



## **Legislative Control System User Guide**

**Version 2.0**

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Our mission is to:

1. Provide a Superior Customer Experience
  - offer the best product quality and support
2. Make Cool Practical Technology
  - develop great products that customers love

Ross has become well known for the Ross Video Code of Ethics. It guides our interactions and empowers our employees. I hope you enjoy reading it below.

If anything at all with your Ross experience does not live up to your expectations be sure to reach out to us at [solutions@rossvideo.com](mailto:solutions@rossvideo.com).



David Ross  
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## Ross Video Code of Ethics

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1. We will always act in our customers' best interest.
2. We will do our best to understand our customers' requirements.
3. We will not ship crap.
4. We will be great to work with.
5. We will do something extra for our customers, as an apology, when something big goes wrong and it's our fault.
6. We will keep our promises.
7. We will treat the competition with respect.
8. We will cooperate with and help other friendly companies.
9. We will go above and beyond in times of crisis. *If there's no one to authorize the required action in times of company or customer crisis - do what you know in your heart is right. (You may rent helicopters if necessary.)*

# Legislative Control System User Guide

- Ross Part Number: **4500DR-001-2.0**
- Release Date: December 8, 2014.
- Software Issue: **2.0**

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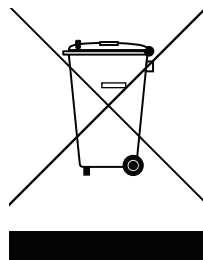
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The equipment that you purchased required the extraction and use of natural resources for its production. It may contain hazardous substances that could impact health and the environment.

To avoid the potential release of those substances into the environment and to diminish the need for the extraction of natural resources, Ross Video encourages you to use the appropriate take-back systems. These systems will reuse or recycle most of the materials from your end-of-life equipment in an environmentally friendly and health conscious manner.

The crossed-out wheeled bin symbol invites you to use these systems.



If you need more information on the collection, reuse, and recycling systems, please contact your local or regional waste administration.

You can also contact Ross Video for more information on the environmental performances of our products.

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# Introduction

This chapter contains the following sections:

- “**Overview**” on page 1–1
- “**Documentation Conventions**” on page 1–1
- “**Contacting Technical Support**” on page 1–2

## Overview

This user guide provides an overview and detailed operational procedures for the DashBoard Legislative Control System (LCS).

The intended audience for this guide is operators who use the LCS to produce video coverage of legislative events. For information about installing and configuring the LCS, see the *LCS Commissioning Guide (4500DR-002)*.

## Documentation Conventions

Special text formats are used in this guide to identify parts of the user interface, text that a user must enter, or a sequence of menus and submenus that must be followed to reach a particular command.

### Interface Elements

Bold text is used to identify a user interface element such as a dialog box, menu item, or button. For example:

In the **Media Manager Client**, tap **Channel 1** in the **Channels** section.

### Touch-Screen Support

This guide assumes you are using a touch-screen. The guide includes instructions to tap user interface elements. If you are using a mouse instead of a touch screen, click the mouse instead of tapping.

### User Entered Text

Courier text is used to identify text that a user must enter. For example:

In the **File Name** box, enter `Channel01.property`.

### Referenced Guides

Italic text is used to identify the titles of referenced guides, manuals, or documents. For example:

*DashBoard Server and User Rights Management User's Guide*

### Menu Sequences

Menu arrows are used in procedures to identify a sequence of menu items that you must follow. For example, if a step reads “**Server > Save As,**” you would tap the **Server** menu and then tap **Save As**.

### Interface Navigation

Navigation procedures assume that you are running Microsoft® Windows®. If you are running Mac® OS or Linux® Fedora®, menu names and options may differ.

## Contacting Technical Support

At Ross Video, we take pride in the quality of our products, but if problems occur, help is as close as the nearest telephone.

Our 24-hour Hot Line service ensures you have access to technical expertise around the clock. After-sales service and technical support is provided directly by Ross Video personnel. During business hours (Eastern Time), technical support personnel are available by telephone. After hours and on weekends, a direct emergency technical support phone line is available. If the technical support person who is on call does not answer this line immediately, a voice message can be left and the call will be returned shortly. This team of highly trained staff is available to react to any problem and to do whatever is necessary to ensure customer satisfaction.

- **Technical Support:** (+1) 613-652-4886
- **After Hours Emergency:** (+1) 613-349-0006
- **E-mail:** [techsupport@rossvideo.com](mailto:techsupport@rossvideo.com)
- **Website:** <http://www.rossvideo.com>

# LCS Overview

In a legislative environment, LCS makes it easy to steer cameras, switch video and audio, and bring up graphics, all automatically via a simple touch screen user interface. The LCS interface is very visual and is customizable to the exact layout required.

This chapter provides an overview of the LCS, and includes the following topics:

- “**Features**” on page 2–1
- “**User Interface Overview**” on page 2–2

## Features

The LCS provides a comprehensive and wide range of features.

### Fully Integrated HD Production

Ross offers a complete HD video production system comprising robotic camera mounts, the popular Carbonite™ production switcher, and XPression™ graphics.

### 3D Motion Graphics

Designed to meet the demanding requirements of sports TV and live shows, including the Academy Awards™, but priced to fit within a Legislative budget, XPression™ offers state of the art graphics.

### Customized Control

The user interface is fully customizable to include artwork and seating plans that are as unique as your Legislature.

### Works with Your Delegate System

We're proud to work with the International Roll Call™ microphone system and are committed to inter-operating with systems from other vendors as needed.

### Simplicity Included

Imagine what it takes to create a multi-camera production with 8 or more cameras, and overlay the program out with custom graphics that are built on-the-fly. It takes a lot less than you just imagined! With its compact, intuitive, and comprehensive user interface, LCS empowers a single operator to create sophisticated content cleanly.

### Live Video in the GUI

Only Ross gives you live video in the GUI with latency as low as 33ms (one video frame). This enables the operator to stay focused and make a "clean show", and potentially reduces monitoring costs.

### Adapts to Changing Requirements

Elections change seating plans. Members change portfolios. Photographs need to be updated. LCS adapts to all of these changes easily.

## User Interface Overview

The LCS panel includes two layout views for operating the system, plus a configuration interface.

**Note:** Each LCS panel is customized to the layout of a specific legislature. The LCS interface may vary according to your needs. The images of the LCS interface in this guide are used for demonstrative purposes only.

### Layout Views

Your LCS panel is configured to use either the **Seat Layout** view or the **Mark Layout** view:

- The **Seat Layout** view is a photo or map of your legislature, overlaid with the names and thumbnail photos of representatives. Switching between representatives is as simple as tapping the representative's photo and then tapping the **TAKE** button. The Seat Layout view also enables you to preview alternative camera views, and take representative-specific graphics in and out.
- The **Mark Layout** view also shows a photo or map of the your legislature, but is overlaid with camera icons and numbered marks (target locations). The Mark Layout view is as easy to use as the Seat Layout view, but has additional capabilities. It enables you to choose shots from multiple cameras for each mark, and includes manual camera controls.

**IMPORTANT:** Use only the layout for which your LCS panel is configured. If you are unsure of which layout your LCS panel uses, tap the **Seat Layout** and **Mark Layout** buttons. The layout that shows a picture or drawing of your legislature is the correct one to use.

### Configuration Interface

The configuration interface enables you to quickly edit representative data, assign camera shots to marks, and configure connectivity settings for devices in the system such as cameras, production switchers, and graphics systems.

## Seat Layout View

The Seat Layout view enables you to quickly select shots of representatives and take them to air. It also enables you to take graphics in and out, complete with representative data.

Figure 2.1 shows the Seat Layout view.



Figure 2.1 Seat Layout View

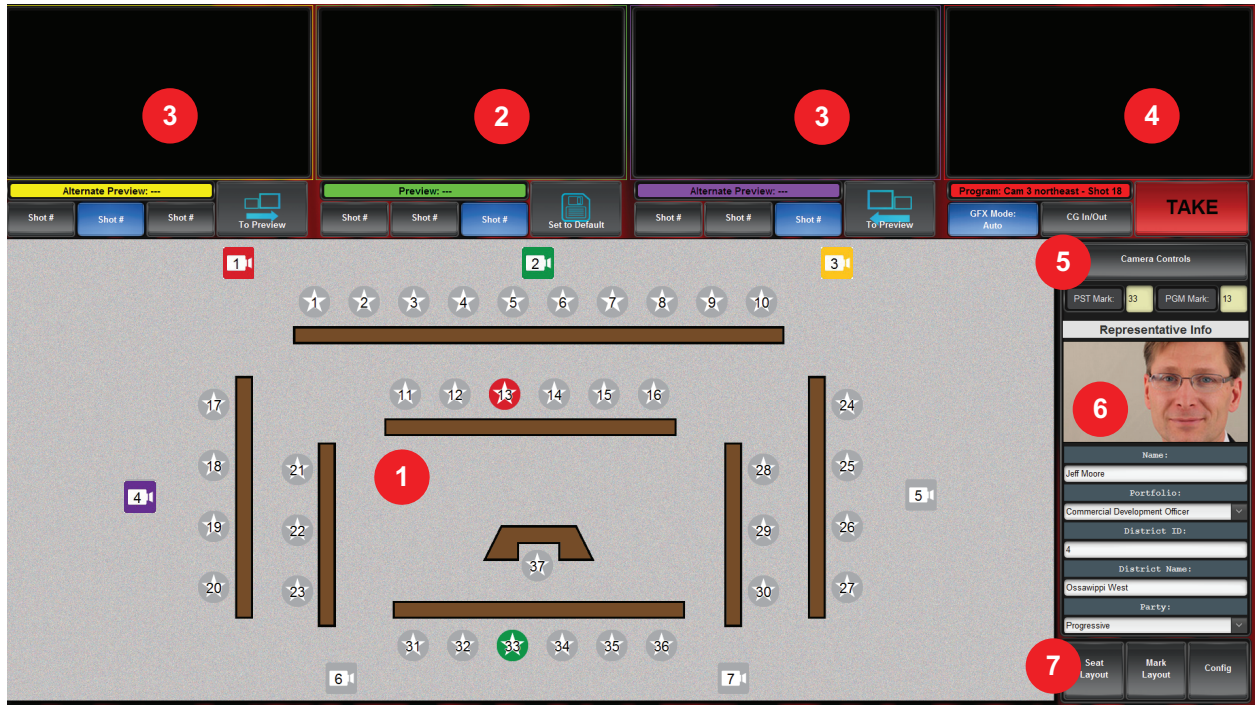
1	<p><b>Seat Layout</b> — displays a photo or map of the legislature, overlaid with the names and thumbnail photos of representatives. Tap a representative to select him or her for preview. The border of the thumbnail photo is green when the representative is in preview, and turns red when the representative is taken to air.</p>
2	<p><b>Preview pane</b> — displays the preview shot. Tap the shot buttons below the <b>Preview</b> pane to select a shot. Tap the <b>TAKE</b> button to take the shot to air.</p> <p><b>Tip:</b> When you take a shot to air, the <b>Preview</b> pane changes to show the shot that was previously on-air. To switch back to the previous shot, tap the <b>TAKE</b> button again.</p>
3	<p><b>Program pane</b> — displays the program out video.</p> <p>Use the <b>GFX Mode</b> button to select a graphics mode. The <b>GFX Mode</b> button shows the current state (<b>Auto</b> or <b>Manual</b>):</p> <ul style="list-style-type: none"> <li>• <b>Auto</b> — Graphics are taken to air when the preview is taken to air. During the transition between shots, the graphic moves out, the new shot appears, and the updated graphic moves in.</li> <li>• <b>Manual</b> — Graphics are taken on or off air only when you tap the <b>CG In/Out</b> button. When a shot goes on air, the graphic is not present until you tap the <b>CG In/Out</b> button.</li> </ul> <p><b>Tip:</b> If you require rapid transitions between shots, switch to manual mode.</p> <p><b>Note:</b> Graphics must be built properly to be used with the LCS. For more information, see the <i>LCS Commissioning Guide (4500DR-002)</i>.</p>

<b>4</b>	<b>Representative Info Area</b> — use this area to view and edit representative information. For example, a representative may have multiple portfolios. You can choose which portfolio text populates the graphics. Changes made in this area are temporary and do not persist for subsequent transitions.
<b>5</b>	<b>Interface Selection Buttons</b> — use these buttons to switch between Seat Layout view, Mark Layout view, and the configuration interface.

## Mark Layout View

The Mark Layout view enables you to quickly select shots of representatives and take them to air. The Mark Layout view is based on target locations, or marks, in the legislative chamber. Multiple cameras, each with up to three shots, can be associated with each mark.

**Figure 2.2** shows the Mark Layout view.



**Figure 2.2** Mark Layout View

<p><b>1</b></p>	<p><b>Mark Layout</b> — displays a photo or map of the legislature, overlaid with mark icons (stars), and camera icons.</p> <p>The background of an icon is green when that camera or mark is in preview, and turns red when it is taken to air. Alternative previews are indicated by yellow or purple backgrounds.</p>
<p><b>2</b></p>	<p><b>Preview pane</b> — displays the preview shot.</p> <p>Tap the shot buttons below the <b>Preview</b> pane to select a shot. Tap the <b>TAKE</b> button to take the shot to air.</p> <p><b>Tip:</b> When you take a shot to air, the <b>Preview</b> pane changes to show the shot that was previously on-air. To switch back to the previous shot, tap the <b>TAKE</b> button again.</p> <p>If you want to adjust the position of the camera shown in the <b>Preview</b> pane, double-tap the pane to open the <b>Camera Controls</b> window, which enables you to manually control the camera. For more information, see “<b>Adjusting the Camera Position, Using the LCS</b>” on page 3–4.</p> <p>If you want to make the current preview shot the default shot for the current mark, tap <b>Set to Default</b>.</p> <p><b>Tip:</b> On the layout, icons for the preview camera and mark have green backgrounds. The border and title background of the <b>Preview</b> pane are also green.</p>

<p><b>3</b></p>	<p><b>Alternate Preview panes</b> — display alternative preview shots from other cameras.</p> <p>You can keep one shot prepared in the <b>Preview</b> pane, while using the <b>Alternate Preview</b> panes to consider other shots for preview.</p> <p>Use the shot buttons below the <b>Alternate Preview</b> panes to select shots. When you find a shot you want to use, tap the <b>To Preview</b> button to move the shot to the <b>Preview</b> pane.</p> <p><b>Tip:</b> On the layout, icons for alternative preview cameras and marks have colored backgrounds. Yellow backgrounds indicate one alternative preview, and purple backgrounds indicate the other. These colors also appear in the borders and title backgrounds of the <b>Alternative Preview</b> panes.</p> <p>If you want to adjust the position of a camera shown in an <b>Alternative Preview</b> pane, double-tap the pane to open the <b>Camera Controls</b> window, which enables you to manually control the camera. For more information, see “<b>Adjusting the Camera Position, Using the LCS</b>” on page 3–4.</p>
<p><b>4</b></p>	<p><b>Program pane</b> — displays the program out video.</p> <p>Use the <b>GFX Mode</b> button to select a graphics mode. The <b>GFX Mode</b> button shows the current state (<b>Auto</b> or <b>Manual</b>):</p> <ul style="list-style-type: none"> <li>• <b>Auto</b> — Graphics are taken to air when the preview is taken to air. During the transition between shots, the graphic moves out, the new shot appears, and the updated graphic moves in.</li> <li>• <b>Manual</b> — Graphics are taken on or off air only when you tap the <b>CG In/Out</b> button. When a shot goes on air, the graphic is not present until you tap the <b>CG In/Out</b> button.</li> </ul> <p><b>Tip:</b> If you require rapid transitions between shots, switch to manual mode.</p> <p><b>Note:</b> Graphics must be built properly to be used with the LCS. For more information, see the <i>LCS Commissioning Guide (4500DR-002)</i>.</p>

5

**Camera Controls Button** — opens the **Camera Controls** window, which enables you to select a camera and control it manually.

**Tip:** There is another way to open the **Camera Controls** window. Double-tap a video feed in the **Preview** pane, the **Program** pane, or one of the **Alternate Preview** panes. The **Camera Controls** window opens to show controls for the shot you double-tapped.



Use the buttons at the top of the Camera Control window to select a camera to control. The button names indicate the camera and whether the camera is in preview or on program.

Use the green arrow buttons to adjust pan, tilt, and zoom positions:

- If you are using a mouse, click and hold the button until the camera is in the desired position.
- If you are using a touch screen, rapidly double-tap to move the camera slightly. To move the camera further, rapidly double-tap and hold the button until the camera is in the desired position. Note that if you double-tap too slowly, the system may interpret it as a right-click, and the camera moves as far as possible in the direction indicated by the button.

Use the **Far** and **Near** buttons in the **FOCUS** area to manually adjust camera focus. Using the **FOCUS** controls turns off automatic focus. Tap once to move the focus slightly. To move the focus further, rapidly double-tap and hold the button until the camera is in the desired position.

Use the **Open** and **Close** buttons in the **IRIS** area to adjust lens iris. Using the **IRIS** controls turns off automatic iris. Tap once to move the iris slightly. To move the iris further, rapidly double-tap and hold the button until the camera is in the desired position.

Tap the **Advanced** button to open a separate camera control panel which enables you to view and adjust advanced camera settings. For more information, see the **LCS Commissioning Guide (4500DR-002)**.

Use the **Recall Preset** reset to reset the camera to the position stored in the original shot.

Use the **Store Preset** button to record the current camera position, replacing the original shot.

Use the **Close** button to close the **Camera Controls** window.

<b>6</b>	<p><b>Representative Info Area</b> — use this area to view and edit representative information. For example, a representative may have multiple portfolios. You can choose which portfolio text populates the graphics.</p> <p>Changes made in this area are temporary and do not persist for subsequent transitions.</p>
<b>7</b>	<p><b>Interface Selection Buttons</b> — use these buttons to switch between <b>Seat Layout</b> view, <b>Mark Layout</b> view, and the configuration interface (<b>Config</b> button).</p>

## Configuration Interface

The configuration interface includes seven tabs:

- **General Tab** — Data and images for location, layout backgrounds, and legislative parties
- **Devices Tab** — Connectivity Settings for external devices such as a switcher and a graphics system
- **Cameras Tab** — Connectivity settings and layout position data for cameras
- **Representatives Tab** — Data and images for representatives
- **Marks Tab** — Layout position data for marks, and mapping data between marks and cameras used to shoot those marks
- **Maps Tab** — Mapping data between marks and representatives
- **Connections Tab** — Connection protocols for device listeners (for delegate systems and for cameras)

## General Tab

Figure 2.3 shows the General tab.

Figure 2.3 General Configuration Tab

The **General** tab includes the following settings and buttons:

Setting or Button	Description
<b>Location</b>	
<b>Body</b>	Specify the name of the legislative assembly.
<b>Country</b>	Specify the nation where the legislative assembly is located.
<b>State</b>	Specify the state, province, territory, or region where the legislative assembly is located.
<b>Images</b>	
<b>Seat Layout Background</b>	<p>If you want the panel to use the <b>Seat Layout</b> view, specify the filename of the background image.</p> <p>Background images are stored on the DashBoard LCS computer, in the <b>Images/Photos</b> folder.</p> <p><b>Note:</b> An LCS panel must use only one type of layout, either Seat Layout or Mark Layout.</p>
<b>Mark Layout Background</b>	<p>If you want the panel to use the <b>Mark Layout</b> view, specify the filename of the background image.</p> <p>Background images are stored on the DashBoard LCS computer, in the <b>Images/Photos</b> folder.</p> <p><b>Note:</b> An LCS panel must use only one type of layout, either Seat Layout or Mark Layout.</p>
<b>Parties</b>	
<b>Party Key</b>	Displays the numeric identifier for the party.

Setting or Button	Description
<b>Party Name</b>	Displays the name of the party. This is set when the party is created, and is used in on-air graphics. Tap a party name to edit it.
<b>Add button</b>	Creates a new party. To create a party, type the name of the party in the box beside the <b>Add</b> button, and then tap the <b>Add</b> button.
<b>Delete button</b>	Deletes the currently-selected party.
Other Buttons	
<b>Reload Data</b>	Discards any unsaved changes and reverts to previous values.
<b>Save Changes</b>	Saves any changes made on the current tab. If you do not save changes before changing tabs, the changes are lost.

### Devices Tab

Figure 2.4 shows the Devices tab.

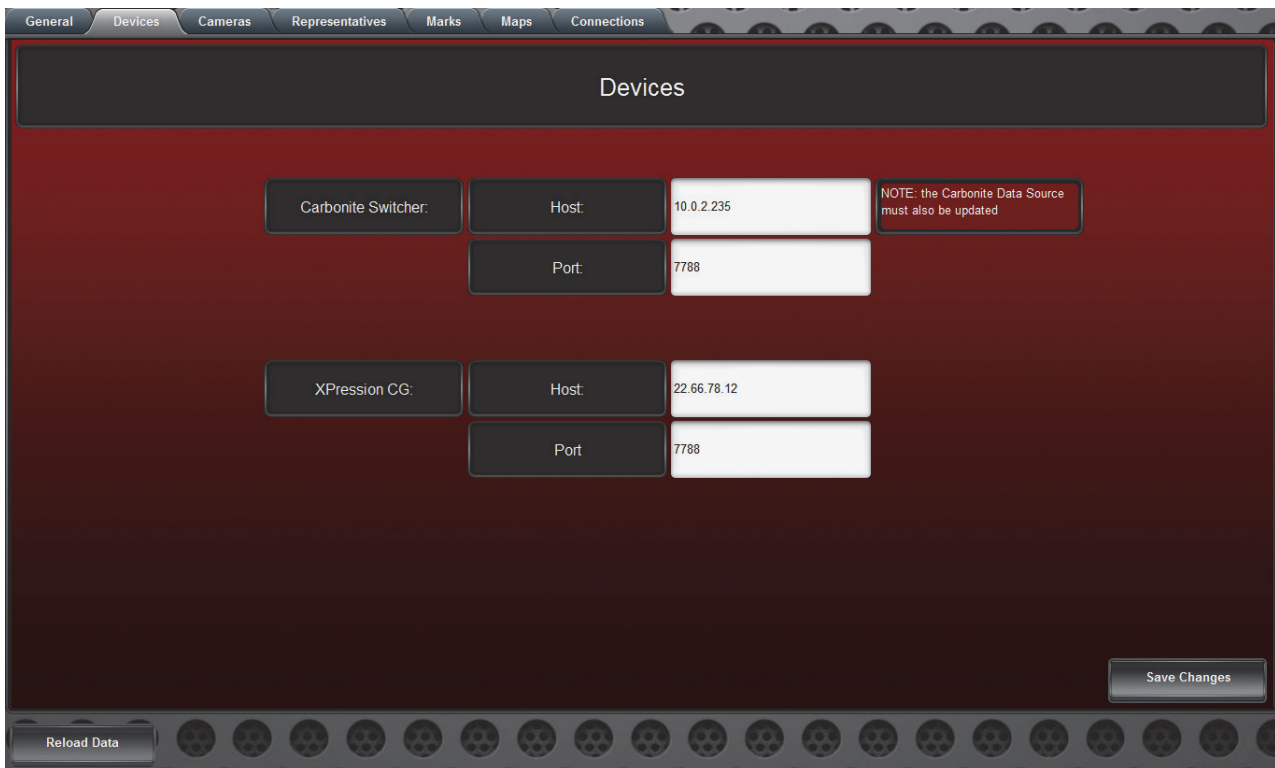


Figure 2.4 Devices Configuration Tab

The **Devices** tab includes the following settings and buttons:

Setting or Button	Description
Carbonite Switcher	
<b>Host</b>	Specify the Host IP address for the Carbonite switcher.
<b>Port</b>	Specify the communication Port number for the Carbonite switcher.
XPression CG	
<b>Host</b>	Specify the Host IP address for the XPression graphics system.

Setting or Button	Description
<b>Port</b>	Specify the communication Port number for the XPression graphics system. The default port for rosstalk communication is 7788.
Other Buttons	
<b>Reload Data</b>	Discards any unsaved changes and reverts to previous values.
<b>Save Changes</b>	Saves any changes made on the current tab. If you do not save changes before changing tabs, the changes are lost.

## Cameras Tab

Figure 2.5 shows the Cameras tab.

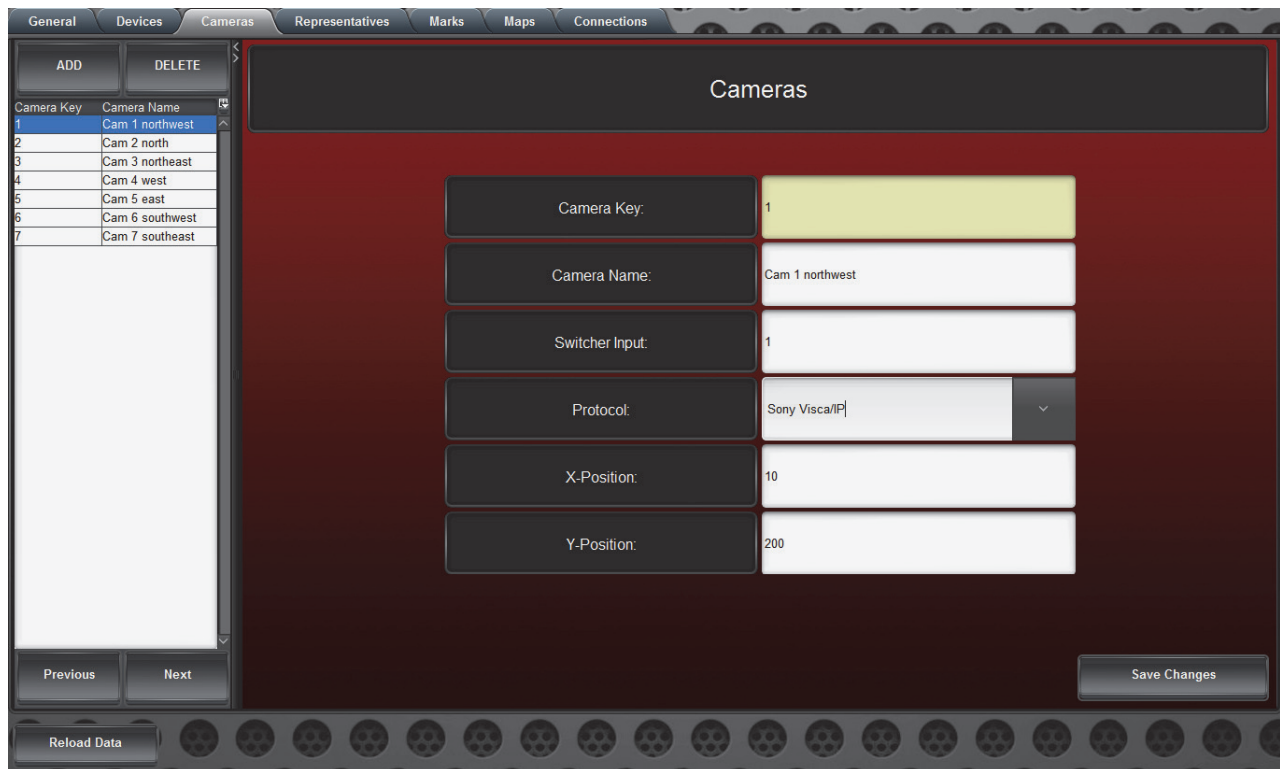


Figure 2.5 Cameras Configuration Tab

The **Cameras** tab includes the following settings and buttons:

Setting or Button	Description
Camera List Area (left side of tab)	
<b>Camera Key</b>	Displays the numeric identifier for the camera. Tap a camera key to show and configure the properties of the camera. <b>IMPORTANT:</b> If you configure the properties of a camera, save the changes before you select a different camera. Otherwise, your changes are lost.
<b>Camera Name</b>	Displays the name of the camera. Tap a camera name to show and edit the properties of the camera. <b>IMPORTANT:</b> If you configure the properties of a camera, save the changes before you select a different camera. Otherwise, your changes are lost.
<b>ADD button</b>	Adds a new camera to the list.

Setting or Button	Description
<b>DELETE button</b>	Deletes the currently-selected camera from the list. The currently-selected camera is indicated by a blue background.
<b>Previous button</b>	Moves up to the previous camera in the list. <b>IMPORTANT:</b> If you configure the properties of a camera, save the changes before you select a different camera. Otherwise, your changes are lost.
<b>Next button</b>	Moves down to the next camera in the list. <b>IMPORTANT:</b> If you configure the properties of a camera, save the changes before you select a different camera. Otherwise, your changes are lost.
Cameras Area (right side of tab)	
<b>Camera Key</b>	Displays the numeric identifier for the camera. When you tap a key in the list, the <b>Cameras</b> area displays settings for that camera.
<b>Camera Name</b>	Displays the name of the camera. This name appears in the Seat Layout and Mark Layout views. When you tap a name in the list, the <b>Cameras</b> area displays settings for that camera.
<b>Switcher Input</b>	Specify the switcher crosspoint with which the camera is associated.
<b>Protocol</b>	Select the camera type from the list.
<b>X-Position</b>	Specify a number representing the horizontal position of the camera on the Seat Layout and Mark Layout views. A value of zero positions the camera icon at the far left side.
<b>Y-Position</b>	Specify a number representing the vertical position of the camera on the Seat Layout and Mark Layout views. A value of zero positions the camera icon at the top.
Other Buttons	
<b>Reload Data</b>	Discards any unsaved changes and reverts to previous values.
<b>Save Changes</b>	Saves any changes made on the current tab. If you do not save changes before selecting a different camera or changing tabs, the changes are lost.

## Representatives Tab

Figure 2.6 shows the Representatives tab.

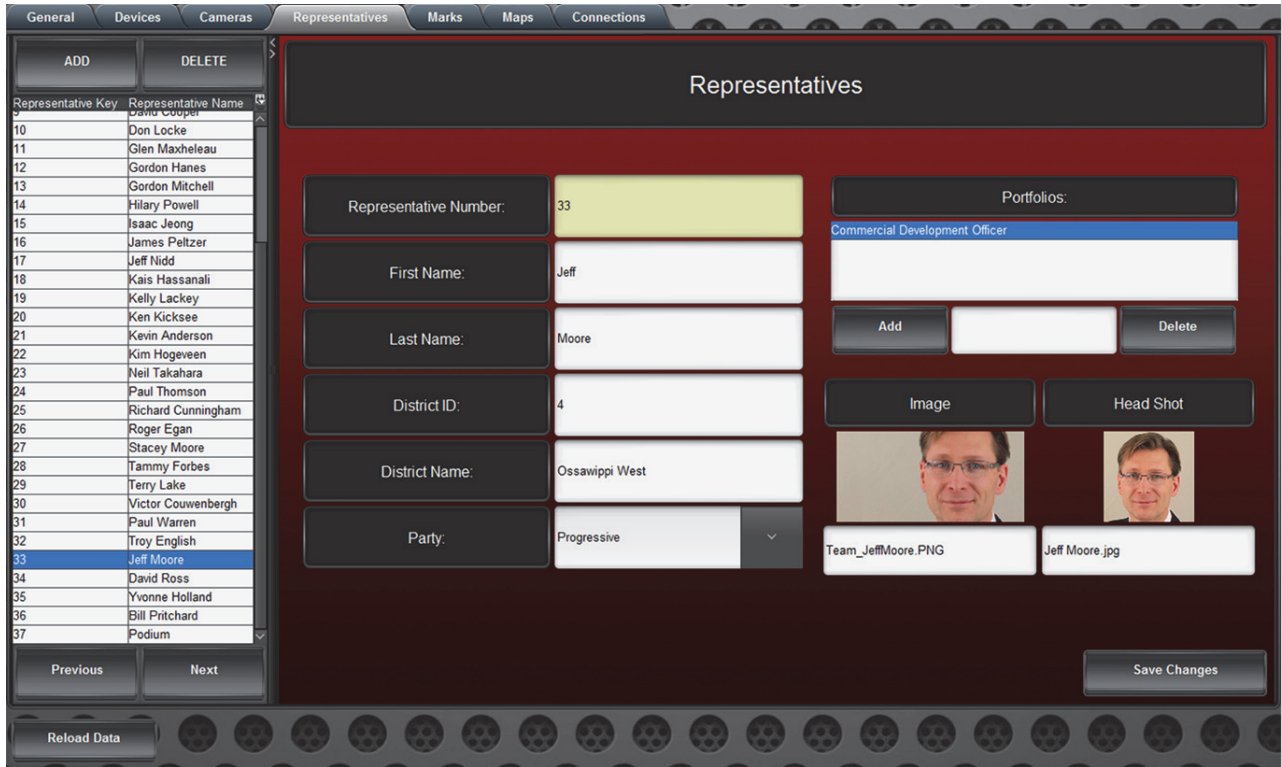


Figure 2.6 Representatives Configuration Tab

The Representatives tab includes the following settings and buttons:

Setting or Button	Description
<b>Representatives List Area (left side of tab)</b>	
<b>Representative Key</b>	Displays the numeric identifier for the representative. Tap a representative key to show and configure the properties of the representative. <b>IMPORTANT:</b> If you configure the properties of a representative, save the changes before you select a different representative. Otherwise, your changes are lost.
<b>Representative Name</b>	Displays the name of the representative. Tap a representative name to show and configure the properties of the representative. <b>IMPORTANT:</b> If you configure the properties of a representative, save the changes before you select a different representative. Otherwise, your changes are lost.
<b>ADD button</b>	Adds a new representative to the list.
<b>DELETE button</b>	Deletes the selected representative from the list. The selected representative is indicated by a blue background.
<b>Previous button</b>	Moves up to the previous representative in the list. <b>IMPORTANT:</b> If you configure the properties of a representative, save the changes before you select a different representative. Otherwise, your changes are lost.
<b>Next button</b>	Moves down to the next representative in the list. <b>IMPORTANT:</b> If you configure the properties of a representative, save the changes before you select a different representative. Otherwise, your changes are lost.
<b>Representatives Area (right side of tab)</b>	

Setting or Button	Description
<b>Representative Number</b>	Displays the numeric identifier for the representative.
<b>First Name</b>	Specify the first name of the representative. This name appears in the Seat Layout and Mark Layout views, and in on-air graphics.
<b>Last Name</b>	Specify the last name of the representative. This name appears in the Seat Layout and Mark Layout views, and in on-air graphics.
<b>District ID</b>	Specify the district identifier (if any) for the representative. This ID appears in the Seat Layout and Mark Layout views, and in on-air graphics.
<b>District Name</b>	Specify the name of the district (if any) for the representative. This name appears in the Seat Layout and Mark Layout views, and in on-air graphics.
<b>Party</b>	Select a party for the representative. Parties are defined on the <b>General</b> configuration tab.
<b>Portfolios list</b>	Lists all portfolios for the representative. Double-tap a portfolio name to edit it.
<b>Add button</b>	Adds a portfolio to the list for this representative.
<b>Delete button</b>	Deletes the selected portfolio from the list for the representative. The selected portfolio is indicated by a blue background.
<b>Image</b>	Specify the filename of the representative's photo. This image is used in the <b>Representative Info</b> area of the Seat Layout and Mark Layout views. It is not used in on-air graphics. Representative images are stored on the DashBoard LCS computer, in the <b>Images/Photos</b> folder. The photos must be either .png or .jpg format. DashBoard automatically resizes photos to fit, but to avoid image distortion it's important to maintain the correct ratio of height to width: <ul style="list-style-type: none"> <li>• For LCS systems that use the Mark Layout view, the Image photo area is 155 pixels wide by 284 pixels high.</li> <li>• For LCS systems that use the Seat Layout view, the Image photo area is 100 pixels wide by 452 pixels high.</li> </ul>
<b>Head Shot</b>	Specify the filename of the representative's head shot photo. This image is used in icons in the Seat Layout view. It is not used in on-air graphics. Representative images are stored on the DashBoard LCS computer, in the <b>Images/Photos</b> folder. The photos must be either .png or .jpg format. DashBoard automatically resizes photos to fit, but to avoid image distortion it's important to maintain the correct ratio of height to width. The Head Shot photo area is 70 pixels wide by 85 pixels high.
Other Buttons	
<b>Reload Data</b>	Discards any unsaved changes and reverts to previous values.
<b>Save Changes</b>	Saves any changes made on the current tab. If you do not save changes before selecting a different representative or changing tabs, the changes are lost.

## Marks Tab

Figure 2.7 shows the Marks tab.

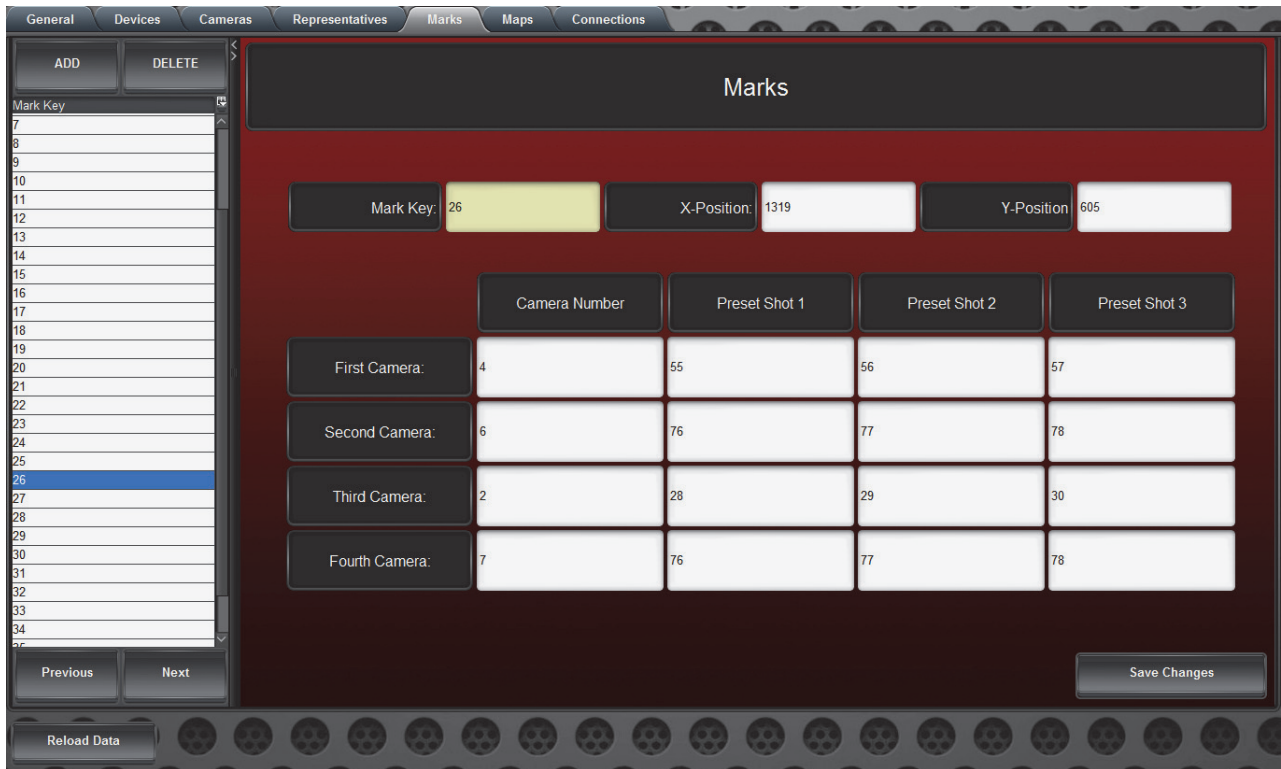


Figure 2.7 Marks Configuration Tab

The Marks tab includes the following settings and buttons:

Setting or Button	Description
<b>Marks List Area (left side of tab)</b>	
<b>Mark Key</b>	Displays the numeric identifier for the mark. Tap a mark key to show and configure the properties of the mark. <b>IMPORTANT:</b> If you configure the properties of a mark, save the changes before you select a different mark. Otherwise, your changes are lost.
<b>ADD button</b>	Adds a new mark to the list. <b>IMPORTANT:</b> If you configure the properties of a mark, save the changes before you add a new mark. Otherwise, your changes are lost.
<b>DELETE button</b>	Deletes the selected mark from the list. The selected mark is indicated by a blue background.
<b>Previous button</b>	Moves up to the previous mark in the list. <b>IMPORTANT:</b> If you configure the properties of a mark, save the changes before you select a different mark. Otherwise, your changes are lost.
<b>Next button</b>	Moves down to the next mark in the list. <b>IMPORTANT:</b> If you configure the properties of a mark, save the changes before you select a different mark. Otherwise, your changes are lost.
<b>Marks Area (right side of tab)</b>	
<b>Mark Key</b>	Displays the numeric identifier for the mark.

Setting or Button	Description																									
<b>X-Position</b>	<p>Specify a number representing the horizontal position of the mark on the Seat Layout or Mark Layout view.</p> <p>A value of zero positions the mark icon (star) at the far left side.</p> <p><b>Note:</b> An LCS panel must use only one type of layout, either Seat Layout or Mark Layout.</p>																									
<b>Y-Position</b>	<p>Specify a number representing the vertical position of the mark on the Seat Layout and Mark Layout views.</p> <p>A value of zero positions the mark icon (star) at the top.</p> <p><b>Note:</b> An LCS panel must use only one type of layout, either Seat Layout or Mark Layout.</p>																									
<b>Preset Grid</b>	<p>Use the preset grid to specify which cameras and shots are available for the mark. To edit the value of a cell in the grid, tap the cell.</p> <table border="1" data-bbox="456 594 1414 926"> <thead> <tr> <th></th> <th>Camera Number</th> <th>Preset Shot 1</th> <th>Preset Shot 2</th> <th>Preset Shot 3</th> </tr> </thead> <tbody> <tr> <td>First Camera:</td> <td>4</td> <td>55</td> <td>56</td> <td>57</td> </tr> <tr> <td>Second Camera:</td> <td>6</td> <td>76</td> <td>77</td> <td>78</td> </tr> <tr> <td>Third Camera:</td> <td>2</td> <td>28</td> <td>29</td> <td>30</td> </tr> <tr> <td>Fourth Camera:</td> <td>7</td> <td>76</td> <td>77</td> <td>78</td> </tr> </tbody> </table> <p>Each row of the grid represents a camera. The cameras are prioritized from top to bottom. The <b>Camera</b> buttons left of the grid indicate this priority.</p> <p>The <b>Camera Number</b> column shows the camera number.</p> <p>The <b>Preset Shot</b> columns list names of shots that are available for the mark. The columns are prioritized from 1 to 3.</p> <p>When completing the grid, evaluate which shots are the best for the mark. Place the best camera on the top row. Place the best shot in the <b>Preset Shot 1</b> column. Place the next-best shots from that camera in the other two <b>Preset Shot</b> columns.</p> <p><b>Note:</b> Operators can set a preview shot as the default for a mark, overriding the preset grid. When an operator sets the new default, if the new default shot is on a different camera than the first camera in the grid, the new default camera moves to the top of the grid. The order of presets for the camera (Preset Shot 1, 2, or 3) does not change.</p>		Camera Number	Preset Shot 1	Preset Shot 2	Preset Shot 3	First Camera:	4	55	56	57	Second Camera:	6	76	77	78	Third Camera:	2	28	29	30	Fourth Camera:	7	76	77	78
	Camera Number	Preset Shot 1	Preset Shot 2	Preset Shot 3																						
First Camera:	4	55	56	57																						
Second Camera:	6	76	77	78																						
Third Camera:	2	28	29	30																						
Fourth Camera:	7	76	77	78																						
<b>Other Buttons</b>																										
<b>Reload Data</b>	<p>Discards any unsaved changes and reverts to previous values.</p>																									
<b>Save Changes</b>	<p>Saves any changes made on the current tab. If you do not save changes before selecting a different mark or changing tabs, the changes are lost.</p>																									

## Maps Tab

Figure 2.8 shows the Maps tab.

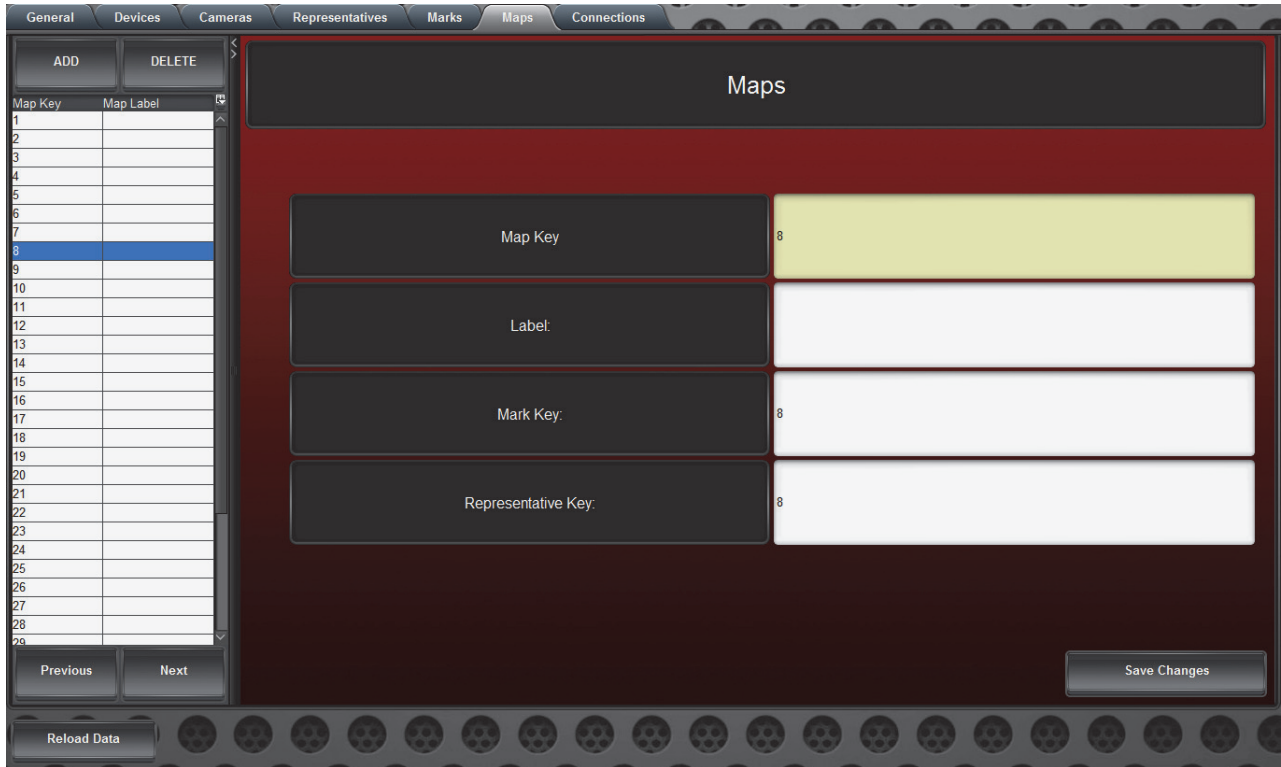


Figure 2.8 Maps Configuration Tab

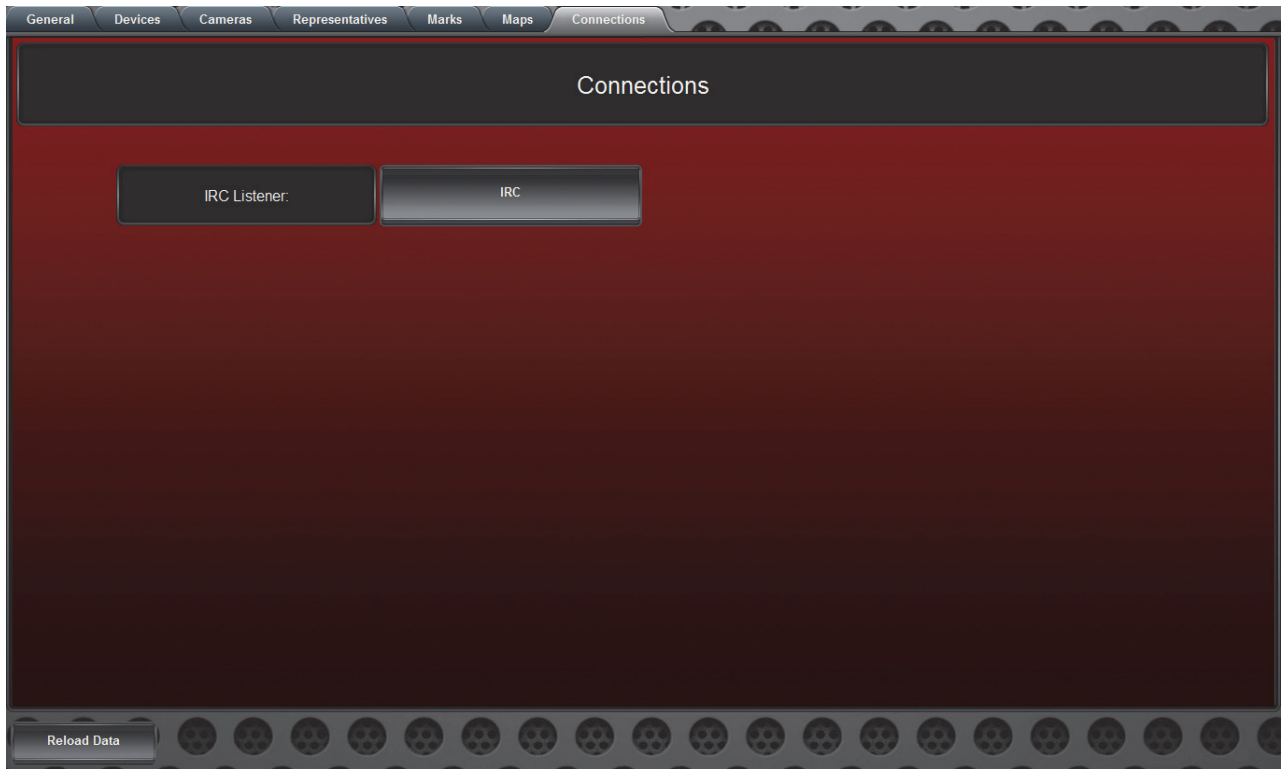
The Maps tab includes the following settings and buttons:

Setting or Button	Description
<b>Map Key and Label List (left side of tab)</b>	
<b>Map Key</b>	Displays the numeric identifiers for mappings between marks and representatives. Tap a map key to show and configure the properties of the mapping. <b>IMPORTANT:</b> If you configure the properties of a mapping, save the changes before you select a different mapping. Otherwise, your changes are lost.
<b>Map Label</b>	Displays the names of mappings between marks and representatives. Tap a map label key to show and configure the properties of the mapping. <b>IMPORTANT:</b> If you configure the properties of a mapping, save the changes before you select a different mapping. Otherwise, your changes are lost.
<b>ADD button</b>	Adds a new mapping to the list. <b>IMPORTANT:</b> If you configure the properties of a mapping, save the changes before you add a new mapping. Otherwise, your changes are lost.
<b>DELETE button</b>	Deletes the currently-selected mapping from the list. The currently-selected mapping is indicated by a blue background.
<b>Previous button</b>	Moves up to the previous mapping in the list. <b>IMPORTANT:</b> If you configure the properties of a mapping, save the changes before you select a different mapping. Otherwise, your changes are lost.

Setting or Button	Description
<b>Next button</b>	<p>Moves down to the next mapping in the list.</p> <p><b>IMPORTANT:</b> If you configure the properties of a mapping, save the changes before you select a different mapping. Otherwise, your changes are lost.</p>
<b>Maps Area (right side of tab)</b>	
<b>Map Key</b>	Displays the numeric identifier for the selected mapping.
<b>Label</b>	Specify a name for the mapping. This is optional. The label appears only on the <b>Maps</b> tab.
<b>Mark Key</b>	<p>Specify the mark key with which you want to associate a representative.</p> <p>Marks keys are shown as labels in the Mark Layout view.</p> <p>Marks, their positions, and their available camera shots are defined on the <b>Marks</b> tab.</p>
<b>Representative Key</b>	<p>Specify the representative key with which you want to associate the mark.</p> <p>Representatives are defined on the <b>Representatives</b> tab.</p>
<b>Other Buttons</b>	
<b>Reload Data</b>	Discards any unsaved changes and reverts to previous values.
<b>Save Changes</b>	Saves any changes made on the current tab. If you do not save changes before selecting a different mapping or changing tabs, the changes are lost.

## Connections Tab

Figure 2.9 shows the Connections tab.



**Figure 2.9** Connections Configuration Tab

The **Connections** tab includes the following settings and buttons:

Setting or Button	Description
<b>Connections Area</b>	
<b>IRC button</b>	Tap the button to enable or disable communication with the IRC delegate systems. Communication is enabled when the button is green.
<b>Other Buttons</b>	
<b>Reload Data</b>	Discards any unsaved changes and reverts to previous values.



# Operating the LCS

This chapter explains how to start the Legislative Control System (LCS), and how to operate it during a broadcast.

Your LCS panel is configured to use either the **Seat Layout** view or the **Mark Layout** view:

- The **Seat Layout** view is a photo or map of your legislature, overlaid with the names and thumbnail photos of representatives. Switching between representatives is as simple as tapping the representative's photo and then tapping the **TAKE** button. The Seat Layout view also enables you to preview alternative camera views, and take representative-specific graphics in and out.
- The **Mark Layout** view also shows a photo or map of the your legislature, but is overlaid with camera icons and numbered marks (target locations). The Mark Layout view is as easy to use as the Seat Layout view, but has additional capabilities. It enables you to choose shots from multiple cameras for each mark, and includes manual camera controls.

**IMPORTANT:** Use only the layout for which your LCS panel is configured. If you are unsure of which layout your LCS panel uses, tap the **Seat Layout** and **Mark Layout** buttons. The layout that shows a picture or drawing of your legislature is the correct one to use.

## Starting the system

**To start the system:**

1. Ensure the following equipment is running:
  - Carbonite Switcher (Frame and Panel)
  - XPression Graphics System
  - Robotic Cameras
  - DashBoard LCS computer or CamBot Control computer with DashBoard and LCS software installed.
  - IP network equipment (network switch)
  - IRC Delegate system (if present)
  - Other accessories (if present)
2. On the DashBoard LCS computer, start DashBoard.
3. In DashBoard, open the panel file for your legislature, and the panel file(s) corresponding to each type of camera the system uses.

**Tip:** When DashBoard starts, it automatically opens all panels that were open when it was last shut down.
4. On the keyboard, press **SHIFT+F11** to display the LCS panel in full-screen mode.
5. Test the system by selecting shots from each camera, and taking them to air.

## Operating the LCS in Seat Layout View

This section includes the following topics:

- “**Setting Up a Preview Shot in Seat Layout View**” on page 3–2
- “**Taking a Shot to Air in Seat Layout View**” on page 3–2

### Setting Up a Preview Shot in Seat Layout View

**To set up a preview shot:**

1. In the **Seat Layout** view, tap the thumbnail photo of the representative you want to preview.  
The border of thumbnail turns green, and the member info appears in the **Representative Info** area.  
The default shot of the representative appears in the **Preview** pane.
2. If you want to use a different shot, tap the shot buttons below the **Preview** pane.  
Each representative has up to three shots.
3. In the **Representative Info** area, edit the information if necessary.  
The information in this section is used to populate on-air graphics.  
**Note:** Changes to the data are not retained permanently, so you must edit the data each time you use the shot. To edit the data permanently, use the **Representatives** tab of the **Configuration** interface. For more information, see “**Representatives Tab**” on page 2–13.

### Taking a Shot to Air in Seat Layout View

1. In the **Seat Layout** view, set up a shot in the **Preview** pane.  
For more information, see “**Setting Up a Preview Shot in Seat Layout View**” on page 3–2.
2. Use the **GFX Mode** button to select a graphics mode. The **GFX Mode** button shows the current state (**Auto** or **Manual**):
  - **Auto** — Graphics are taken to air when the preview is taken to air. During the transition between shots, the graphic moves out, the new shot appears, and the updated graphic moves in.
  - **Manual** — Graphics are taken on or off air only when you tap the **CG In/Out** button. When a shot goes on air, the graphic is not present until you tap the **CG In/Out** button.**Tip:** If you require rapid transitions between shots, switch to manual mode.
3. When you are ready to send the shot to air, tap the **TAKE** button.  
The shot goes to air. If **GFX Mode** is set to **Auto**, the graphics also appear on-air.
4. If you want to take the graphics on or off air at any time, tap the **CG In/Out** button.

## Operating in Mark Layout View

This section includes the following topics:

- “**Setting Up a Preview Shot in Mark Layout View**” on page 3–3
- “**Taking a Shot to Air in Mark Layout View**” on page 3–3
- “**Adjusting the Camera Position, Using the LCS**” on page 3–4

### Setting Up a Preview Shot in Mark Layout View

**To set up a preview shot:**

1. In the **Mark Layout** view, tap the mark you want to preview.

The mark icon turns green, and associated representative info appears in the **Representative Info** area.

The default preview shot appears in the **Preview** pane (middle preview pane). Shots from other cameras appear in the **Alternate Preview** panes.

2. If you want to use a different shot, tap the shot buttons below the three **Preview** panes to select a shot you like.

If the shot you like is in one of the **Alternate Preview** panes, tap the **To Preview** button to send the shot to the **Preview** pane. The **Preview** pane and the **Alternate Preview** pane swap shots.

3. If you want to adjust a camera do one of the following:

- Use the control device that came with your cameras.
- Use the **Camera Controls** window on the LCS.

For information about using LCS camera controls, see “**Adjusting the Camera Position, Using the LCS**” on page 3–4.

4. If you want the **Preview** shot to become the default shot for the mark, tap the **Set to Default** button.

5. In the **Representative Info** area, edit the information if necessary.

The information in this section is used to populate on-air graphics.

**Note:** Changes to the data are not retained permanently, so you must edit the data each time you use the shot. To edit the data permanently, use the **Representatives** tab of the **Configuration** interface. For more information, see “**Representatives Tab**” on page 2–13.

### Taking a Shot to Air in Mark Layout View

1. In the **Mark Layout** view, set up a shot in the **Preview** pane.

For more information, see “**Setting Up a Preview Shot in Mark Layout View**” on page 3–3.

2. Use the **GFX Mode** button to select a graphics mode. The **GFX Mode** button shows the current state (**Auto** or **Manual**):

- **Auto** — Graphics are taken to air when the preview is taken to air. During the transition between shots, the graphic moves out, the new shot appears, and the updated graphic moves in.
- **Manual** — Graphics are taken on or off air only when you tap the **CG In/Out** button. When a shot goes on air, the graphic is not present until you tap the **CG In/Out** button.

**Tip:** If you require rapid transitions between shots, switch to manual mode.

3. When you are ready to send the shot to air, tap the **TAKE** button.

The shot goes to air. If **GFX Mode** is set to **Auto**, the graphics also appear on-air.

4. If you want to take the graphics on or off air at any time, tap the **CG In/Out** button.

## Adjusting the Camera Position, Using the LCS

You can use the **Camera Controls** window to adjust the pan, tilt, zoom, focus, and iris positions of a camera shot. Before you can adjust the shot, it must be visible in the **Program** pane, the **Preview** pane, or an **Alternate Preview** pane.

### To adjust the camera position:

1. Double-tap the video pane for the camera shot you want to adjust.

The **Camera Controls** window appears.

**Tip:** The video panes are across the top of the **Mark Layout** view. They include the **Preview** pane, two **Alternate Preview** panes, and the **Program** pane.

2. If you want to adjust the direction the camera is pointing, use the green arrow buttons (**Zoom In**, **Tilt Up**, **Zoom Out**, **Pan Left**, **Tilt Down**, and **Pan Right**):
  - If you are using a mouse, click and hold the button until the camera is in the desired position.
  - If you are using a touch screen, rapidly double-tap and hold the button until the camera is in the desired position. Note that if you double-tap too slowly, the system may interpret it as a right-click, and the camera moves as far as possible in the direction indicated by the button.
3. If you want to manually adjust the focus or iris, use the **FOCUS Far** and **Near** buttons. Using the **FOCUS** controls turns off automatic focus. Tap once to move the focus slightly. To move the focus further, rapidly double-tap and hold the button until the camera is in the desired position.
4. If you want to manually adjust the lens iris, use the **IRIS Open** and **Close** buttons. Using the **IRIS** controls turns off automatic iris. To move the iris further, rapidly double-tap and hold the button until the camera is in the desired position.
5. If you want to revert back to the original shot, tap the **Recall Preset** button.
6. If you want to replace the original shot with the current camera settings, tap the **Store Preset** button.
7. If you want to adjust another shot, make it visible in one of the video panes across the top of the **Mark Layout** view, and then tap it.

Alternatively, you can tap the corresponding selection button at the top of the **Camera Controls** window.

**Tip:** In the **Camera Controls** window, the selection button for the shot currently being adjusted has a blue background.

8. If you want to adjust advanced camera settings, tap the **Advanced** button in the bottom left corner of the **Camera Controls** window.

A separate camera control panel appears. It includes controls that enable you to view and adjust advanced camera settings. For more information, see the *LCS Commissioning Guide (4500DR-002)*.

9. When you are finished adjusting cameras, click the **Close** button.

# Editing Representative Data

This chapter explains how to edit representative data including names, districts, portfolios, parties, and seat positions. You can also update representative photos.

This chapter includes the following sections:

- “**Editing Representative Data**” on page 4–1
- “**Updating Representative Photos**” on page 4–2
- “**Moving a Representative to a Different Seat Position**” on page 4–3
- “**Adding, Deleting, or Renaming Parties**” on page 4–3

**Note:** For information about changing other configuration settings, see “**Configuration Interface**” on page 2–2, or see the *LCS Commissioning Guide (4500DR-002)*.

## Editing Representative Data

This section describes how to edit representative data.

### To edit representative data:

1. In the LCS panel, tap the **Config** button.
2. On the **Representatives** tab, edit the following data as required:
  - **First Name** — Specify the first name of the representative.  
This name appears in the Seat Layout and Mark Layout views, and in on-air graphics.
  - **Last Name** — Specify the last name of the representative.  
This name appears in the Seat Layout and Mark Layout views, and in on-air graphics.
  - **District ID** — Specify the district identifier (if any) for the representative.  
This ID appears in the Seat Layout and Mark Layout views, and in on-air graphics.
  - **District Name** — Specify the district name for the representative.  
This name appears in the Seat Layout and Mark Layout views, and in on-air graphics.
  - **Party** — Select a party for the representative.  
**Tip:** If the representative’s party is not listed, see “**Adding, Deleting, or Renaming Parties**” on page 4–3.
3. In the **Portfolios** area, edit the representative’s portfolio(s) as required:
  - **To add a portfolio**, type the name of the portfolio in the box at the bottom of the **Portfolios** area, and then tap the **Add** button.
  - **To rename a portfolio**, double-tap the portfolio name in the list, and then type the new portfolio name.
  - **To delete a portfolio**, tap the portfolio in the list, and then tap the **Delete** button.
4. Tap the **Save Changes** button.

## Updating Representative Photos

The LCS user interface displays up to two photos for each representative:

- The **Image** photo appears in the **Representative Info** area of the **Seat Layout** view and the **Mark Layout** view.
- The **Head Shot** photo appears as an icon on the **Seat Layout** view. It indicates the representative's position in the legislative chamber.

**Note:** Neither type of photo is used in on-air graphics.

The photos are stored on the DashBoard LCS computer, in the **Images/Photos** folder. They must be either **.png** or **.jpg** format. DashBoard automatically resizes photos to fit, but to avoid image distortion it's important to maintain the correct ratio of height to width:

- For LCS systems that use the **Mark Layout** view, the **Image** photo area is **155 pixels wide by 284 pixels high**.
- For LCS systems that use the **Seat Layout** view, the **Image** photo area is **100 pixels wide by 452 pixels high**. The **Head Shot** photo area is **70 pixels wide by 85 pixels high**.

### To replace an image or head shot photo:

1. Create the new photo and save it in the **Images/Photos** folder.
2. In the LCS panel, tap the **Config** button.
3. On the **Representatives** tab, select the representative whose photo you want to replace.
4. In the **Representative Info** area, in the box below the photo you are replacing, do one of the following:
  - If the new photo has a different file name, replace it with the new file name.
  - If the new photo has the same file name, do the following:
    - › Delete the name so the box is empty.
    - › Tap **Save Changes**.
    - › Select the representative again.
    - › Type the file name in the box.
5. Tap **Save Changes**.

## Moving a Representative to a Different Seat Position

Your LCS panel is configured to use one of two layout views, either **Seat Layout** or **Mark Layout**. The layout views show the location of each representative. The Seat Layout view shows photo icons of the representatives. The Mark Layout view shows star icons to indicate where representatives sit.

In LCS configuration, each representative has a **Representative Key** number, which is mapped to a mark. The marks are XY positions on the layout.

By editing the mappings between marks and representatives, you can effectively move representatives to different seat positions.

### To move a representative to a different seat position:

1. In the LCS panel, tap the **Config** button.
2. On the **Representatives** tab, find the representative you want to move, and note their **Representative Key** number.
3. Do one of the following:
  - If your LCS panel uses the **Mark Layout** view, tap the **Mark Layout** button and then note the mark number of the destination seat. This is the **Mark Key**.
  - If your LCS panel uses the **Seat Layout** view, tap the **Seat Layout** button and then note the name of the representative currently in the destination seat. This is the representative you are going to displace. Tap the **Config** button, and then on the **Representatives** tab, locate that representative's name in the list, and note their **Representative Key** number.
4. Tap the **Config** button.
5. On the **Maps** tab, scroll through the list until a mapping appears that includes the **Mark Key** or **Representative Key** you noted in **Step 3**.

**Tip:** If the representative you are displacing is moving to a different seat, note their representative key to avoid losing track of them.
6. Change the **Representative Key** to the key number for the representative you want to move.
7. Tap the **Save Changes** button.

## Adding, Deleting, or Renaming Parties

You can add, delete, or rename parties.

### To add, delete, or rename a party:

1. In the LCS panel, tap the **Config** button.
2. On the **General** tab, do one of the following:
  - **To rename a party**, double-tap the party name in the list, and then type the new party name.
  - **To add a party**, type the name of the party in the box at the bottom of the **Parties** area, and then tap the **Add** button.
  - **To delete a party**, tap the party in the list, and then tap the **Delete** button.
3. Tap the **Save Changes** button.



# Upgrading LCS Panel Software

This chapter describes how to upgrade LCS panel software while preserving data specific to your LCS panel(s).

The new LCS panel software is delivered as a compressed zip archive file.

**Note:** If the LCS is used for multiple types of events, there are multiple sets of LCS panel files, each of which must be upgraded.

## **To upgrade the LCS panel:**

1. On the LCS computer, create a backup copy of your current LCS installation folder (typically, **C:\LCS**).
2. Open the new **LCS zip file** to display the contents of the archive.
3. Copy the **LCS.grid** file and the **LCS.xml** file to **c:\LCS**. Agree to replace the destination files when prompted.
4. Copy the folder **\LCS\Images\Photos** to **c:\LCS\Images\Panel**. Agree to replace the destination files when prompted.

