Legislative Control System User Guide

Version 2.2

www.rossvideo.com

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Production Technology Experts

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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*.

David Ross
CEO, Ross Video
dross@rossvideo.com

Ross Video Code of Ethics

Any company is the sum total of the people that make things happen. At Ross, our employees are a special group. Our employees truly care about doing a great job and delivering a high quality customer experience every day. This code of ethics hangs on the wall of all Ross Video locations to guide our behavior:

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-001-2.2**
- Release Date: February 27, 2015.
- Software Issue: **2.2**

The information contained in this Guide is subject to change without notice or obligation.

Copyright

Patents

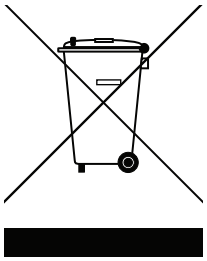
Ross Video products are protected by patent numbers US 7,034,886; US 7,508,455; US 7,602,446; US 7,802,802 B2; US 7,834,886; US 7,914,332; US 8,307,284; US 8,407,374 B2; US 8,499,019 B2; US 8,519,949 B2; US 8,743,292 B2; GB 2,419,119 B; GB 2,447,380 B. Other patents pending.

Environmental Information

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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Contents

Introduction

This chapter contains the following sections:

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
- **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

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 a configuration interface plus two layout views for operating the system.

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.

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. For more information about the configuration interface, see "**Configuration Interface**" on page 2–7.

Layout Views

Each LCS panel is configured to use either the **Seat Layout** view or the **Mark Layout** view. Both layouts consist of a photo or diagram of your legislature, showing the positions of representative, podiums, etc. Both layouts enable you to easily select camera shots and take them to air, along with graphics complete with representative data.

- **Seat Layout** — This layout is designed for simple operation and offers a larger view of the legislative chamber. For more information about the Seat Layout view, see "**Seat Layout View**" on page 2–2.
- **Mark Layout** — This layout is designed for flexibility, and is especially useful in legislatures with more cameras. For more information about the Mark Layout view, see "**Mark Layout View**" on page 2–4.

Tip: 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 photo or drawing of your legislature is the correct one to use. If you switch to the other layout, you'll notice that there is no background image.

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.

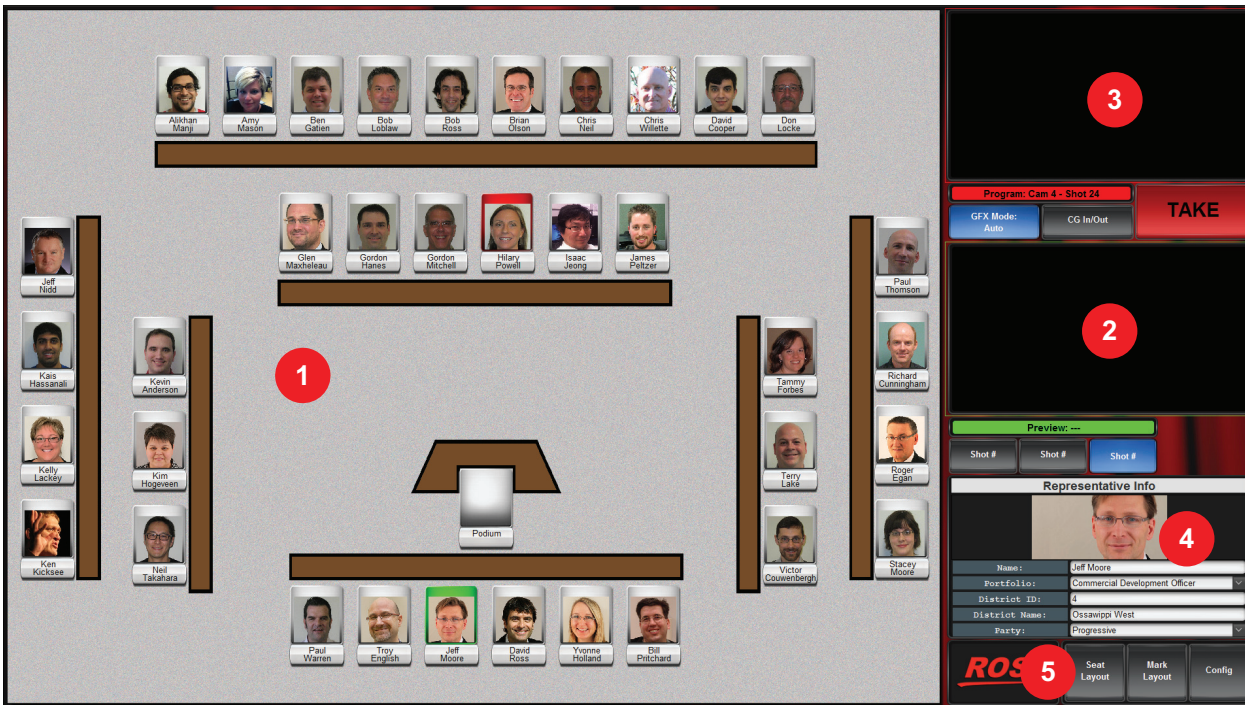


Figure 2.1 *Seat Layout View*

1	**Seat Layout** — displays a photo or diagram of the legislature, overlaid with the names and thumbnail photos of representatives (mark icons). 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. If the photo or diagram of the legislature is too big to fit on-screen, scroll bars are available.
2	**Preview pane** — displays the preview shot. Tap the shot buttons below the **Preview** pane to select a shot. Tap the **TAKE** button to take the shot to air. If you want to adjust the position of the camera shown in the **Preview** pane, use the joystick panel. For more information, see "**Using the Ross Video Joystick Panel**" on page 3–5. **Tip:** When you take a shot to air, the **Preview** pane changes to show the shot that was previously on-air. To switch back to the previous shot, tap the **TAKE** button again.
3	**Program pane** — displays the program out video. 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. **Note:** Graphics must be built properly to be used with the LCS. For more information, see the ***LCS Commissioning Guide (4500DR-002)***.
4	**Representative Info Area** — 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.
5	**Interface Selection Buttons** — use these buttons to switch between **Seat Layout** view, **Mark Layout** view, and the configuration interface (**Config**).

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. Up to four cameras, each with up to three shots, can be associated with each mark.

Figure 2.2 shows the Mark Layout view.

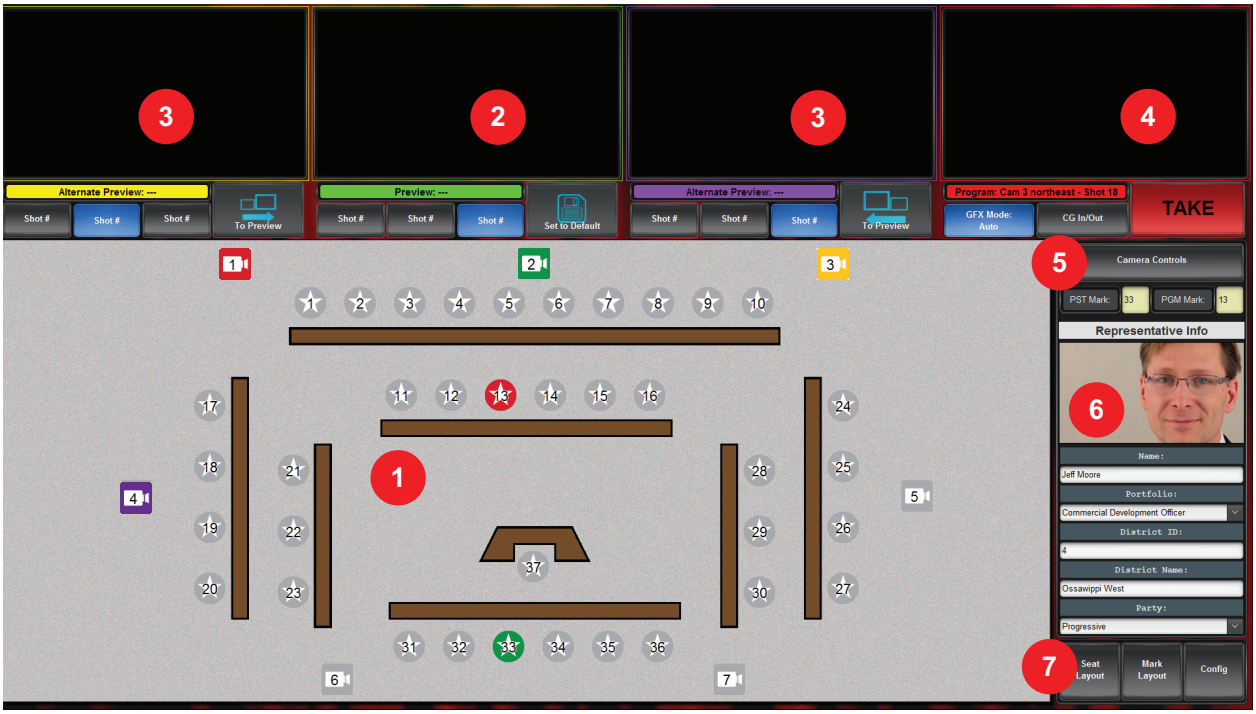


Figure 2.2 *Mark Layout View*

1	**Mark Layout** — displays a photo or map of the legislature, overlaid with mark icons and camera icons. A mark icon indicates the position of a representative, podium, etc. It can appear as a thumbnail photo or a star icon. The background of a mark 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. If the photo or diagram of the legislature is too big to fit on-screen, scroll bars are available.
2	**Preview pane** — displays the preview shot. Tap the shot buttons below the **Preview** pane to select a shot. Tap the **TAKE** button to take the shot to air. **Tip:** When you take a shot to air, the **Preview** pane changes to show the shot that was previously on-air. To switch back to the previous shot, tap the **TAKE** button again. If you want to adjust the position of the camera shown in the **Preview** pane, tap the pane and then use the joystick panel or the **Camera Controls** window. For more information, see "**Adjusting the Camera Position Using the Camera Controls Window**" on page 3–4. If you want to make the current preview shot the default shot for the current mark, tap **Set to Default**. **Tip:** On the layout, icons for the preview camera and mark have green backgrounds. The border and title background of the **Preview** pane are also green.

3	**Alternate Preview panes** — display alternative preview shots from other cameras. You can keep one shot prepared in the **Preview** pane, while using the **Alternate Preview** panes to consider other shots for preview. Use the shot buttons below the **Alternate Preview** panes to select shots. When you find a shot you want to use, tap the **To Preview** button to move the shot to the **Preview** pane. **Tip:** 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 **Alternative Preview** panes. If you want to adjust the position of a camera shown in an **Alternative Preview** pane, tap the pane and then use the joystick panel or the **Camera Controls** window. For more information, see "**Adjusting the Camera Position Using the Camera Controls Window**" on page 3–4.
4	**Program pane** — displays the program out video. 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. If you want to adjust the position of a camera shown in the **Program** pane, tap the pane and then use the joystick panel or the **Camera Controls** window. For more information, see "**Adjusting the Camera Position Using the Camera Controls Window**" on page 3–4. **Note:** Graphics must be built properly to be used with the LCS. For more information, see the ***LCS Commissioning Guide (4500DR-002)***.

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. Tap a video feed in the **Preview** pane, the **Program** pane, or one of the **Alternate Preview** panes. The **Camera Control**s window opens to show controls for the shot you tapped.

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

To control a camera:

- **Pan and Tilt** — Move the crosshairs in the **PAN & TILT** area to adjust the pan and tilt position of the camera. Alternatively, tap the **Positioner** button to reveal **PAN** and **TILT** slider handles, which can be dragged to adjust pan and tilt individually.
- **Zoom** — Drag the **ZOOM** slider handle to adjust the zoom position of the lens.
- **Focus** — Drag the **FOCUS** slider handle to adjust the focal position of the lens. When you use the **FOCUS** slider, auto focus turns off. To turn auto focus on, tap the **Auto Focus** button.
- **Iris** — Drag the **IRIS** slider handle, if present, to adjust the lens iris. The LCS does not control iris on CamBots. When you use the **IRIS** slider, auto iris turns off. To turn auto iris on, tap the A**uto Iris** button.
- Tap the **Advanced** button to open a separate camera control panel that includes advanced camera settings. For more information, see the ***LCS Commissioning Guide (4500DR-002)***.
- Tap the **Recall Preset** button to reset the camera to the position stored in the original shot.
- Tap the **Store Preset** button to record the current camera position, replacing the original shot.
- Tap the **Close** button to close the **Camera Controls** window.

6	**Representative Info Area** — 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.
7	**Interface Selection Buttons** — use these buttons to switch between **Seat Layout** view, **Mark Layout** view, and the configuration interface (**Config**).

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 positions for marks, mappings between marks and representatives, and mappings between marks and cameras used to shoot those marks. Also includes mappings between marks and delegate microphones, if applicable.
- **Mic Systems** — Connection settings for supported delegate microphone systems, if applicable. Supported delegate microphone systems can be used to automatically select preview shots and take them to air.
- **Joystick Tab** — Shows read-only raw data from the joystick panel, in real-time.

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
	Location
Body	Specify the name of the legislative assembly.
Country	Specify the nation where the legislative assembly is located.
State	Specify the state, province, territory, or region where the legislative assembly is located.
	Images
Seat Layout Background	If you want the panel to use the **Seat Layout** view, specify the filename of the background image. Background images are stored on the DashBoard LCS computer, in the **Images/Photos** folder. The image must be either .png or .jpg format. If the background image is larger than the screen space alloted to display it, scroll bars appear so you can access the entire chamber. Note the pixel height and width of the image. When you position marks in the layout, the locations are specified as X-Y pixel values.
Mark Layout Background	If you want the panel to use the **Mark Layout** view, specify the filename of the background image. Background images are stored on the DashBoard LCS computer, in the **Images/Photos** folder. The image must be either .png or .jpg format. If the background image is larger than the screen space alloted to display it, scroll bars appear so you can access the entire chamber. Note the pixel height and width of the image. When you position marks in the layout, the locations are specified as X-Y pixel values.
	Parties
Party Key	Displays the numeric identifier for the party.
Party Name	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.
Add button	Creates a new party. To create a party, type the name of the party in the box beside the **Add** button, and then tap the **Add** button.
Delete button	Deletes the currently-selected party.
	Other Buttons
Reload Data	Discards any unsaved changes and reverts to previous values.
Save Changes	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.

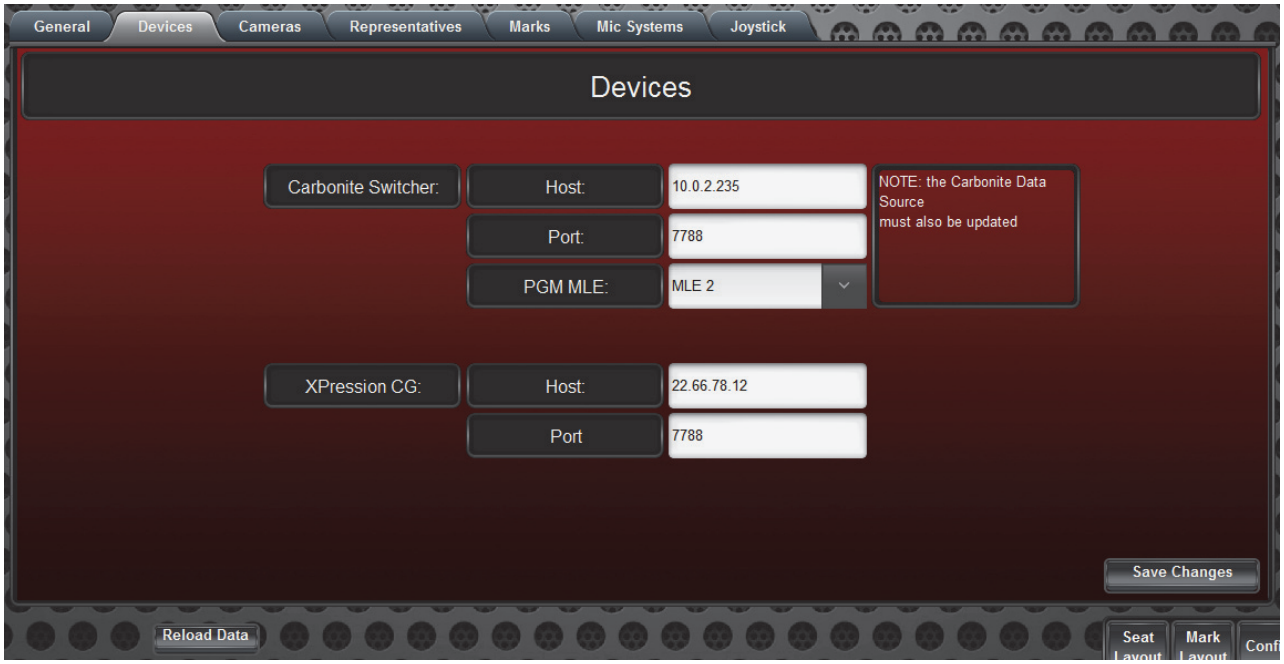


***Figure 2.4** Devices Configuration Tab*

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

Setting or Button	Description
Carbonite Switcher	
Host	Specify the Host IP address for the Carbonite switcher.
Port	Specify the communication Port number for the Carbonite switcher.
PGM MLE	Specify the ME (multi-layer effects) bus to be used as the program ME.
XPression CG	
Host	Specify the Host IP address for the XPression graphics system.
Port	Specify the communication Port number for the XPression graphics system. The default port for rosstalk communication is `7788`.
Other Buttons	
Reload Data	Discards any unsaved changes and reverts to previous values.
Save Changes	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.

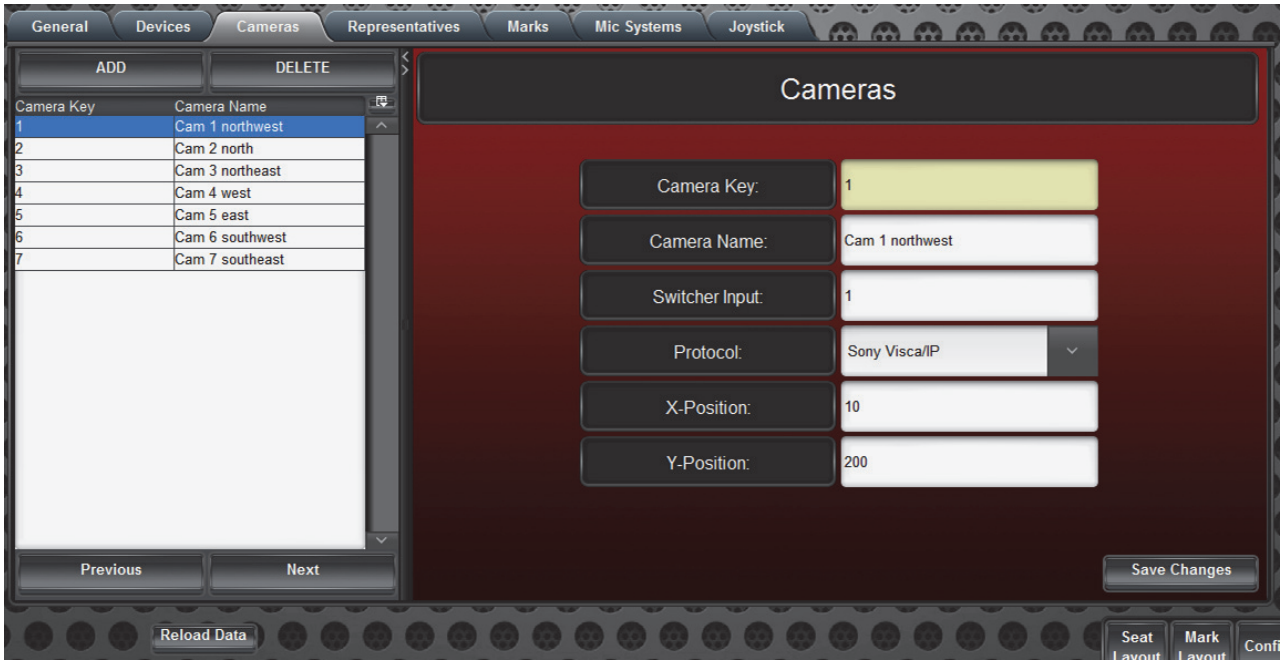


***Figure 2.5** Cameras Configuration Tab*

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

Setting or Button	Description
Camera List Area (left side of tab)	
Camera Key	Displays the numeric identifier for the camera. Tap a camera key to show and configure the properties of the camera. **IMPORTANT:** If you configure the properties of a camera, save the changes before you select a different camera. Otherwise, your changes are lost.
Camera Name	Displays the name of the camera. Tap a camera name to show and edit the properties of the camera. **IMPORTANT:** If you configure the properties of a camera, save the changes before you select a different camera. Otherwise, your changes are lost.
ADD button	Adds a new camera to the list.
DELETE button	Deletes the currently-selected camera from the list. The currently-selected camera is indicated by a blue background.
Previous button	Moves up to the previous camera in the list. **IMPORTANT:** If you configure the properties of a camera, save the changes before you select a different camera. Otherwise, your changes are lost.
Next button	Moves down to the next camera in the list. **IMPORTANT:** 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)	
Camera Key	Displays the numeric identifier for the camera. When you tap a key in the list, the **Cameras** area displays settings for that camera.

Setting or Button	Description
Camera Name	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 **Cameras** area displays settings for that camera.
Switcher Input	Specify the switcher crosspoint with which the camera is associated.
Protocol	Select the camera type from the list.
X-Position	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.
Y-Position	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	
Reload Data	Discards any unsaved changes and reverts to previous values.
Save Changes	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.

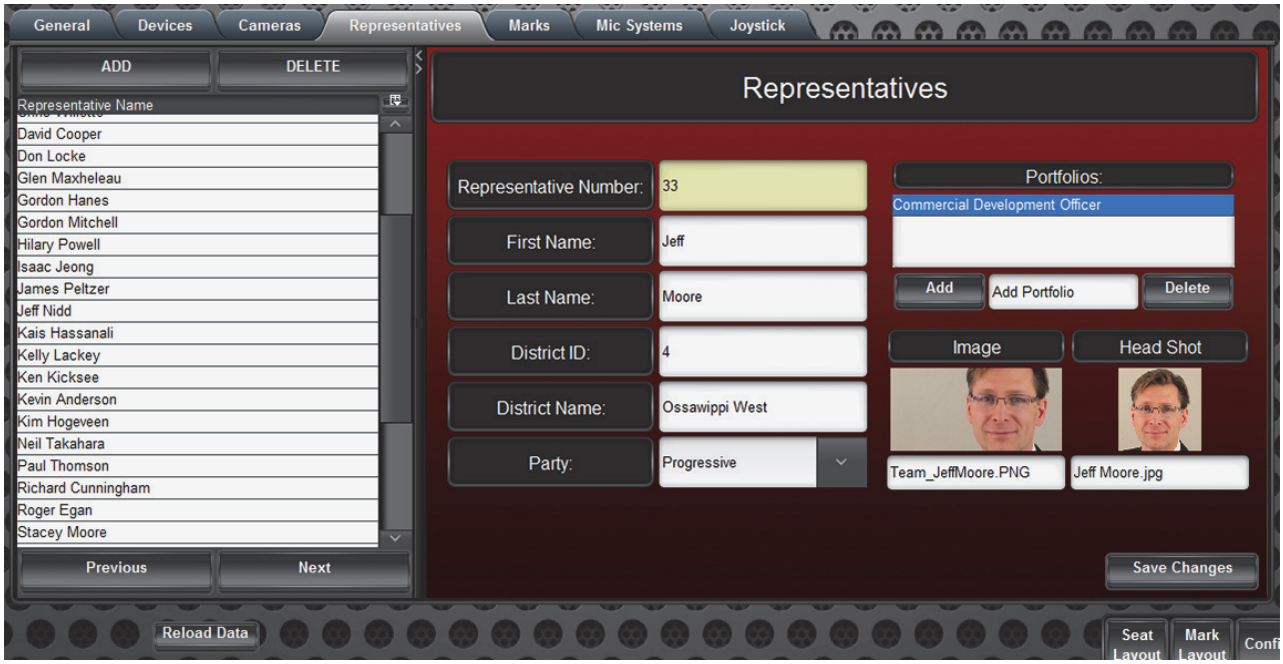


***Figure 2.6** Representatives Configuration Tab*

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

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

Setting or Button	Description
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 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.
Party	Select a party for the representative. Parties are defined on the **General** configuration tab.
Portfolios list	Lists all portfolios for the representative. Tap a portfolio name to edit it.
Add button	Adds a portfolio to the list for this representative.
Delete button	Deletes the selected portfolio from the list for the representative. The selected portfolio is indicated by a blue background.
Image	Specify the filename of the representative's photo. This image is used in the **Representative Info** 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 **Images/Photos** 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: • 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.
Head Shot	Specify the filename of the representative's head shot photo. This photo is used in icons in the Seat Layout view. It is not used in on-air graphics. Head shot photos are stored on the DashBoard LCS computer, in the **Images/Photos** folder. The photos must be either .png or .jpg format. If necessary, DashBoard automatically shrinks photos to fit within the mark size you specify on the **Marks** tab. For best performance and a consistent visual appearance, make all the images the same size, and keep them small. A typical size might be 70 pixels wide by 85 pixels high.
Other Buttons	
Save Changes	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.
Reload Data	Discards any unsaved changes and reverts to previous values.

Marks Tab

Figure 2.7 shows the Marks tab.

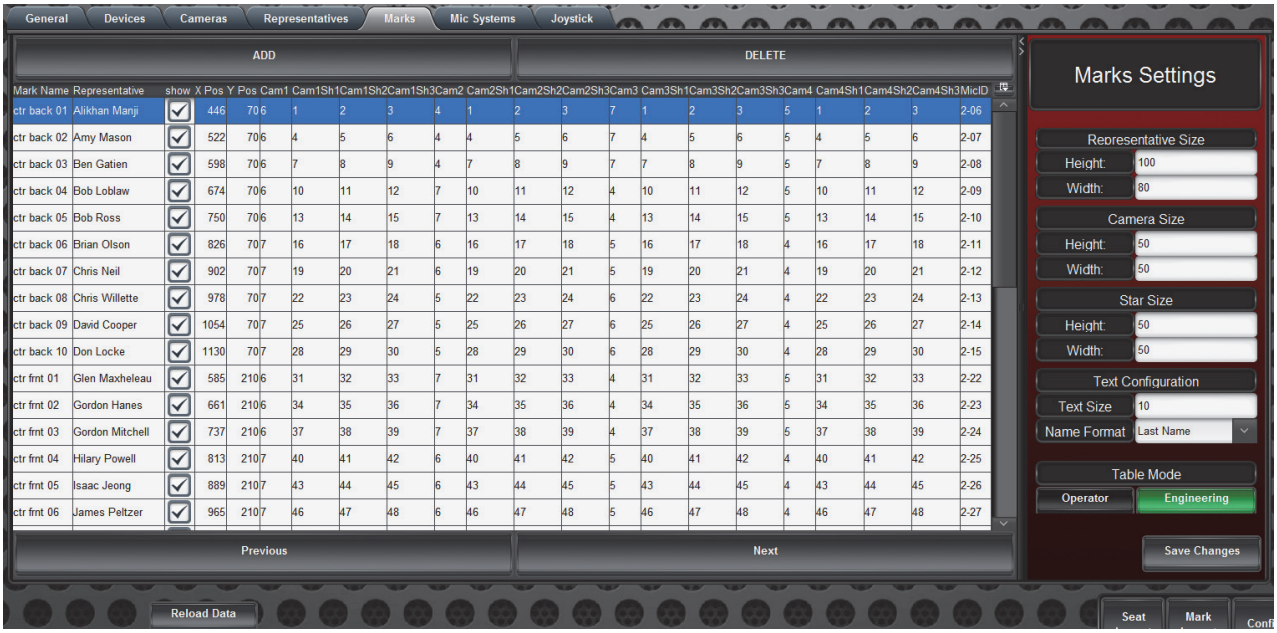


***Figure 2.7** Marks Configuration Tab*

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

Setting or Button	Description
Marks Table Area (left side of tab)	
ADD button	Adds a new mark to the list.
DELETE button	Deletes the selected mark from the list. The selected mark is indicated by a blue background.
Mark Name	Specify a name for the mark. This is optional. **Tip:** The name should reflect the location or purpose of the mark.
Representative	From the list, select a representative associated with the mark. Data associated with the representative is made available to on-air graphics. **Tip:** If there is no representative for the mark location, select the blank entry. Blank marks are shown as stars on the Mark Layout view but are not shown on the Seat Layout view.
show	Sets the appearance of marks in the Mark Layout view: • When selected, marks appear as head shot photos of the representatives. • When cleared, marks appear as stars. **Note:** Applies only to Mark Layout view. In Seat Layout view, marks are always shown as head shot photos.
X-Pos	Specify the horizontal position of the mark on the layout view, in pixels. A value of zero positions the mark at the far left side. Tip: The **X-Pos** and **Y-Pos** values position the top left pixel of the mark.
Y-Pos	Specify the vertical position of the mark on the layout view, in pixels. A value of zero positions the mark at the top. The **X-Pos** and **Y-Pos** values position the top left pixel of the mark.

Setting or Button	Description
Cam1 **Cam2** **Cam3** **Cam4**	Specify the cameras to use for the mark. There are four camera columns: **Cam1**, **Cam2**, **Cam3**, and **Cam4**. **Cam1** is the default camera. If it is unavailable, the next camera is used.
Cam1sh1 **Cam1sh2** **Cam1sh3** **Cam2sh1** **Cam2sh2** **...** **Cam4sh3**	Specify shot numbers for the mark. For Camera 1, **Cam1sh1** is the default shot. The other Camera 1 shots are available as alternatives. **IMPORTANT:** Ensure that shot 1 is specified for each camera to be used for shooting the mark. For example, if using two cameras for the mark, specify shots for **Cam1sh1** and **Cam2sh1**. These "shot 1s" are the default shots for the cameras, and must be present for the system to work properly.
Mic ID	Applies only to systems that use a delegate microphone system to select previews and/or trigger video transitions. Maps the mark to a microphone. When the microphone is activated, the mark is selected. Type the string that the microphone system sends when the microphone at the mark location is activated.
Previous button	Moves up to the previous mark in the list.
Next button	Moves down to the next mark in the list.
Marks Settings Area (right side of tab)	
Mark Size	Specify the height and width of the mark icons, in pixels. **Tip:** If your LCS panel uses head shot photos, set the **Mark Size** to match the size of the photos.
Camera Size	If your LCS panel uses the Mark Layout view, specify the size of the camera icons, in pixels. Camera icons show the position of cameras on the Mark Layout view.
Star Size	If your LCS panel uses the Mark Layout view and uses star icons for marks, specify the size of the star icons, in pixels.
Text Configuration	Set the following text properties: • **Text Size** — Specify the text size. • **Name Format** — Specify how the representative's name is displayed below the mark.
Table Mode	Tap the buttons to toggle between display modes for the marks table: • **Operator** — Shows only the **Mark Name** and **Representative** columns. This mode is used by operators to quickly assign representatives to marks. • **Engineering** — Shows all columns. This mode is used for initial configuration of marks, including mark positions and camera shots.
Other Buttons	
Save Changes	Tap this button to save and apply all changes made on the **Marks** tab.
Reload Data	Discards any unsaved changes and reverts to previous values.

Mic Systems Tab

Figure 2.8 shows the Mic Systems tab.

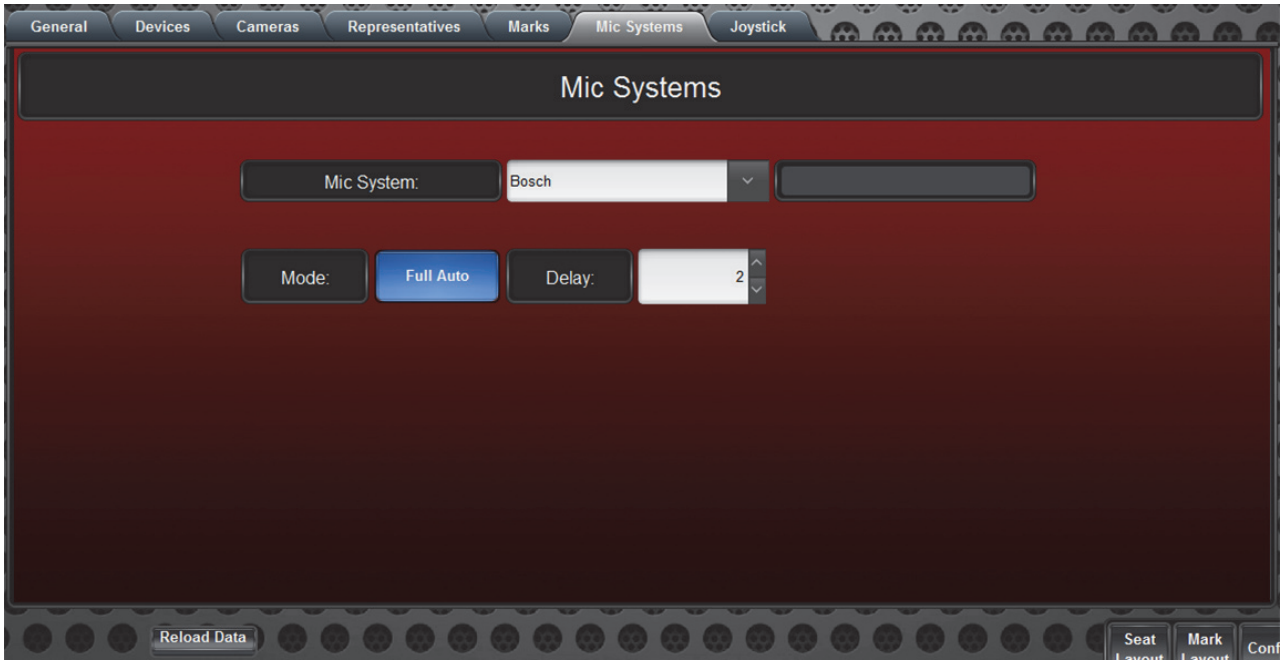


***Figure 2.8** Mic Systems Tab*

The **Mic Systems** tab includes the following settings and buttons:

Setting or Button	Description
	Mic Systems Area
Mic System	Select the type of delegate microphone system to be used for selecting previews and/or triggering video transitions: • **None** — Select this option if you want to select previews manually. • **IRC** — Select this option if you have an International Roll Call (IRC) delegate microphone system. • **Bosch** — Select this option if you have a Bosch delegate microphone system. If you have a Bosch system, select an operating mode: • **Semi-Auto** — The Bosch system selects preview shots, but an operator must take them to air. • **Full Auto** — The Bosch system selects a preview shot and takes it to air. No operator is required. When a microphone goes live, the system pauses for the number of seconds specified in the **Delay** box before taking the preview shot to air. **IMPORTANT:** Set the delay to be longer than the longest shot recall. If a shot recall takes longer than the delay, the camera may still be moving when the shot goes to air.
	Other Buttons
Reload Data	Discards any unsaved changes and reverts to previous values.

Joystick Tab

Figure 2.8 shows the Joystick tab.

Figure 2.9 *- Joystick Tab*

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

Setting or Button	Description
Joystick Area	
Joystick Pan:	Shows raw pan position data from the joystick, in real time.
Joystick Tilt:	Shows raw tilt position data from the joystick, in real time.
Joystick Zoom:	Shows raw zoom position data from the joystick, in real time.
Joystick Focus:	Shows raw focus position data from the joystick, in real time.
Other Buttons	
Reload Data	Discards any unsaved changes and reverts to previous values.

Operating the LCS

This chapter explains how to start and operate the Legislative Control System (LCS) during a broadcast. The following subjects are included:

Note: If your system includes a Bosch delegate microphone system that will be used to select previews and take them to air automatically, no LCS operator is required.

Understanding LCS Layout Views

Your LCS panel is configured to use either the **Seat Layout** view or the **Mark Layout** view. Both layouts consist of a photo or diagram of your legislature, showing the positions of representative, podiums, etc. Both layouts enable you to easily select camera shots and take them to air, along with graphics complete with representative data.

- **Seat Layout** — This layout is designed for simple operation and offers a larger view of the legislative chamber. For more information about the Seat Layout view, see "**Seat Layout View**" on page 2–2.
- **Mark Layout** — This layout is designed for flexibility, and is especially useful in legislatures with more cameras. For more information about the Mark Layout view, see "**Mark Layout View**" on page 2–4.

Tip: 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 photo or drawing of your legislature is the correct one to use. If you switch to the other layout, you'll notice that there is no background image.

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 all-in-one computer.
   - IP network equipment (network switch)
   - IRC Delegate system (if present)
   - Other accessories (if present)
2. If your system includes a Ross Video joystick panel, on the DashBoard LCS computer, in the **C:\Cambotics** folder, start **masterpanel1.exe**.
3. Start DashBoard.
4. In DashBoard, open the panel file for your legislature, plus the panel file(s) corresponding to the type(s) of camera(s) your LCS panel uses.

   Tip: When DashBoard starts, it automatically opens all panels that were open when it was last shut down.
5. On the keyboard, press **SHIFT+F11** to display the LCS panel in full-screen mode.
6. 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:

Tip: Representatives are mapped to seats (marks). If a representative moves to a different seat during proceedings, you can quickly change the mapping. For more information, see "**Moving a Representative to a Different Mark**" on page 4–2,

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. If you want to adjust the shot, do one of the following:

   - Use the Ross Video joystick panel.

     By default, the joystick panel controls the camera shown in the **Preview** pane. If you want to adjust a camera shown in an **Alternate Preview** pane or the **Program** pane, tap the corresponding video pane and then use the joystick.

     For more information about using the Ross Video joystick panel, see "**Using the Ross Video Joystick Panel**" on page 3–5.

   - Use the joystick control console that came with your camera system.

4. 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 2–12.

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:

Tip: Representatives are mapped to seats (marks). If a representative moves to a different seat during proceedings, you can quickly change the mapping. For more information, see "**Moving a Representative to a Different Mark**" on page 4–2,

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 reposition a camera, do one of the following:

   - Use the Ross Video joystick panel.

     By default, the joystick panel controls the camera shown in the **Preview** pane. If you want to adjust a camera shown in an **Alternate Preview** pane or the **Program** pane, tap the corresponding video pane and then use the joystick.

     For more information about using the Ross Video joystick panel, see "**Using the Ross Video Joystick Panel**" on page 3–5.

   - Use the **Camera Controls** window.

     For information about using camera controls, see "**Adjusting the Camera Position Using the Camera Controls Window**" on page 3–4.

   - Use the joystick control console that came with your camera system.

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 2–12.

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 Camera Controls Window

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.

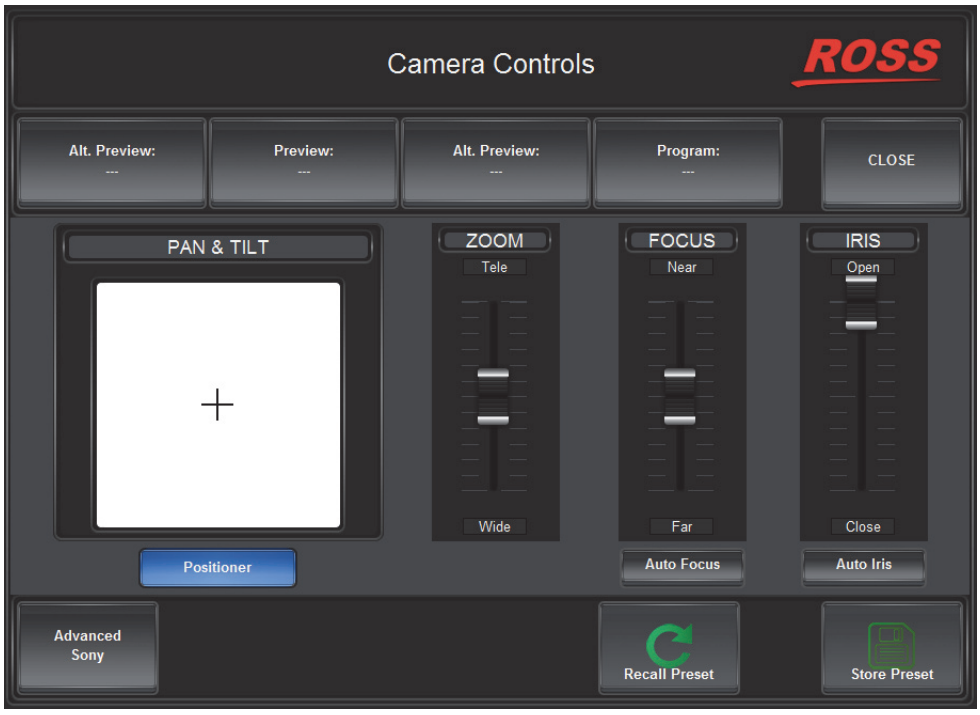
Tip: Alternatively, you can use the joystick panel to reposition cameras. For more information, see "**Using the Ross Video Joystick Panel**" on page 3–5.

To adjust the camera position:

1. 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. To pan and/or tilt, move the crosshairs in the **PAN & TILT** area. Alternatively, you can tap the **Position** button to reveal the **PAN** and **TILT** slider handles, which can be dragged to adjust pan and tilt individually.
3. To zoom, drag the **ZOOM** slider handle to adjust the zoom position of the lens.
4. To focus, drag the **FOCUS** slider handle to adjust the focal position of the lens.

   Note: When you use the **FOCUS** slider, auto focus turns off. To turn auto focus on, tap the **Auto Focus** button.
5. To adjust the iris, drag the **IRIS** slider handle, if present.

   Note: The LCS does not control iris on CamBots.

   Note: When you use the **IRIS** slider, auto iris turns off. To turn auto iris on, tap the **Auto Iris** button.
6. To access a separate camera control panel that includes advanced camera settings, tap the **Advanced** button.
7. To reset the camera to the position stored in the original shot, tap the **Recall Preset** button.
8. To record the current camera position, replacing the original shot, tap the **Store Preset** button.
9. To close the **Camera Controls** window, tap the **Close** button.

Using the Ross Video Joystick Panel

You can use the Ross Video joystick panel to adjust the position of a camera in four axes: pan, tilt, zoom, and focus. The joystick panel does not include iris control.

Figure 3.1 shows the Ross Video joystick panel.

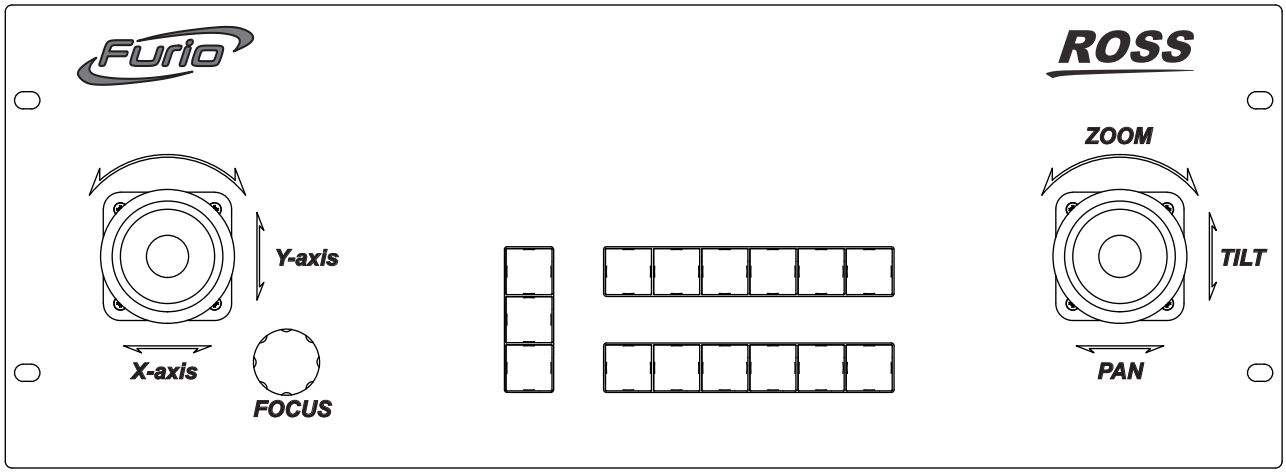


Figure 3.1 *- Ross Video Joystick Panel*

Selecting a Camera to Control

By default, the Ross Video joystick panel controls whatever camera is shown in the **Preview** pane of the LCS panel.

If your LCS panel uses the **Mark Layout** view and you want to control a camera shown in an **Alternative Preview** pane or the **Program** pane, tap the corresponding video pane and then use the joystick.

Alternatively, you can select a camera by pressing the corresponding camera button on the Ross Video joystick panel. When you select a camera, the button turns either red or green. Red indicates that the camera is currently on-air.

Figure 3.2 shows the camera selection buttons.

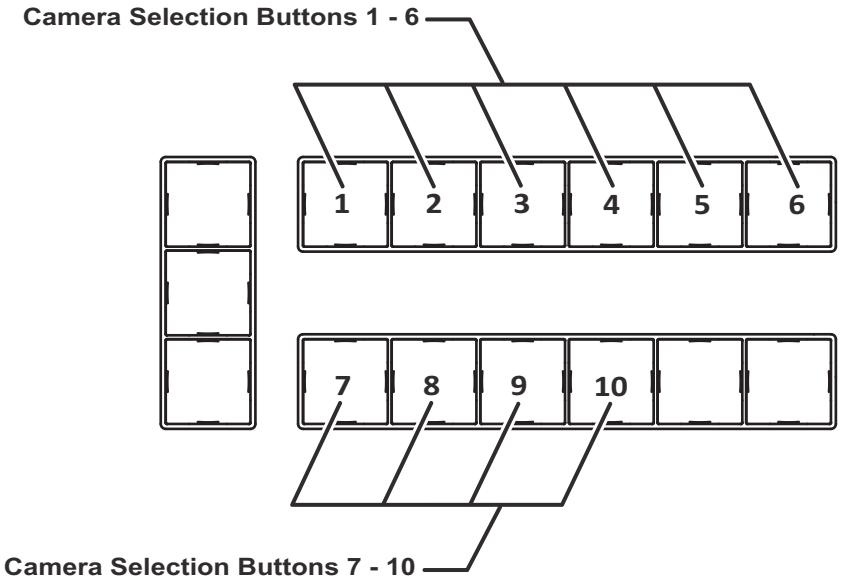


Figure 3.2 *- Camera Selection Buttons*

Adjusting Camera Position

You can use the joystick panel to adjust the following axes:

- **Pan** — Push the right joystick right and left.
- **Tilt** — Push the right joystick forward and backward.
- **Zoom** — Rotate the right joystick.
- **Focus** — Turn the **FOCUS** knob.

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:

Note: For information about changing other configuration settings, refer to 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**, 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/Photo**s 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 Mark

1. Find the mark to which you want to move the representative (destination mark):
   - If your LCS panel uses **Mark Layout** view, note the name of the representative at the destination mark.

     If the destination mark is a star and does not have a representative name, it is a blank mark. Note the text on the mark. This text is the mark name.
   - If your LCS panel uses **Seat Layout** view — Note the name of the representative at the destination mark.

     If the destination mark is not visible, there is no representative currently associated with it. It is a blank mark. Tap the **Mark Layout** button, find the mark, and note the text on the mark. This text is the mark name.
2. Tap the **Config** button.
3. On the **Marks** tab, tap the **Operator** button and then in the list find the mark entry for the destination mark:
   - If you noted a representative name in **Step 1**, find the name in the **Representative** column.
   - If you noted a mark name in **Step 1**, find the mark name in the **Mark Name** column.
4. In the **Representative** box for the destination mark, select the name of the new representative.
5. If the new representative was already associated with a different mark, you can remove them from that mark by replacing them with a different representative or a blank entry. This is optional.
6. When you are finished mapping representatives to marks, tap the **Save Changes** button to apply your changes.

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**, 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 the installation folder (typically, **C:\LCS**).

   Agree to replace the destination files when prompted.
4. Copy all files from the folder **\LCS\Images\Panel**, and paste them into the **Images\Panel** folder in your installation location (typically **C:\LCS\Images\Panel**).

   Agree to replace the destination files when prompted.