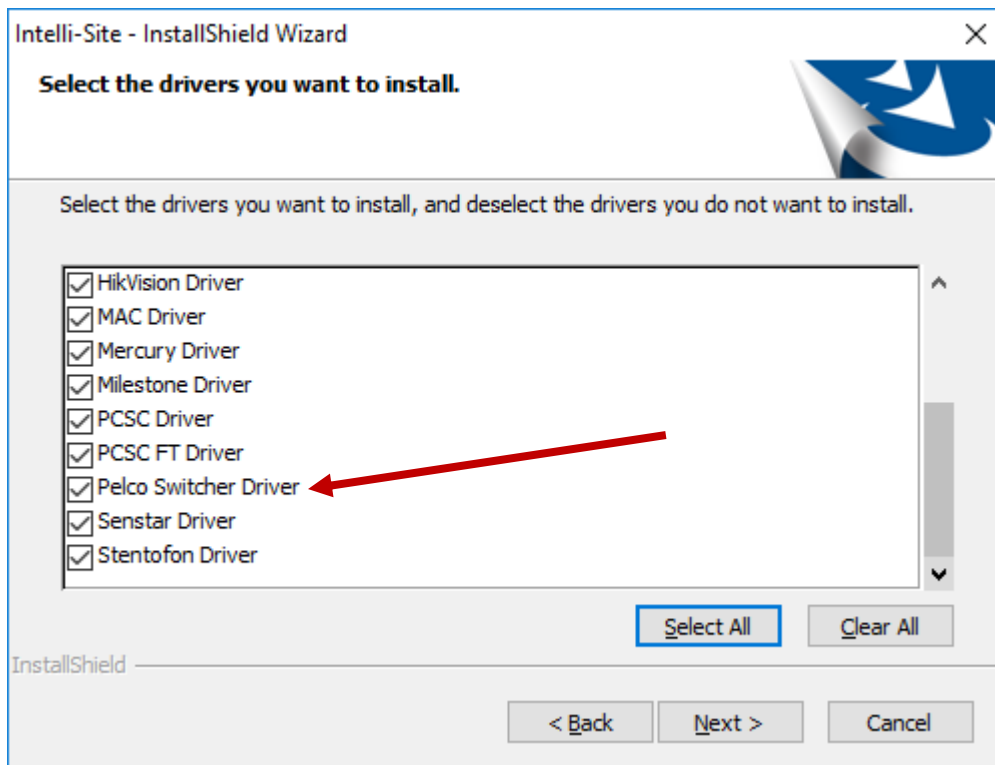



Figure 1 - Select the drivers you want to install

Ensure the **Pelco Switcher Driver** option is checked then continue with the installation or modification.


Note: The drivers are listed alphabetically. You may need to scroll down to find the Pelco Switcher Driver option.

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3 Hardware Management View

The Pelco Switcher Driver and Pelco Switcher panel are best configured in  **Hardware Management View**. Once configured, the panels can be easily monitored and controlled using their panel control screens.

3.1 Setup

The Pelco Switcher Driver and Pelco Switcher panel are best configured in  **Hardware Management View**. Before we begin though, it is a good idea to gather the communication information for each switcher. If the switcher is a network device, you need its IP address; otherwise, you'll need the COM port information. You also need the panel addresses of each of the panels.

Once the above information is obtained, the setup process is straight forward.

1. Add a Pelco Switcher Driver
2. Add a Communication Method to the driver
3. Add a Pelco Switcher Panel
4. Configure the Pelco Switcher Panel
5. Enable the Pelco Switcher Driver

3.1.1 Add a Pelco Switcher Driver

Adding a Pelco Switcher Driver is simple, but important. Without it, no communication with the Pelco Switcher IS or LS panels can occur.

Launch the Desktop Client and login.

Hardware is managed in the  **Hardware Management View**. If you are not in  **Hardware Management View** (Figure 2), click on **Menu**  and select .

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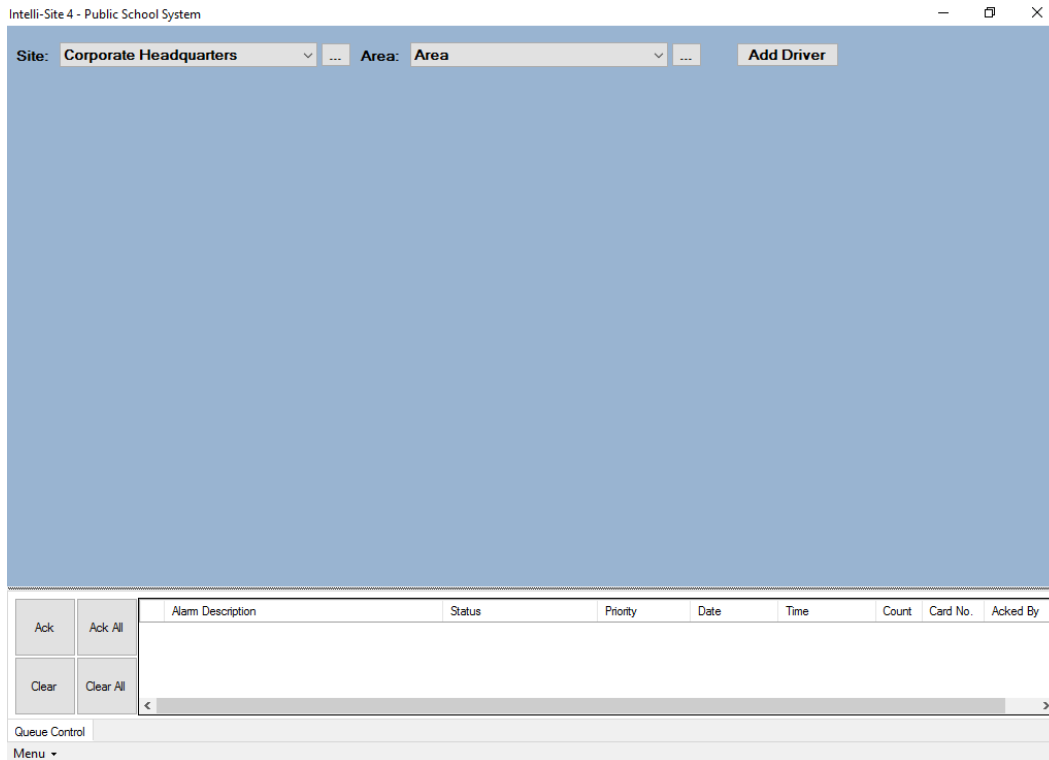


Figure 2 - Hardware Management View

To add the Pelco Switcher driver, click **Add Driver**. The **Choose Driver Type** dialog displays.

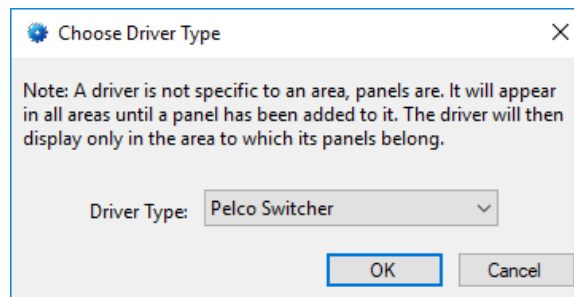


Figure 3 - Choose Driver Type Dialog

Select the *Pelco Switcher* from the **Driver Type** drop-down menu in the **Choose Driver Type** dialog. Click **OK**. A new Pelco Switcher driver icon is added to the screen and its properties dialog opens.

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[1216] New Pelco Switch Driver

Properties

Name: ID:

User Level:

Notes:

Enabled:

Default Retry Start Delay:

Retry Start Delay:

Send Queue

Retries:

Timeout:

Interval:

Panel List:

Computer List:

OK Cancel


Figure 4 - Pelco Switcher Driver Properties Dialog

Please change the name of the driver to reflect the use and/or location of the panels that this driver will manage.

Note: For an explanation of all of the driver properties, see [Pelco Switcher Driver Node](#).



Figure 5 - Pelco Switcher Driver Icon

Notice the warning icon, . This appears when the driver needs a communication method. So, let's add one.

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3.1.2 Add a Communications Method

Each Pelco Switcher driver type must have a communication method defined and configured. Without one, the Intelli-Site Driver Service does not know where or how to communicate with the panel.

The communication method is added using the right-click context menu on the driver. Right-click on the driver icon and hover over *Comm Method*. The side menu opens. At this time it only has one option, *Add Comm Method*. Select it. The **Choose Communication Method Type** dialog appears.

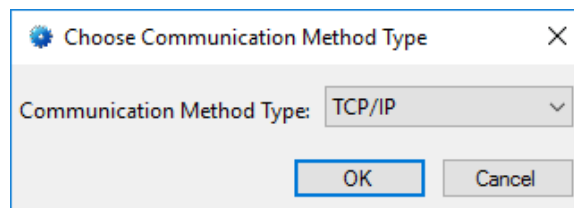


Figure 6 - The Choose Communication Method Type dialog

There are two possible communication methods for the Pelco Switcher drivers: TCP/IP or Rs232. Select the correct communication method for the panel that you will be adding then click . A new communication method node is added to the driver and its properties dialog opens. The following example uses TCP/IP.

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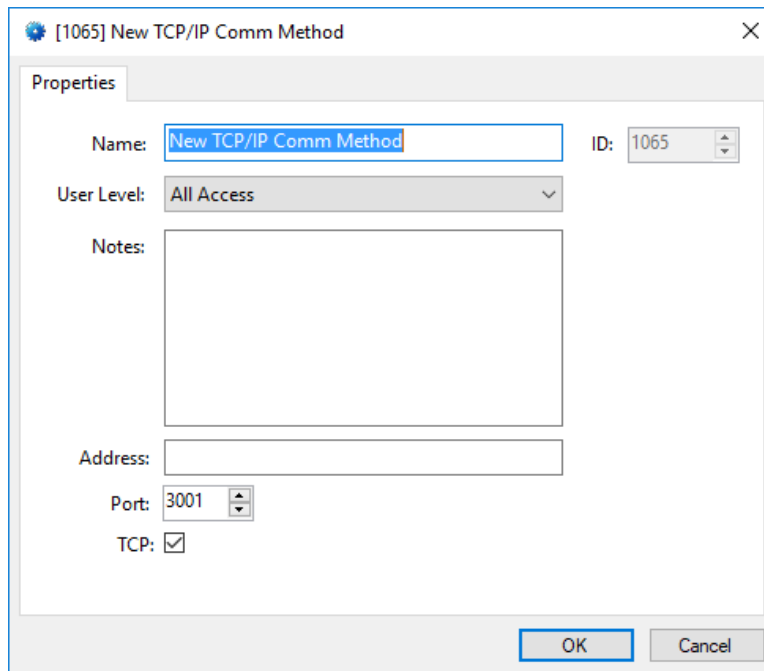
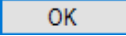


Figure 7 - The TCP/IP Communication Method properties dialog

Note: For a full explanation of all of the fields on this dialog, please read [Communication Method Nodes](#). This section details both communication methods.

This is where the communication information is defined. Enter the communication information for the panel to which this driver will communicate. Please change the name and click .

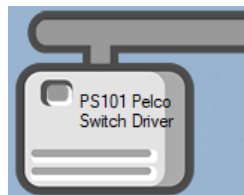


Figure 8 - The driver icon with a communication method

Notice the warning icon is no longer on the front of the driver icon.

It's now time to add a panel to the driver.

3.1.3 Add an Pelco Switcher Panel

Once a Pelco Switcher driver has been added, it's time to add an Pelco Switcher panel to it.

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Right-click on the Pelco Switcher Driver and select *Add Panel*. The **Add Panel** dialog displays.

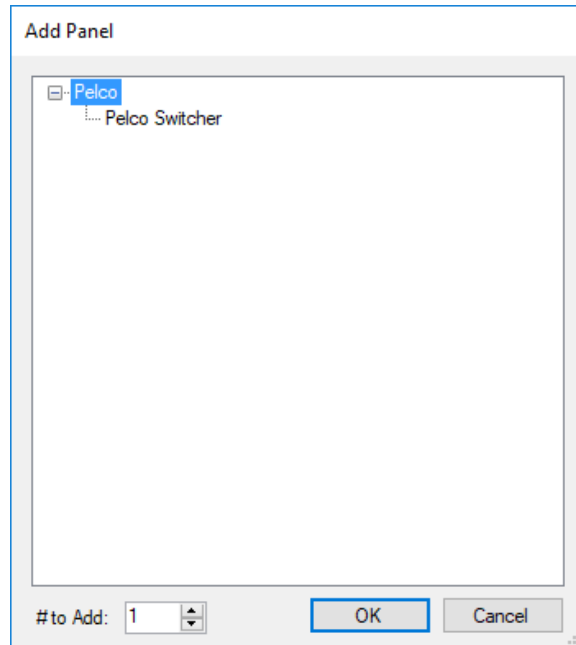


Figure 9 - Add Panel Dialog

This dialog only displays the panels that are appropriate for the target driver. In this case, the target driver is a **Pelco Switcher** driver; therefore, only **Pelco Switcher** is a valid panel type. Select the **Pelco Switcher**. Change the value of **# to Add** to the number of panels this driver will control. Generally speaking, only one (1) panel should be added to any Pelco Switcher driver. Additional panels can be added later. Click . A **New Pelco Switcher** icon is added to the target Pelco Switcher driver.



Figure 10 - A new Pelco Switcher panel attached to a Pelco Switcher driver

Next comes configuring the panel(s).

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3.1.4 Configure the Pelco Switcher Panel

The Pelco Switcher panel is configured using the **Quick Config** dialog. To open the **Quick Config** dialog, right-click on the Pelco Switcher icon and select *Quick Config*.

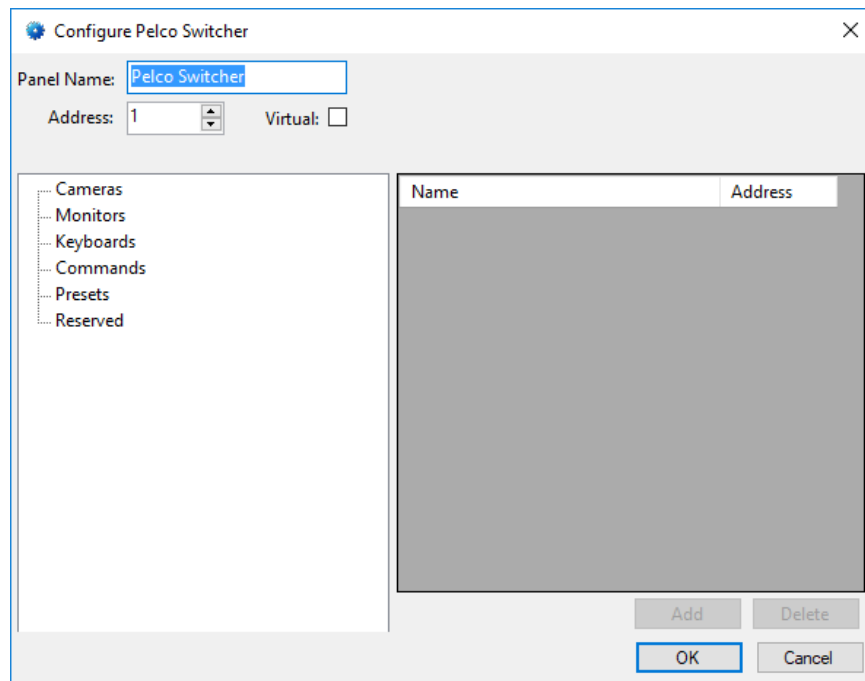


Figure 11 – Pelco Switcher Panel Quick Config Dialog

Change the **Panel Name** to describe its use or location. In our example, it is the switcher for PS101.

Set the **Address** to the panel address of the Pelco Switcher panel.

Clicking on any of the tree items on the left (Camera, Monitors, Commands, Presets, and Reserved) will populate the table on the right.

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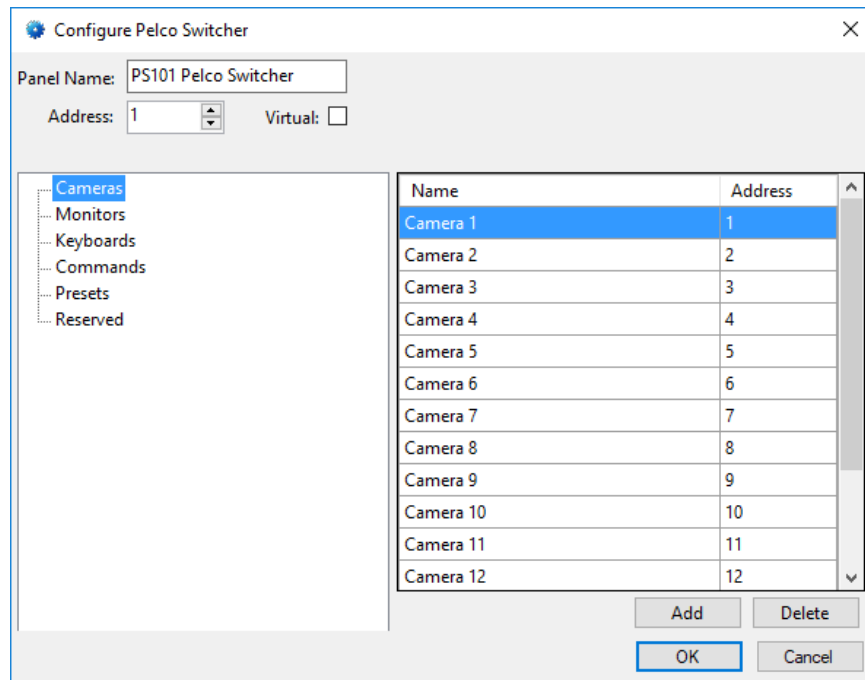
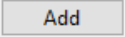


Figure 12 - Cameras table in the Quick Config

It is important to select Cameras, Monitors, and Keyboards to name the different ones for use. The Presets are common to all cameras and should not be renamed. The Commands table lists the available commands. And Reserved is, well, reserved. The order in the table directly corresponds to the order in the physical Pelco Switcher. Row 1 is Camera 1, Monitor 1, Keyboard 1, etc. When a command is sent to the switcher, the row number is sent to the switcher, not the name.

Note: Do not edit the Address column. It is a reference for us humans to know which row it is. There can be hundreds of rows, and I for one can get confused as to which row is which. Changing it won't break anything, but it will make it difficult to know which row is which.

When the panel is added, it is prepopulated with 16 cameras, 8 monitors, 4 keyboards, and 15 presets. The Quick Config dialog allows you to add additional cameras, monitors, keyboards, and/or presets using the  button. Each click of this button adds another row to the selected table. This row is added to the bottom of the table. See [Pelco Switcher Panel Child Nodes](#) for information on adding multiple nodes at a time.

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3.1.5 Enable the Pelco Switcher Driver

At this point, the Pelco Switcher panel and the Pelco Switcher driver are configured, but the driver is not online. A quick way to know this is that the communication indicator is grey.



Figure 13 – Disabled Pelco Switcher Driver

Right-click on the driver to open the context menu; select *Enable Driver*. The communications indicator will change color to green when it's online.

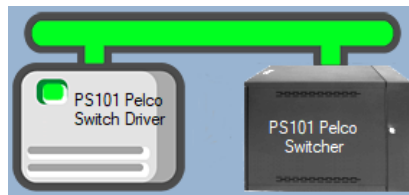


Figure 14 - Enabled Pelco Switcher Driver

If for some reason the Engine cannot connect to the Driver Service or the Driver cannot connect to the Pelco Switcher, the communication indicator will be red.



Figure 15 - Enabled Pelco Switcher Driver that is not communicating with the Driver Service

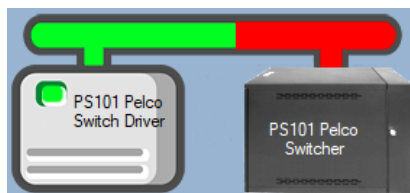


Figure 16 - Enabled Pelco Switcher Driver that is communicating with the Driver Service but NOT the panel

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Note: *The software will not necessarily know if or when a panel is offline until a command is sent to the panel.*

Congratulations! The Pelco Switcher is integrated and ready to use in screen design for  **Live View**. Screen design occurs in  **Design View**.

3.2 Panel Control Screen

Every Pelco Switcher panel has a **Panel Control Screen**. From this screen, the user can set the “hot” camera, monitor, and keyboard then send commands. However, it is not intended as the main panel from which the switcher is controlled. If any cameras, monitors, keyboards, commands, or presets are added or deleted, this screen is not automatically updated.

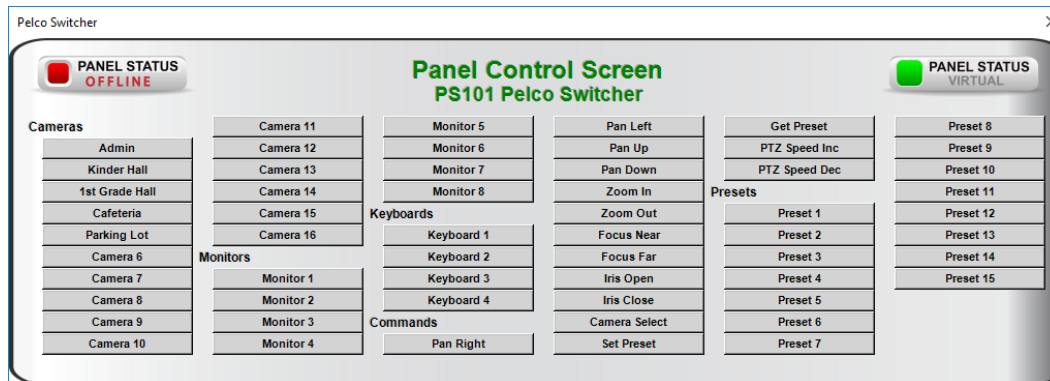



Figure 17 - Sample Pelco Switcher Panel Control Screen

Note: *When a PTZ command button is clicked, a SetOn for that command is sent. The “hot” camera will continue to perform that command until a SetOff is sent. See [Pan-Tilt-Zoom and Focus Control](#).*

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4 Design View

 **Design View** is the home of the Project Node Tree and the place where screens and screen objects are programmed. The following sections explain the Driver node properties, the Panel node properties, and screen object programming especially the programming for PTZ commands.

4.1 Pelco Switcher Driver Node

The Pelco Switcher driver node is found by expanding **Setup->Computer Setup->Drivers**.

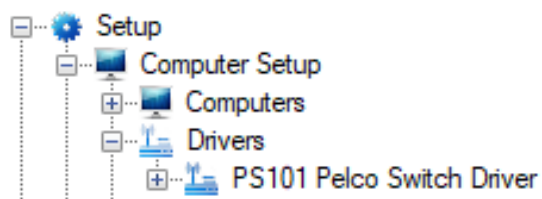


Figure 18 – The driver node in the Project Node Tree

Right-click on the driver node and select *Properties* to open the properties dialog.

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The screenshot shows a Windows-style dialog box titled "[1064] PS101 Pelco Switch Driver". The dialog has a "Properties" tab. It contains the following elements:

- Name:** A text box containing "PS101 Pelco Switch Driver".
- ID:** A numeric spinner box set to "1064".
- User Level:** A drop-down menu currently showing "All Access".
- Notes:** A large, empty multiline text area.
- Enabled:** A checked checkbox.
- Default Retry Start Delay:** A checked checkbox.
- Retry Start Delay:** A numeric spinner box set to "15".
- Send Queue:** A sub-dialog box containing:
 - Retries:** A numeric spinner box set to "3".
 - Timeout:** A numeric spinner box set to "1000".
 - Interval:** A numeric spinner box set to "250".
- Panel List:** A list box containing "[1066] PS101 Pelco Switcher".
- Computer List:** A list box containing "[4] QAWin10".
- Buttons:** "OK" and "Cancel" buttons at the bottom right.

Figure 19 – Pelco Switcher Driver properties dialog

Name – edit box; the name for the node; the name doesn't have to be unique

ID – numeric (disabled); the unique identifier of this node; generated by the software

User Level – drop-down menu (default: All Access); the User Level a user must possess to open the properties for this node

Notes – multiline edit box; any notes the user may have for the node

Enabled – check box; when checked the driver is enabled

Default Retry Start Delay – check box (default: checked); if the driver did not connect, pause before attempting to connect again

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Retry Start Delay – numeric (default: 15); number of seconds to wait between retries on connection attempts

Retries – numeric (default: 3); number of retries for sending a packet

Timeout – numeric (default: 1000); number of milliseconds to wait for a response before assuming the packet was not received

Interval – numeric (default: 25); number of milliseconds to wait after a timeout before sending the packet again

Panel List- drop box; the Pelco Switcher nodes attached to this driver

Computer List – drop box (default: the computer on which the Engine is running); the computer node on which this driver is running

4.2 Communication Method Nodes

The communication method node is a child of the driver.

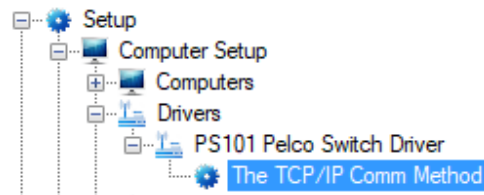


Figure 20 - Communication Method node in the Project Node Tree

There are two different types of communication methods:

- TCP/IP
- Rs232

4.2.1 TCP/IP Communication Method Node

Right-click on the communication method node and select *Properties* to open the properties dialog.

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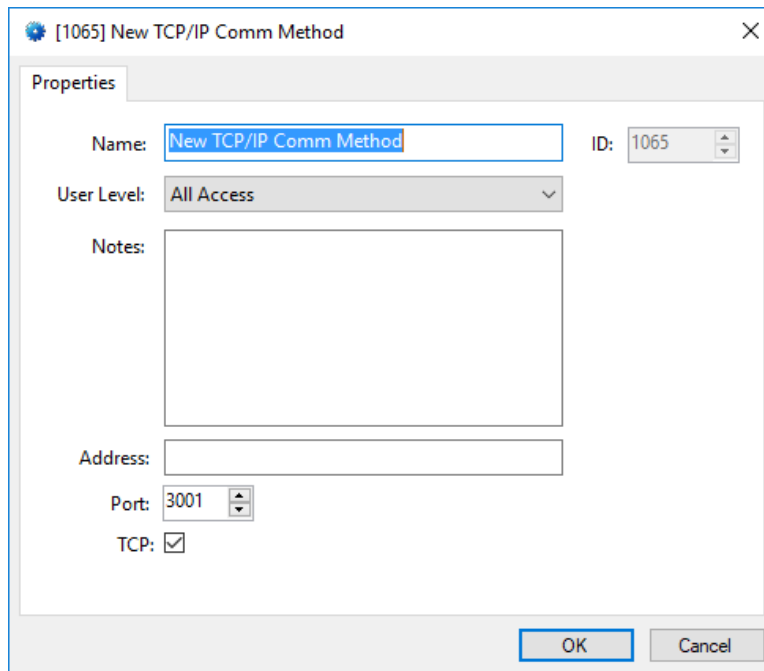


Figure 21 – TCP/IP Communication Method node properties dialog

Name – edit box; the name for the node; the name doesn't have to be unique

ID – numeric (disabled); the unique identifier of this node; generated by the software

User Level – drop-down menu (default: All Access); the User Level a user must possess to open the properties for this node

Notes – multiline edit box; any notes the user may have for the node

Address – edit box; the IP address of the panel

Port – numeric (default: 3001); the TCP or UDP port number

TCP- checkbox (default: checked); when checked, the driver will communicate with the panel using TCP; when not checked, the driver assumes UDP is the desired communication protocol

4.2.2 Rs232 Communication Method Node

Right-click on the communication method node and select *Properties* to open the properties dialog.

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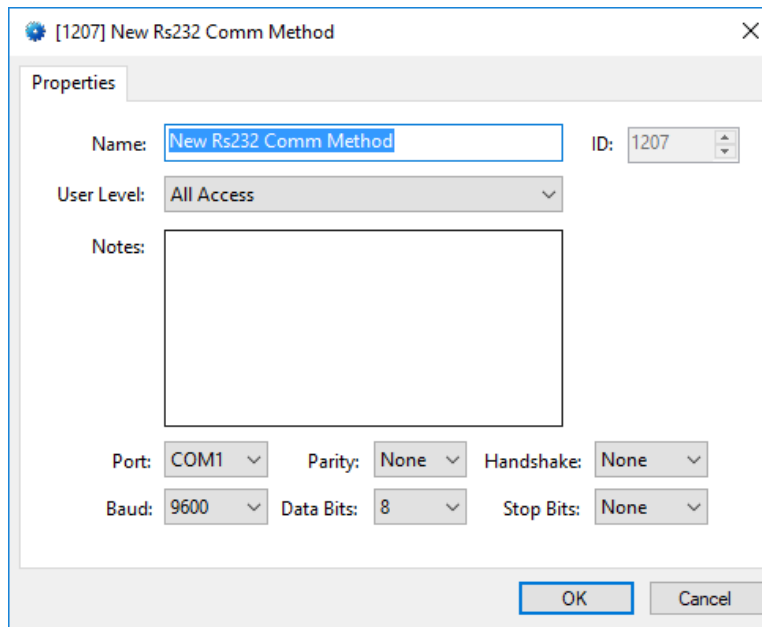


Figure 22 – Rs232 Communication Method node properties dialog

Name – edit box; the name for the node; the name doesn't have to be unique


ID – numeric (disabled); the unique identifier of this node; generated by the software

User Level – drop-down menu (default: All Access); the User Level a user must possess to open the properties for this node

Notes – multiline edit box; any notes the user may have for the node

The rest are the properties associated with Rs232. If you can't figure it out, our [tech support](#) department will gladly help you.

4.3 Pelco Switcher Panel Node

The Pelco Switcher panel node is found by expanding **System Layout** then the Site and Area to which the Pelco Switcher panel was added in  **Hardware Management View**. In the example below, the panel was added to the site **Corporate Headquarters** and the area **Area**.

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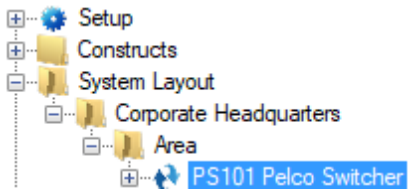


Figure 23 - The Pelco Switcher panel node in the Project Node Tree

The Pelco Switcher panel node is the root node for the panel. The following sections will explain:

- The properties of the Pelco Switcher panel node
- The configuration of the Pelco Switcher panel (a.k.a. **Quick Config**)
- The child nodes of the Pelco Switcher panel

4.3.1 Pelco Switcher Panel Node Properties

Right-click on the Pelco Switcher panel node to open the properties. These fields are not accessible through the **Quick Config** dialog except for **Name**, **Address**, and **Virtual**. They correspond to those features that aren't part of the day to day running of the system.

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The image shows a software dialog box titled "[1065] Pelco Switcher". It contains several configuration fields: "Name" (text box with "Pelco Switcher"), "ID" (spin box with "1065"), "User Level" (drop-down menu with "All Access"), "Notes" (empty multiline text area), "Address" (spin box with "1"), "Virtual" (checkbox), "Virtual Point" (empty text box), and "Event buffer delta (min)" (spin box with "0"). At the bottom are "Apply", "OK", and "Cancel" buttons.

Figure 24 - Pelco Switcher node properties dialog

Name – edit box; the name for the node; the name doesn't have to be unique

ID – numeric (disabled); the unique identifier of this node; generated by Intelli-Site

User Level – drop-down menu (default: All Access); the User Level a user must possess to open the properties for this node

Notes – multiline edit box; any notes the user may have for the node

Address – numeric; the address of the Pelco Switcher

Virtual – check box; when checked the panel is virtualized, allowing the driver to be brought online without having the physical panel available

Virtual Point – drop box; this I/O Point will be set when the panel is virtualized, clear when it is not

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Event buffer delta (min) – numeric (default: 0); only applies to panels that buffer data; the Engine compares the time an event occurs versus the current time, if the difference is greater than the **Event buffer delta**, the event is logged but not acted upon

4.3.2 Pelco Switcher Panel Quick Config

The **Quick Config** dialog is accessible either in  **Hardware Management View** or in  **Design View**. To open the **Quick Config** dialog, right-click on the Pelco Switcher panel node and select *Quick Config*.

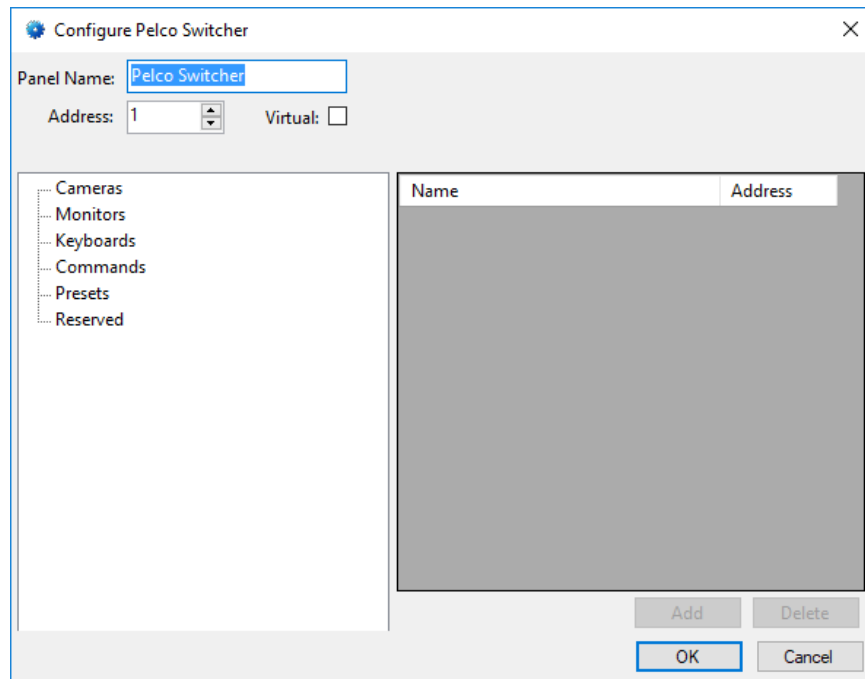


Figure 25 - Pelco Switcher panel Quick Config dialog

Panel Name – edit box; the name of the Pelco Switcher panel; updating this field will change the name of the node

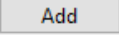
Address – numeric; the address of the Pelco Switcher panel


Virtual – check box; when checked the panel is virtualized, allowing the driver to be brought online without having the physical panel available

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Children – tree; the switcher controls and commands; the controls are Cameras, Monitors, Keyboards, Presets, and Reserved; the commands are Commands; these correspond to the child nodes of the Pelco Switcher panel node

Table – table; lists the existing items for the selected tree child

 - button; add a row to the table; disabled until a child is selected in the Children tree

 - button; delete the selected row from the table; disabled until a child is selected in the Children tree

Note: *The row in the table corresponds to the physical input number on the Pelco Switcher itself. For example, row 7 in the Cameras table corresponds to the 7th video input on the switcher. Deleting row 7 means that row 8 becomes row 7. Deleting should be done with great care.*

4.3.3 Pelco Switcher Panel Child Nodes

The child nodes of the Pelco Switcher panel node are:

- Cameras
- Monitors
- Keyboards
- Commands
- Presets
- Reserved
- Alarms

Except for the Alarms child nodes, all child nodes are GenProto nodes with **Type** set to *Command*. The Alarms child nodes are the only true I/O Points. Alarms are the only points that have a state and can be sent to the Event queue. See the User's Guide for more information about I/O Points.

4.3.3.1 Cameras

A newly added Pelco Switcher panel has 16 camera nodes. The camera's position in the Tree corresponds to the physical input on the switcher itself. It also defines which row it is in the **Quick Config** dialog.

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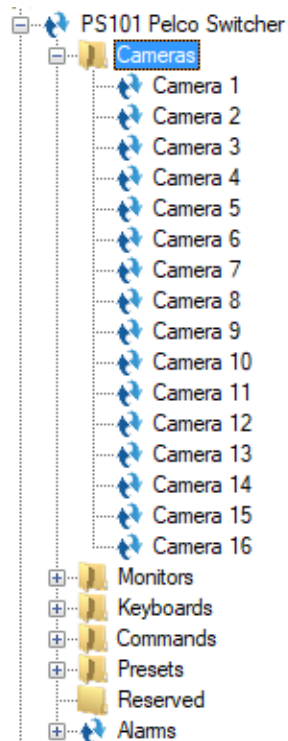



Figure 26 - Pelco Switcher panel Camera nodes

These nodes are used to define which camera is used when the actually command is sent to the Pelco Switcher. See [Project Programming](#).

Addition camera nodes can be added in  **Design View** one at a time by using the *Add* right-click context menu option. To add more than one camera at a time, select *Add Multiple...*. Remember that the order in the Tree corresponds to the actual input order in the Pelco Switcher. The first camera node in the Tree is camera input 1, the second camera node in the Tree is camera input 2, etc.

4.3.3.2 Monitors

A newly added Pelco Switcher panel has 8 Monitor nodes. The monitor's position in the Tree corresponds to the physical input on the switcher itself. It also defines which row it is in the **Quick Config** dialog.

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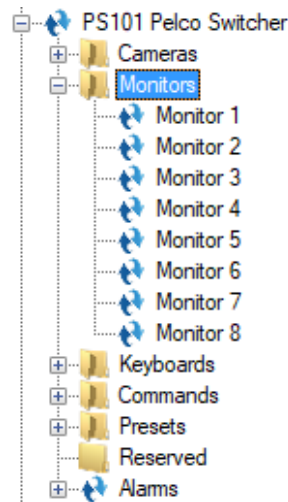



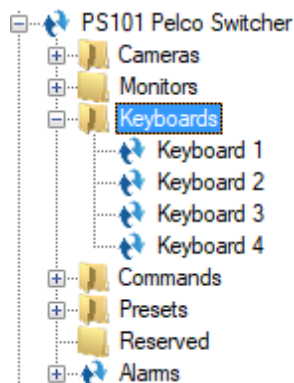
Figure 27 - Pelco Switcher panel Monitor nodes

These nodes are used to define which monitor input is used when the actually command is sent to the Pelco Switcher. See [Project Programming](#).

Addition monitor nodes can be added in  **Design View** one at a time by using the *Add* right-click context menu option. To add more than one monitor at a time, select *Add Multiple...* Remember that the order in the Tree corresponds to the actual monitor order in the Pelco Switcher. The first monitor node in the Tree is monitor 1 of the switcher, the second monitor node in the Tree is monitor 2, etc.

4.3.3.3 Keyboards


A newly added Pelco Switcher panel has 4 keyboard nodes. The keyboard's position in the Tree corresponds to the physical input on the switcher itself. It also defines which row it is in the **Quick Config** dialog.



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Figure 28 - Pelco Switcher panel Keyboard nodes

These nodes are used to define which keyboard input is used when the actually command is sent to the Pelco Switcher. See [Project Programming](#).

Addition keyboard nodes can be added in  **Design View** one at a time by using the *Add* right-click context menu option. To add more than one keyboard at a time, select *Add Multiple...* Remember that the order in the Tree corresponds to the actual input order in the Pelco Switcher. The first keyboard node in the Tree is keyboard input 1, the second keyboard node in the Tree is keyboard input 2, etc.

4.3.3.4 Commands

A newly added Pelco Switcher panel has nodes that correspond to the commands needed to control the Pelco Switcher.

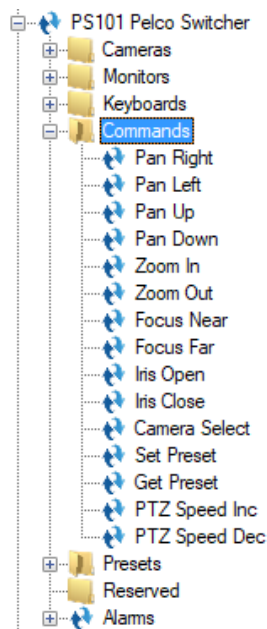


Figure 29 - Pelco Switcher panel Command nodes

These nodes are the commands sent to the Pelco Switcher after the camera, monitor, keyboard, and/or preset are defined.

Note: *PTZF* means Pan, Tilt, Zoom and Focus.

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Command	Function
Pan Right	Begin panning right
Pan Left	Begin panning left
Pan Up	Begin panning up
Pan Down	Begin panning down
Zoom In	Start variable zoom to telephoto
Zoom Out	Start variable zoom to wide
Focus Near	Start variable focus to close-in
Focus Far	Start variable focus to far-field
Iris Open	Start variable iris to open
Iris Close	Start variable iris to close
Set Preset	Sets the current PTZF setting on the "hot" camera to the current preset
Get Preset	Send the current "hot" camera to the "hot" preset
PTZ Speed Inc	Increase the PTZF speed
PTZ Speed Dec	Decrease the PTZF speed

4.3.3.5 Presets


A newly added Pelco Switcher panel has 15 preset nodes. The preset's position in the Tree corresponds to the preset number that is sent to the camera. It also defines which row it is in the **Quick Config** dialog.



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Figure 30 - Pelco Switcher panel Preset nodes

These nodes are used to define which preset along with the camera and monitor are used when the actually command is sent to the Pelco Switcher. See [Project Programming](#).

Addition preset nodes can be added in  **Design View** one at a time by using the *Add* right-click context menu option. To add more than one keyboard at a time, select *Add Multiple...* Remember that the order in the Tree corresponds to the actual order for the camera. The first camera node in the Tree is preset 1 for the designated camera, the second camera node in the Tree is preset 2 for the designated camera, etc.

4.3.3.6 Alarms

The alarms for the Pelco Switcher are located under the **Alarms** node. There is only one alarm, **Panel Status**.

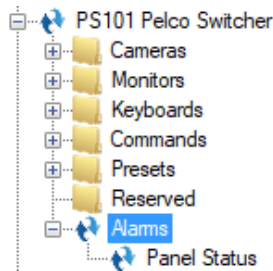


Figure 31 - Pelco Switcher panel Alarm nodes

The **Panel Status** point is high when the panel is offline (assuming the driver is online and the panel is not virtualized).

4.4 Project Programming

Programming for the Pelco Switcher requires multiple steps to set up the target hardware and inputs on the switcher and then send the command. Defining the target hardware and inputs is defining the "hot" objects. For example, to stream video from a camera onto a monitor, you have to designate the camera and the monitor then specify the command to select the camera.

Action	Target	Result
SetOn	Monitor_n	Sets Monitor_n as the "hot" monitor.
SetOn	Camera_n	Sets Camera_n as the "hot" camera.


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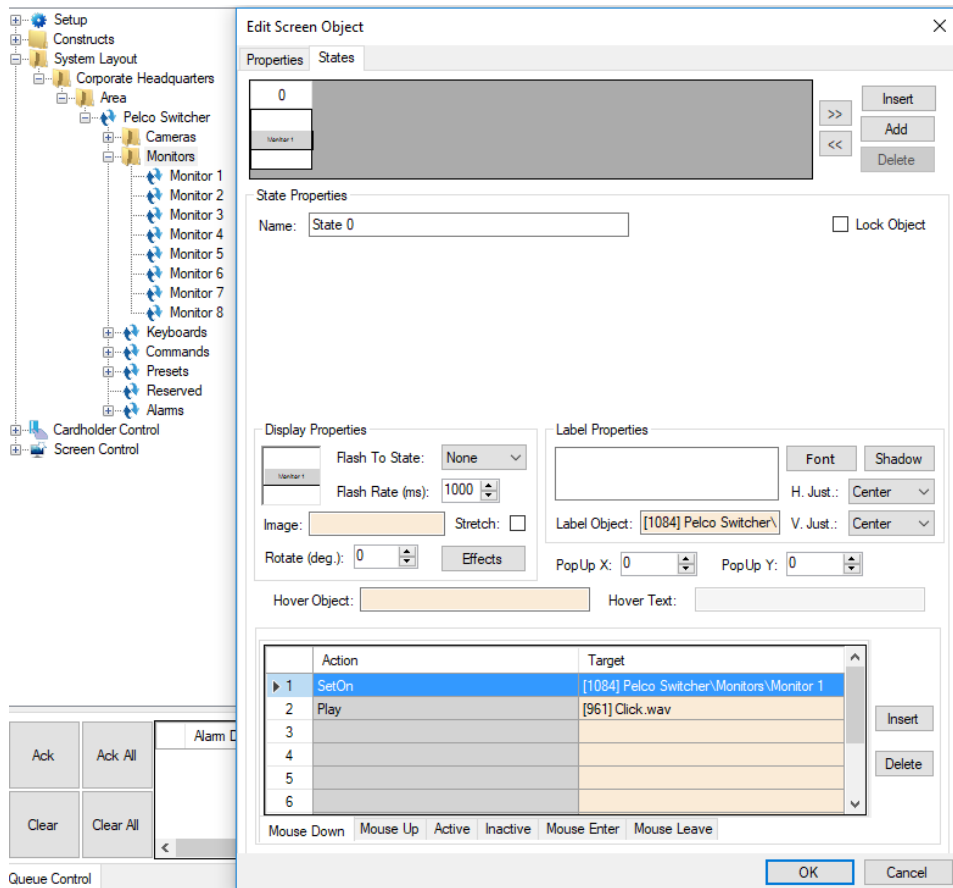
SetOn	Camera Sel	Sends the command – Switch Camera_n to Monitor_n.
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The following are specific programming examples.

4.4.1 Camera-Monitor Switching using Discrete Controls

In this programming example we will build a simple, camera-to-monitor switch control using discrete buttons. We need three screen buttons: one to set the “hot” monitor, one to set the “hot” camera, and one to send the **Select Camera** command.

1. In  **Design View** Create a **SetOn** Monitor button (screen object) using the drawing tools. Then modify the properties of the button as shown below:



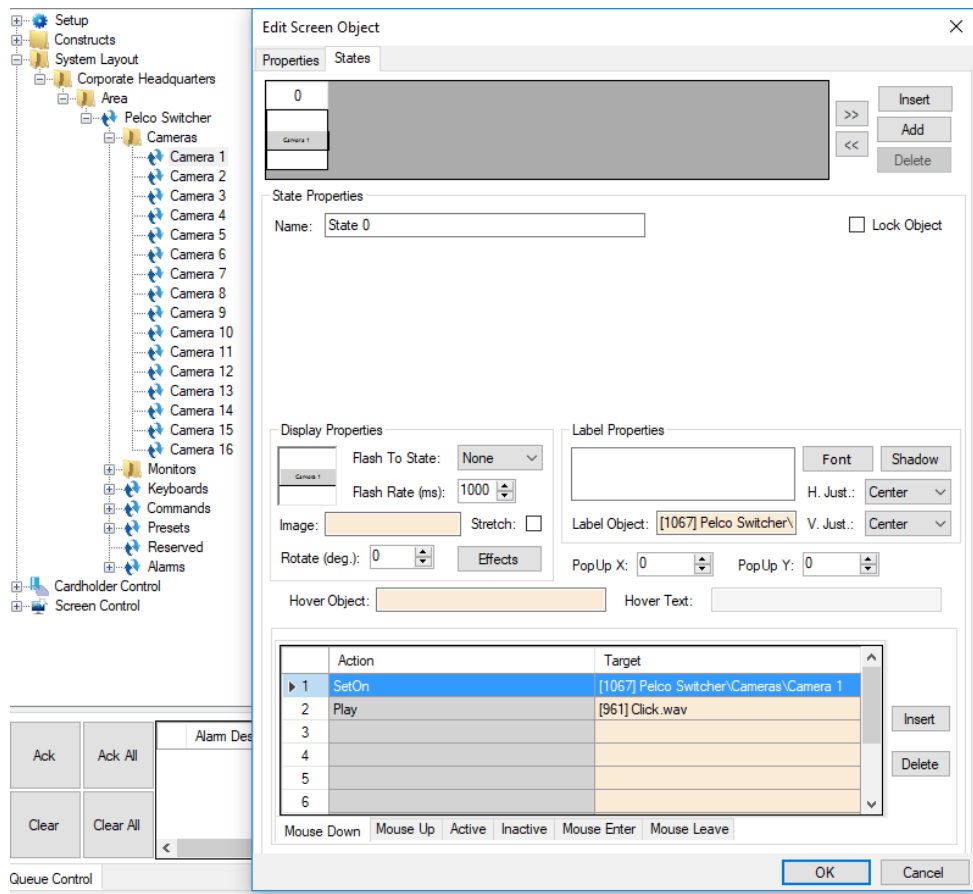
- a. In the **Label Properties** either drag-and-drop the monitor node into the **Label Object** field or type in a descriptive label.
- b. Program the **Mouse Down** action grid.
 - i. Click in the **Action** cell of the first row to open the **Actions** dialog.

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- ii. Select the **SetOn** action.
- iii. Drag-and-drop the monitor node into the Target cell of the first row.

Note: It is always good to have a sound played when a button is clicked to give the user feedback.

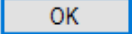
- c. Click **OK** to save these settings.
2. Create a **SetOn** Camera button and modify the properties of the button as shown below:



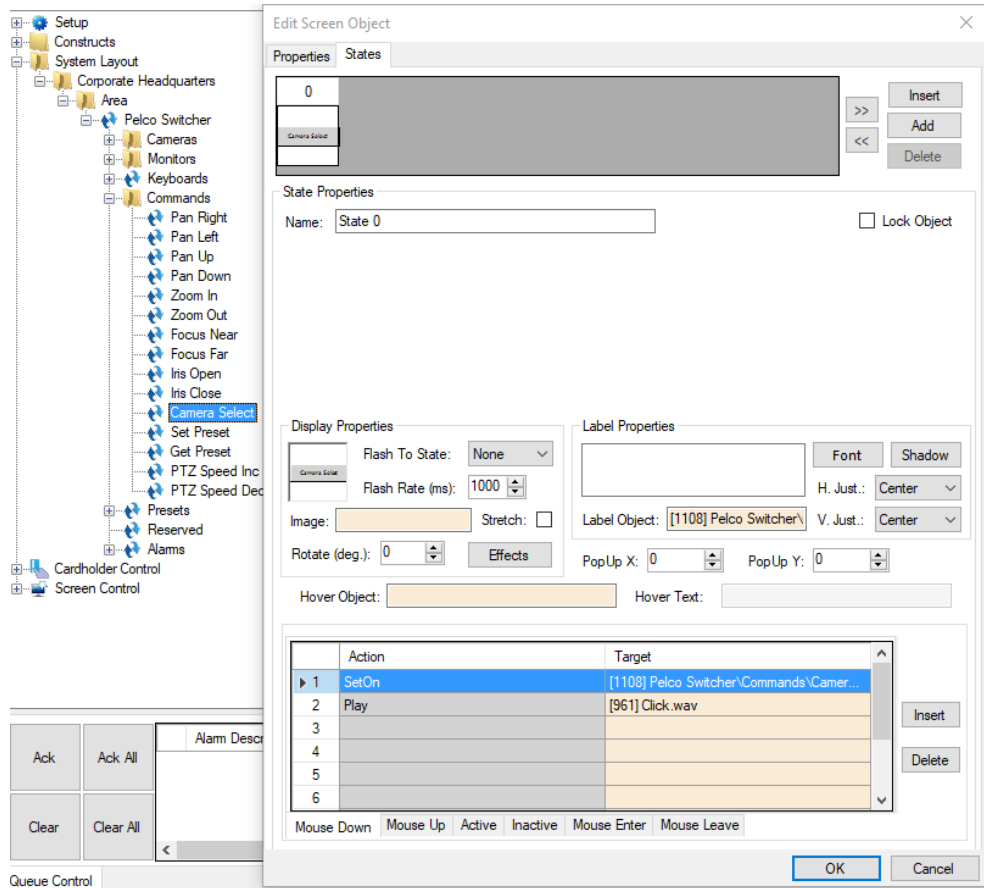
- a. In the **Label Properties** either drag-and-drop the computer node into the **Label Object** field or type in a descriptive label.
- b. Program the **Mouse Down** action grid.
 - i. Click in the **Action** cell of the first row to open the **Actions** dialog.
 - ii. Select the **SetOn** action.
 - iii. Drag-and-drop the computer node into the Target cell of the first row.

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Note: It is always good to have a sound played when a button is clicked to give the user feedback.

c. Click  to save these settings.

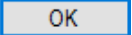
3. Create a *Camera Select* (Enter) button and modify the properties of the button as shown below:



- In the **Label Properties** either drag-and-drop the **Camera Select** command node into the **Label Object** field or type in a descriptive label.
- Program the **Mouse Down** action grid.
 - Click in the **Action** cell of the first row to open the **Actions** dialog.
 - Select the **SetOn** action.
 - Drag-and-drop the **Camera Select** command node into the Target cell of the first row.

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Note: *It is always good to have a sound played when a button is clicked to give the user feedback.*


- c. Click  to save these settings.

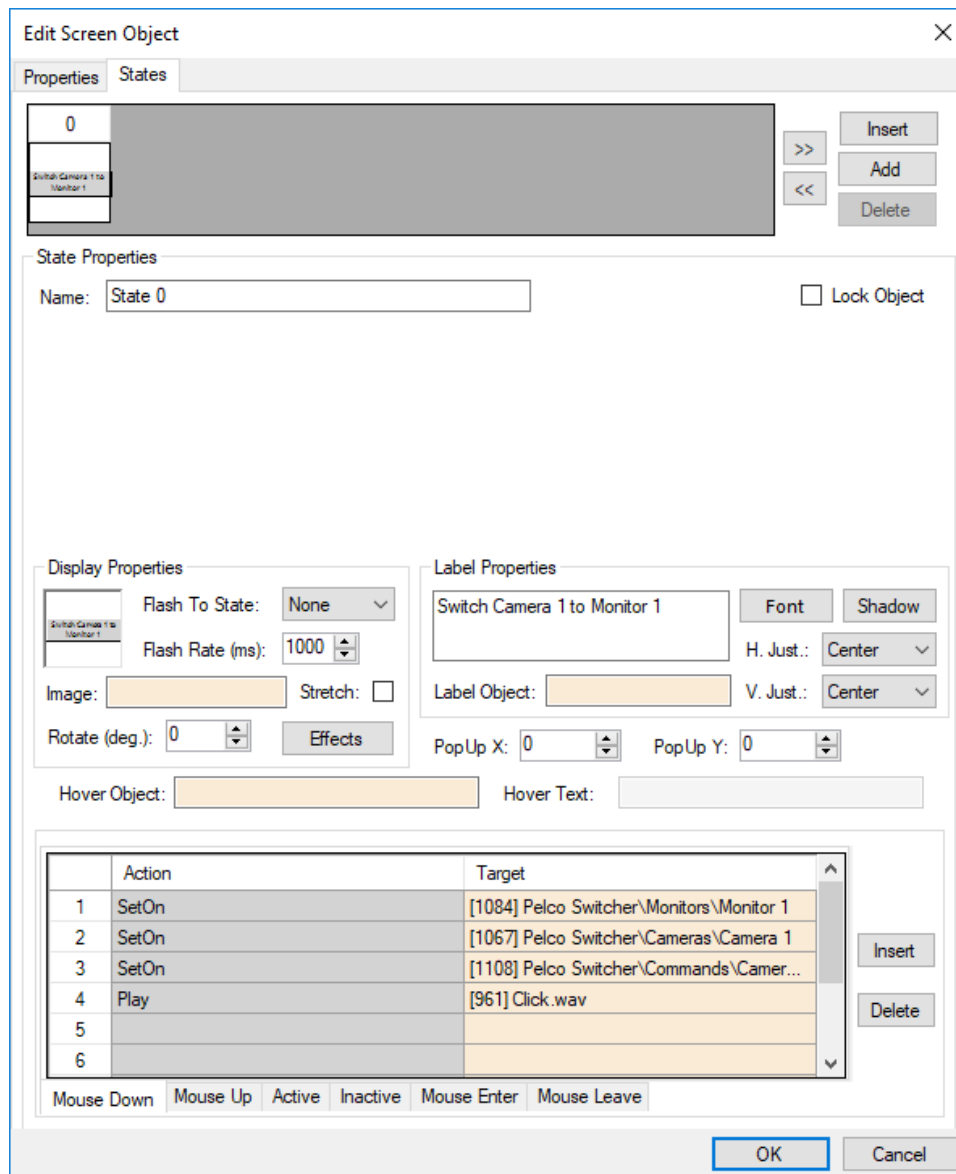
The user must click the monitor and camera buttons before clicking the Camera Select button. The monitor and camera buttons can be clicked in any order, but there must be a “hot” monitor and a “hot” camera before the Camera Select button is clicked. Otherwise, nothing will happen. An error message may be written to the Driver **Messages** window if the window is open.

4.4.2 Camera-Monitor Switching in a Combined Control

In this programming example we will build a single camera-to-monitor switch control using a single button. This ensures that a “hot” monitor and “hot” camera are set before the command is sent to the driver.

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In  **Design View** Create a Camera-Monitor Switch button (screen object) using the drawing tools. Modify the properties of the button as shown below:

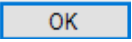


- a. In the **Label Properties** type in a descriptive label. The example label is "Switch Camera 1 to Monitor 1".
- b. Program the **Mouse Down** action grid.
 - i. Click in the **Action** cell of the first row to open the **Actions** dialog.
 - ii. Select the **SetOn** action.
 - iii. Drag-and-drop the monitor node into the Target cell of the first row.

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- iv. Click in the **Action** cell of row 2 to open the **Actions** dialog.
- v. Select the **SetOn** action.
- vi. Drag-and-drop the computer node into the Target cell of row 2.
- vii. Click in the **Action** cell of row 3 to open the **Actions** dialog.
- viii. Select the **SetOn** action.
- ix. Drag-and-drop the **Camera Select** command node into the Target cell of row 3.

Note: It is always good to have a sound played when a button is clicked to give the user feedback.


- c. Click  to save these settings.

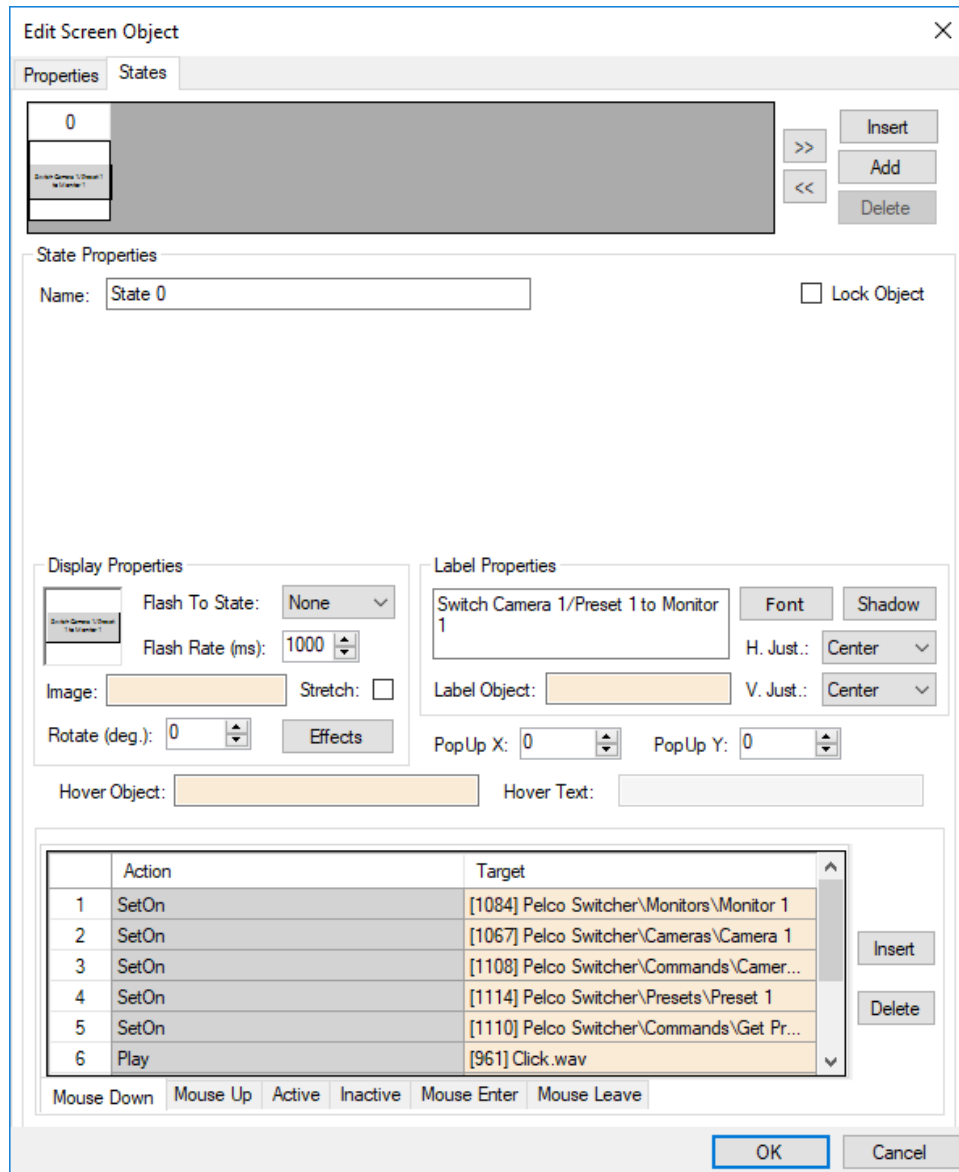
This button sets the “hot” monitor to **Monitor 1**, sets the “hot” camera to **Camera 1** then issues the **Camera Select** command.

4.4.3 Camera-Monitor Switching with Presets in a Combined Control

In this programming example, we will build a simple switch camera at preset to monitor control using a single button.

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In  **Design View** Create a Camera-Monitor Switch button (screen object) using the drawing tools. Modify the properties of the button as shown below:

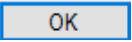


- a. In the **Label Properties** type in a descriptive label. The example label is "Switch Camera 1/Preset 1 to Monitor 1".
- b. Program the **Mouse Down** action grid.
 - x. Click in the **Action** cell of the first row to open the **Actions** dialog.
 - xi. Select the **SetOn** action.

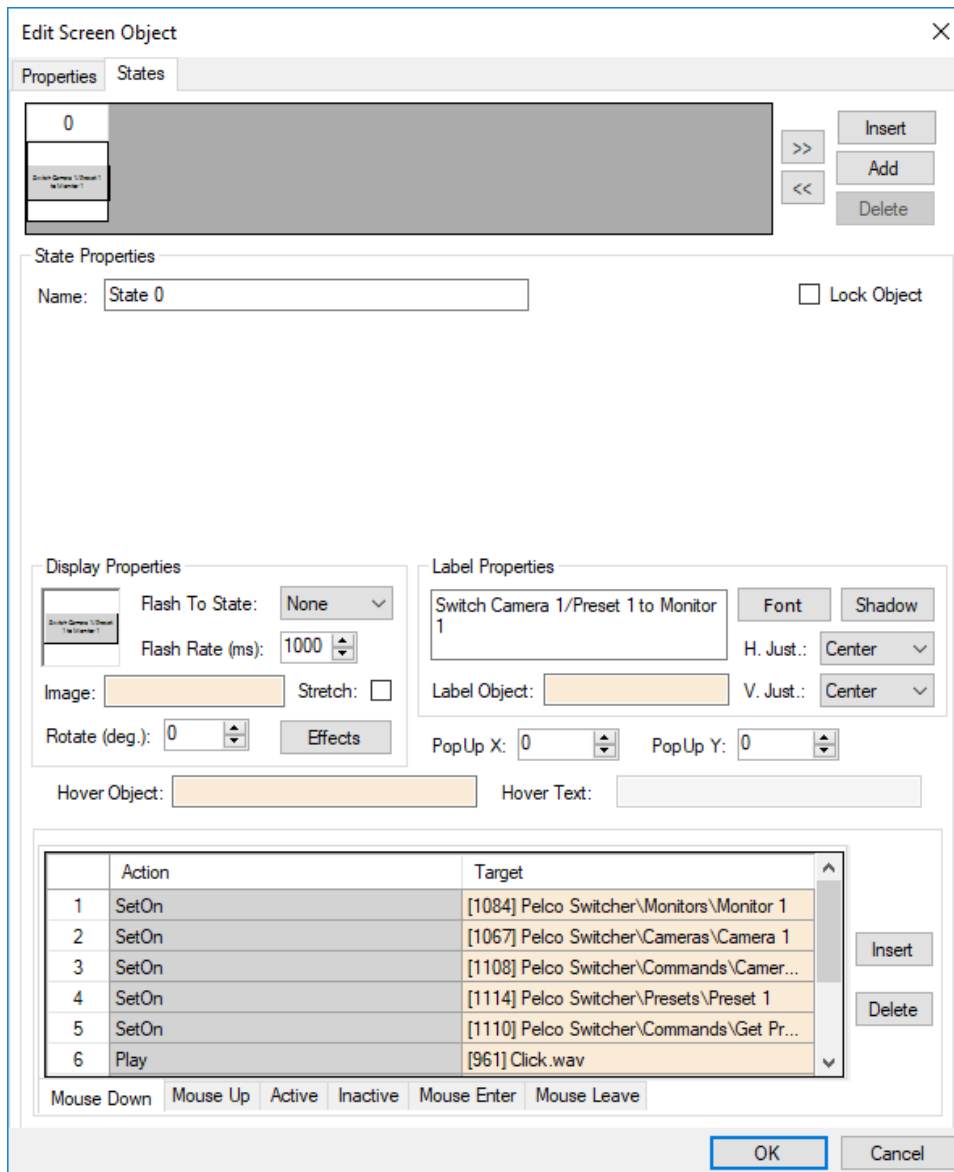
Pelco Switcher Panel Guide

- xii. Drag-and-drop the monitor node into the Target cell of the first row.
- xiii. Click in the **Action** cell of row 2 to open the **Actions** dialog.
- xiv. Select the **SetOn** action.
- xv. Drag-and-drop the computer node into the Target cell of row 2.
- xvi. Click in the **Action** cell of row 3 to open the **Actions** dialog.
- xvii. Select the **SetOn** action.
- xviii. Drag-and-drop the **Camera Select** command node into the Target cell of row 3.
- xix. Click in the **Action** cell of row 4 to open the **Actions** dialog.
- xx. Select the **SetOn** action.
- xxi. Drag-and-drop the the present node into the Target cell of row 4.
- xxii. Click in the **Action** cell of row 5 to open the **Actions** dialog.
- xxiii. Select the **SetOn** action.
- xxiv. Drag-and-drop the **Get Preset** command node into the Target cell of row 5.

Note: It is always good to have a sound played when a button is clicked to give the user feedback.

- c. Click  to save these settings.

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This button sets the “hot” monitor to **Monitor 1**, sets the “hot” camera to **Camera 1** then issues the **Camera Select** command. It then sets the “hot” preset before issuing the **Get Preset** command.


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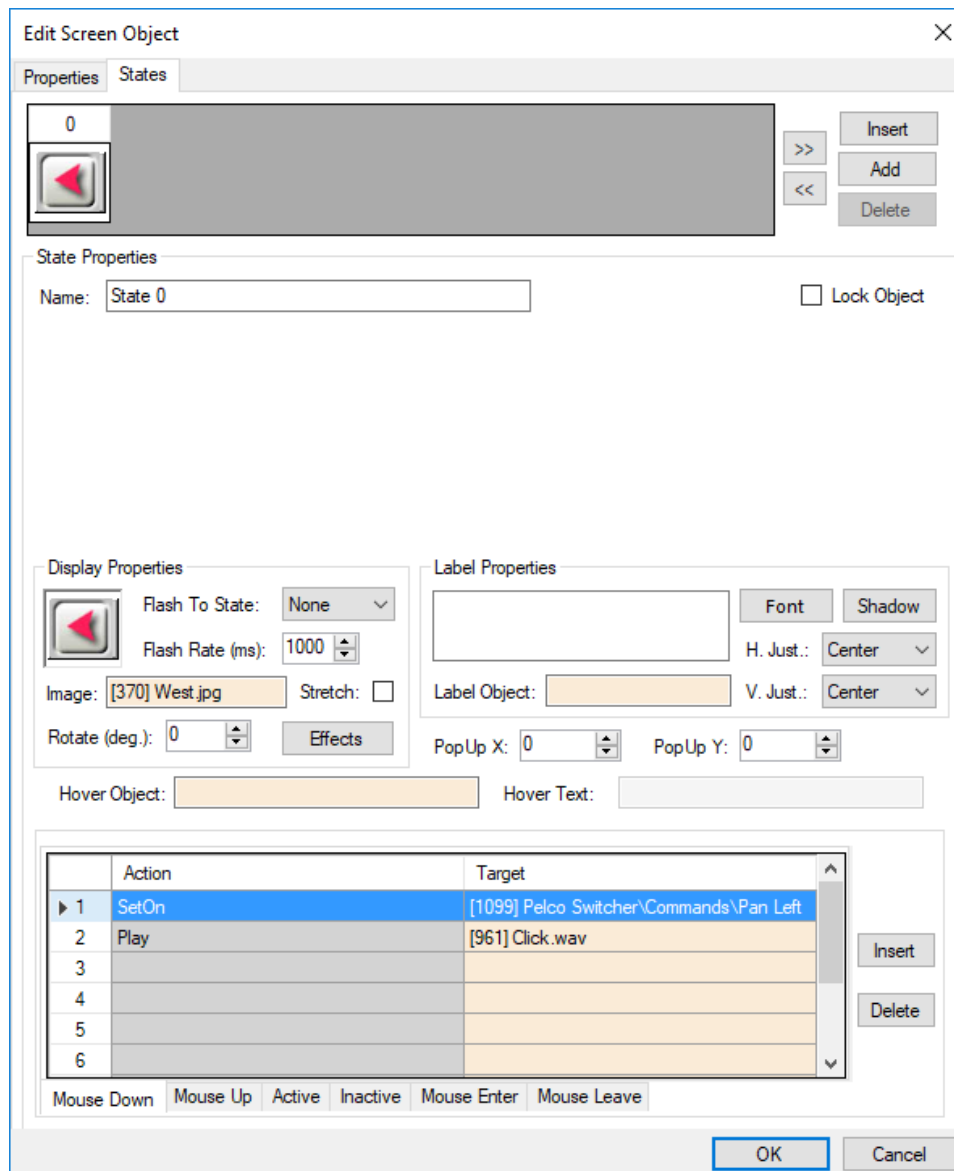
4.4.4 Pan-Tilt-Zoom and Focus Control

Pan-Tilt-Zoom and Focus (PTZ) commands are different than other commands in that the command remains in effect until a **SetOff** is issued. When a **Pan Left** command is issued, the camera will continue to pan left until it is told to stop. Therefore, we will use both the **Mouse Down** and **Mouse Up** action grids of a screen object. The **SetOn** PTZ command is issued on the mouse down event. The **SetOff** PTZ command is issued on the mouse up event. In this example, we will build a typical PTZ control button.

Note: A “hot” camera is required for any PTZ command. The example only programs the PTZ control. Using the PTZ control will require the “hot” camera to be set by another control first. See [Camera-Monitor Switching in a Combined Control](#).

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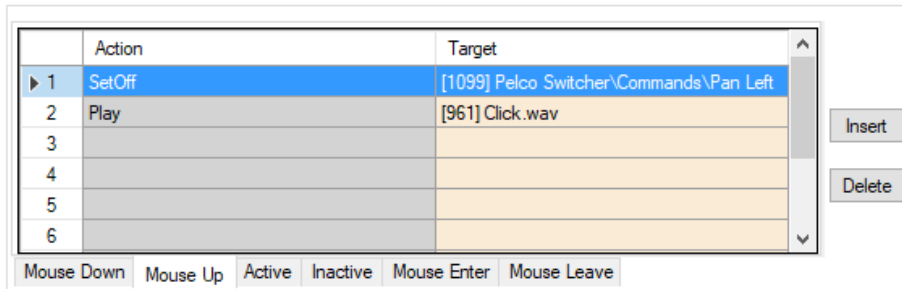
In  **Design View** Create a Pan Left button (screen object) using the drawing tools. Modify the properties of the button as shown below:



- Because this is a PTZ button, we suggest using an image for the button indicating the direction. Under **Setup->Images->Video_Commands->PTZ** are images for PTZ. For pan left, this example uses West.jpg
- In the **Mouse Down** action grid, click in the **Action** cell of the first row to open the **Actions** dialog.
- Select the **SetOn** action.

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- d. Drag-and-drop the **Pan Left** command node into the **Target** cell of the first row
- e. Click on the **Mouse Up** tab of the action grid.



	Action	Target
▶ 1	SetOff	[1099] Pelco Switcher\Commands\Pan Left
2	Play	[961] Click.wav
3		
4		
5		
6		

Mouse Down Mouse Up Active Inactive Mouse Enter Mouse Leave

Insert

Delete

- f. Click in the **Action** cell of the first row to open the **Actions** dialog.
- g. Select the **SetOff** action.
- h. Drag-and-drop the **Pan Left** command node into the **Target** cell of the first row


Note: It is always good to have a sound played when a button is clicked and released to give the user feedback.

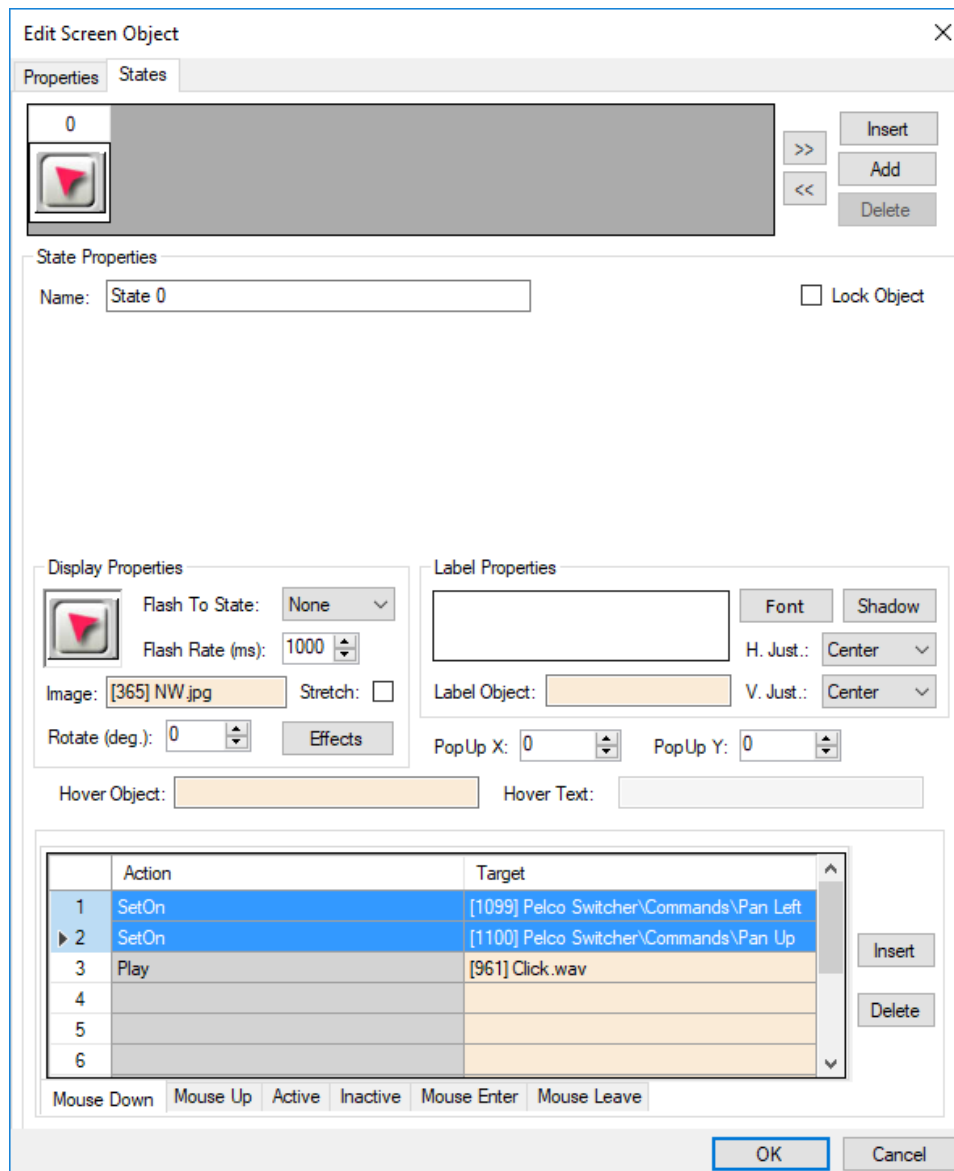
- i. Click to save these settings

4.4.5 Diagonal Pan-Tilt-Zoom Control

To pan diagonally, you must **SetOn** a combination of Up-Down/Left-Right pan commands. This example shows you how.

Pelco Switcher Panel Guide

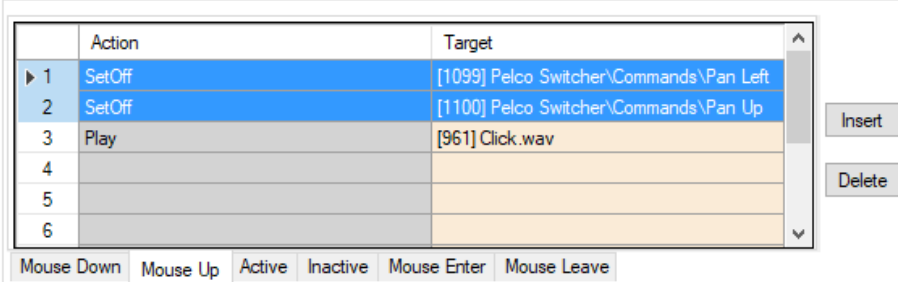
In  **Design View** Create a Pan Up-Left button (screen object) using the drawing tools. Modify the properties of the button as shown below:



- Because this is a PTZ button, we suggest using an image for the button indicating the direction. Under **Setup->Images->Video_Commands->PTZ** are images for PTZ. For pan left, this example uses NW.jpg
- In the **Mouse Down** action grid, click in the **Action** cell of the first row to open the **Actions** dialog.
- Select the **SetOn** action.

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- d. Drag-and-drop the **Pan Left** command node into the **Target** cell of the first row
- e. In the second row, click in the **Action** cell and select **SetOn**.
- f. Drag-and-drop the **Pan Up** command node into the **Target** cell of the second row.
- g. Click on the **Mouse Up** tab of the action grid.



	Action	Target
▶ 1	SetOff	[1099] Pelco Switcher\Commands\Pan Left
2	SetOff	[1100] Pelco Switcher\Commands\Pan Up
3	Play	[961] Click.wav
4		
5		
6		

Mouse Down Mouse Up Active Inactive Mouse Enter Mouse Leave

Insert Delete

- h. Click in the **Action** cell of the first row to open the **Actions** dialog.
- i. Select the **SetOff** action.
- j. Drag-and-drop the **Pan Left** command node into the **Target** cell of the first row
- k. In the second row, click in the **Action** cell and select **SetOff**.
- l. Drag-and-drop the **Pan Up** command node into the **Target** cell of the second row.
- m.

Note: It is always good to have a sound played when a button is clicked and released to give the user feedback.

- n. Click to save these settings

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Revision History

2018-11-30 Creation Date