

# TruZoom

## Quick Reference Guide

### Introduction

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This Quick Reference Guide provides a brief synopsis of basic TruZoom operations including:

- Using Virtual Cameras (learning and recalling)
- Building and running timeline effects
- Using TruZoom Keyboard shortcuts
- TruZoom Control Panel key functions
- Using the Tangent Element-Kb control panel for color matching

**Figure 1. Typical AJA TruZoom System Hardware**



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# Virtual Cameras

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A Virtual Camera is a pre-defined ROI that can be applied quickly. Up to 100 Virtual Cameras can be created and stored (Learned) by name. When recalled, that virtual camera's ROI can be instantly taken with a cut, or can smoothly transition from the current ROI at a defined rate or duration.

**Bank:** The currently selected Virtual Camera register bank is displayed in this field. After clicking on the Bank button, clicking a number on the numeric keypad to the right immediately selects a new bank of registers, each of which stores up to 10 virtual cameras (0-9).

**Virtual Camera Registers:** After selecting a Bank, use the computer keyboard numerals or the UI screen keypad to immediately select a numbered virtual camera register. Keypad buttons are tallied orange to indicate that the a virtual camera has been learned into that register.

**Learn:** Use the Learn button to store virtual camera information into registers. Click **Learn** to put the keypad in a learning mode. In this mode, you can use the **Bank** button and numeric keypad buttons to assign the register that will store the current ROI settings. See ["Learning and Recalling Virtual Cameras"](#).

**Cut:** This button selects a Cut transitions between different ROI selections.

**Trans:** This button selects a Transition of an assigned rate (duration) between ROI selections.

**Duration:** Specifies transition duration (in frames) between each ROI selection.

**Set:** The Set button is used to set the Transition Duration.

## Learning and Recalling Virtual Cameras

Virtual Cameras are created (learned) and recalled from registers (numbered 0 to 99) that store the ROI position and size information.

**Learn:** To create a Virtual Camera setting:

1. Select the ROI for that Virtual Camera using the joystick or touchscreen.
2. "Learn" the register into the desired bank, by pressing **Learn**, followed by **[register #]** or **Learn, Bank, [bank #], [register #]**.
  - If the register bank is already selected, click **Learn**, and then click on the number of the register you want to use.
  - If you are not in the desired register bank, click **Bank**, click the number of the desired bank, then click the number of the register you want to use.

**Recall:** The GUI's numeric keypad is available for instant Virtual Camera recall by number. Virtual Cameras are stored in banks of registers, corresponding to the 10s and 1s digits of numbers 00-99. Once a bank has been selected, single digit entry recalls that corresponding Virtual Camera in that bank.

To recall a Virtual Camera: use **#**, or **Bank, #, #**.

- If the register bank is already selected, simply click on the number of the Virtual Camera register you want to recall.

If you are not in the correct register bank, click **Bank**, click on the number of the desired Bank, and then click the number of the Virtual Camera register you want to recall.

# Build and Run Timeline Effects

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An effect timeline consists of a series of keyframes associated with a clip. When the timeline is played (run) TruZoom interpolates between keyframes.

## Building a Timeline

This example builds a timeline that has a video hold freeze frame, an ROI zoom in and out, and a portion that plays in slow motion.

*Select Playback Mode:* Access Playback mode by clicking on the **Playback** GUI radio button, or the **PLAY MODE** button on the control panel.

*Load the Clip:* Load the clip by clicking on its name in the Playback folder.

*Create the First Keyframe:* 1. Shuttle and Jog the clip so it is stopped on the first frame of the desired video.  
2. Move the ROI to the desired location.

Press **MARK** on the control panel, or click/touch **Set Mark** on the GUI. The keyframe is added and appears on the timeline.

*Create the Second Keyframe:* 3. Play or jog the clip to the location where the hold and zoom in will begin.  
Mark that location. The keyframe is added and appears on the timeline.

*Set Video Hold and Zoom In:* 4. Click **Video Hold** so it is checked, and enter the duration of the freeze frame hold during the zoom in.  
5. Zoom in the ROI by rotating and positioning the Joystick, or using the mouse or touchscreen.  
6. Mark that location. The hold and zoom in keyframe is added and appears on the timeline. The duration of the held frame is shown in red.

*Set Video Hold and Zoom Out:* 7. Zoom out the ROI.  
8. Click **Video Hold** so it is checked, and enter the duration of the hold during the zoom out.  
9. Mark that keyframe. The video hold and zoom out keyframe is added and appears on the timeline.

*Select Slow Motion:* 10. Click on the Speed list and select **1/3**.  
11. Play or jog the clip to location where the slow motion will end and normal playback will resume.  
12. Mark that keyframe. The slow motion keyframe is added and appears on the timeline.

*Enter Final Keyframe:* 13. Play or jog the clip to the last frame to be used in that clip.  
14. Mark that keyframe. This final keyframe is added and appears on the timeline.

## Save and Recall the Timeline

If you wish, you can save up to 100 timeline effects for reuse in the future.

*To save an effect:* 1. Press **Save As**. A pop-up dialog appears where you enter the Bank and Register number (0-99), and the name of the effect.  
2. Press **Save**.

- If there is a current timeline, the timeline and the clip folder name will be saved in the register.
- If there is no timeline, the current frame index and the clip folder name will be saved in the register.

- To recall an effect:*
1. Select the register number (0-99) using Bank and Reg pull-downs. The name of the effect will be displayed.
  2. Press **Load**. The clip will be loaded
    - If there is a timeline, it will be cued to the first keyframe.
    - If there is no timeline, it will be positioned at the saved frame index.

*Auto-Save:* When you build a timeline, it is automatically saved with the clip. However, it will be overwritten by the next timeline recall. **To preserve timelines, they must be Saved.**

## Testing a Timeline

To test an effect, it is often useful to run this effect with **Pause Next KF** on so that the effect stops at each keyframe. Pressing **KF+** and **KF-** can also navigate between keyframes.

*Run Timeline With Keyframe Pauses:*

1. Turn **Pause Next KF** On.
2. Press the **Run** button on the GUI or control panel. The effect will cue to the first keyframe, run to the second keyframe, and then pause.

Pressing **Pause** or **Run** resumes the effect run to the next keyframe, where it will pause.

## Running A Timeline

After a timeline has been created, it can immediately be run.

*NOTE:* If an effect has User Pauses, the operator will need to press Run or Pause after the effect has stopped to continue the effect's run.

*Run Timeline Once Continuously From Beginning:*

1. Ensure **Loop** and **Pause Next KF** are turned Off.
2. Press the **Run** button on the GUI or control panel.

The effect will cue to its first keyframe and run once as programmed.

*Run Timeline as a Loop:*

1. Turn **Loop** On, and ensure **Pause Next KF** is turned Off.
2. Press the **Run** button on the GUI or control panel.

The effect will cue to its first keyframe, run to the end, jump back to the first keyframe and resume playing as an endless loop.

*Manually Pausing, Halting, and Rerunning a Timeline:*

Pressing **Pause** during the running of an effect pauses the timeline run.

- Pressing **Pause** again resumes its run from that paused location, etc. The **Pause** button acts as a toggle during playback.
- Pressing **Run** after a Pause also resumes the run from that paused location. Pressing **Run** a second time halts the effect. You can press the **Pause** and **Run** buttons in that order to alternatively pause and run an effect from its current location.

Pressing **Run** during the running of an effect halts the timeline run.

- Pressing **Run** again when not Paused cues the timeline to its first keyframe and runs it from there.

# TruZoom Keyboard Shortcuts.

**Table 1. Keyboard Shortcuts**

TruZoom Mode	Function	Keystroke	Action
Playback (scrub bar active)	Clip Play	Home	Cues to the start of the clip
		End	Cues to the end of the clip
		Right arrow	Jogs plus 1 frame on clip
		Left arrow	Jogs minus 1 frame on clip
		Up arrow	Jogs minus 10 frames up clip
		Down arrow	Jogs plus 10 frames down clip
		Page Up	Jogs minus 1 second on clip
		Page Down	Jogs plus 1 second on clip
		Spacebar	Stop/start play
		J	Reverse play, repeat doubles, or halves forward speed
		K	Stop
		L	Forward play, repeat doubles, or halves reverse speed
		K/J	Halves reverse speed or doubles forward speed
		K/L	Halves forward speed or doubles reverse speed
		Ctrl-L	Loop on/off
	Timeline run	Ctrl-Home	Cues to the first keyframe (timeline start)
		Ctrl-End	Cues to the last keyframe (timeline end)
		Ctrl-Right arrow	Jogs plus 1 frame on timeline
		Ctrl-Left arrow	Jogs minus 1 frame on timeline
		Ctrl-Up arrow	Jogs minus 10 frames on timeline (back up)
		Ctrl-Down arrow	Jogs plus 10 frames on timeline (down the clip)
		Ctrl-Page Up	Jogs minus one second on timeline
		Ctrl-Page Down	Jogs plus one second on timeline
		Ctrl-L	Loop on/off
		Ctrl-Spacebar	Stop/start timeline run
	Timeline load/save	Ctrl-R-n-n	Recall effect nn
		Ctrl-S-n-n	Save effect nn
Playback (cont.)	Timeline edit	M	Mark
		Alt-P	User Pause on/off
		Alt-H	Video Hold on/off
		Alt-D	Set hold duration
		C	Zoom Cut
		T	Zoom Transition
		Ctrl-Z-n	Keyframe speed = 1/n
		Alt-Z-n	Keyframe speed = n

**Table 1. Keyboard Shortcuts**

TruZoom Mode	Function	Keystroke	Action
Live Mode		P	Prepare
		Enter	Take
		C	Recall effect nn
		T	Save effect nn
		Alt-T	Set transition duration
All		F1	Live Mode
		F2	Replay Mode
		Tab	Start/Stop Record
		ESC	Stop record
		0-9	Recall Virtual Camera n

## TruZoom Control Panel Functions



## Color Management Using Tangent Element-Kb Panel

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*Figure 2. Element-Kb Control Panel*



### **Tangent Element-Kb Operations**

- Turning Knob – adjusts parameters
- Pressing Knob – resets parameter to default
- Pressing Button A – changes page
- Hold down Button B & Press A – resets all parameters on current page