

# *DashBoard*

## **User Manual for PT Head Control Plugin**

for DashBoard v9.2.2 (or higher)

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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).



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# User Manual for PT Head Control Plugin

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# Introduction

This chapter contains the following sections:

- “**Overview**” on [page 7](#)
- “**Documentation Conventions**” on [page 7](#)
- “**Contacting Technical Support**” on [page 8](#)

## Overview

The PT Head Control Plugin is a DashBoard application that enables you to control supported robotic Pan & Tilt heads (PT heads). You can control PT heads manually, and store and recall presets.

In addition to performing pan and tilt motions, the DashBoard PT Head Control Plugin enables you to control lens and camera functions such as zoom, focus, iris, and paint settings.

This manual describes how to set up your system for use with the PT Head Control Plugin.

## Documentation Conventions

Special text formats are used in this manual 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:

On the **Manage Deleted Presets** page, tap the **ALL BANKS** tab to view all deleted presets.

### 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-Typed Text

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

In the **File Name** box, type `Channel102.property`.

### Referenced Guides

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

***User Manual for PT Head Control Plugin (8351DR-019-xx)***

### 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**.

# 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
- **Toll-Free Technical Support:** 1-844-652-0645 (North America) or +800 1005 0100 (International)
- **After Hours Emergency:** (+1) 613-349-0006
- **E-mail:** techsupport@rossvideo.com
- **Website:** <http://www.rossvideo.com>



# System Setup

This section describes how to set up a PT Head Control system.

Complete the following setup tasks, in the order presented:

- “**Install and Configure Ross Video PT Heads**” on [page 9](#)
- “**Install and Configure Cameras**” on [page 9](#)
- “**Install DashBoard Software**” on [page 11](#)
- “**Add Ross Video PT Heads to DashBoard**” on [page 11](#)
- “**Link Camera Controls to the PT Head Control interface**” on [page 12](#)

## Install and Configure Ross Video PT Heads

Before you can use the PT Head Control Plugin to control Ross Video pan & tilt heads and cameras mounted to them, the heads must be mounted, cabled, configured, and turned on.

Configure each PT head to have a unique IP addresses. All PT heads must be accessible by the PT Head Control computer over the IP network.

For information about how to install and configure Ross Video PT heads, contact Technical Support.

**Note:** While Furio and X-series heads can communicate with Dashboard directly, CamBot heads require the CamBot Translation service, which typically runs on a Robotics Server, to communicate with Dashboard. For more information, contact Technical Support.

## Install and Configure Cameras

In addition to controlling head movements (pan and tilt), the PT Head Control Plugin can control lens functions (focus, zoom, and iris). Connect lens control cables directly to the PT head.

If a camera can be controlled by DashBoard, the PT Head Control interface can control camera functions such as paint and on-screen menu settings, as an alternative to using the default DashBoard interface for the camera. DashBoard connects to the camera over the IP network.

This section includes instructions about how to install and configure your DashBoard-controllable camera system for integration with the PT Head Control interface.

Topics in this section include:

- “**Install and Configure Ross Video ACID Cameras**” on [page 9](#)
- “**Install and Configure Panasonic Cameras**” on [page 10](#)
- “**Install and Configure Sony Cameras**” on [page 10](#)

## Install and Configure Ross Video ACID Cameras

This section applies only if your system includes Ross Video ACID cameras.

**Note:** If you plan to control ACID cameras from a different workstation, or from multiple workstations, you must access them through a DashBoard proxy server. For more information about configuring a proxy server in DashBoard, see the *DashBoard User Guide (8351DR-004-xx)*. The *User Guide* is available through the DashBoard **Help** system. In DashBoard, navigate to **Help > Help Contents**, and then use the **Search** box to find the term, “**proxy server**”.

### To install and configure each ACID camera:

1. Mount the camera on a Ross Video Pan & Tilt head.
2. Cable and configure the camera:
  - a. Connect the power cable.
  - b. Connect an Ethernet cable between the **Remote 2** port on the camera and the IP network.  
DashBoard controls all camera functions over the IP network. Cameras must be on the same network as the control computer(s).
  - c. Carefully dress all cables running to the camera and to the Pan & Tilt head. Ensure that there is enough slack to allow full robotic pan and tilt motion.
  - d. Configure the camera to have a unique IP address, using the remote control device that came with the camera. Note the new IP address for future reference.

**Tip:** For detailed information about how to perform the tasks in this step, see the User Guide for your cameras:

- ***ACIDCam AC-H200-UCHR User Guide (5000DR-100-xx)***
- ***ACIDCam AC-Z50-UCHR User Guide (5000DR-200-xx)***

These documents are available for free download from the Ross Video website, at <https://www.rossvideo.com/support/product-documentation/acidcam/>.

## Install and Configure Panasonic Cameras

This section applies only if your system includes supported Panasonic box cameras, such as model AK-HC-1500. For information about which Panasonic cameras are supported, contact Ross Video Technical Support.

Install the Panasonic cameras and then configure each of the control computers as a DashBoard Panasonic paint control workstation. After the cameras and workstations have been set up for paint control, all camera functions, including paint settings are available to the DashBoard PT Head Control Plugin.

To install and configure Panasonic cameras, follow the instructions in the ***Panasonic Paint Control Installation Guide (8351DR-008-xx)***, which is available for free download from the Ross Video website, at <https://www.rossvideo.com/support/product-documentation/ross-robotics/>.

**Note:** DashBoard control of Panasonic box cameras requires a license from Ross Video. You must purchase the license before you can configure the control workstations. One license is required per control workstation. For more information, contact Ross Video.

## Install and Configure Sony Cameras

This section applies only if your system includes supported Sony box cameras, such as Sony System 700 series. For information about which Sony cameras are supported, contact Ross Video Technical Support.

Install the Sony cameras and then configure each of the control computers as a DashBoard Sony paint control workstation. After the cameras and workstations have been set up for paint control, all camera functions, including paint settings are available to the DashBoard PT Head Control Plugin.

To install and configure Sony cameras, follow the instructions in the ***Sony Paint Control Installation Guide (8351DR-012-xx)***, which is available for free download from the Ross Video website, at <https://www.rossvideo.com/support/product-documentation/ross-robotics/>.

**Note:** DashBoard control of Sony box cameras requires a license from Ross Video. You must purchase the license before you can configure the control workstations. One license is required per control workstation. For more information, contact Ross Video.

# Install DashBoard Software

Install the latest version of the DashBoard Control System application on each control workstation computer. The PT Head Control Plugin is automatically installed as part of DashBoard.

**Note:** If your system includes supported Panasonic and/or Sony cameras, you have already installed DashBoard on all workstation computers. Proceed to the next task, “**Add Ross Video PT Heads to DashBoard**” on [page 11](#).

DashBoard and the DashBoard User Guide are available as free downloads from Ross Video. The DashBoard User Guide contains instructions for installing DashBoard. Both are available from the following location:

<http://www.rossvideo.com/control-systems/dashboard/index.html>.

## Add Ross Video PT Heads to DashBoard

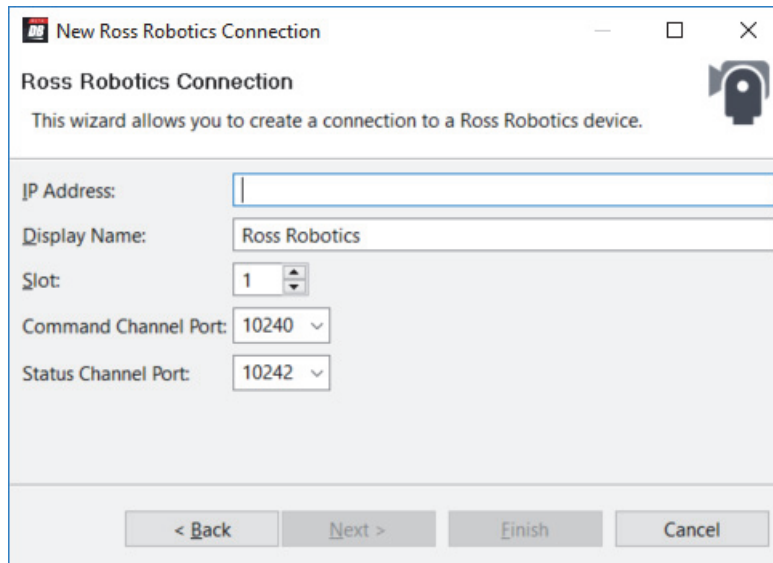
Add each Ross PT head as a device in DashBoard.

DashBoard control of Ross PT heads through the PT Head Control Plugin is free and does not require a software license.

**IMPORTANT:** To set up multiple DashBoard computers to control the same PT head, follow the instructions in this section to establish separate direct connections between each computer and the head. Use of the DashBoard proxy server to share devices is not supported.

### To add a Ross PT head:

1. On the PT Head Control computer, open DashBoard.
2. From the **File** menu, tap **New**, and then tap **Other**.  
The **New** dialog box appears.
3. Expand the **Robots** node, tap **Ross PT Head**, and then tap **Next**.  
The **New Ross Robotics Connection** dialog box appears ([Figure 1](#)).



**Figure 1** - The New Ross Robotics Connection dialog box

4. In the **IP Address** box, type the IP address required to access the PT head:
  - **For Furio and X-series heads, and CamBot XY Pedestals running Furio firmware** — Type the IP address of the head.
  - **For CamBot heads** — Type the IP address of the computer running the CamBot Translation service (typically a Robotics Server).
5. In the **Display Name** box, type the name of the PT head, as you want it to appear in DashBoard.
6. In the **Slot** box, select or type a slot number (1 or higher) to specify the order in which the PT head is to be listed in the DashBoard tree.
 

**Tip:** If you do not specify a slot number, or if you specify one that is already in use, the PT head is assigned the lowest available slot number.
7. If you are adding a CamBot head, set the **Command Channel Port** and the **Status Channel Port** to those assigned to the robot by the CamBot Translation service, which typically runs on a Robotics Server.
8. Tap **Finish**.  
The PT head should appear in the DashBoard tree, within the **Ross Robotics** node ([Figure 2](#)).



**Figure 2** - The Ross Robotics node of the DashBoard tree

9. If the PT head fails to appear in the DashBoard tree, or appears with a red dot, try the following:
  - a. Ensure that power is connected to the head, and that the head is turned **ON**.
  - b. Check that the IP address you typed in **Step 4** matches the IP address of the PT head (for a Furio or X-series head), or of the computer running the CamBot Translation service, typically a Robotics Server (for a CamBot head).  
If the IP address is not correct, you must add the robot again, using the correct IP address.  
**Tip:** To view the IP address, hover the cursor over the Slot node for the robot in the DashBoard tree.
  - c. Check for a status message near the top of the PT Head Control interface.
10. In the DashBoard tree, expand the **Ross Robotics > Slot** node for the PT head you just added, and then double-tap **Remote Control**.  
The PT Head Control interface appears.

## Link Camera Controls to the PT Head Control interface

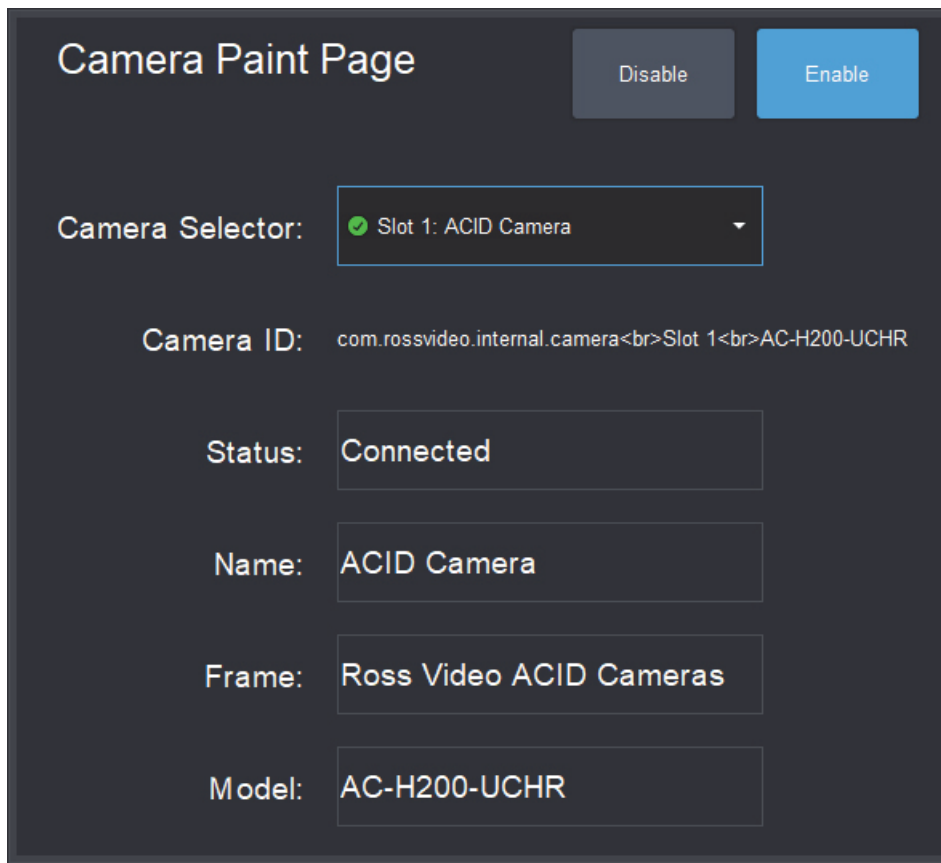
If the camera mounted to the PT head can be controlled by DashBoard, the PT Head Control interface can control camera functions such as pan and on-screen menu settings.

In the PT Head Control interface, you must specify which camera is to be controlled. Both the camera and the PT head can then be controlled from within the same interface.

### To select the camera to be controlled



1. In the PT Head Control interface, tap the **Config** button.  
The **Configuration** page appears.
2. Tap the **Device** tab.  
Device configuration controls appear, including the **Camera Paint Page** area ([Figure 3](#)).



**Figure 3 - Camera Paint Page Area**

3. In the **Camera Paint Page** area, in the **Camera Selector** list, select the camera that is mounted to the PT head you are controlling.  
**Note:** If the list does not include the required camera, ensure that the camera is represented by a node in the DashBoard tree, and that it is operational.
4. Tap the **Enable** button.  
The interface switches to the **Presets** page. The **Paint** icon appears.
5. If you want to access the **Paint** page, tap the **Paint** icon.  
Shading and paint controls appear.

# Presets Page

A preset is a record of the position of all controllable axes for a camera system (pan, tilt, focus, zoom, and iris). It also includes a name, a run duration, a category, and an External ID (optional). Presets are stored on the PT head.

On the **Presets** page, each preset is represented by a preset button. Each preset belongs to a category. Categories and presets are stored on the PT head, and can also be accessed and modified via other controllers such as a SmartShell workstation or another computer running the DashBoard PT head control plugin.

**Tip:** If you are using multiple devices to control a head, be sure to co-ordinate your activities with other users to avoid accidentally modifying each other's categories and presets.

**Note:** Not all axes may be controllable on all models of PT head.



To access the **Presets** page, tap the **Presets** button.

This section of the User Manual describes features available on the Presets page, and includes the following topics:

- “**About Preset Modes**” on [page 14](#)
- “**Presets Page (in Panel Mode)**” on [page 15](#)
- “**Presets Page (in Shotbox Mode)**” on [page 18](#)

For more information about performing tasks related to presets, see “**Working with Presets**” on [page 39](#).

## About Preset Modes

The PT Head Control interface has two operation modes, also known as **Preset Modes**, which define the behavior of the **Presets** page:

- **Panel mode** — In this mode, you tap a preset to select it, and then tap an action button (**Cut, Run, Clone, Update, Edit, or Delete**) at the bottom of the **Presets** page. When you select a preset, the border of the preset button turns purple.
- **Shotbox mode** — In this mode, you tap an action button at the bottom of the **Presets** page to enter an action mode (**Cut, Run, Alt, Clone, Update, Edit, or Delete**), and then tap the preset to which you want to apply the action.

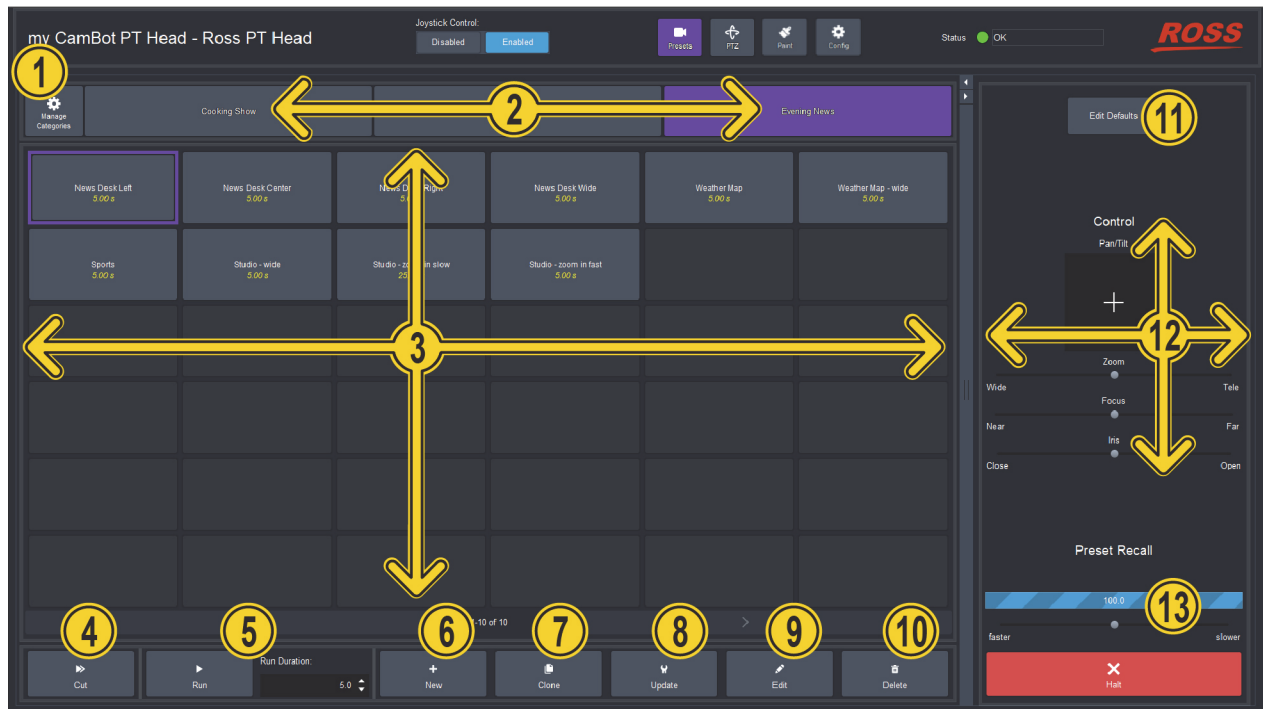
**Tip:** If the row of action buttons includes the **Alt** button, the interface is in **Shotbox** mode.

For information about switching between operation modes, see “**Interface Area**” on [page 35](#).

# Presets Page (in Panel Mode)

This section describes features of the **Presets** page. Information presented here applies only when the PT Head Control interface is in **Panel** mode (as opposed to **Shotbox** mode).

[Figure 4](#) shows the **Presets** page in **Panel** mode. The yellow circles identify buttons and areas of the user interface that are described in the sections that follow. If you are reading this document on a computer, tap the numbered buttons or areas of the diagram to jump to the descriptions.



**Figure 4 - Presets Page (in Panel mode)**

## 1 Manage Categories Button

Opens the **Manage Categories** page, which enables you to add, rename, and delete categories of presets.

For more information, see “**Managing Categories**” on [page 55](#).

Tap [HERE](#) to return to the **Presets** page diagram.

## 2 Category Tabs

Tap a category tab to switch to that category of presets. The category tab turns purple.

**Tip:** If a category contains more presets than can be displayed in the **Presets** page, tap the left and right arrows (< and >) below the preset buttons to navigate between pages of preset buttons.

For information about adding, renaming, or deleting categories, see “**Managing Categories**” on [page 55](#).

Tap [HERE](#) to return to the **Presets** page diagram.

### 3 Preset Buttons

The **Presets** page displays categories of preset buttons.

A preset is a record of the position of all controllable axes for a camera system (pan, tilt, focus, zoom, iris, etc.). It also stores the preset name, run duration, category, and External ID (ID).

Each preset button displays the preset's ID and/or name in white text, and the run duration (in seconds) in yellow text.

To work with a preset, tap its button to select the preset, and then tap an action button. When you select a preset, the border of its button turns purple. To de-select a preset, tap its button to turn the button border gray. Selecting a different preset also de-selects the current one.

For more information, see “**Working with Presets in Panel Mode**” on [page 39](#).

Tap [HERE](#) to return to the **Presets** page diagram.

### 4 Cut Button

Recalls the selected preset, moving all controllable axes as quickly as possible.

For more information about recalling presets in **Panel** mode, see “**Recall a Preset (Panel Mode)**” on [page 42](#).

Tap [HERE](#) to return to the **Presets** page diagram.

### 5 Run Button and Run Duration Box

The **Run** button and **Run Duration** box work together to enable you to recall the selected preset using either its stored duration or a one-time custom duration. Duration values are shown in seconds (s).

For more information about recalling presets in **Panel** mode, see “**Recall a Preset (Panel Mode)**” on [page 42](#).

Tap [HERE](#) to return to the **Presets** page diagram.

### 6 New Button

Adds a new preset based on the current position of the PT head (pan and tilt) and the camera lens (zoom, focus, and iris).

When you add a new preset, you can specify the preset **Name**, **Duration** (in seconds), and **External ID**.

For more information about adding presets in **Panel** mode, see “**Add a New Preset (Panel mode)**” on [page 40](#).

Tap [HERE](#) to return to the **Presets** page diagram.

### 7 Clone Button

Creates a copy of the selected preset.

When you clone a preset, you can modify the cloned preset's **Name**, **Duration** (in seconds), and **External ID**.

For more information about cloning presets in **Panel** mode, see “**Clone a Preset (Panel mode)**” on [page 41](#).

Tap [HERE](#) to return to the **Presets** page diagram.



## 8 Update Button

Updates the selected preset by storing the current position of the PT head (pan and tilt) and the camera lens (zoom, focus, and iris).

For more information about updating presets in **Panel** mode, see “**Update a Preset Position (Panel mode)**” on [page 42](#).

Tap [HERE](#) to return to the **Presets** page diagram.

## 9 Edit Button

Opens the **Edit Preset** dialog box, which enables you to modify the selected preset’s settings (**Name**, **Duration** (in seconds), **External ID**, and **Category**), and/or position. You can also **Edit Acceleration** values for the preset on an axis-by-axis basis.

For more information about editing presets in **Panel** mode, see “**Edit a Preset (Panel mode)**” on [page 43](#).

Tap [HERE](#) to return to the **Presets** page diagram.

## 10 Delete Button

Permanently deletes the selected preset.

For more information about deleting presets in **Panel** mode, see “**Delete a Preset (Panel mode)**” on [page 46](#).

Tap [HERE](#) to return to the **Presets** page diagram.

## 11 Edit Defaults Button

Opens a dialog box where you can specify default **Preset Options** (**Name**, **Duration**, and automatically-assigned **External ID**). When an operator adds a new preset, the default **Preset Options** are either presented for review and approval or automatically applied, depending on the current **Store** mode.

For more information, see “**Edit Default Preset Options (Panel mode)**” on [page 45](#).

Tap [HERE](#) to return to the **Presets** page diagram.

## 12 Control Area (Pan/Tilt, Zoom, Focus, and Iris)

The **Control** area enables you to manually pan, tilt, zoom, focus, and iris.

To pan and/or tilt the head, tap and drag the cross-hairs away from the center of the **Pan/Tilt** area. Dragging the cross-hairs farther from center results in faster movement. Horizontal displacement of the cross-hairs pans the head. Vertical displacement tilts the head.

To adjust lens settings, tap and drag the **Zoom** slider to zoom, the **Focus** slider to focus, or the **Iris** slider to adjust the aperture.

For more information about manually controlling the head and lens, see “**Manual Controls (PTZ Page)**” on [page 23](#).

Tap [HERE](#) to return to the **Presets** page diagram.

## 13 Preset Recall Area

The **Preset Recall** area displays the progress of the selected preset as it runs. It also enables you to increase or decrease the speed of the preset in progress. Tap and drag the speed slider to make the head move **slower** or **faster**.

The **Halt** button stops movement of the head.

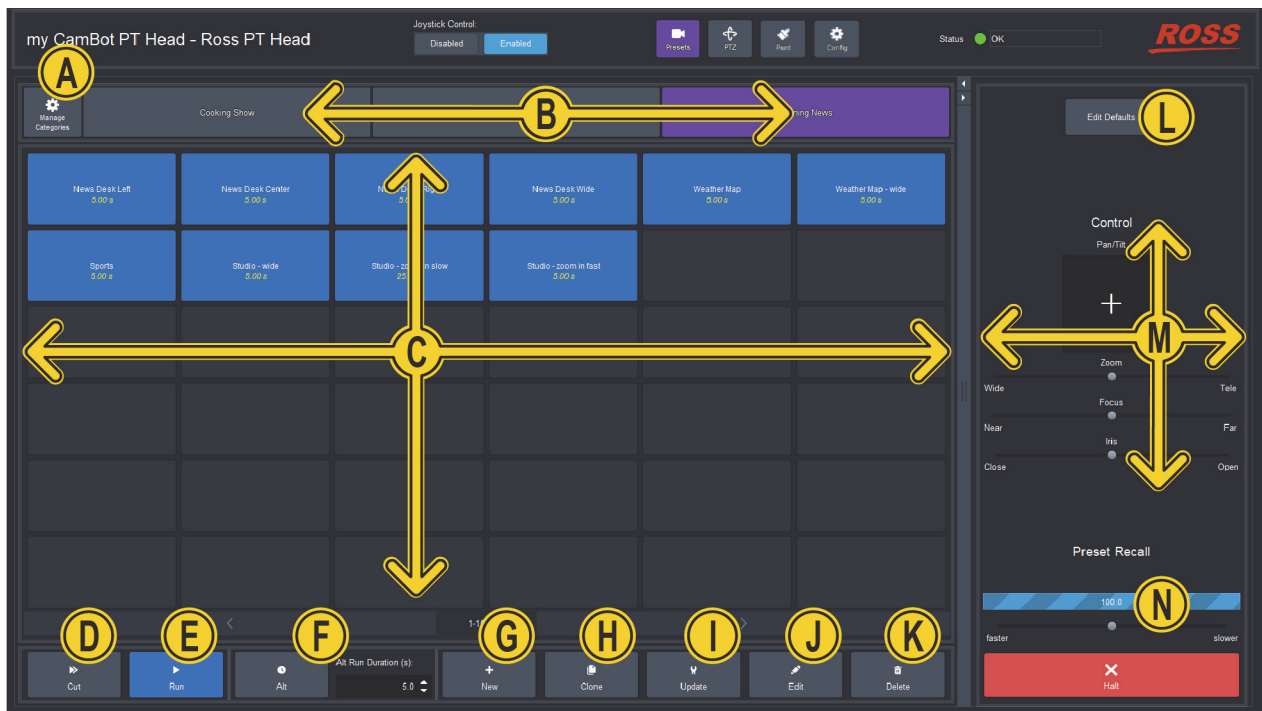
For more information about recalling presets in **Panel** mode, see “**Recall a Preset (Panel Mode)**” on [page 42](#).

Tap [HERE](#) to return to the **Presets** page diagram.

## Presets Page (in Shotbox Mode)

This section describes features of the **Presets** page. Information presented here applies only when the PT Head Control interface is in **Shotbox** mode (as opposed to **Panel** mode).

[Figure 5](#) shows the **Presets** page in **Shotbox** mode. The yellow circles identify buttons and areas of the user interface that are described in the sections that follow. If you are reading this document on a computer, tap the lettered buttons or areas of the diagram to jump to the descriptions.



*Figure 5 - Presets Page (in Shotbox mode, with Run mode enabled)*

### A Manage Categories Button

Opens the **Manage Categories** page, which enables you to add, rename, and delete categories of presets.

For more information, see “**Managing Categories**” on [page 55](#).

Tap [HERE](#) to return to the **Presets** page diagram.

## B Category Tabs

Tap a category tab to switch to that category of presets. The category tab turns purple.

**Tip:** If a category contains more presets than can be displayed in the **Presets** page, tap the left and right arrows (< and >) below the preset buttons to navigate between pages of preset buttons.

For information about adding, renaming, or deleting categories, see “**Managing Categories**” on [page 55](#).

Tap [HERE](#) to return to the **Presets** page diagram.

## C Preset Buttons

The **Presets** page displays categories of preset buttons.

A preset is a record of the position of all controllable axes for a camera system (pan, tilt, focus, zoom, iris, etc.). It also stores the preset name, run duration, category, and External ID (ID).

Each preset button displays the preset’s ID and/or name in white text, and the run duration (in seconds) in yellow text.

To work with presets, select an action button at the bottom of the **Presets** page to enter an action mode (**Cut**, **Run**, **Alt**, **Clone**, **Update**, **Edit**, or **Delete**), and then tap the preset to which you want to apply the action.

**Tip:** Action buttons are colored when selected, and gray when not selected. You can tap the currently-selected action button to de-select it and exit that action mode. This may help prevent an unintended action, should you accidentally tap a preset button.

Depending on the current action mode, preset buttons are colored as follows:

- **Dark Gray** — No action mode is active.
- **Purple** — **Cut** mode. Tap a preset button to recall the preset as quickly as possible.
- **Blue** — **Run** mode. Tap a preset button to run the preset using its default duration.
- **Pale Green** — **Alternative Duration (Alt)** mode. Specify a duration (in seconds) in the **Alt Run Duration** box, and then tap a preset button to recall the preset using that duration.
- **Pink** — **Clone** mode. Tap a preset button to create a copy of the preset on a new button. You can assign the cloned preset a new **Name**, **Duration**, and **External ID**.
- **Orange** — **Update** mode. Tap a preset button to update the preset with the current position of the PT head (pan and tilt) and the camera lens (zoom, focus, and iris).
- **Bright Green** — **Edit** mode. Tap a preset button to edit the preset’s **Name**, **Duration**, **External ID**, and position values (pan, tilt, zoom, focus, and iris). You can also **Edit Acceleration** values for the preset on an axis-by-axis basis.
- **Red** — **Delete** mode. Tap a preset button to delete that preset.

For more information, see “**Working with Presets in Shotbox Mode**” on [page 47](#).

Tap [HERE](#) to return to the **Presets** page diagram.

## D Cut Button

The **Cut** button places the **Presets** page into **Cut** mode. When the interface is in **Cut** mode, assigned preset buttons are purple.

Tap a preset button to recall that preset as quickly as possible.

For more information about recalling presets in **Shotbox** mode, see “**Recall a Preset (Shotbox mode)**” on [page 50](#).

Tap [HERE](#) to return to the **Presets** page diagram.

## **E** Run Button

The **Run** button places the **Presets** page into **Run** mode, which enables you to run presets using the duration stored in the preset.

When the interface is in **Run** mode, assigned preset buttons are blue.

For more information about recalling presets in **Shotbox** mode, see “**Recall a Preset (Panel Mode)**” on [page 42](#).

Tap [HERE](#) to return to the **Presets** page diagram.

## **F** Alt Button and Alt Run Duration Box

The **Alt** button places the **Presets** page into **Alternative Duration (Alt)** mode.

When the interface is in **Alt** mode, assigned preset buttons are pale green.

The **Alt** button and the **Alt Run Duration** box work together to enable you to recall presets using a custom duration.

In **Alt** mode, specify the desired duration (in seconds) in the **Alt Run Duration** box, and then tap the preset you want to run.

For more information about recalling presets in **Shotbox** mode, see “**Recall a Preset (Panel Mode)**” on [page 42](#).

Tap [HERE](#) to return to the **Presets** page diagram.

## **G** New Button

Adds a new preset based on the current position of the PT head (pan and tilt) and the camera lens (zoom, focus, and iris).

When you add a new preset, you can specify the preset **Name**, **Duration**, and **External ID**.

For more information about adding new presets in **Shotbox** mode, see “**Add a New Preset (Shotbox mode)**” on [page 47](#).

Tap [HERE](#) to return to the **Presets** page diagram.

## **H** Clone Button

The **Clone** button places the **Presets** page into **Clone** mode, which enables you to make a copies of existing presets.

When the interface is in **Clone** mode, assigned preset buttons are pink.

Tap a preset button to clone that preset. When you clone a preset, you can specify the new preset’s **Name**, **Run Duration**, and **External ID**.

For more information about cloning presets in **Shotbox** mode, see “**Clone a Preset (Shotbox mode)**” on [page 49](#).

Tap [HERE](#) to return to the **Presets** page diagram.

## I Update Button

The **Update** button places the **Presets** page into **Update** mode, which enables you to update the position data stored in existing presets (pan, tilt, zoom, focus, and iris).

When the interface is in **Update** mode, assigned preset buttons are orange. Tap a preset button to update that preset.

For more information about updating presets in **Shotbox** mode, see “**Update a Preset Position (Shotbox mode)**” on [page 50](#).

Tap [HERE](#) to return to the **Presets** page diagram.

## J Edit Button

The **Edit** button places the **Presets** page into **Edit** mode, which enables you to modify a preset’s settings (**Name**, **Run Duration**, **External ID**, and **Category**), and/or position. You can also **Edit Acceleration** values for the preset on an axis-by-axis basis.

When the interface is in **Edit** mode, assigned preset buttons are bright green. Tap a preset button to edit that preset.

For more information about editing presets in **Shotbox** mode, see “**Edit a Preset (Shotbox mode)**” on [page 51](#).

Tap [HERE](#) to return to the **Presets** page diagram.

## K Delete Button

The **Delete** button places the **Presets** page into **Delete** mode, which enables you to permanently delete presets.

When the interface is in **Delete** mode, assigned preset buttons are red.

Tap the preset you want to delete, and then confirm that you want to delete it.

For more information about deleting presets in **Shotbox** mode, see “**Delete a Preset (Shotbox mode)**” on [page 54](#).

Tap [HERE](#) to return to the **Presets** page diagram.

## L Edit Defaults Button

Opens a dialog box where you can specify default **Preset Options** (**Name**, **Duration**, and automatically-assigned **External ID**). When an operator adds a new preset, the default **Preset Options** are either presented for review and approval or automatically applied, depending on the current **Store** mode.

For more information, see “**Edit Default Preset Options (Shotbox mode)**” on [page 53](#).

Tap [HERE](#) to return to the **Presets** page diagram.

## M Control Area (Pan/Tilt, Zoom, Focus, and Iris)

The **Control** area enables you to manually adjust pan, tilt, zoom, focus, and iris.

To pan and/or tilt the head, tap and drag the cross-hairs away from the center of the **Pan/Tilt** area. Dragging the cross-hairs farther from center results in faster movement. Horizontal displacement of the cross-hairs pans the head. Vertical displacement tilts the head.

To adjust lens settings, tap and drag the **Zoom** slider to zoom, the **Focus** slider to focus, or the **Iris** slider to adjust the aperture.

For more information about manually controlling the head and lens, see “**Manual Controls (PTZ Page)**” on [page 23](#).

Tap [HERE](#) to return to the **Presets** page diagram.



## Preset Recall Area

The **Preset Recall** area displays the progress of a running preset.

It also enables you to increase or decrease the speed of the preset in progress. Tap and drag the speed slider to make the head move **slower** or **faster**.

The **Halt** button stops movement of the head.

For more information about recalling presets in **Shotbox** mode, see “**Recall a Preset (Shotbox mode)**” on [page 50](#).

Tap [HERE](#) to return to the **Presets** page diagram.

# Manual Controls (PTZ Page)

A robotic axis is a path of motion or range of linear control. For Ross PT heads, axes include pan, tilt, zoom, focus, and iris.

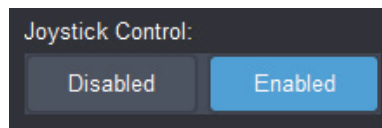
The PTZ page contains controls and settings that enable you to operate axes manually, and to configure how axes behave when they are operated manually. This chapter contains the following sections:

- “**Operating Axes Manually**” on [page 24](#).
- “**Configuring Axis Behavior**” on [page 26](#)

**Note:** Some features described in this section are not available on all robotic PT heads. The selection of features and the appearance of the interface may vary between PT head models. Not all axes may be controllable on all models of PT head.

**To access the PTZ page and assume manual control:**

1. Tap the **Enabled** button (see [Figure 6](#)).



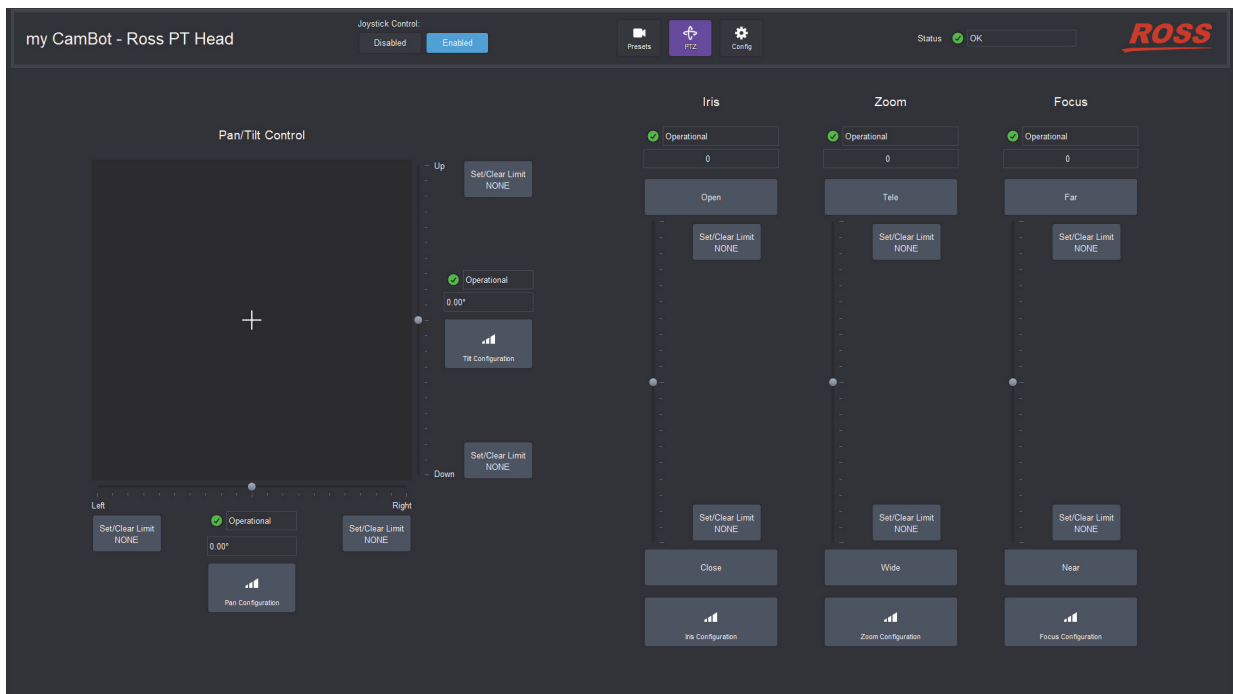
*Figure 6 - Disabled and Enabled Buttons for manual and joystick control*

**Note:** A PT head can be manually controlled by only one workstation at a time. When you (or another) operator enables **Joystick Control**, they take control and the previous controller loses it. If the other operator is using the DashBoard PT Head Control Plugin, their **Joystick Control** status changes to **Disabled**, and their **PTZ Page** closes.



2. Tap the **PTZ** button.

The **PTZ page** appears ([Figure 7](#)).



*Figure 7 - Controls for Pan/Tilt, Iris, Zoom, and Focus*

# Operating Axes Manually

You can control the pan and tilt axes manually. You can also configure how these axes respond when controlled manually.

This section includes the following topics:

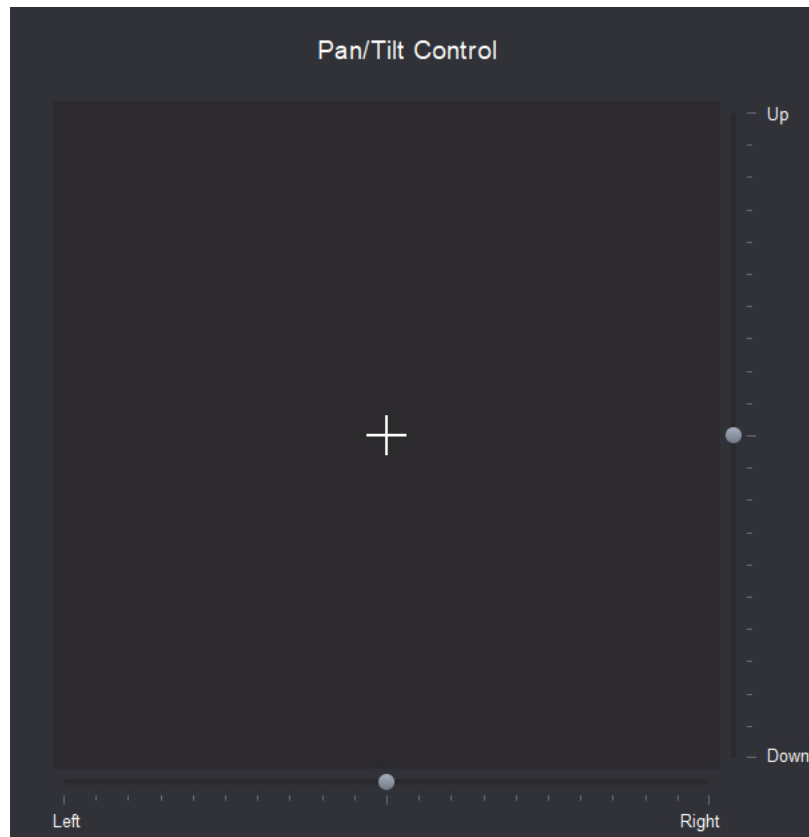
- “**Manually Control Pan and Tilt Axes**” on [page 24](#).
- “**Manually Control Lens Axes (Iris, Zoom, and Focus)**” on [page 25](#).

**Tip:** As an alternative to manual control from the PTZ page, you can use controls on the right side of the **Presets** page, or use a USB game controller such as a joystick. For information about adding such a control device, see “**Adding USB Controllers**” on [page 57](#).

## Manually Control Pan and Tilt Axes

You can use controls on the PTZ page to manually control the pan and tilt axes.

[Figure 8](#) shows the **Pan/Tilt** controls.



**Figure 8** - Pan/Tilt Control area of the PTZ page

**To pan and/or tilt the camera, do one of the following:**

- Tap and drag the cross-hairs away from center. The farther the cross-hairs are from center, the faster the head moves. Dragging right and left pans the camera. Dragging up and down tilts the camera.
- Tap and drag either the pan slider (**Left / Right**) or the tilt slider (**Up / Down**) away from center. The farther a slider handle is from center, the faster the head moves.

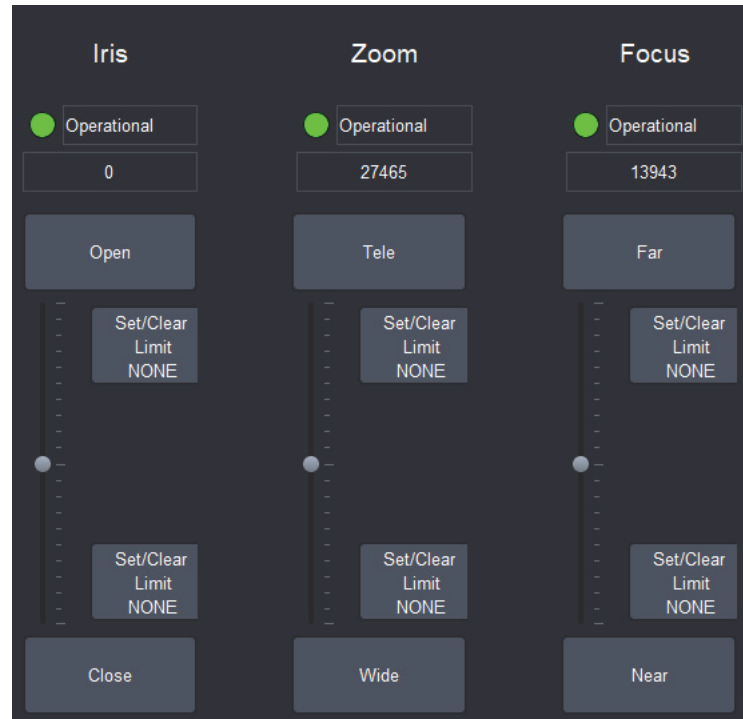


## Manually Control Lens Axes (Iris, Zoom, and Focus)

You can use controls on the PTZ page to manually control the iris, zoom, and focus axes.

**Note:** Iris control is not available on some models of PT head.

[Figure 9](#) shows the **Iris**, **Zoom**, and **Focus** controls.



**Figure 9** - Iris, Zoom, and Focus controls

For each axis, controls include a vertical slider, and buttons with labels that indicate the direction of axis movement:

- **Iris** — **Open** or **Close**

Iris controls are shown on the **PTZ** page only if the PT head is configured to control iris. Otherwise, for cameras that can be controlled by DashBoard, iris controls are available on the **Paint** page of the PT Head Control interface, or in the camera's default DashBoard interface.

- **Zoom** — **Tele** or **Wide**

- **Focus** — **Far** or **Near**

A value box close to each axis control displays the current numeric position of the lens axis (raw lens data values). For example, in [Figure 9](#) the value box for the **Zoom** axis displays a value of **27465**.

**To manually control a lens axis, do one of the following:**

- Tap and drag the vertical slider away from center. The farther the slider handle is from center, the faster the lens axis moves.
- Tap one of the buttons above or below the vertical slider to move the lens axis one step.

**Tip:** The degree to which the axis moves each time you tap a button depends on the button sensitivity setting for that axis. For more information, see "**Joystick Area**" on [page 34](#).

# Configuring Axis Behavior

You can set axis limits, and configure how axes behave when controlled manually.

This section includes the following topics:

- “**Set Axis Limits**” on [page 26](#)
- “**Configure Axis Behavior**” on [page 27](#)

## Set Axis Limits

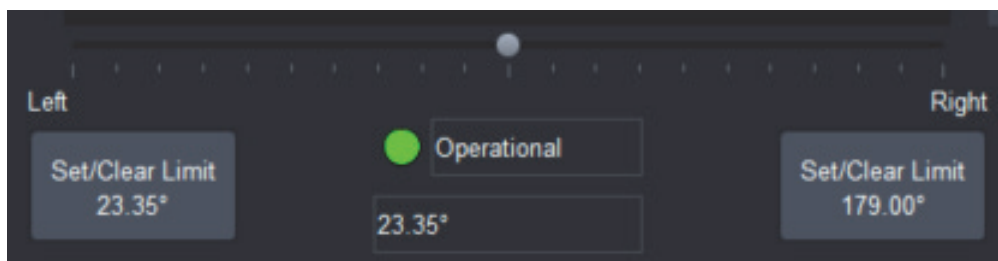
There are two types of axis limits:

- persistent limits — These cannot be configured within the PT Head Control interface.
- temporary limits — These can be configured. The temporary limits for a given axis define a range of motion that falls within the bounds of the persistent limits for that axis.

When you configure temporary limits, those limits are applied to the head. They limit the range of motion for all entities that control the head, including hardware controllers such as USB joysticks, and software interfaces such as SmartShell and the DashBoard PT Head Control interface.

Temporary limits remain in force until they are changed, or until the robotic head is restarted.

For each axis, there are two **Set/Clear Limit** buttons, one at each end of the axis range (see [Figure 10](#)). A box near the axis displays the current position value. If you repeatedly tap a **Set/Clear Limit** button, the value displayed on the button toggles between the current position value and the persistent limit value. If the value on the **Set/Clear Limit** button matches the current position value, the temporary limit is set to the current position. If the values do not match, the temporary limit is cleared and the persistent limit applies.



**Figure 10** - Set/Clear Limit buttons for the Pan axis (box at center displays current position value)

### To set a temporary axis limit:

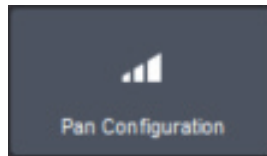
1. Move the axis to the position you want to set as the temporary limit.  
**Tip:** If the axis stops before it gets to the position you want, it may have reached the current temporary limit. Tap the **Set/Clear Limit** button once and then try moving the axis to the desired position. If it can not move in that direction, the axis has reached the persistent limit and can go no farther.
2. Tap the **Set/Clear Limit** button once.
3. Compare the current position value to the value displayed on the **Set/Clear Limit** button:
  - If the values are the same, the limit has been set.
  - If the values are different, tap the **Set/Clear Limit** button once to set the temporary limit.

## Configure Axis Behavior

You can configure how each axis behaves when it is controlled manually. Axes can be manually controlled through the PT Head Control interface or a USB joystick.

When you configure axis behavior, the settings are immediately applied to the head. Whenever an operator enables manual control (via the **Joystick Control > Enabled** button), the axis behavior settings are applied to the head. This allows you to configure different settings for each Dashboard control station. If you want all Dashboard controllers to use the same settings, you must configure them individually from each control station.

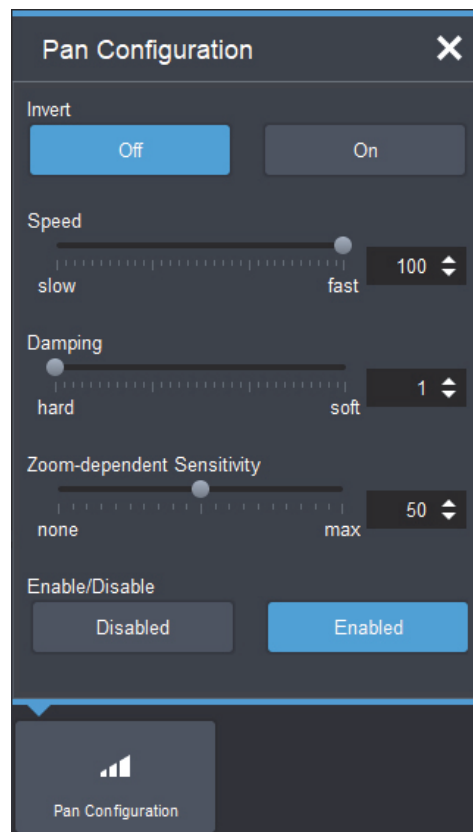
Each set of axis controls includes a **Configuration** button, as shown in [Figure 11](#).



**Figure 11** - Example of an Axis Configuration button (Pan Configuration button shown)

**To configure axis behavior:**

1. Tap the **Configuration** button for the axis you want to configure.
2. The **Configuration** dialog box for the axis appears (see [Figure 12](#)).



**Figure 12** - Axis Configuration dialog box (pan configuration shown)

3. Configure axis behavior as required:
  - To invert the axis, tap whichever **Invert** button (**Off** or **On**) is black, to turn it blue.
  - To set the maximum speed, either move the **Speed** slider (**slow / fast**), or specify the maximum speed as a percentage in the **Speed** box.

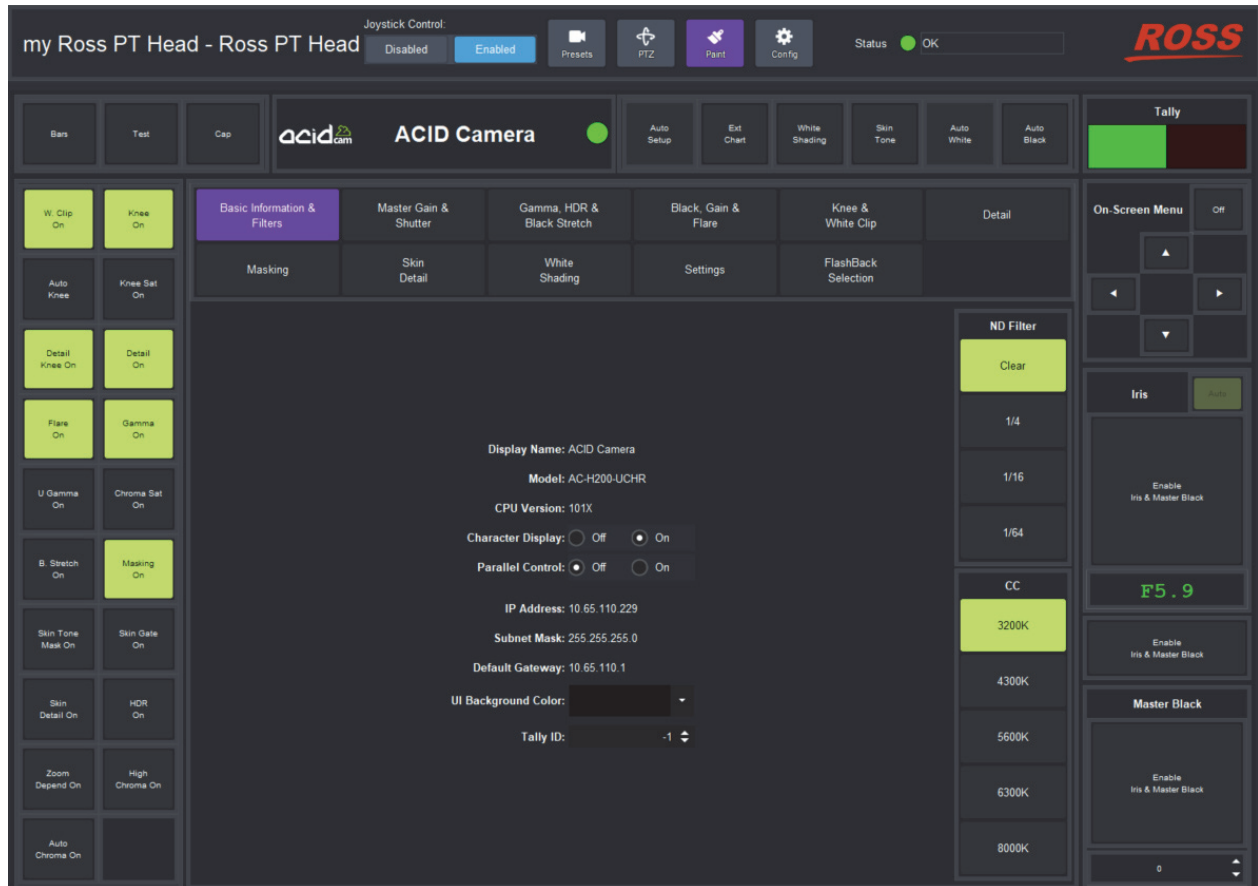
- Pan and tilt axes only: To set the degree of acceleration/deceleration damping, either move the **Speed** slider (**hard/soft**), or specify the damping level as a percentage of the maximum acceleration/deceleration rate, in the **Damping** box.  
Damping determines the responsiveness of the axis to sudden manual and joystick requests. It alters the rate of acceleration/deceleration.
- Pan and tilt axes only: To set the sensitivity of zoom-dependent axis speed, either move the **Zoom-dependent Sensitivity** slider (**none/max**), or specify the sensitivity as a percentage in the **Speed** box.  
**About zoom-dependent axis speed:** A camera moving at a given rate creates a more drastic visual effect when the lens is zoomed in. The zoom-dependent speed feature, which applies to manual control only, varies the speed of the affected axis (pan or tilt) with the value of the zoom axis, so the motion appears less drastic. When the lens is zoomed in, the affected axis moves more slowly. When the lens is zoomed out, the affected axis moves more quickly.
- To disable or enable control of the axis, tap either the **Disabled** button or the **Enabled** button. The axis is disabled for manual control through the PT Head Control interface or joystick, and also for presets. If an operator runs a preset that requires movement of one or more axes that are disabled, the preset is not recalled and a **WARNING** message appears stating the **Reason** as **NOTENABLED**.  
**Note:** Depending on how your system is configured, the **Disabled** and **Enabled** buttons may not be visible. For more information about configuring manual control, see **“Joystick Area”** on [page 34](#).

# Paint Page

The **Paint** page provides access to camera paint and shading settings, as exposed by the camera.

The types of settings presented vary by camera model. For information about specific settings, consult the user manual for the camera.

[Figure 13](#) shows an example of the **Paint** page, as it appears for an ACIDCam AC-H200-UCHR camera.



**Figure 13** - Paint page, as it appears for an ACIDCam AC-H200-UCHR camera

## To access the Paint page:

1. If the **Paint** icon is visible, tap it and then:

- If shading and paint controls appear, the **Paint** page is ready to use. Skip the rest of this procedure.
- If the **Unable to locate selected camera** dialog box appears, use the **Camera Selector** list to select the camera that is mounted to the PT head. If the required camera is not on the list, ensure that it is represented by a node in the DashBoard tree, and that it is operational.

2. If the **Paint** icon is not visible, enable the **Paint** page and then access it:

- a. Tap the **Config** button.  
The **Configuration** page appears.
- b. Tap the **Device** tab.  
Device configuration controls appear.

- c. In the **Camera Paint Page** area, in the **Camera Selector** list, select the camera that is mounted to the PT head you are controlling.

**Note:** If the list does not include the required camera, ensure that the camera is represented by a node in the DashBoard tree, and that it is operational.

- d. Tap the **Enable** button.

The interface switches to the **Presets** page. The **Paint** icon appears.

- e. To access the **Paint** page, tap the **Paint** icon.

Shading and paint controls appear.

# Configuration Settings (Config Page)

The **Config** page contains controls and settings that enable you to view and adjust configuration settings for the PT head and the PT Head Control interface.

This chapter contains the following sections:

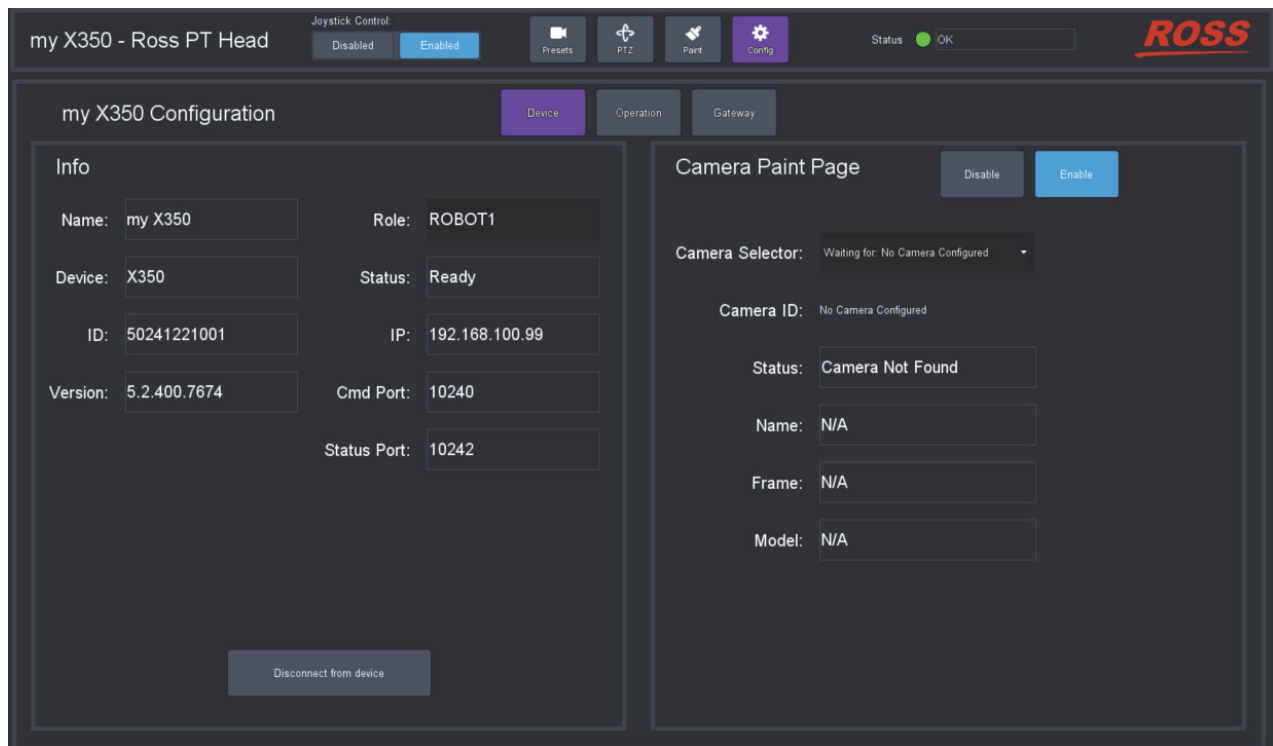
- “**Device Settings**” on [page 32](#)
- “**Operation Settings**” on [page 34](#)
- “**Gateway Settings**” on [page 36](#)

**Note:** Some features described in this section are not available on all robotic PT heads. The selection of features and the appearance of the interface may vary between PT head models.

## To access the Config page:

- Tap the **Config** button.

The **Config** page appears ([Figure 14](#)).



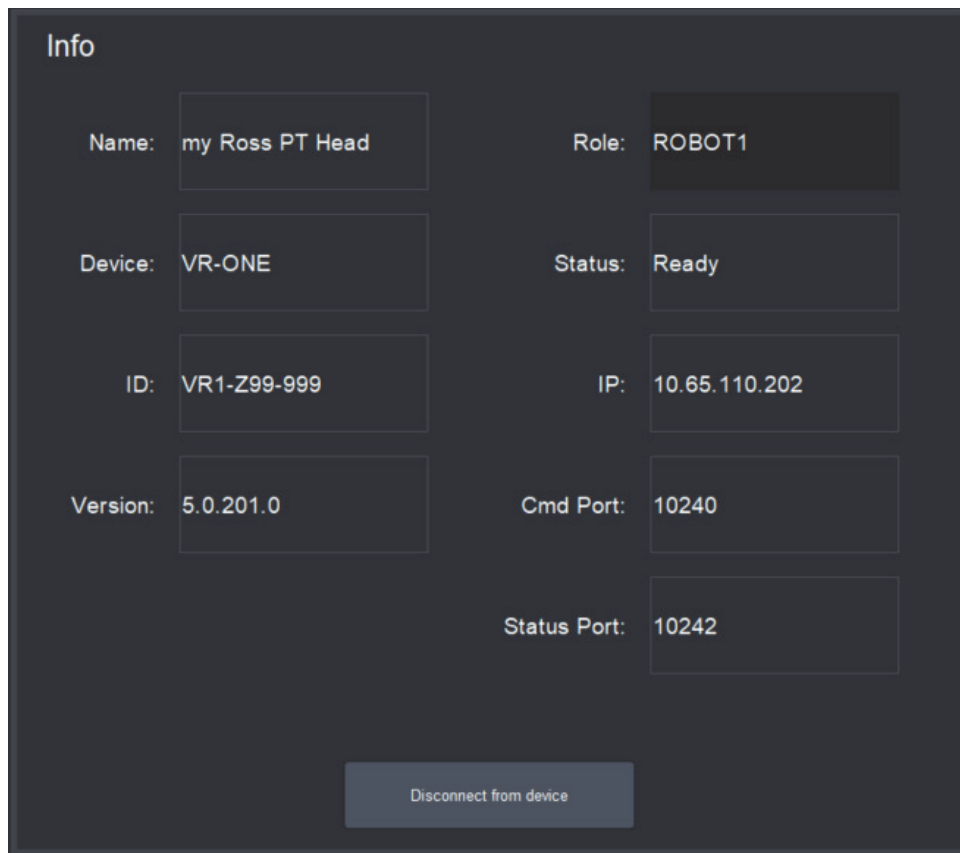
**Figure 14** - Config Page (with Device tab selected)

# Device Settings

The **Device** tab contains information and settings pertaining to the PT head, and to the camera. It includes the PT head **Info** area (see [page 32](#)) and the **Camera Paint Page** area (see [page 33](#)).

## Info Area

The **Info** area ([Figure 15](#)) displays information about the PT head. It also enables you to disconnect from the head.



**Figure 15 - Info Area**

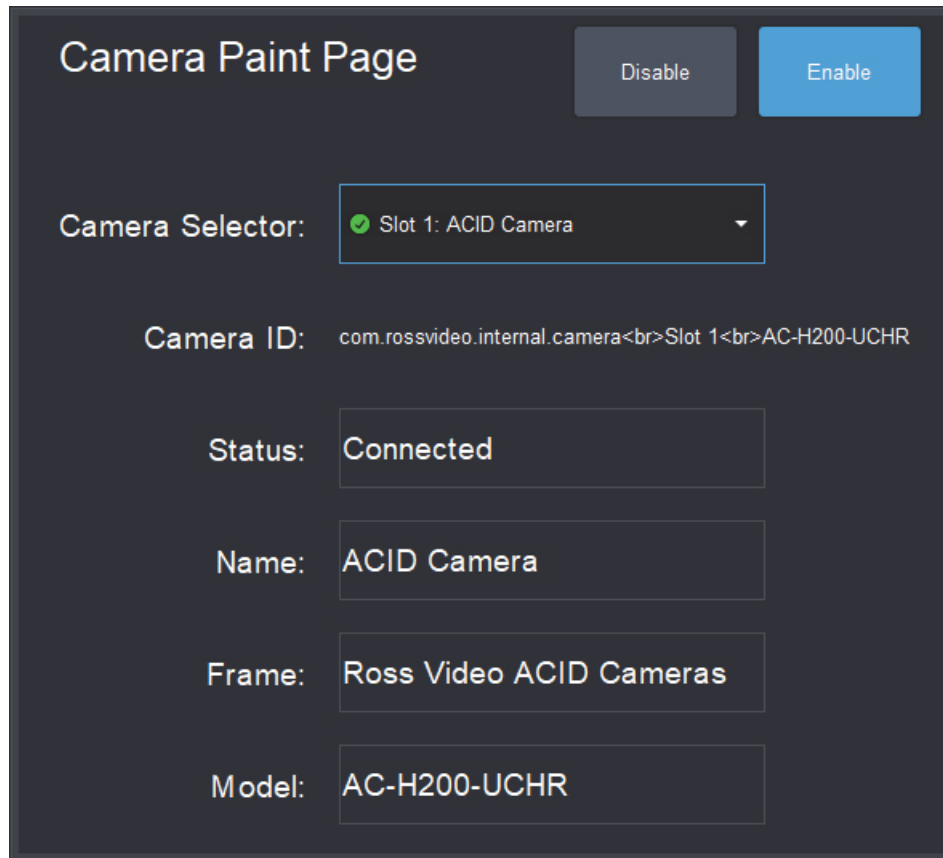
The **Info** area includes the following:

- **Name** — The name of the PT head in DashBoard, as defined when the head was added to DashBoard.
- **Device** — The device type (CAMBOT, VR-ONE, VRONE, X300, X350, or VR600).
- **ID** — For Furio and X-series robots, the serial number is displayed. For CamBot robots, the Robot ID as defined by the CamBot Translation service is displayed.
- **Version** — The version of firmware on the PT head.
- **Role** — The Role setting is not currently operational.
- **Status** — The operational status of the PT head controller (the PT Head Control Plugin).
- **IP** — The IP address of the PT head (for Furio and X-series robots), or of the computer running the CamBot Translation service, typically a Robotics Server (for CamBot robots).
- **Cmd Port** — The number of the command port.
- **Status Port** — The number of the status port.
- **Disconnect from device** — Tap this button to sever communication between DashBoard and the PT head. The **Disconnected from device** dialog box appears. It contains a **Reconnect** button. DashBoard and the head remain disconnected until you tap the **Reconnect** button.



## Camera Paint Page Area

In the **Camera Paint Page** area ([Figure 16](#)) you can enable or disable the **Paint** page, which contains controls for adjusting camera paint settings. You can also select which camera is to be painted, and view information about the selected camera.



**Figure 16** - Camera Paint Page Area

The **Camera Paint Page** area includes the following:



- **Disable and Enable** buttons — When **Enabled**, the PT Head Control interface includes a **Paint** button. To access the **Paint** page, tap the **Paint** button.
- **Camera Selector** — Enables you to select which camera is to be painted. Select the camera that is mounted to the PT head.
- **Camera ID** — Displays connection information about the selected camera, including the **Slot** number within the DashBoard frame that lists the camera, and the camera model.
- **Status** — Displays the operational status of the selected camera.
- **Name** — Displays the name of the selected camera.
- **Frame** — The name of the node in the DashBoard tree through which you can access controls for the selected camera.
- **Model** — Displays the model number of the selected camera.

For more information about the **Paint** page, see “**Paint Page**” on [page 29](#).

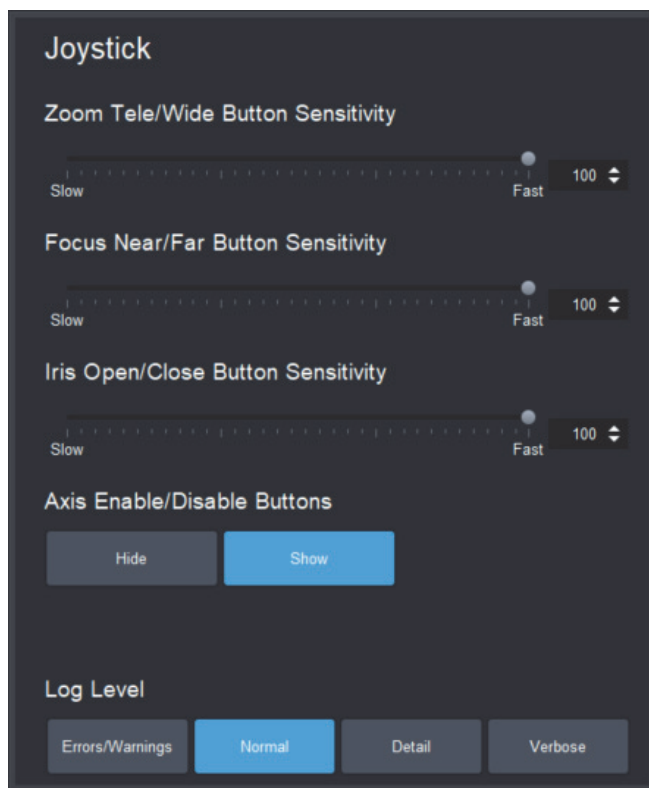
# Operation Settings

The **Operation** tab contains information and settings related to the PT Head Control interface.

It includes the **Joystick** configuration area and the **Interface** configuration area.

## Joystick Area

The **Joystick** configuration area ([Figure 17](#)) enables you to configure how the system responds to joystick input. It also enables you to set the level of detail recorded in system logs.



*Figure 17 - Joystick configuration area*

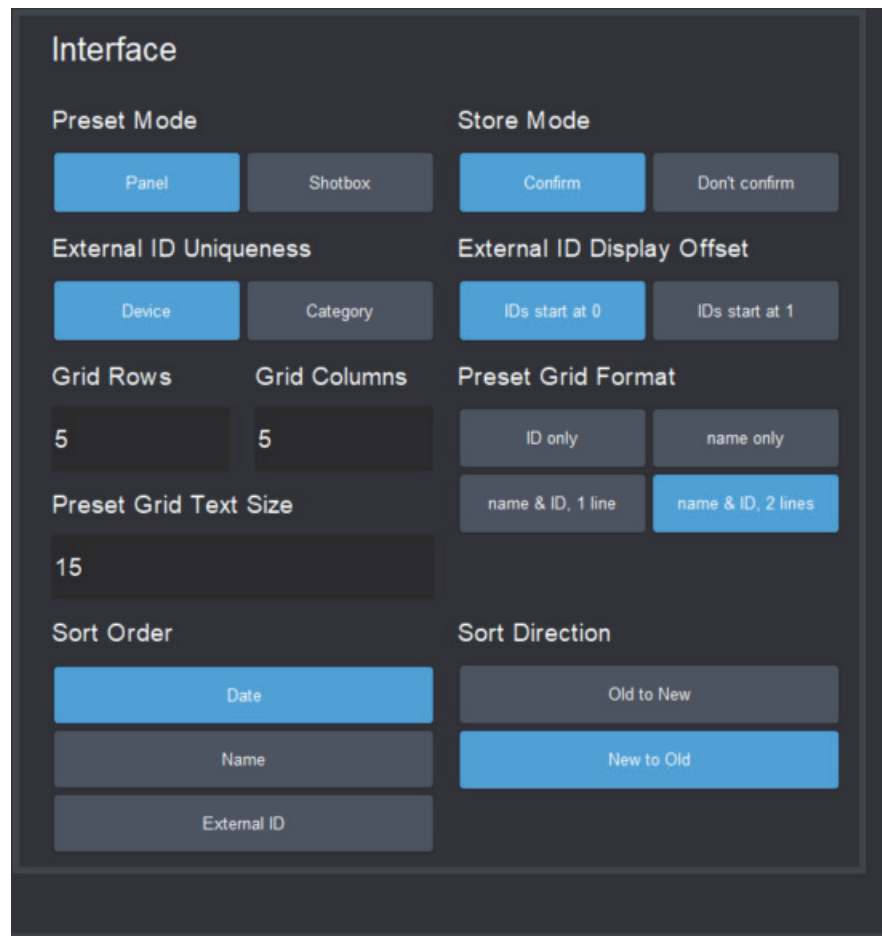
The **Joystick** configuration area includes the following settings:

- **Zoom Tele/Wide Button Sensitivity** — Defines how far the zoom axis moves when you tap the **Tele** button or the **Wide** button on the **PTZ page**.
- **Focus Near/Far Button Sensitivity** — Defines how far the focus axis moves when you tap the **Near** button or the **Far** button on the **PTZ page**.
- **Iris Open/Close Button Sensitivity** — Defines how far the iris axis moves when you tap the **Open** button or the **Close** button on the **PTZ page**.
- **Axis Enable/Disable Buttons** — **Hide** or **Show** the **Enabled** and **Disabled** buttons on the PTZ page. For more information about the **Enabled** and **Disabled** buttons, see “**Configure Axis Behavior**” on [page 27](#).
- **Log Level** — Sets the level of detail recorded in system activity logs. More intensive logging consumes CPU capacity and results in more logging data.

The default setting is **Normal**. There is no need to adjust the logging level unless requested to do so by Ross Video.

## Interface Area

The **Interface** area ([Figure 18](#)) includes settings related to the behavior of the user interface.



**Figure 18** - Interface area

The **Interface** configuration area includes the following settings:

- **Preset Mode** — Defines the behavior of the **Preset** page:
  - › **Panel mode** — In this mode, you tap a preset to select it, and then tap an action button (**Cut**, **Run**, **Clone**, **Update**, **Edit**, or **Delete**) at the bottom of the **Presets** page. When you select a preset, the border of the preset button turns purple.
  - › **Shotbox mode** — In this mode, you tap an action button at the bottom of the **Presets** page to enter an action mode (**Cut**, **Run**, **Alt**, **Clone**, **Update**, **Edit**, or **Delete**), and then tap the preset to which you want to apply the action.
- **External ID Uniqueness** — Sets the scope within which External IDs are kept unique:
  - › **Device** — No two External IDs for a device can be identical.
  - › **Category** — No two External IDs within a preset category can be identical. An External ID may be used in multiple categories.
- **Grid Rows** — Sets the number of horizontal rows of preset buttons displayed on the **Presets** page. Specify the number and then tap **ENTR**.
- **Grid Columns** — Sets the number of vertical columns of preset buttons displayed on the **Presets** page. Specify the number and then tap **ENTR**.
- **Preset Grid Text Size** — Defines the size of text on preset buttons (**4 - 20**). Specify the size and then tap **ENTR**.
- **Sort Order** — Specifies the criterion for arranging preset buttons on the **Presets** page. You can sort by the preset creation time (**Date**), by the preset **Name**, or by the **External ID**.

- **Store Mode** — Defines whether the operator has an opportunity to modify default options that are otherwise applied, each time a new preset is created.
  - › If **Store Mode** is set to **Confirm**, the operator can review and modify **Preset Options** when they add or clone a preset. When the operator updates a preset position, the **CONFIRM UPDATE** dialog box appears.
  - › If **Store Mode** is set to **Don't confirm**, default **Preset Options** are automatically stored with the preset. If the operator updates a preset position, the update is applied immediately without a confirmation message. If the operator clones a preset, a current date stamp is added to the name of the cloned preset.

**Tip:** To view/modify the default options for all new presets, tap the **Presets** button, and then tap **Edit Defaults**.
- **External ID Display Offset** — Sets the lowest possible External ID number that the PT Head Control interface can display, as either as **0** or **1**.
 

This feature enables you to align the numbering of presets between the PT Head Control interface and external controllers, so the same number is displayed for a given preset. For example, if this setting is **0** and you change it to **1**, all existing External IDs are incremented by **1** before they are displayed in the PT Head Control interface.

This setting is an aesthetic choice that affects only the display of External ID values in the PT Head Control interface. It does not affect how External IDs are stored in DashBoard or on the PT head. You can change this setting at any time without affecting the ability to recall presets.

**Tip:** For many external VISCA controllers, such as Carbonite, preset numbering starts at **1**. If such a VISCA controller recalls preset **1**, the first preset is recalled, regardless of whether the PT Head Control interface shows it as preset **0** or **1**. To avoid confusion, when using an external VISCA controller we recommend you set **External ID Display Offset** to match the controller's numbering.
- **Preset Grid Format** — Defines what text appears on preset buttons, and how it is arranged:
  - › **ID only** — The External ID of the preset is displayed
  - › **Name only** — The preset name is displayed
  - › **Name & ID, 1 line** — The top line displays the External ID of the preset, followed by a colon (:) and the preset name.
  - › **Name & ID, 2 lines** — The top line displays the External ID of the preset only. Subsequent lines display the preset name.

**Note:** Run duration (in seconds) is displayed in yellow text, as the final line on all preset buttons.
- **Sort Direction** — Specifies whether preset buttons on the **Presets** page are displayed in the order of most to least, or least to most. The options available depend on the **Sort Order** setting:
  - › **Date** — The options are **Old to New**, and **New to Old**.
  - › **Name** — The options are **A to Z**, and **Z to A**.
  - › **External ID** — The options are **Low to High**, and **High to Low**.

## Gateway Settings

The **Gateway Settings** page has settings for establishing a communication gateway, to enable external systems to control the PT head.

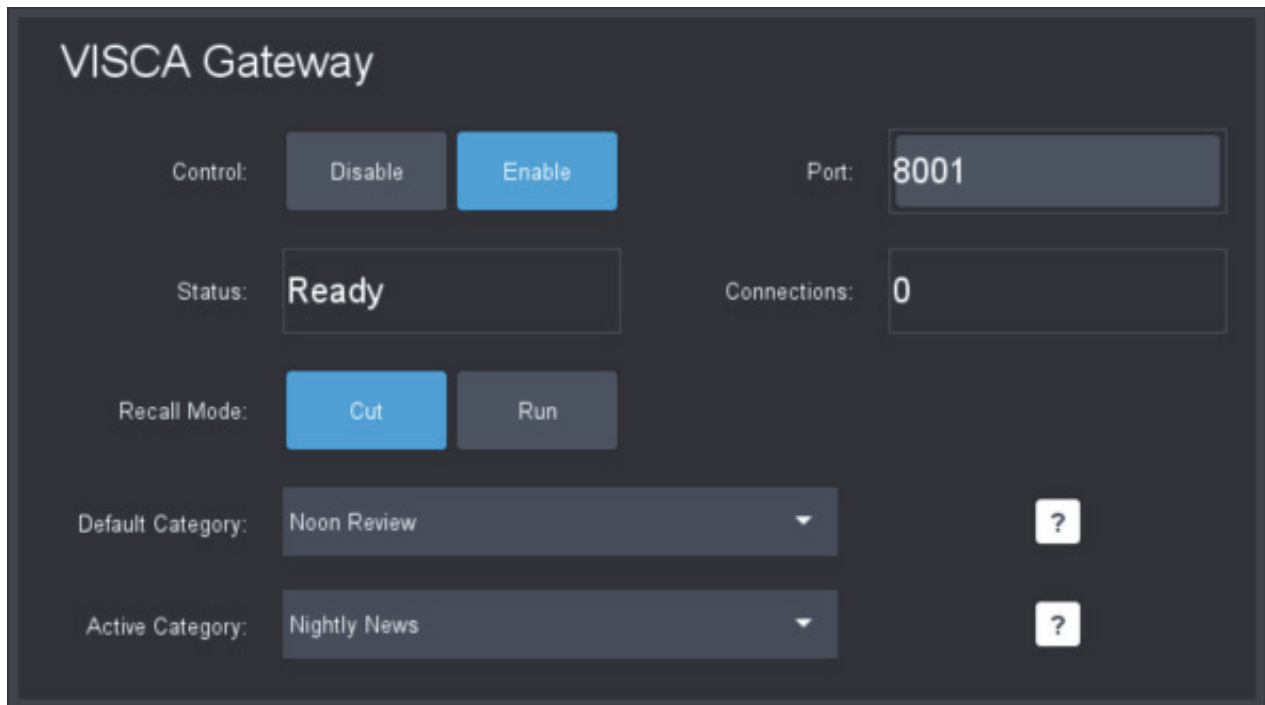
### VISCA Gateway

VISCA Gateway settings ([Figure 19](#)) enable you to open a server port to connect VISCA controllers, such as a Carbonite switcher, to the PT head via the PT Head Control plugin.

External VISCA controllers can directly control the pan, tilt, zoom and focus axes. They can also store presets and recall them, by referencing external IDs assigned to presets. The communication protocol is serial VISCA over TCP. Only a subset of VISCA commands is supported. For more information about VISCA control and supported VISCA commands, contact Ross Video Technical Support.

**Note:** This VISCA gateway implementation is not compatible with the legacy PIVOTCam Control Panel.

**Tip:** On the **Operation** tab of the **Config** page, you can configure whether the external numbering of presets starts at **0** or **1** (**External ID Display Offset**). The setting is purely aesthetic, and can be changed at any time. For many external VISCA controllers, such as Carbonite, preset numbering starts at **1**. If such a VISCA controller recalls preset **1**, the first preset is recalled, regardless of whether the PT Head Control interface shows it as preset **0** or **1**. To avoid confusion, when using an external VISCA controller we recommend you set **External ID Display Offset** to match the controller's numbering. For more information, see "**Interface Area**" on [page 35](#).



**Figure 19 - VISCA Gateway settings**

**VISCA Gateway settings include the following:**

- **Control** — To open a server port, set **Control** to **Enable**.
  - **Port** — The port number. Can be edited only when **Control** is set to **Disable**.
  - **Status** (read-only):
    - › **Closed** — The port is closed, either because the gateway is disabled or because DashBoard is not connected to the target PT head.
    - › **Ready** — The port is open, but no controllers are currently connected to it.
    - › **Connected** — The port is open and one or more controllers are connected to it.
    - › **Error** — Typically means that the selected port is unavailable. For example, it may be in use by a different service or as a gateway for a different PT head.
  - **Connections** (read-only) — When status is **Connected**, shows how many connections are established.
  - **Recall Mode:**
    - › **Cut** — When a VISCA command recalls a preset, a **CUT** operation is performed. All controlled axes move to their preset destinations as quickly as possible.
    - › **Run** — When a VISCA command recalls a preset, a **RUN** operation is performed. All controlled axes reach their preset destinations at the same time. The duration of the preset recall is defined in the preset. For more information, see "**Working with Presets**" on [page 39](#).
- Note:** If a preset recall request submitted through the gateway is rejected, the recall fails and no warning message appears, even if the **Presets** page is visible. A recall action may be rejected for

various reasons such as insufficient time allotted to run the preset or if one or more required axes are disabled.

- **Default Category** — Specifies the category where new presets are to be stored when a store preset command is sent to the gateway and no existing preset with the same external ID already exists.
- **Active Category** — Specifies the category where DashBoard searches for an existing preset with the requested external ID when a store or recall preset command is sent to the gateway. Valid only when **External ID Uniqueness** in the **Interface** area of the **Operation** tab is set to **Category**. For more information, see “**Interface Area**” on [page 35](#).

**Note:** If a VISCA store operation causes a new preset to be created, the name of the new preset is **Remote <time\_stamp>**. For example, **Remote 2202-01-07 13:26:42**.

### **Storing and Recalling Presets through VISCA Gateway**

Each preset on the PT head has an external ID. The results of storing and recalling presets through VISCA commands varies depending on the **External ID Uniqueness** setting in the **Interface** area of the **Operation** tab. This setting specifies either that all external IDs on the head must be unique (**Device** option), or that identical external IDs can exist on the head as long as each ID is in a different category (**Category** option).

The following table describes how a PT head responds to **Store** and **Recall** actions requested through VISCA commands.

<b>Action</b>	<b>External IDs Unique by Category</b>	<b>External IDs Unique by Device</b>
Store	1) If a preset with the requested external ID exists in the Active Category, overwrite this preset with the current head location (name unchanged). 2) If the Active Category does not contain a preset with the requested external ID but the Default Category does, overwrite this preset with current head location (name unchanged). 3) If the PT head has no presets with the requested external ID, create a new preset in the Default Category, with the name <b>Remote &lt;time_stamp&gt;</b> .	1) If the PT head has a preset with the requested external ID, overwrite this preset with the current head location (name unchanged). 2) If the PT head has no presets with the requested external ID, create a new preset in the Default Category, with the name <b>Remote &lt;time_stamp&gt;</b> .
Recall	If a preset with the requested external ID exists in the Active Category, recall this preset.	If a preset with the requested external ID exists on the PT head, recall this preset.

### **Joystick Control through VISCA Gateway**

Joystick control is shared between the PT Head Control plugin and any controllers connected through the VISCA gateway.

If joystick control is currently enabled for the plugin, axes can be controlled using the PT Head Control interface, a joystick connected to DashBoard, or a controller connected to the VISCA gateway. A new command from any of these devices overrides previous commands.

If joystick control is currently disabled for the PT Head Control plugin, any velocity controls sent through the VISCA gateway are rejected.

**Tip:** This VISCA implementation includes a special command that enables a VISCA controller to activate the enable/disable joystick control on the PT Head Control plugin. For more information, contact Ross Video Technical Support.

# Working with Presets

A preset is a record of the position of all controllable axes for a camera system (pan, tilt, focus, zoom, and iris). It also includes a name, a run duration, a category, and an External ID (optional).

This section describes how to work with presets, including creating, editing, and recalling them. It includes the following major topics:

- “**About Preset Modes**” on [page 39](#)
- “**Working with Presets in Panel Mode**” on [page 39](#)
- “**Working with Presets in Shotbox Mode**” on [page 47](#)

## About Preset Modes

The PT Head Control interface has two operation modes, also known as **Preset Modes**, which define the behavior of the **Presets** page:

- **Panel mode** — In this mode, you tap a preset to select it, and then tap an action button (**Cut**, **Run**, **Clone**, **Update**, **Edit**, or **Delete**) at the bottom of the **Presets** page. When you select a preset, the border of the preset button turns purple.
- **Shotbox mode** — In this mode, you tap an action button at the bottom of the **Presets** page to enter an action mode (**Cut**, **Run**, **Alt**, **Clone**, **Update**, **Edit**, or **Delete**), and then tap the preset to which you want to apply the action.

**Tip:** If the row of action buttons includes the **Alt** button, the interface is in **Shotbox** mode.

For information about switching between operation modes, see “**Interface Area**” on [page 35](#).

## Working with Presets in Panel Mode

This section describes how to work with presets in **Panel** mode. Information presented here applies only when the PT Head Control interface is in **Panel** mode (as opposed to **Shotbox** mode).

Unless stated otherwise, tasks described in this section are to be performed from the **Presets** page.



To access the **Presets** page, tap the **Presets** button.

Before you attempt these procedures, we suggest you review the various controls available on the **Presets** page. For a description of these controls, see “**Presets Page (in Panel Mode)**” on [page 15](#).

This section includes information about performing the following tasks in panel mode:

- “**Switch Between Categories of Presets (Panel mode)**” on [page 40](#)
- “**Add a New Preset (Panel mode)**” on [page 40](#)
- “**Clone a Preset (Panel mode)**” on [page 41](#)
- “**Update a Preset Position (Panel mode)**” on [page 42](#)
- “**Recall a Preset (Panel Mode)**” on [page 42](#)
- “**Edit a Preset (Panel mode)**” on [page 43](#)
- “**Edit Default Preset Options (Panel mode)**” on [page 45](#)
- “**Delete a Preset (Panel mode)**” on [page 46](#)

## Switch Between Categories of Presets (Panel mode)

Presets are arranged in categories, represented by category buttons near the top of the Presets page. The background of the category button representing the current category is always purple.

### To switch to a different category:

- Tap the category button representing the desired category.  
The category button turns purple, and the presets in that category are accessible.

## Add a New Preset (Panel mode)

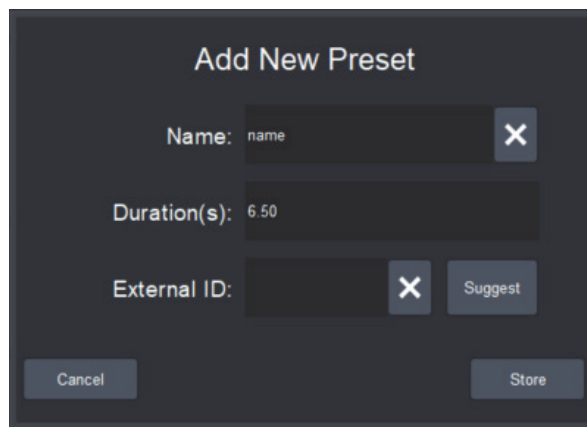
A preset is a record of the position of all controllable axes for a camera system (pan, tilt, focus, zoom, and iris). It also includes a name, a run duration, a category, and an External ID (optional).

When a preset is stored, it includes a set of **Preset Options** (preset **Name** and preset **Duration**). Depending on the current **Store Mode**, you may be required to review the **Preset Options** when you add a new preset. For more information, see “**Interface Area**” on [page 35](#).

### To add a new preset:

1. Adjust the camera position and lens settings to prepare the shot.
2. Tap the **New** button.

Depending on the **Store Mode** setting, the **Add New Preset** dialog box may appear ([Figure 20](#)). For more information about the **Store Mode** setting, see “**Interface Area**” on [page 35](#).



*Figure 20 - Add New Preset dialog box*

3. If the **Add New Preset** dialog box appears, review and/or modify the **Preset Options** as required:
  - a. In the **Name** box, type a name for the preset. The name appears on the preset button.
  - b. Tap the **Duration** box, specify the recall duration (in seconds) on the number pad, and then tap **ENTR**.
  - c. In the **External ID** box, do one of the following to specify an External ID, if required:
    - If an External ID number has already been assigned and you do not need to change it, skip the rest of this step, and proceed to 4.
    - Tap the **Suggest** button to automatically assign an External ID.  
**Tip:** You can configure the system to automatically assign an External ID each time you add or clone a preset. For more information, see “**Edit Default Preset Options (Panel mode)**” on [page 45](#).
    - Tap the **External ID** box, specify the External ID number in the number pad, and then tap **ENTR**.



**Tip:** Alternatively, if you want to delete the External ID, tap the **X** button beside the **External ID** box.

**Note:** Each External ID must be unique within a certain scope — either unique within the preset category, or unique among all External IDs for the device. The scope within which External IDs must be unique depends on the **External ID Uniqueness** setting. For more information, see “**Interface Area**” on [page 35](#).

**Tip:** An External ID is an identification number assigned to a preset. External IDs enable automation control systems to address and run presets. Not all automation control systems require External IDs. You can also use External IDs to reference presets if you are creating your own custom panel to recall presets.

4. Tap **Store**.

## Clone a Preset (Panel mode)

You can create a copy of a preset.

When you clone a preset, you can modify the cloned preset’s **Name**, **Duration** (in seconds), and **External ID**.

**To clone a preset:**

1. Select the preset you want to copy.

**Tip:** To select or deselect a preset, tap its button. A preset is selected when the border of its button is purple.

2. Tap the **Clone** button.

Depending the **Store Mode** setting, the **Clone Preset** dialog box may appear ([Figure 21](#)). For more information about the **Store Mode** setting, see “**Interface Area**” on [page 35](#).



*Figure 21 - Clone Preset dialog box*

3. If the **Clone Preset** dialog box appears, review and/or modify the **Preset Options** as required:

- a. In the **Name** box, type a name for the preset. The name appears on the preset button.
- b. Tap the **Duration** box, specify the recall duration (in seconds) on the number pad, and then tap **ENTR**.
- c. In the **External ID** box, do one of the following to specify an External ID, if required:
  - If an External ID number is already assigned and you do not need to change it, skip the rest of this step, and proceed to 4.
  - Tap the **Suggest** button to automatically assign an External ID.

**Tip:** You can configure the system to automatically assign an External ID each time you add or clone a preset. For more information, see “**Edit Default Preset Options (Panel mode)**” on [page 45](#).

- Tap the **External ID** box, specify the External ID number in the number pad, and then tap **ENTR**.

**Tip:** Alternatively, if you want to delete the External ID, tap the **X** button beside the **External ID** box.

**Note:** Each External ID must be unique within a certain scope — either unique within the preset category, or unique among all External IDs for the device. The scope within which External IDs must be unique depends on the **External ID Uniqueness** setting. For more information, see “**Interface Area**” on [page 35](#).

**Tip:** An External ID is an identification number assigned to a preset. External IDs enable automation control systems to address and run presets. Not all automation control systems require External IDs. You can also use External IDs to reference presets if you are creating your own custom panel to recall presets.

#### 4. Tap **Clone**.

## Update a Preset Position (Panel mode)

You can update the selected preset by storing the current position of the PT head (pan and tilt) and the camera lens (zoom, focus, and iris).

Alternatively, you can edit a preset to update its position and preset options. For more information, see “**Edit a Preset (Panel mode)**” on [page 43](#).

**Note:** If a preset has been locked by SmartShell or another controller, it can not be updated from DashBoard. If you try to update such a preset, a message appears, to inform you that the preset is locked. Presets can not be locked or unlocked from the PT Head Control Plugin.

#### To update a preset:

1. Select the preset you want to update.  
**Tip:** To select or deselect a preset, tap its button. A preset is selected when the border of its button is purple.
2. Tap the **Update** button.
3. If the **CONFIRM UPDATE** dialog box appears, tap **Update**.

## Recall a Preset (Panel Mode)

There are two ways to recall a preset:

- **Cut** — All axes move towards their destinations as quickly as possible.
- **Run** — The axes all reach their destinations at the same time. A preset runs over a specified duration. You can run a preset using the default duration, or specify an alternative duration for one-time use.

**Note:** If recalling a preset requires movement of one or more axes that are disabled, the preset is not recalled and a **WARNING** message appears stating the **Reason** as **NOTENABLED**. For information about enabling and disabling axes, see “**Configure Axis Behavior**” on [page 27](#).

#### To cut a preset:

1. Select the preset you want to cut.  
**Tip:** To select or deselect a preset, tap its button. A preset is selected when the border of its button is purple.
2. Tap the **Cut** button.

### To run a preset:

1. Select the preset you want to run.

**Tip:** To select or deselect a preset, tap its button. A preset is selected when the border of its button is purple.

2. Do one of the following:

- To run the preset using the default duration, tap the **Run** button.
- To run the preset using an alternative duration, tap the **Run Duration** box, specify the duration (in seconds) on the number pad, tap the **ENTR** button, and then tap the **Run** button.

### While a preset is being recalled, you can do any of the following:

- Use manual controls to adjust the position of any controllable axes. Manual control is available only if manual control is enabled (via the **Joystick Control > Enabled** button).
- Use time control to adjust the duration of the preset. This feature is not available on some heads.
- Recall a different preset, causing the head to move to the new preset position instead of the original preset.
- Halt the head, stopping all axes as quickly as possible.

## Edit a Preset (Panel mode)

When a preset is stored, it includes a set of **Preset Options** consisting of a name, a run duration, a category, and an External ID (optional).

You can edit a preset to modify the preset options and the preset position.

When you edit a preset, you can customize the acceleration and deceleration rate of the axes. You can configure all axes to have the same rates, or customize the rates for individual axes. If you want the axes to accelerate in sync, set identical rates for each axis. The same applies to deceleration rates. For example, if acceleration rates differ between two axes, the axis with the higher acceleration rate may appear to start moving before the other axis, and may reach its constant velocity sooner.

**Note:** If a preset has been locked by SmartShell or another controller, it can not be edited from DashBoard. If you try to edit such a preset, a message appears, to inform you that the preset is locked. Presets can not be locked or unlocked from the PT Head Control Plugin.

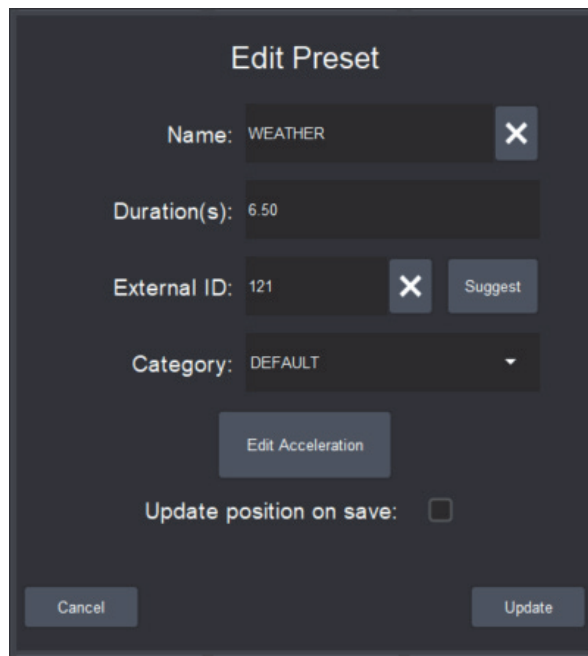
### To edit a preset:

1. Select the preset you want to edit.

**Tip:** To select or deselect a preset, tap its button. A preset is selected when the border of its button is purple.

2. Tap the **Edit** button.

The **Edit Preset** dialog box appears ([Figure 22](#)).



**Figure 22** - Edit Preset dialog box

3. In the **Name** box, type a name for the preset. The name appears on the preset button.
4. Tap the **Duration** box, specify the recall duration (in seconds) on the number pad, and then tap **ENTR**.
5. In the **External ID** box, do one of the following to specify an External ID, if required:
  - If an External ID number is already assigned and you do not need to change it, skip the rest of this step, and proceed to 6.
  - Tap the **Suggest** button to automatically assign an External ID.
  - Tap the **External ID** box, specify the External ID number in the number pad, and then tap **ENTR**.

**Tip:** Alternatively, to delete the External ID, tap the **X** button beside the **External ID** box.

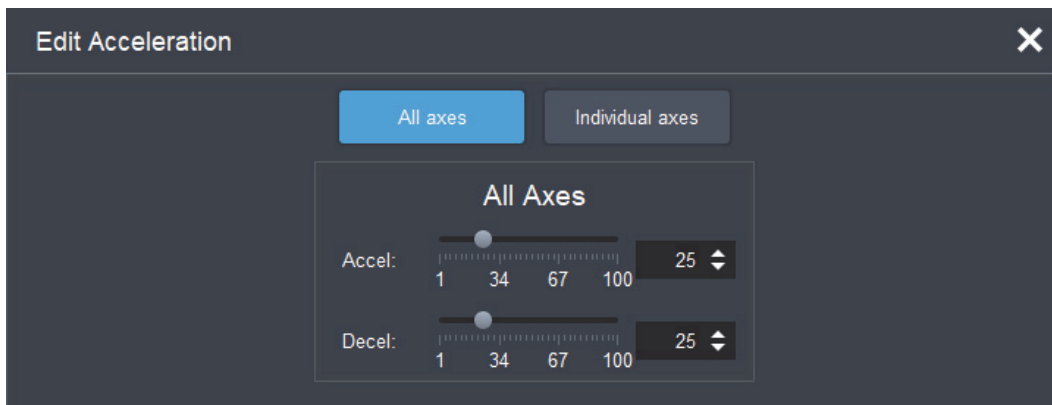
**Note:** Each External ID must be unique within a certain scope — either unique within the preset category, or unique among all External IDs for the device. The scope within which External IDs must be unique depends on the **External ID Uniqueness** setting. For more information, see “**Interface Area**” on [page 35](#).

**Tip:** An External ID is an identification number assigned to a preset. External IDs enable automation control systems to address and run presets. Not all automation control systems require External IDs. You can also use External IDs to reference presets if you are creating your own custom panel to recall presets.

6. In the **Category** box, select the category to which you want the preset to belong.
7. If you want to customize the acceleration and deceleration rates for the preset, tap the **Edit Acceleration** button (if present — not available on some PT heads), and then:
  - d. Tap the **All Axes** button, and then specify the default acceleration rate (**Accel**) and the default deceleration rate (**Decel**) for all axes (pan, tilt, zoom, and focus). See [Figure 23](#).

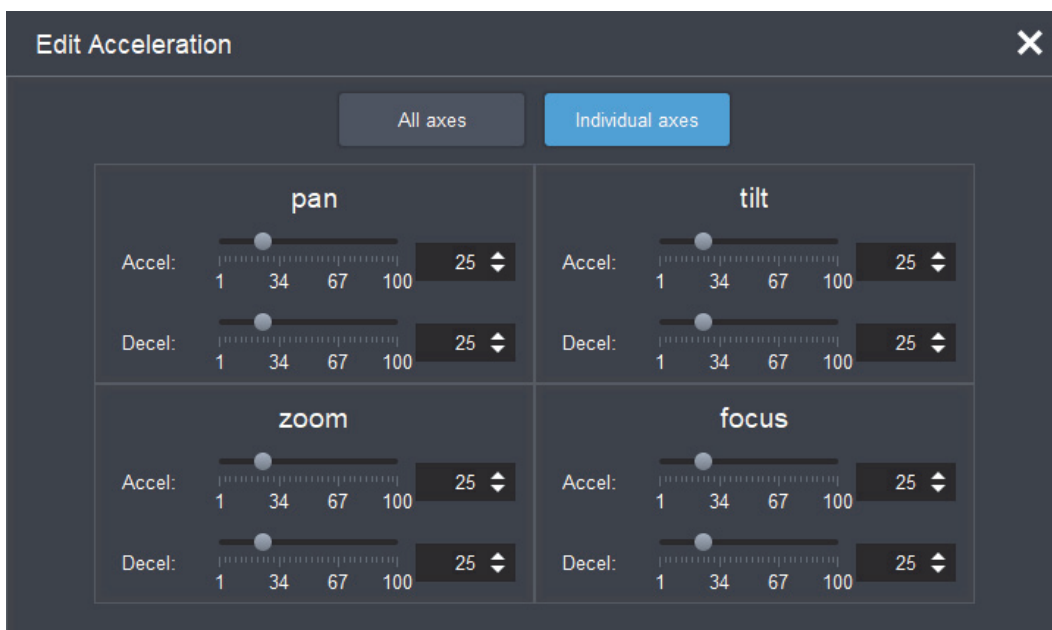
**Tip:** For Furio heads running v5.x firmware, and X-series heads, we recommend setting acceleration and deceleration rates to **25** for optimal performance.

**Tip:** This step sets the rates for all axes to the same values. You can keep them all the same, or customize the rates for individual axes in the next step.



**Figure 23** - Edit Acceleration dialog box (all axes)

- e. If you want to customize the acceleration rate and/or deceleration rate for individual axes, tap the **Individual axes** button and then specify the rates for each axis as required. See [Figure 24](#).



**Figure 24** - Edit Acceleration dialog box (individual axes)

- f. When you are finished setting acceleration and deceleration rates, tap the **X** button to close the **Edit Acceleration** dialog box.
- 8. If you want to update the preset to record the current positions of all controllable axes, select the **Update position on save** check box.
- 9. Tap **Update**.

## Edit Default Preset Options (Panel mode)

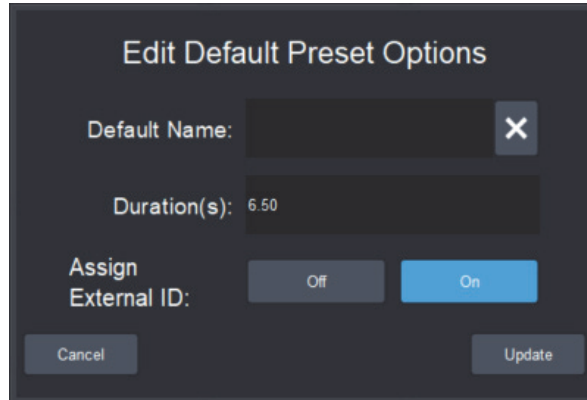
You can edit the default values for the **Preset Options**, which are the values presented for review or automatically applied each time you store a preset.

When you store a preset, **Preset Options** are also stored. Depending on the **Store Mode**, you may or may not have an opportunity to review and edit the **Preset Options** before they are stored with the preset. For more information about the **Store Mode** setting, see "Interface Area" on [page 35](#).

**Note:** **Preset Options** can also be changed after a preset is added or cloned. For more information, see "Edit a Preset (Panel mode)" on [page 43](#).

**To define the default Preset Options:**

1. Tap the **Edit Defaults** button.  
The **Edit Default Preset Options** dialog box appears ([Figure 25](#)).



**Figure 25** - Edit Default Preset Options dialog box

2. Review and/or modify the default **Preset Options** as follows:
  - a. In the **Default Name** box, type a default name for new presets. The name, plus a timestamp showing when the preset was created, are displayed on the preset button.
  - b. In the **Duration** box, specify the default run duration, in seconds.
  - c. If you want an External ID to be automatically assigned whenever a new preset is added, beside **Assign External ID** tap the **On** button. Otherwise, tap the **Off** button.  
**Tip:** An External ID is an identification number assigned to a preset. External IDs enable automation control systems to address and run presets. Not all automation control systems require External IDs. You can also use External IDs to reference presets if you are creating your own custom panel to recall presets.  
Each External ID must be unique within a certain scope — either unique within the preset category, or unique among all External IDs for the device. The scope within which External IDs must be unique depends on the **External ID Uniqueness** setting. For more information, see [“Interface Area”](#) on [page 35](#).
  - d. Tap **Update**.

## Delete a Preset (Panel mode)

After you delete a preset, it is permanently deleted from the head and can no longer be recalled.

**Note:** If a preset has been locked by SmartShell or another controller, it can not be deleted from DashBoard. If you try to delete such a preset, a message appears, to inform you that the preset is locked. Presets can not be locked or unlocked from the PT Head Control Plugin.

**To delete a preset:**

1. Select the preset you want to delete.  
**Tip:** To select or deselect a preset, tap its button. A preset is selected when the border of its button is purple.
2. Tap the **Delete** button.  
The **CONFIRM DELETE** dialog box appears.
3. Tap **Delete**.

# Working with Presets in Shotbox Mode

This section describes how to work with presets in **Shotbox** mode. Information presented here applies only when the PT Head Control interface is in **Shotbox** mode (as opposed to **Panel** mode).

Unless stated otherwise, tasks described in this section are to be performed from the **Presets** page.



To access the **Presets** page, tap the **Presets** button.

Before you attempt these procedures, we suggest you review the various controls available on the **Presets** page. For a description of these controls, see “**Presets Page (in Shotbox Mode)**” on [page 18](#).

This section includes information about performing the following tasks in Shotbox mode:

- “**Switch Between Categories of Presets (Shotbox mode)**” on [page 47](#)
- “**Add a New Preset (Shotbox mode)**” on [page 47](#)
- “**Clone a Preset (Shotbox mode)**” on [page 49](#)
- “**Update a Preset Position (Shotbox mode)**” on [page 50](#)
- “**Recall a Preset (Shotbox mode)**” on [page 50](#)
- “**Edit a Preset (Shotbox mode)**” on [page 51](#)
- “**Edit Default Preset Options (Shotbox mode)**” on [page 53](#)
- “**Delete a Preset (Shotbox mode)**” on [page 54](#)

## Switch Between Categories of Presets (Shotbox mode)

Presets are arranged in categories, represented by category buttons near the top of the Presets page. The background of the category button representing the current category is always purple.

**To switch to a different category:**

- Tap the category button representing the desired category.  
The category button turns purple, and the presets in that category are accessible.

## Add a New Preset (Shotbox mode)

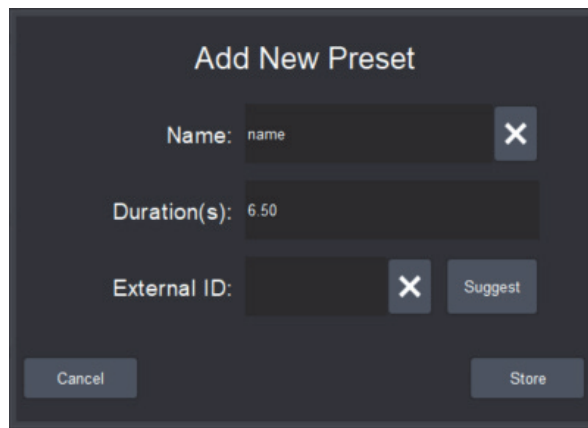
A preset is a record of the position of all controllable axes for a camera system (pan, tilt, focus, zoom, and iris). It also includes a name, a run duration, a category, and an External ID (optional).

When a preset is stored, it includes a set of **Preset Options** (preset **Name** and preset **Duration**). Depending on the current **Store Mode**, you may be required to review the **Preset Options** when you add a new preset. For more information, see “**Interface Area**” on [page 35](#).

**To add a new preset:**

1. Adjust the camera position and lens settings to prepare the shot.
2. Tap the **New** button.

Depending the **Store Mode** setting, the **Add New Preset** dialog box may appear ([Figure 26](#)). For more information about the **Store Mode** setting, see “**Interface Area**” on [page 35](#).



**Figure 26** - Add New Preset dialog box

3. If the **Add New Preset** dialog box appears, review and/or modify the **Preset Options** as follows:
  - a. In the **Name** box, type a name for the preset. The name appears on the preset button.
  - b. Tap the **Duration** box, specify the recall duration (in seconds) on the number pad, and then tap **ENTR**.
  - c. In the **External ID** box, do one of the following to specify an External ID, if required:
    - If an External ID number is already assigned and you do not need to change it, skip the rest of this step, and proceed to 4.
    - Tap the **Suggest** button to automatically assign an External ID.
 

**Tip:** You can configure the system to automatically assign an External ID each time you add or clone a preset. For more information, see “**Edit Default Preset Options (Shotbox mode)**” on [page 53](#).
    - Tap the **External ID** box, specify the External ID number in the number pad, and then tap **ENTR**.

**Tip:** Alternatively, if you want to delete the External ID, tap the **X** button beside the **External ID** box.

**Note:** Each External ID must be unique within a certain scope — either unique within the preset category, or unique among all External IDs for the device. The scope within which External IDs must be unique depends on the **External ID Uniqueness** setting. For more information, see “**Interface Area**” on [page 35](#).

**Tip:** An External ID is an identification number assigned to a preset. External IDs enable automation control systems to address and run presets. Not all automation control systems require External IDs. You can also use External IDs to reference presets if you are creating your own custom panel to recall presets.
4. Tap **Store**.



## Clone a Preset (Shotbox mode)

You can create a copy of a preset.

When you clone a preset, you can modify the cloned preset's **Name**, **Duration** (in seconds), and **External ID**.

### To clone a preset:

1. If the **Clone** button is not pink, tap it to place the interface in **Clone** mode. All assigned preset buttons turn pink.

2. Tap the preset you want to copy.

Depending the **Store Mode** setting, the **Clone Preset** dialog box may appear ([Figure 27](#)). For more information about the **Store Mode** setting, see “**Interface Area**” on [page 35](#).



*Figure 27 - Clone Preset dialog box*

3. If the **Clone Preset** dialog box appears, review and/or modify the **Preset Options** as required:
  - a. In the **Name** box, type a name for the preset. The name appears on the preset button.
  - b. Tap the **Duration** box, specify the recall duration (in seconds) on the number pad, and then tap **ENTR**.
  - c. In the **External ID** box, do one of the following to specify an External ID, if required:
    - If an ID number is already assigned and you do not need to change it, skip the rest of this step, and proceed to 4.
    - Tap the **Suggest** button to automatically assign an External ID.

**Tip:** You can configure the system to automatically assign an External ID each time you add or clone a preset. For more information, see “**Edit Default Preset Options (Shotbox mode)**” on [page 53](#).

- Tap the **External ID** box, specify the External ID number in the number pad, and then tap **ENTR**.

**Tip:** Alternatively, if you want to delete the External ID, tap the **X** button beside the **External ID** box.

**Note:** Each External ID must be unique within a certain scope — either unique within the preset category, or unique among all External IDs for the device. The scope within which External IDs must be unique depends on the **External ID Uniqueness** setting. For more information, see “**Interface Area**” on [page 35](#).

**Tip:** An External ID is an identification number assigned to a preset. External IDs enable automation control systems to address and run presets. Not all automation control systems require External IDs. You can also use External IDs to reference presets if you are creating your own custom panel to recall presets.

4. Tap **Clone**.

## Update a Preset Position (Shotbox mode)

You can update the selected preset by storing the current position of the PT head (pan and tilt) and the camera lens (zoom, focus, and iris).

Alternatively, you can edit a preset to update its position and preset options. For more information, see “**Edit a Preset (Shotbox mode)**” on [page 51](#).

**Note:** If a preset has been locked by SmartShell or another controller, it can not be updated from DashBoard. If you try to update such a preset, a message appears, to inform you that the preset is locked. Presets can not be locked or unlocked from the PT Head Control Plugin.

### To update a preset:

1. If the **Update** button is not orange, tap it to place the interface in **Update** mode.  
All assigned preset buttons turn orange.
2. Tap the preset you want to update.
3. Tap the **Update** button.
4. If the **CONFIRM UPDATE** dialog box appears, tap **Update**.

## Recall a Preset (Shotbox mode)

There are two ways to recall a preset:

- **Cut** — All axes move towards their destinations as quickly as possible.
- **Run** — The axes all reach their destinations at the same time. A preset runs over a specified duration.  
You can run a preset using the default duration, or specify an alternative duration for one-time use.

**Note:** If recalling a preset requires movement of one or more axes that are disabled, the preset is not recalled and a **WARNING** message appears stating the **Reason** as **NOTENABLED**. For information about enabling and disabling axes, see “**Configure Axis Behavior**” on [page 27](#).

### To cut a preset:

1. If the **Cut** button is not purple, tap it to place the interface in **Cut** mode.  
All assigned preset buttons turn purple.
2. Tap the preset button that represents the preset you want to cut.

### To run a preset using the default duration:

1. If the **Run** button is not blue, tap it to place the interface in **Run** mode.  
All assigned preset buttons turn blue.
2. Tap the preset button that represents the preset you want to run.

### To run a preset using an alternative duration:

1. If the **Alt** button is not pale green, tap it to place the interface in **Alternative Duration (Alt)** mode.  
All assigned preset buttons turn pale green.
2. Tap the **Run Duration** box, specify the duration (in seconds) on the number pad, and then tap the **ENTR** button.
3. Tap the preset button that represents the preset you want to run.

**While a preset is being recalled, you can do any of the following:**

- Use manual controls to adjust the position of any controllable axes. Manual control is available only if manual control is enabled (via the **Joystick Control > Enabled** button).
- Use time control to adjust the duration of the preset. This feature is not available on some heads.
- Recall a different preset, causing the head to move to the new preset position instead of the original preset.
- Halt the head, stopping all axes as quickly as possible.

## Edit a Preset (Shotbox mode)

When a preset is stored, it includes a set of **Preset Options** consisting of a name, a run duration, a category, and an External ID (optional).

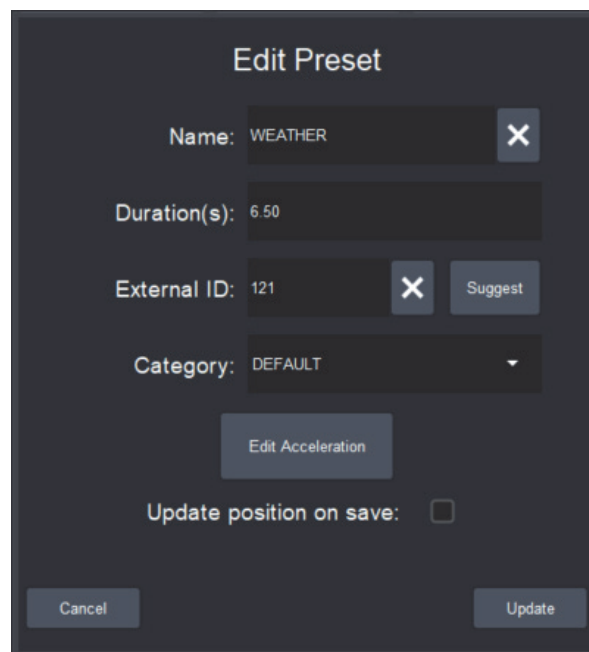
You can edit a preset to modify the preset options and the preset position.

When you edit a preset, you can customize the acceleration and deceleration rate of the axes. You can configure all axes to have the same rates, or customize the rates for individual axes. If you want the axes to accelerate in sync, set identical rates for each axis. The same applies to deceleration rates. For example, if acceleration rates differ between two axes, the axis with the higher acceleration rate may appear to start moving before the other axis, and may reach its constant velocity sooner.

**Note:** If a preset has been locked by SmartShell or another controller, it can not be edited from DashBoard. If you try to edit such a preset, a message appears, to inform you that the preset is locked. Presets can not be locked or unlocked from the PT Head Control Plugin.

**To edit a preset:**

1. If the **Edit** button is not bright green, tap it to place the interface in **Edit** mode. All assigned preset buttons turn bright green.
2. Tap the preset button for the preset you want to edit.
3. Tap the **Edit** button. The **Edit Preset** dialog box appears ([Figure 28](#)).



**Figure 28** - Edit Preset dialog box

4. In the **Name** box, type a name for the preset. The name appears on the preset button.

5. Tap the **Duration** box, specify the recall duration (in seconds) on the number pad, and then tap **ENTR**.
6. In the **External ID** box, do one of the following to specify an External ID, if required:
  - If an External ID number is already assigned and you do not need to change it, skip the rest of this step, and proceed to 7.
  - Tap the **Suggest** button to automatically assign an External ID.
  - Tap the **External ID** box, specify the External ID number in the number pad, and then tap **ENTR**.

**Tip:** Alternatively, to delete the External ID, tap the **X** button beside the **External ID** box.

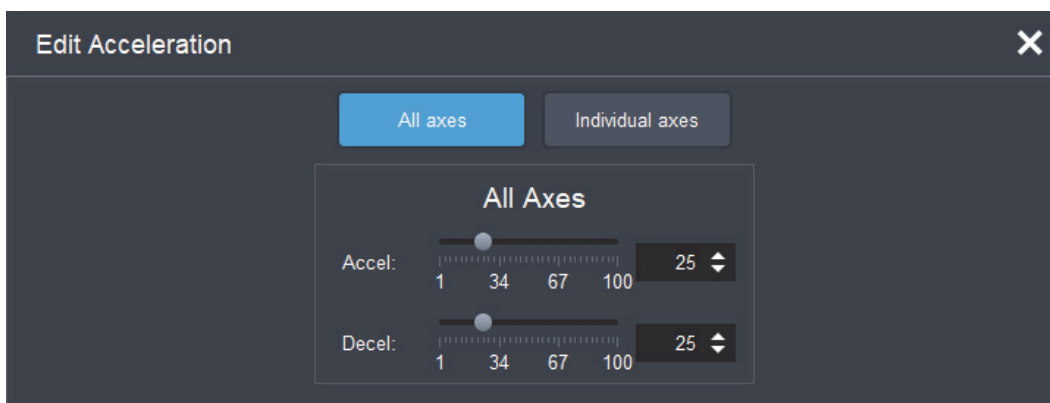
**Note:** Each External ID must be unique within a certain scope — either unique within the preset category, or unique among all External IDs for the device. The scope within which External IDs must be unique depends on the **External ID Uniqueness** setting. For more information, see “**Interface Area**” on [page 35](#).

**Tip:** An External ID is an identification number assigned to a preset. External IDs enable automation control systems to address and run presets. Not all automation control systems require External IDs. You can also use External IDs to reference presets if you are creating your own custom panel to recall presets.

7. In the **Category** box, select the category to which you want the preset to belong.
8. If you want to customize the acceleration and deceleration rates for the preset, tap the **Edit Acceleration** button (if present — not available on some PT heads), and then:
  - d. Tap the **All Axes** button, and then specify the default acceleration rate (**Accel**) and the default deceleration rate (**Decel**) for all axes (pan, tilt, zoom, and focus). See [Figure 29](#).

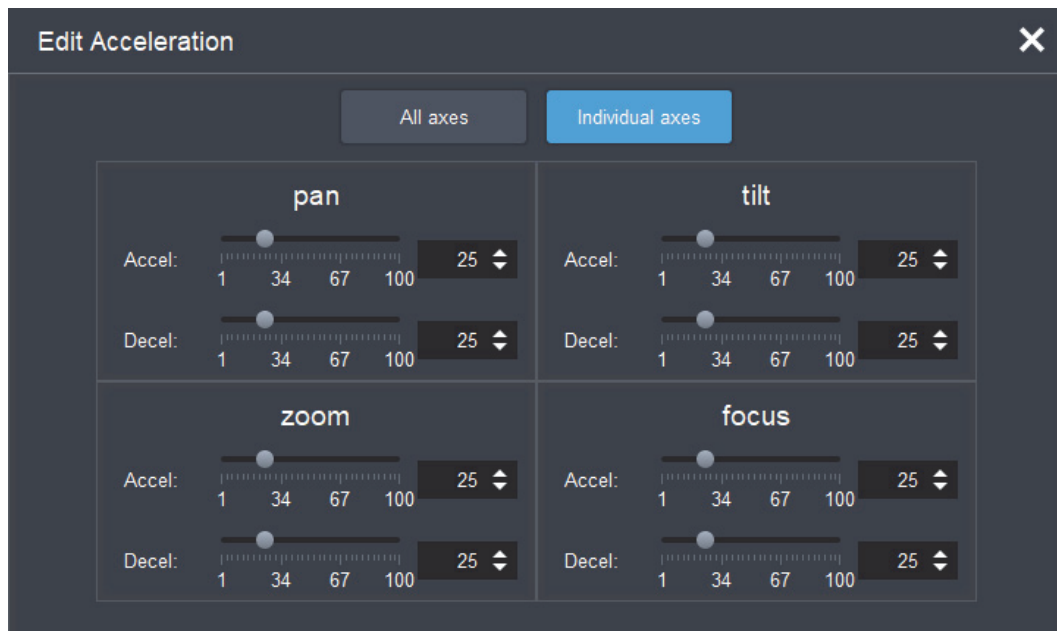
**Tip:** For Furio heads running v5.x firmware, and X-series heads, we recommend setting acceleration and deceleration rates to **25** for optimal performance.

**Tip:** This step sets the rates for all axes to the same values. You can keep them all the same, or customize the rates for individual axes in the next step.



**Figure 29** - Edit Acceleration dialog box (all axes)

- e. If you want to customize the acceleration rate and/or deceleration rate for individual axes, tap the **Individual axes** button and then specify the rates for each axis as required. See [Figure 30](#).



**Figure 30** - Edit Acceleration dialog box (individual axes)

- f. When you are finished setting acceleration and deceleration rates, tap the **X** button to close the **Edit Acceleration** dialog box.
9. If you want to update the preset to record the current positions of all controllable axes, select the **Update position on save** check box.
10. Tap **Update**.

## Edit Default Preset Options (Shotbox mode)

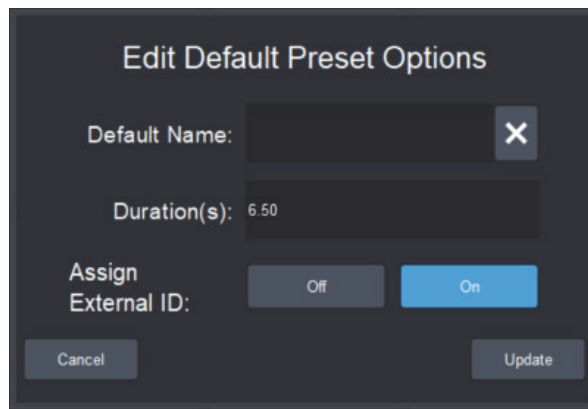
You can edit the default values for the **Preset Options**, which are the values presented for review or automatically applied each time you store a preset.

When you store a preset, **Preset Options** are also stored. Depending on the **Store Mode**, you may or may not have an opportunity to review and edit the **Preset Options** before they are stored with the preset. For more information about the **Store Mode** setting, see “**Interface Area**” on [page 35](#).

**Note:** **Preset Options** can also be changed after a preset is added or cloned. For more information, see “**Edit a Preset (Shotbox mode)**” on [page 51](#).

### To define the default Preset Options:

1. Tap the **Edit Defaults** button.  
The **Edit Default Preset Options** dialog box appears ([Figure 25](#)).



**Figure 31** - Edit Default Preset Options dialog box

2. Review and/or modify the default **Preset Options** as follows:
  - a. In the **Default Name** box, type a default name for new presets. The name, plus a timestamp showing when the preset was created, are displayed on the preset button.
  - b. In the **Duration** box, specify the default run duration, in seconds.
  - c. If you want an External ID to be automatically assigned whenever a new preset is added, beside **Assign External ID** tap the **On** button. Otherwise, tap the **Off** button.

**Tip:** An External ID is an identification number assigned to a preset. External IDs enable automation control systems to address and run presets. Not all automation control systems require External IDs. You can also use External IDs to reference presets if you are creating your own custom panel to recall presets.

Each External ID must be unique within a certain scope — either unique within the preset category, or unique among all External IDs for the device. The scope within which External IDs must be unique depends on the **External ID Uniqueness** setting. For more information, see “**Interface Area**” on [page 35](#).

3. Tap **Update**.

## Delete a Preset (Shotbox mode)

After you delete a preset, it is permanently deleted from the head and can no longer be recalled.

**Note:** If a preset has been locked by SmartShell or another controller, it can not be deleted from DashBoard. If you try to delete such a preset, a message appears, to inform you that the preset is locked. Presets can not be locked or unlocked from the PT Head Control Plugin.

### To delete a preset:

1. If the **Delete** button is not red, tap it to place the interface in **Delete** mode. All assigned preset buttons turn red.
2. Tap the preset button that represents the preset you want to delete.
3. Tap the **Delete** button. The **CONFIRM DELETE** dialog box appears.
4. Tap **Delete**.

# Managing Categories

A category is a grid of preset buttons, each of which represents a preset. The PT head can store multiple categories of preset buttons. You can add, delete, and rename categories.

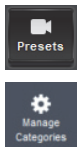
This section includes the following topics:

- “Access the Manage Categories Page” on [page 55](#)
- “Add a Category” on [page 56](#)
- “Rename a Category” on [page 56](#)
- “Delete a Category” on [page 56](#)

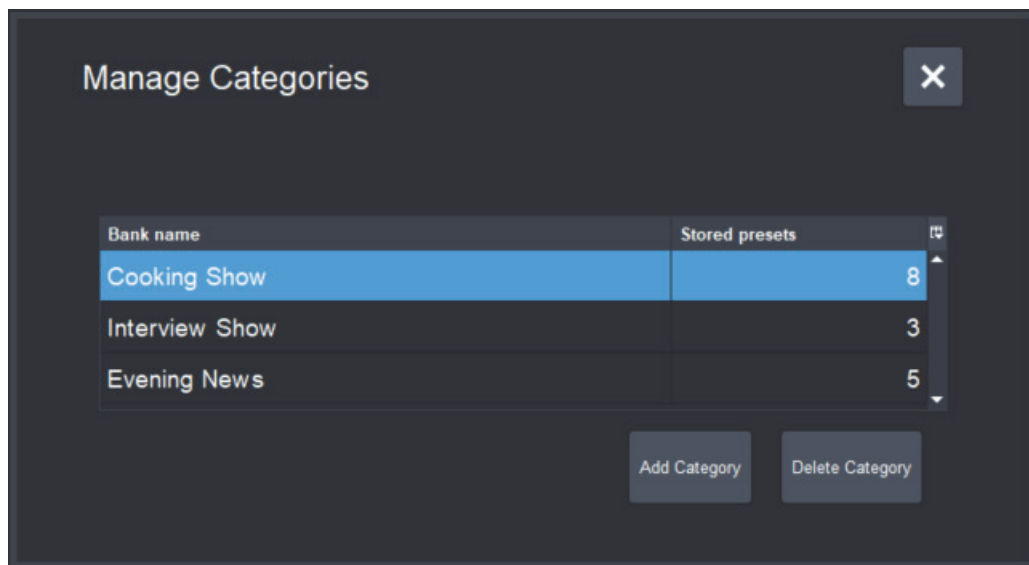
## Access the Manage Categories Page

The **Manage Categories** page lists all categories and the number of presets stored in each. It enables you to **Add**, **Delete**, or rename categories.

To access the **Manage Categories** page:



1. Tap the **Presets** button.  
The **Presets** page opens.
2. Tap the **Manage Categories** button.  
The **Manage Categories** page appears ([Figure 32](#)).



*Figure 32 - Manage Categories page*

# Add a Category

You can add a category.

## To add a category:

1. On the **Manage Categories** page, tap the **Add Category** button.  
The **Add Category** dialog box appears.
2. In the **Category Name** box, type a name for the category.
3. Tap **OK**.

# Rename a Category

You can rename categories, to make the names more meaningful.

## To rename a category:

1. In the list of categories, tap the name box of the category you want to rename.  
**Tip:** The first category in the list is the default category. In some cases, it can not be renamed.
2. Replace the old name with a new one.

# Delete a Category

You can permanently delete a category of presets.

When you delete a category, the presets within it are also permanently deleted.

**Note:** If the category contains one or more locked presets, the category can not be deleted. Presets can not be locked or unlocked from the PT Head Control Plugin. Some control applications, such as SmartShell, can lock and unlock presets.

## To delete a category:

1. Open the **Manage Categories** page.
2. In the list of categories, tap the category you want to delete.  
**Tip:** The first category in the list is the default category. It can not be deleted.
3. Tap the **Delete Category** button.  
The **CONFIRM DELETE** dialog box appears.
4. Tap **Discard**.



# Adding USB Controllers

You can set up USB controllers such as joysticks, button pads, and game controllers, to select camera systems and to operate head movements (pan and tilt) and lens functions (focus, zoom, and iris). USB controllers working in conjunction with the PT Head Control Plugin can also control shading and paint settings on DashBoard-controllable cameras such as ACID cameras and supported third-party cameras.

This section describes how to set up one or more USB joysticks or other USB controllers to select and control Ross PT heads and cameras/lenses mounted to them.

**Note:** USB joystick controls are not supported for use with a proxy server. They are designed for systems where the control computer is connected directly to the PT head over an IP network.

The main steps are as follows:

- “Add a USB Controller in DashBoard” on [page 57](#)
- “Add Device Classes, and Map Controls to Parameters” on [page 59](#)
- “Map Device Classes to Controllers” on [page 65](#)
- “Configure Relationship Between Camera System Selection and UI Focus” on [page 66](#)
- “Map Buttons for Camera Selection” on [page 67](#)

## Add a USB Controller in DashBoard

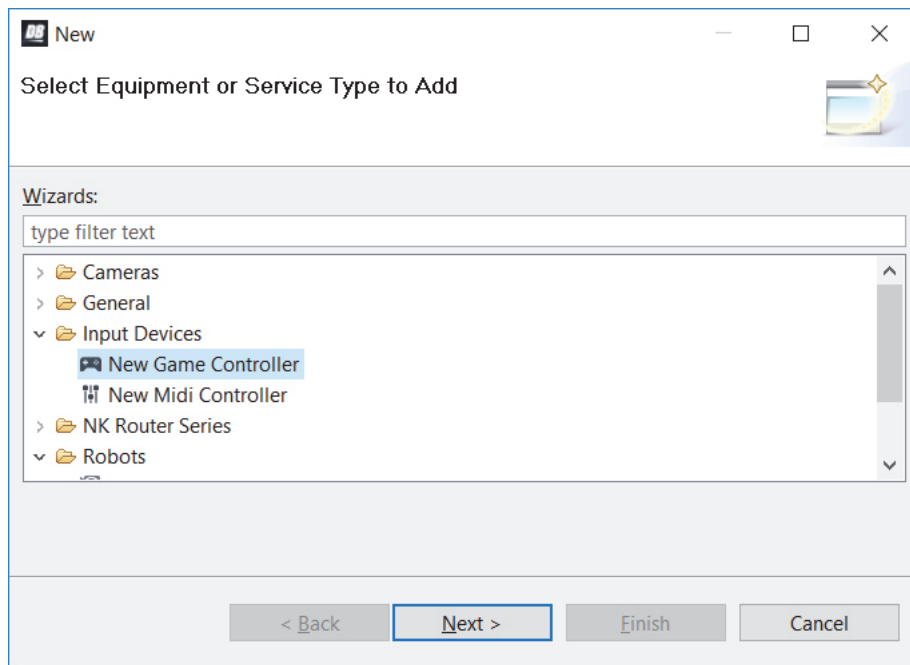
To add a USB controller:

1. Close DashBoard.
2. Plug the USB controller into a USB port on the DashBoard computer.
3. Start DashBoard.

When DashBoard starts, it detects the controller.

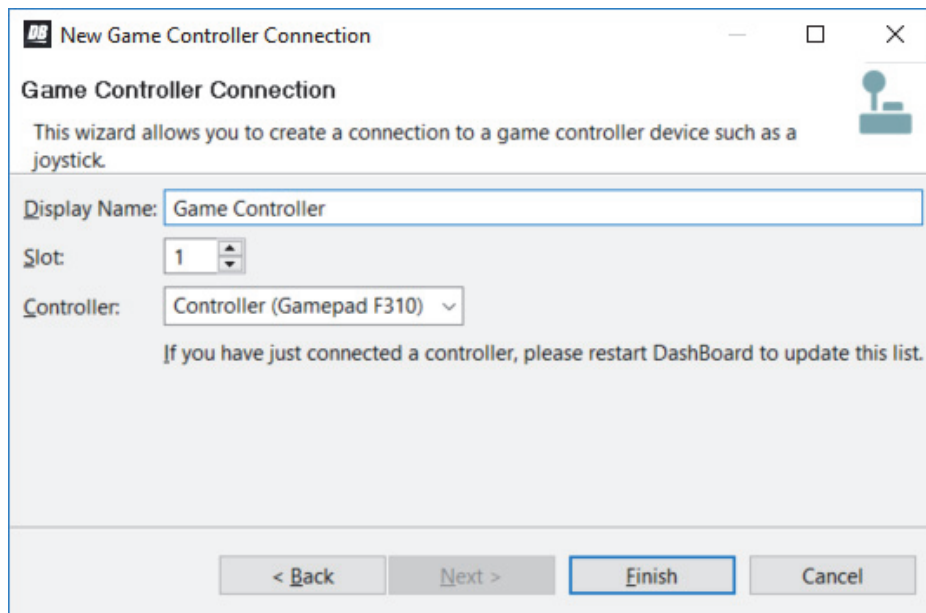
**Tip:** DashBoard can detect the controller only if the controller is plugged in when DashBoard starts.

4. In DashBoard, on the **File** menu, select **New**, and then select **Other**.  
The **New** dialog box appears ([Figure 33](#)).



**Figure 33 - Adding a USB controller**

5. In the **Wizards** list, expand **Input Devices**, select **New Game Controller**, and then tap **Next**. The **New Game Controller Connection** dialog box appears ([Figure 34](#)).



**Figure 34 - Connecting to a USB controller**

6. In the **Display Name** box, type a name for the controller.
7. In the **Controller** list, select the type of USB controller you plugged in.  
**Note:** If the controller type is not on the list, either it was not detected or it is already registered in DashBoard.
8. Click **Finish**.  
 A node for the controller appears within the **Game Controllers** node in the DashBoard **Component Tree**. The node has the name you specified.

# Add Device Classes, and Map Controls to Parameters

A USB controller typically has buttons and axis controls. A button is either on or off, and therefore returns one of two data values. An axis control, such as a joystick, can return any value within a range of data values, depending on how far the joystick is moved in one direction or the other.

You can configure each axis control on the USB controller to operate a robotic axis or a control that accepts a continuous range of data values, such as a paint control.

Additionally, you can configure buttons to return single values. For example, if you often want to pan right or left at half speed, you can configure one button to apply a panning speed value of -50 while pressed, and another to apply a panning speed value of 50 (pan axis range is -100 to 100).

This section describes how to map a wide variety of commonly-used axis controls and button controls. You can decide which controls you want to map, based on your preferences and the available physical controls on your USB device(s).

## To add device classes and map controls to DashBoard parameters (OIDs):

1. In the DashBoard **Component Tree**, expand the **Game Controllers** node, and then double-tap the controller node you added.

The configuration interface for the controller appears ([Figure 35](#)). The **ptzjoystick** Device Class is present by default.



**Figure 35** - Mapping USB controller inputs (shown with Device Classes added and controls mapped to OIDs)

The number and types of axis controls and buttons vary between different models of USB controllers.

2. If you want this controller to operate the lens iris and/or camera shading and paint controls (DashBoard-controllable cameras only), in the **Device Classes** list, add a new device class and name it **paintbox**.
3. If you have multiple PT heads and want to use buttons on this controller to select which head to operate, in the **Device Classes** list, add a new device class named **selector**.
4. If you want to use buttons on this controller for shot controls (cut, run, alt, halt, and preset duration controls), in the **Device Classes** list, add a new device class named **shotcontrol**.
5. In the **Axis Controls** table, create mappings for the velocity parameters that you want the USB controller's axis controls (such as joysticks) to operate.

When you create mappings, you link data items reported by the controller to parameters (OIDs) in the PT Head Control interface.

**Tip:** To determine which **Axis Controls** and **Buttons** correspond to physical controls on the controller, move the controller's joystick and push its buttons while observing changes in the **Value** column.

For an example showing the **Axis Controls** mapping table completed, see [Figure 35](#) on **page 59**.

**Tip:** If you are configuring multiple controllers and dividing the control functions between them, the controls within each device class must be assigned to a single controller. The name of each parameter OID starts with the name of its device class (**selector**, **ptzjoystick**, **paintbox**, or **shotcontrol**).

The following table lists parameters that are commonly mapped to axis controls.

Parameter (Mapped OID)	Description
ptzjoystick.vel.tilt	Tilt axis
ptzjoystick.vel.pan	Pan axis
ptzjoystick.vel.zoom	Zoom axis (lens zoom)
ptzjoystick.vel.focus	Focus axis (lens focus)
paintbox.vel.iris.control	Iris axis (lens iris)
paintbox.vel.black.master_black	Master Black paint control (DashBoard-controllable cameras only)
paintbox.vel.black.g	Green Ped paint control (DashBoard-controllable cameras only)
paintbox.vel.black.b	Blue Ped paint control (DashBoard-controllable cameras only)
paintbox.vel.black.r	Red Ped paint control (DashBoard-controllable cameras only)
paintbox.vel.whitebalance.gain.g	Green Gain paint control (DashBoard-controllable cameras only)
paintbox.vel.whitebalance.gain.b	Blue Gain paint control (DashBoard-controllable cameras only)
paintbox.vel.whitebalance.gain.r	Red Gain paint control (DashBoard-controllable cameras only)

Parameter (Mapped OID)	Description
shotcontrol.vel.time	<p>Time adjustment axis. This parameter enables the operator to increase/decrease the duration of a preset, either before it is run or during recall.</p> <p>This parameter works in conjunction with the <b>shotcontrol.time.mode</b> parameter, which can be mapped to a button:</p> <ul style="list-style-type: none"> <li>• If <b>shotcontrol.time.mode</b> value is <b>0</b> — the <b>shotcontrol.vel.time</b> parameter controls time dilation, which is changing the duration of a preset while it is running.</li> <li>• If <b>shotcontrol.time.mode</b> value is <b>1</b> — the <b>shotcontrol.vel.time</b> parameter controls alt run duration, which is changing the duration of a preset before it runs (alt duration).</li> </ul> <p>Alternatively, if you want to control time dilation only, you can use the <b>ptzjoystick.vel.time</b> parameter instead of <b>shotcontrol.vel.time</b> and <b>shotcontrol.time.mode</b>.</p>
ptzjoystick.vel.time	<p>Time adjustment axis. This parameter enables the controller to change the speed of robot movement while a preset is being recalled (time dilation).</p> <p>Alternatively, you can use <b>shotcontrol.vel.time</b> in conjunction with <b>shotcontrol.time.mode</b>.</p>

Relevant columns in the **Axis Controls** mapping table are as follows:

- **ID** - The ID of the control, as reported by the controller. This is not configurable.
- **Name** - You can name each control for future reference (optional).
- **Min** and **Max** - Defines the range of data values sent to the DashBoard parameter. When the control is in a neutral position, the data value is halfway between **Min** and **Max**. For example, if **Min** is **-100** and **Max** is **200**, the neutral value is **50**.  
**Tip:** DashBoard automatically scales the data value to suit the data range of the associated parameter. You do not need to match **Min** and **Max** to the lowest and highest parameter values.
- **Speed%** — Scales the data values, to make them change more or less gradually. For example, if you use a joystick to control a paint velocity parameter such as **paintbox.vel.black.master\_black**, you might set **Speed %** to **10**. When you push the joystick all the way, the value changes at one-tenth the default rate. This enables you to see the effect more easily as you change the value.
- **Sensitivity** — Defines the number of steps between each end of the data range and the controller's neutral position. For example, if **Min** is **-100**, **Max** is **100**, and Sensitivity is **20**, then the value changes by increments of **5**. The range of values starts at **-100** (**-100**, **-95**, **-90**, etc.) and continues to **100**.
- **Invert** - When selected, reverses the direction of joystick motion required to move the axis. For example, if the PT head and camera are ceiling mounted, select **Invert** for pan and tilt so when you move the joystick, the head and camera move as desired.
- **Value** - Shows the current data value reported by the controller. This is useful for testing.
- **Mapped OID** - Specify the parameter OID from the PT Head Control interface to be mapped to the control.

6. In the **Buttons** table, create mappings for the parameters that you want the USB controller's buttons to operate.

When you create mappings, you link data items reported by the controller to parameters (OIDs) in the PT Head Control interface.

**Tip:** To determine which **Axis Controls** and **Buttons** correspond to physical controls on the controller, move the controller's joystick and push its buttons while observing changes in the **Value** column.

For an example showing the **Buttons** mapping table completed, see [Figure 35](#) on **page 59**,

**Tip:** If you are configuring multiple controllers and dividing the control functions among them, the controls within each device class must be assigned to a single controller. The name of each

parameter OID starts with the name of its device class (**selector**, **ptzjoystick**, **shotcontrol**, or **paintbox**).

The following table lists parameters that are commonly mapped to button controls.

Parameter (Mapped OID)	Description
selector.selection	<p>Camera system selection, for systems that include multiple cameras/robots. Map this parameter to a set of buttons to be used for selecting the camera system to be controlled. Each row in the <b>Buttons</b> table corresponds to a button on the controller. For each button you want to assign as the selector for a camera system, do the following:</p> <ul style="list-style-type: none"> <li>• In the <b>Name</b> column, assign a camera name for future reference (optional).</li> <li>• Set <b>Action</b> to <b>Set Value</b>.</li> <li>• Set <b>Value (Off)</b> to <b>-1</b></li> <li>• Set <b>Value (On)</b> to a unique camera ID number (For example, <b>0</b>, <b>1</b>, <b>2</b>, <b>3</b>, etc.). The actual ID number is arbitrary. Note the camera ID numbers. You will later map this ID number to the camera's <b>remote control</b> DashBoard interface.</li> </ul>
shotcontrol.cut	<p>When pressed, the button performs a <b>Cut</b> action:</p> <ul style="list-style-type: none"> <li>• <b>In Panel mode</b> — cuts to selected preset.</li> <li>• <b>In Shotbox mode</b> — places the interface into <b>Cut</b> mode.</li> </ul> <p>To map <b>shotcontrol.cut</b>:</p> <ul style="list-style-type: none"> <li>• Set <b>Action</b> to <b>Stateless</b>.</li> <li>• Set <b>Value (Off)</b> to <b>0</b>.</li> <li>• Set <b>Value (On)</b> to <b>1</b>.</li> </ul>
shotcontrol.run	<p>When pressed, the button performs a <b>Run</b> action:</p> <ul style="list-style-type: none"> <li>• <b>In Panel mode</b> — runs selected preset.</li> <li>• <b>In Shotbox mode</b> — places the interface into <b>Run</b> mode.</li> </ul> <p>To map <b>shotcontrol.run</b>:</p> <ul style="list-style-type: none"> <li>• Set <b>Action</b> to <b>Stateless</b>.</li> <li>• Set <b>Value (Off)</b> to <b>0</b>.</li> <li>• Set <b>Value (On)</b> to <b>1</b>.</li> </ul>
shotcontrol.alt	<p>When pressed, the button performs an <b>Alt</b> action:</p> <ul style="list-style-type: none"> <li>• <b>In Panel mode</b> — runs selected preset.</li> <li>• <b>In Shotbox mode</b> — places the interface into <b>Alt</b> mode.</li> </ul> <p>To map <b>shotcontrol.alt</b>:</p> <ul style="list-style-type: none"> <li>• Set <b>Action</b> to <b>Stateless</b>.</li> <li>• Set <b>Value (Off)</b> to <b>0</b>.</li> <li>• Set <b>Value (On)</b> to <b>1</b>.</li> </ul>
shotcontrol.halt	<p>When pressed, stops all movement of the PT head and camera controls.</p> <p>To map <b>shotcontrol.halt</b>:</p> <ul style="list-style-type: none"> <li>• Set <b>Action</b> to <b>Stateless</b>.</li> <li>• Set <b>Value (Off)</b> to <b>0</b>.</li> <li>• Set <b>Value (On)</b> to <b>1</b>.</li> </ul>

Parameter (Mapped OID)	Description
shotcontrol.time.mode	<p>This parameter works in conjunction with the <b>shotcontrol.vel.time</b> parameter, which is an axis parameter that increases/decreases the duration of a preset.</p> <p>The <b>shotcontrol.time.mode</b> parameter enables the operator to choose whether <b>shotcontrol.vel.time</b> applies before the preset runs (alt duration), or while the preset is running (time dilation):</p> <ul style="list-style-type: none"> <li>• If <b>shotcontrol.time.mode</b> value is <b>0</b> — the <b>shotcontrol.vel.time</b> parameter controls time dilation, which is changing the duration of a preset while it is running.</li> <li>• If <b>shotcontrol.time.mode</b> value is <b>1</b> — the <b>shotcontrol.vel.time</b> parameter controls run duration, which is changing the duration of a preset before it runs (alt duration).</li> </ul> <p>To map <b>shotcontrol.time.mode</b>:</p> <ul style="list-style-type: none"> <li>• Set <b>Action</b> to <b>Stateless</b>.</li> <li>• Do one of the following to set <b>Value (Off)</b>: <ul style="list-style-type: none"> <li>• If you want the <b>shotcontrol.vel.time</b> parameter to normally control time dilation, but to control alt run duration while this button is pressed, set <b>Value (Off)</b> to <b>0</b>.</li> <li>• If you want the <b>shotcontrol.vel.time</b> parameter to normally control alt run duration, but to control time dilation while this button is pressed, set <b>Value (Off)</b> to <b>1</b>.</li> </ul> </li> <li>• Do one of the following to set <b>Value (On)</b>: <ul style="list-style-type: none"> <li>• If you want the <b>shotcontrol.vel.time</b> parameter to normally control time dilation, but to control alt run duration while this button is pressed, set <b>Value (On)</b> to <b>1</b>.</li> <li>• If you want the <b>shotcontrol.vel.time</b> parameter to normally control alt run duration, but to control time dilation while this button is pressed, set <b>Value (On)</b> to <b>0</b>.</li> </ul> </li> </ul>
shotcontrol.vel.time	<p>Time axis. This parameter works in conjunction with <b>shotcontrol.time.mode</b>, enabling the controller to change either the duration of a preset before it is recalled (alt duration), or change the speed of robot movement while a preset is being recalled (time dilation).</p> <p>You can configure one or more buttons to apply a speed value to the time axis (value range <b>-100</b> to <b>100</b>).</p> <p>To map <b>ptzjystick.vel.time</b> to a button:</p> <ul style="list-style-type: none"> <li>• Set <b>Action</b> to <b>Stateless</b>.</li> <li>• Set <b>Value (Off)</b> to <b>0</b>.</li> <li>• Set <b>Value (On)</b> to the desired speed value.</li> </ul>
ptzjystick.vel.tilt	<p>Tilt axis. You can configure one or more buttons to apply a speed value to the tilt axis (value range <b>-100</b> to <b>100</b>).</p> <p>To map <b>ptzjystick.vel.tilt</b> to a button:</p> <ul style="list-style-type: none"> <li>• Set <b>Action</b> to <b>Stateless</b>.</li> <li>• Set <b>Value (Off)</b> to <b>0</b>.</li> <li>• Set <b>Value (On)</b> to the desired speed value.</li> </ul>
ptzjystick.vel.pan	<p>Pan axis. You can configure one or more buttons to apply a speed value to the pan axis (value range <b>-100</b> to <b>100</b>).</p> <p>To map <b>ptzjystick.vel.pan</b> to a button:</p> <ul style="list-style-type: none"> <li>• Set <b>Action</b> to <b>Stateless</b>.</li> <li>• Set <b>Value (Off)</b> to <b>0</b>.</li> <li>• Set <b>Value (On)</b> to the desired speed value.</li> </ul>

Parameter (Mapped OID)	Description
ptzjoystick.vel.zoom	<p>Zoom axis. You can configure one or more buttons to apply a speed value to the zoom axis (value range <b>-100 to 100</b>).</p> <p>To map <b>ptzjoystick.vel.zoom</b> to a button:</p> <ul style="list-style-type: none"> <li>• Set <b>Action</b> to <b>Stateless</b>.</li> <li>• Set <b>Value (Off)</b> to <b>0</b>.</li> <li>• Set <b>Value (On)</b> to the desired speed value.</li> </ul>
ptzjoystick.vel.focus	<p>Focus axis. You can configure one or more buttons to apply a speed value to the focus axis (value range <b>-100 to 100</b>).</p> <p>To map <b>ptzjoystick.vel.focus</b> to a button:</p> <ul style="list-style-type: none"> <li>• Set <b>Action</b> to <b>Stateless</b>.</li> <li>• Set <b>Value (Off)</b> to <b>0</b>.</li> <li>• Set <b>Value (On)</b> to the desired speed value.</li> </ul>
ptzjoystick.vel.time	<p>Time axis. This parameter enables the controller to change the speed of robot movement while a preset is being recalled.</p> <p>To map <b>ptzjoystick.vel.time</b> to a button:</p> <ul style="list-style-type: none"> <li>• Set <b>Action</b> to <b>Stateless</b>.</li> <li>• Set <b>Value (Off)</b> to <b>0</b>.</li> <li>• Set <b>Value (On)</b> to the desired speed value.</li> </ul>
paintbox.iris.control	<p>Iris control.</p> <p><b>Note:</b> Iris control through the <b>paintbox.iris.control</b> parameter is available only if the PT head is not configured to control iris through the <b>PTZ</b> page.</p> <p>Configure one button to increase the value and another to decrease it:</p> <ul style="list-style-type: none"> <li>• For both buttons, set <b>Action</b> to <b>Increment</b>.</li> <li>• For the button that increases the value, Set <b>Value (On)</b> to <b>1</b>, and set <b>Value (Off)</b> to <b>0</b>.</li> <li>• For the button that decreases the value, Set <b>Value (On)</b> to <b>-1</b>, and set <b>Value (Off)</b> to <b>0</b>.</li> </ul> <p><b>Tip:</b> You can control most camera axes (parameters in the <b>paintbox</b> device class) this way. Remove <b>.vel</b> from the velocity parameter name when you map it. For example, to control master black, map the <b>paintbox.black.master_black</b> parameter and configure a pair of buttons to increment/decrement the value.</p>
ptzjoystick.enable	<p>Enables/disables joystick control of the robot.</p> <p>To map <b>ptzjoystick.enable</b>:</p> <ul style="list-style-type: none"> <li>• Set <b>Action</b> to <b>Toggle</b>.</li> <li>• Set <b>Value (Off)</b> to <b>0</b>.</li> <li>• Set <b>Value (On)</b> to <b>1</b>.</li> </ul>

Relevant columns in the **Buttons** mapping table are as follows:

- **ID** - The ID of the control, as reported by the controller. This is not configurable.
- **Name** - You can name each control for future reference (optional).
- **Action** - The type of action to be performed when the button is pressed.
- **Value (Off)** - The value assigned to the parameter, under the following conditions:
  - › If **Action** is set to **Toggle**, each time the button is pressed the parameter value switches (toggles) between **Value (Off)** and **Value (On)**.
  - › If **Action** is set to **Stateless**, **Value (Off)** is the value of the parameter when the button is released.



- › If **Action** is set to **Set Value**, **Value (Off)** is ignored.
  - › For all other **Action** settings, **Value (Off)** is not applicable.
  - **Value (On)** - The value assigned to the parameter, under the following conditions:
    - › If **Action** is set to **Toggle**, each time the button is pressed the parameter value switches (toggles) between **Value (Off)** and **Value (On)**.
    - › If **Action** is set to **Stateless**, **Value (On)** is the value of the parameter while the button is depressed.
    - › If **Action** is set to **Set Value**, **Value (On)** is the value assigned to the parameter each time the button is pressed.
    - › For all other **Action** settings, **Value (On)** is not applicable.
  - **Value** - Shows the current data value reported by the controller. This is useful for testing.
  - **Mapped OID** - Specify the parameter OID from to be mapped to the control.
7. If you want to save the mappings in a file that can be loaded onto other DashBoard computers, click the **SAVE** button and specify a file name and path.
- Note:** The mappings are specific to the controller(s) you configured. You can use the mappings on other DashBoard computers only if their controllers are the same model, or report the exact same controls.

## Map Device Classes to Controllers

PT head and camera functions that are commonly controlled by a USB controller fall into four groups; camera selection, camera motion (pan, tilt, zoom, and focus), shot controls (cut, run, alt, halt, and preset duration controls), and paintbox controls (lens iris). Depending on the USB controller(s) available, you can control all functions with a single controller, or add a separate controller for each group of functions.

**To map device classes to one or more controllers:**

1. In the **Component Tree**, within the **DashBoard Services** node, double-tap **Device Class Mappings**. The **Device Class Mappings** interface appears ([Figure 36](#)).

Class	Selected Device	Status	Clear Selection
db.uisector	Selector UI Mappings on DashBoard Selector Service	● OK	Clear Selection
paintbox	my Game Controller on Game Controllers	● OK	Clear Selection
ptzjoystick	my Game Controller on Game Controllers	● OK	Clear Selection
selector	my Game Controller on Game Controllers	● OK	Clear Selection
shotcontrol	my Game Controller on Game Controllers	● OK	Clear Selection

**Figure 36** - Device Class Mappings for a USB controller (shown populated with mappings)

2. In the **db.uisector** row, set **Selected Device** to **Selector UI Mappings on DashBoard Selector Service**.  
**Tip:** If a class you want to map is already mapped, click **Clear Selection** and then map it to the controller.
3. If you plan to use the controller to adjust lens iris, in the **paintbox** row set **Selected Device** to the controller you are configuring.
4. If you plan to use the controller to move robots/cameras (pan, tilt, zoom, focus, iris), in the **ptzjoystick** row set **Selected Device** to the controller you are configuring.

5. If your system has multiple PT heads and you plan to use buttons on the controller to select cameras/robots in DashBoard, in the **selector** row set **Selected Device** to the controller you are configuring.
6. If you plan to use shot controls (cut, run, alt, halt, and preset duration controls), set **Selected Device** to the controller you are configuring.

## Configure Relationship Between Camera System Selection and UI Focus

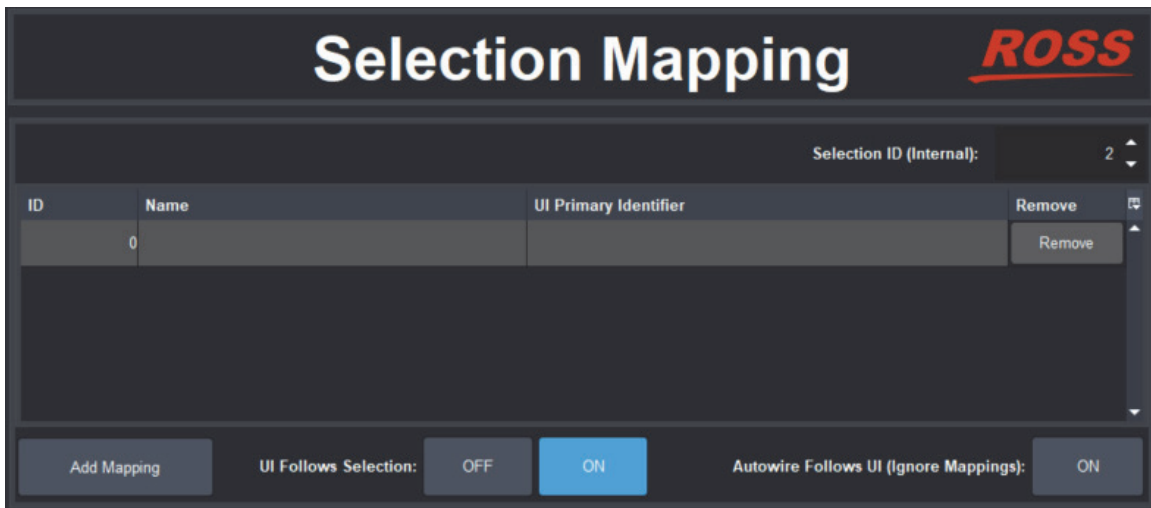
You can configure how the user interface interacts with the controller, to achieve your choice of the following options:

- The controller can select and control camera systems **ONLY IF** the PT Head Control interface is the active DashBoard application (in focus).
- The controller can select and control camera systems regardless of what DashBoard application is active (in focus).
- If a controller button configured to open a device view or panel is pushed, that device view or panel becomes active (in focus).

**To configure the relationship between camera selection and UI focus:**

1. In the **Component Tree**, expand the **DashBoard Services** node, and then double-tap **Selector UI Mappings**.

The **Selection Mapping** interface appears ([Figure 37](#)).



*Figure 37 - UI Follow and Autowire settings*

2. Choose one of the following options and tap the corresponding button:
  - **Autowire Follows UI ON**  
 If you select this option, you cannot use the controller to select and control camera systems unless the PT Head Control interface is the active DashBoard application (in focus).  
 This option helps prevent accidental movement of cameras while the operator is using other DashBoard panels or device views. It also ensures that the PT Head Control interface is always readily available while you are controlling camera systems.
  - **UI Follows Selection OFF**  
 If you select this option, you can use the controller to select and control camera systems regardless of which panel or device view is active (in focus).  
 This option enables you to use the PT Head Control interface and other DashBoard panels or device views for other tasks while you use the controller to select and control camera systems.

- **UI Follows Selection ON**

If you select this option, whenever a configured button opens a DashBoard panel or device view, that panel or device view becomes active (in focus). If the PT Head Control interface is active and you press a controller button to open a different panel or a device view, the PT Head Control interface loses focus.

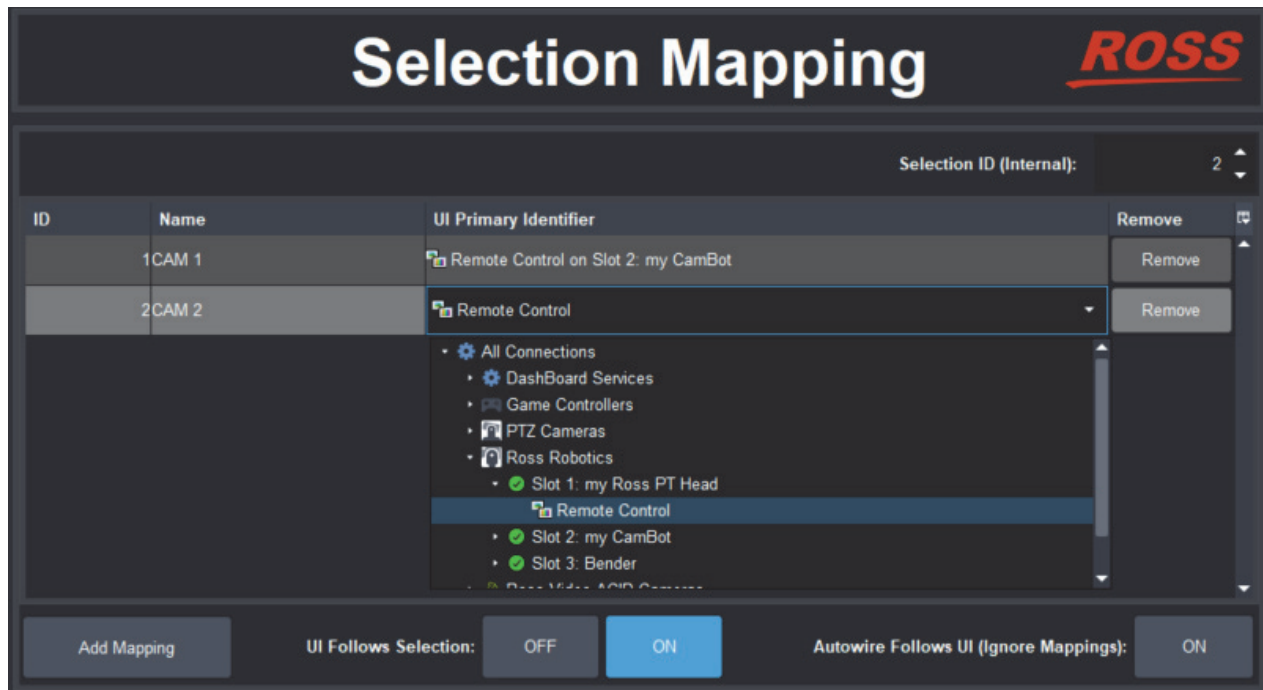
Use this option if you want to configure otherwise unassigned controller buttons to open DashBoard panels and device views on demand, such as Carbonite control, or the PT Head Control interface.

## Map Buttons for Camera Selection

This procedure applies if your system has multiple camera systems and you want to configure controller buttons to select them.

**To map camera selector buttons:**

1. In the **Selection Mapping** interface (Figure 38), tap the **Add Mapping** button. A new mapping row appears in the **Selection Mapping** table.



**Figure 38 - Mapping Camera Selector buttons to Camera Systems**

2. In the new mapping, set **ID** to the camera ID number for a camera system. Each mapping requires a unique ID.  
**Tip:** You defined the camera ID numbers as **Value on** settings for buttons, in a previous procedure (“**Add Device Classes, and Map Controls to Parameters**” on [page 59](#)).
3. Specify a **Name** for the mapping (optional).
4. For **UI Primary Identifier**, navigate to **Remote Control** for the camera system to be selected.
5. Repeat the preceding steps for each camera selector button you want to configure.

# Troubleshooting

This chapter contains information that may help you diagnose and resolve problems.

Ross Video Technical Support specialists are always available to assist you. For more information, see **“Contacting Technical Support”** on [page 8](#).

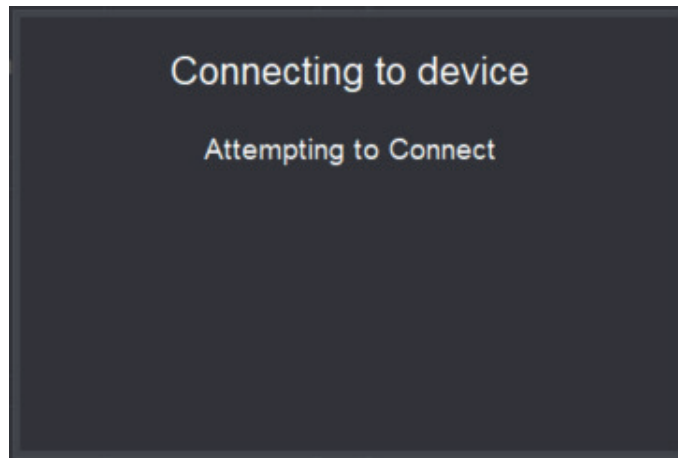
## Status Messages

This section describes following status messages, which may appear while you are using the PT Head Control Plugin:

- **“Connecting to device”** on [page 68](#)
- **“Disconnected from device (Disconnected)”** on [page 69](#)
- **“Disconnected from device (Connect Failed)”** on [page 69](#)
- **“Error connecting to device (ESTOP active)”** on [page 70](#)
- **“Device Error”** on [page 70](#)

### Connecting to device

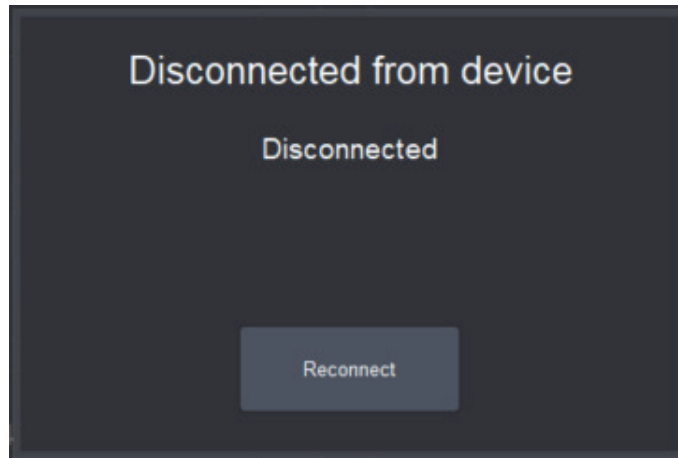
When DashBoard attempts to connect to the head, the **Connecting to device** message appears ([Figure 39](#)). As the connection attempt progresses, the message displays updated connection activity.



*Figure 39 - Status message, “Connecting to device”*

## Disconnected from device (Disconnected)

The following message ([Figure 40](#)) appears when the operator has deliberately disconnected DashBoard from the head:

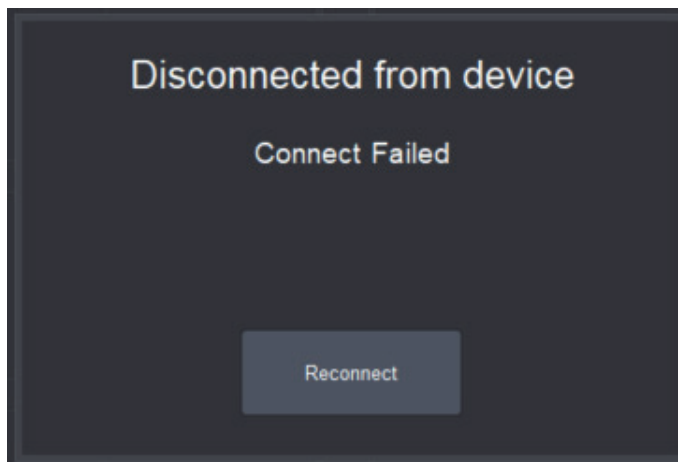


**Figure 40** - Status message, "Disconnected from device — Disconnected"

To re-establish a connection, tap **Reconnect**.

## Disconnected from device (Connect Failed)

The following message ([Figure 41](#)) appears after DashBoard makes several failed attempts to automatically connect to the head:

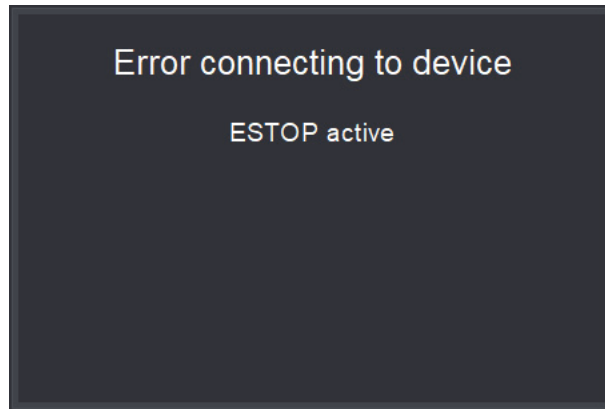


**Figure 41** - Status message, "Disconnected from device — Connect Failed"

To retry, tap **Reconnect**.

## Error connecting to device (ESTOP active)

The following message ([Figure 42](#)) appears when a physical emergency stop (**ESTOP**) button has been pressed:



**Figure 42** - Status message, "Error connecting to device — ESTOP Active"

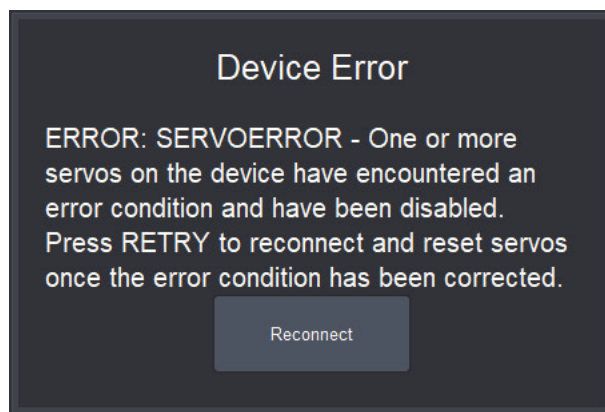
DashBoard automatically reconnects to the head when the **ESTOP** button has been reset.

## Device Error

When the head reports an error that requires resetting the connection between DashBoard and the head, a **Device Error** message appears. The message includes information about the error, as reported by the head. This information may help you and/or Technical Support diagnose and resolve the problem.

Depending on the type of error, it may be necessary to reboot the head before attempting to reconnect to it from DashBoard. If DashBoard fails to reconnect to the head when you tap the **Reconnect** button, it is possible that the head needs rebooting. Reboot the head and then reattempt connection from DashBoard.

[Figure 43](#) shows an example of the **Device Error** message.



**Figure 43** - Example of the "Device Error" status message

To re-establish a connection, tap **Reconnect**.