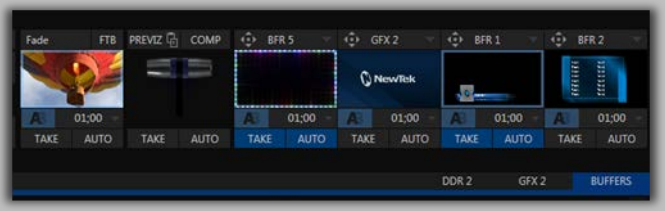
# TriCaster® Advanced Edition: First Look

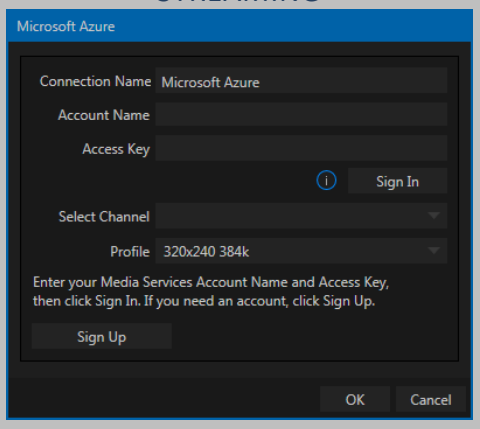
## INTRODUCTION

## UPGRADING FROM ADVANCED EDITION V1

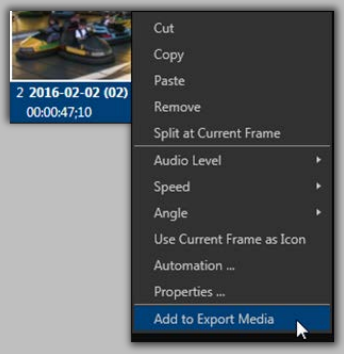
### SWITCHER UPDATES



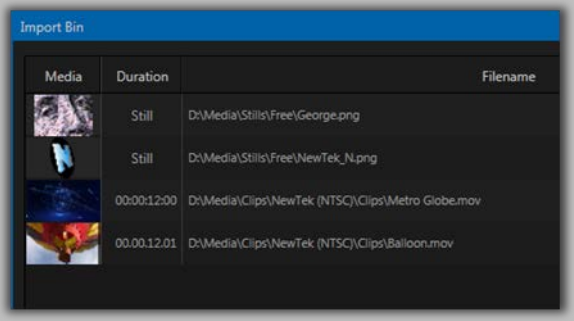

### STREAMING



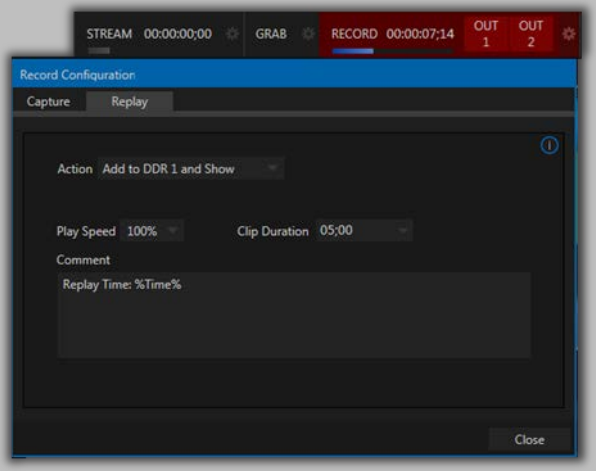

### EXPORT



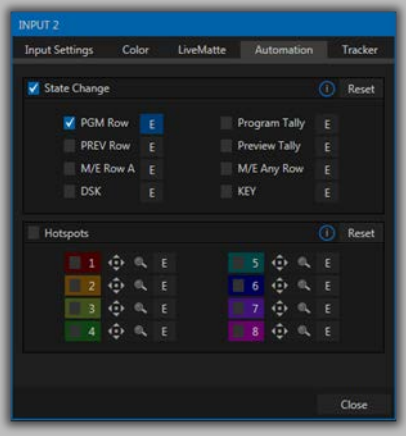

### IMPORT




### IsoCorder™



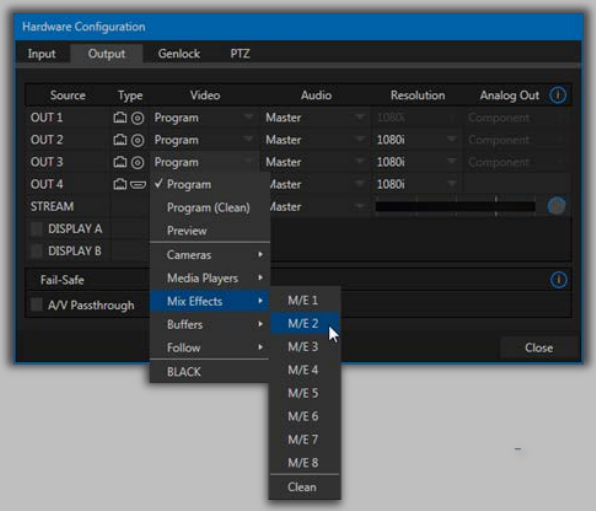

### AUTOMATION



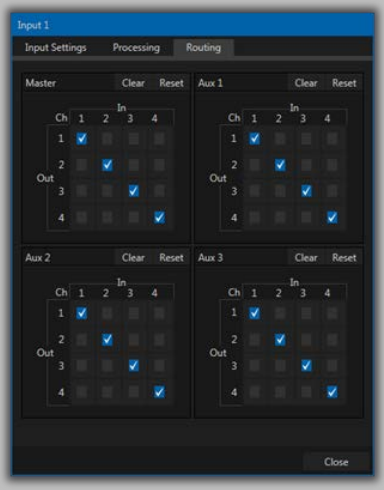
## MEDIA PLAYERS

## DATALINK AND TITLES

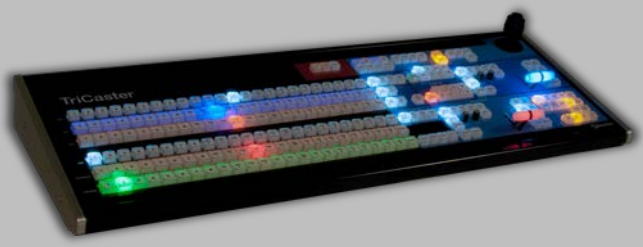

## MORE OUTPUT OPTIONS



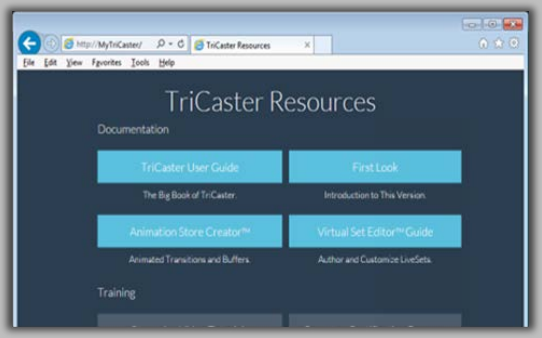

## AUDIO




## CONTROL SURFACES



## DOCUMENTATION AND HELP




## AND EVEN MORE …

## Introduction

Our mission is to give storytellers a voice through video. The advanced capabilities delivered by this installation will enable you to engage and inform your audience in new and exciting ways. Often, using the new features in combination multiplies the benefits.

Every time TriCaster® gains extensive new features, people tell us "This is amazing, you can't possible add more!" … and we just smile.

As always, many of the great new things included in this distribution flow from real world needs reported by our customers. At the same time, though, we are pleased to introduce numerous advancements that are completely novel.

### *Things You Should Know*

*Your TriCaster now provides more production power than ever before. With that come some changes you should note before beginning your next production.*

The various sections of this document each introduce to something that is new, or which has changed. In varying measure, it's important to understand these items. Quite possibly they will affect your workflow and operations, and they also open up new creative possibilities.

Beyond this, the enhanced power of TriCaster Advanced involves new, upgraded and optimized infrastructure that is incompatible with certain components of prior TriCaster software. Please consider the following:

- TriCaster Advanced Edition introduces enhanced LiveSet™ technology. While TriCaster Advanced Edition allows you to continue using older custom content, standard TriCaster systems cannot load the new generation of virtual set effects, nor obtain their benefits.

  Likewise, LiveSets created for TriCaster Advanced Edition with Virtual Set Editor™ Version 3 are not compatible with standard TriCaster systems.

- Similarly, TriCaster Advanced Edition sessions are not compatible with standard TriCaster systems, or vice versa. You will want to allow the necessary time to re-constitute your important sessions when installing TriCaster Advanced, or for that matter, should you ever choose to roll your TriCaster back to its standard form.

- Control Surface mapping and audio routing has undergone significant changes. You will want to acquaint yourself with these matters and their consequences as respects your pipeline and workflow.

We're confident that you'll greatly appreciate all that TriCaster Advanced Edition embodies. Should you, however, opt to revert, please keep the points just mentioned in mind and plan accordingly. In this manner, the process will be as seamless as possible.

[JUMP TO INDEX]

## Upgrading from Advanced Edition V1

- **Recommended Reading:**
    - **What's New:** This document (the one you're reading right now) provides a lot of valuable introductory information for those upgrading from Standard Edition, or an earlier version of AE.
    - **Getting started with NDI:** This document is installed with the free *NewTek NDI Tools* pack and contains is a great starting point. You can download it for advance reading from NDI.NewTek.com - look for the big blue banner. (The new apps are really deliberately very simple to use, but anyone accustomed to our older IP workflows really should read this.) This guide contains valuable network diagnostic information to help you if you run into trouble with NDI™ connections.
    - **NewTek NDI Connect™ & NDI IsoCorder™:** These applications (including the free versions) install documents that answer most of the questions not covered in the guides previously mentioned.
- **Sessions:** Sessions created with previous TriCaster versions (even AE V1) are not recognized by AE V2. The older sessions will not be harmed (so if you roll-back, they will still be there), but are not visible in the session *Open* menu on AE V2.
- **Configuring external inputs:** External inputs are represented by either 8 or 12 buttons on *Main* switcher and *M/E* rows. These are no longer locked to specific inputs, though; they can be assigned to any external input (NDI or hardware connector), in any order.

  Having assigned a specific hardware input to a button using the *Input Configuration* panel, click the configuration gear at right next to the *Source* menu to open the *Hardware Configuration* panel if you need to modify the default connection type (SDI or HDMI "Auto-detect"). You can open *Hardware Configuration* by double-clicking the *Program* monitor, too.
- **Configuring Audio:** Audio routing has changed in several important ways (in some cases, this may require you to rethink your audio cabling). First, every TriCaster now supports four independent 4-channel busses, each with full 4x4 routing. See the *Advanced Audio* configuration panel for any *Mixer* control group for this feature.

  Also, the main output busses have been re-organized. Outputs 1-4 are all four channel, and can be configured to carry many different signals. Obviously, some models do not have four physical output connector groups, but the 'surplus' outputs are available as NDI audio outputs).
- **IsoCorder**
    - **Recorders:** TriCaster's *IsoCorder™*, which formerly recorded up to 8 channels on two TriCaster models, is limited to 4 encoders in AE V2. AE V2 users who are running TriCaster 860 or 8000 qualify for a complementary copy of *NDI IsoCorder Pro*. This allows one to capture additional NDI channels (actually, up to 16 more) on another networked unit.

[JUMP TO INDEX]

Note that it requires some serious hardware and network bandwidth to capture 16 HD sources.) *NDI IsoCorder Pro* sources can be drawn, of course, from any NDI source on the network - including all of the TriCaster sources (i.e., every TriCaster hardware input and any of its 4 outputs.

- **Encoding:** Encoding options (such as H.264) were very resource intensive, and have been removed from *IsoCorder*. AE V2's capture format is a high quality wrapped Quicktime™ file. Playing this format back or using it on an external system requires the NewTek codec pack to be installed on that system. Where that may not be convenient, we recommend using the *Export* feature, which supports fast batch processing and a long list of alternative formats by means of its custom *Transcode* presets.
- **File names:** Files captured are now automatically named for the recorder source, whether an output or an input (e.g., "Out 1", etc.). Note that output and input names are set in the *Hardware Configuration* panel, and are the same names used to identify the corresponding NDI sources on your network.

- **NDI/Network Sources**
  - **iVGA Pro:** This application is not supported for NDI, having been replaced by *NewTek NDI Scan Converter*. The latter is included in *NDI Tools*, which you can download without cost from NDI.NewTek.Com
  - **LiveText**: Native NDI support is provided by *LiveText 3.0*, a free download (for LiveText 2) owners from the main NewTek downloads page. On installation, you can choose whether LiveText's network output will be NDI or use the former method (AirSend).
  - **Other Network Sources:** Manually configuring a number of network input source types (e.g., RTMP, RTSP, cameras using those protocols for network output, etc.) is not supported in AE V2.
  - **TriCaster Standard Edition**: Version 2-5 for these systems provides support for NDI using the *Net 1* and *2* inputs and *Network* output. This update may be downloaded from the NewTek website. (Older style AirSend™ sources still work, too, as does the former *Network Output* method.)
  - **TriCaster Advanced Edition 3-2**: This version provides support for NDI using the *Net 1* and *2* inputs and *Network* output. This update may be downloaded from the NewTek website. (Older style AirSend sources still work, too, as does the former Network output method.)
  - **Other TriCasters**: NDI support has not been extended to other TriCaster models at the current time, but may be added in the future.
  - **TalkShow™**: The TalkShow version 1-2 update (or better) available from the NewTek website adds full NDI support.

[JUMP TO INDEX]

- **3Play™**: In the very near future, software updates providing native NDI output for all current 3Play models will be available from the NewTek website.
- **Third Party AirSend apps**: The *NewTek AirSend Updater*, available from NDI.NewTek.Com, locates any *AirSend* applications (e.g., Chyron™ Lyric) and updates them to support NDI automatically.

- **Control Surfaces (mapping):** The new sources NDI makes available make it impossible to map the different CS units (labeled as shipped) exactly to the software. For example, some surfaces have far less buttons in their *M/E* or *Util* rows than TriCaster AE now provides. By default, sources are mapped to the labeled source as much as possible, even where this breaks the natural order shown on the interface. The *TriCaster User Guide* shows tables for every CS for every TriCaster model in chapter 21.

- **DSK/KEYs**
  - **Numbering:** *DSKs/KEYS* are not labeled 1-4 in the interface. Not surprisingly, DSK 1 is the first one (you can probably figure out the rest). 
  - **Effect Bins:** Previously, you clicked the thumbnail icon for an effect to open a '9-bin'. This has not changed, but the effect icon is now smaller.
  - **Layer delegates:** There used to be a large *Delegate* button above the control group for the *Background* layer and each *DSK/KEY*. These are gone, and the space gained allows a better view of *DDR* playlist contents. To delegate a layer, simply click its small confidence monitor. The monitor for delegated layers show a blue border around the monitor. Shift and Ctrl are supported for multi-selecting layers.

- **Media Players**
  - **Angles:** The *Angles* option has been removed from the *DDR* clip context menu.
  - **Show ON:** This feature has been updated. When the target for playback is an *M/E*, you can now enable the *On PGM* switch shown nearby to cause that *M/E* to *Auto* onto the *Main* switcher's *Program* row. This allows you to i) send *DDR* output to the *A* row of an *M/E*, and ii) display the *M/E* on *PGM* (complete with overlays and more) with one click – perfect for sports replays.

- **M/Es**
  - **LiveSet Positioning:** The former 'mini' LiveSet editor provided in the *M/Es* has been replaced by controls that are directly accessible in the *Live Desktop*. For the Background layer in an *M/E* with a LiveSet effect loaded, use the *T-Bar* to zoom, or right-click and drag on the *POSITION* button below the T-bar; to pan, left-click and drag on the same button.
  - **Comps versus Presets:** Models from TriCaster 460 up show a *COMP* button above the T-Bar - even in the Main Switcher. Other models show a *PRESET* button for *M/Es* only. There are several important things to note in this context. First, both *M/E 'Mems'* (which appear when you bump the left edge of the screen) and *Comps* are

*true* presets, not 'slots' as in the prior implementation. What you store initially is what you will get every time you click a thumbnail.

Otherwise, *Presets* behave like the former LiveSet zoom presets. *Comps*, however, store extra information – notably most *Positioner* attributes from both the *Background* layers and *DSK/KEY* layers. And, while applying a *PRESET* cuts to the stored settings, *Comps* animate each layer into place, using the transition timing you set for individual layers. (This allows you to perform complex multi-layer animations with a single click. Even things like cropping, feathering, and *Priority*, or layer depth, can be animated.)

- **Mirroring (Remote Control)**: This feature is not supported in TriCaster Advanced Edition.
- **PREVIZ:** The new *PREVIZ* tab in the *M/E* group and associated features elsewhere in the *Live Desktop* replace the former *Effect View*. See elsewhere in this document for full details, but note that the *Follow PVW* button on supporting control surface's no longer performs its original function, instead serving as the *PREVIZ* delegate for the *M/E* controls and joystick.

## Switcher Updates

### Undo/Redo

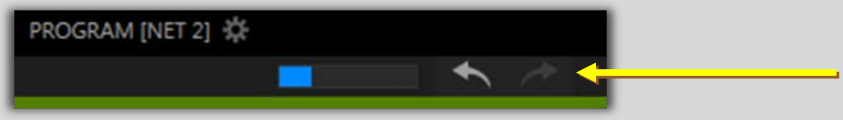



Figure 1

The *Switcher's* new *Undo/Redo* feature (Figure 1) stores multiple undo/redo states. You can easily revert to a prior *Switcher* state, providing another important 'failsafe' feature. Accidents happen; *Undo* is great for those times when you've inadvertently changed something with unwanted results, but lack time to figure out what went wrong.

A fresh *Undo* state is stored whenever the *Program* row selection is updated. (Should you wander down a rabbit hole while configuring an M/E, a quick click (or keyboard Ctrl + z) can quickly get you back onto the beaten path.)

### Smart M/E Configuration

It's no longer necessary to choose *Mix* or *Effect* to configure an *M/E* for your immediate purpose. Simply roll over the effect thumbnail and click the + sign to load the type of effect you want, whether a transition or an effect. The *M/E* immediately reconfigures itself based on your selection.

### KEY Power


Figure 2

TriCaster 8000 has long offered an astonishing four KEY layers for every M/E, while all other models provide one. Now TriCaster Advanced provides the added creative and practical benefits of a second KEY layer to all models, including TriCaster Mini, 410, 460, while the mighty TriCaster 860 now has four KEY layers, just like 8000.

### PREVIZ

TriCaster Advanced Edition (models ranging from TriCaster 8000 to Mini) provides a unique PREVIZ feature which is, in essence, a specialized *ninth* M/E (albeit one that is never seen on video output). Among other things, PREVIZ serves as a sort of 'scratch-pad' where you can try out various main *Switcher* and *M/E* configurations without risk.

[JUMP TO INDEX]

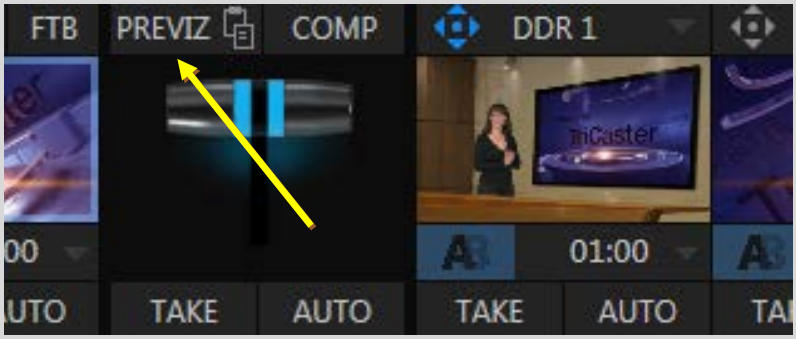



Figure 3

Now you can preview full motion effects, including T-bar operations. Preview any and all *Switcher* and *M/E* effects (including *DSK/Key* layers) without disrupting output. This allows you test different overlay positioning, effects, and more, without any fear that your experiments will accidentally appear on program output. You can also copy from PREVIZ to multiple M/Es, for quick and consistent layer and effect configurations.

## Comps


*Comps* can enhance a production dramatically by enabling you to store and apply a series of custom zooms, pans, and layered motion effects produced by modifying settings in *KEY* layer *Positioning* panels. As well, the *Comp Bin* allows you take advantage of the new *DSK/KEY Positioning* panel attribute called *Priority*, which controls layer order (depth).

For example, suppose you have a quad box composition with four 'talking heads'. You want to scale one or another up as they take turns speaking.

Figure 4

Normally, the fixed layer order would mean that only one source could be scaled up to appear 'in front' of the others. The remaining three sources would always appear behind that one source. Now you can change the hierarchy/priority of each layer when required, and save a *Comp* with the appropriate priority for each version.

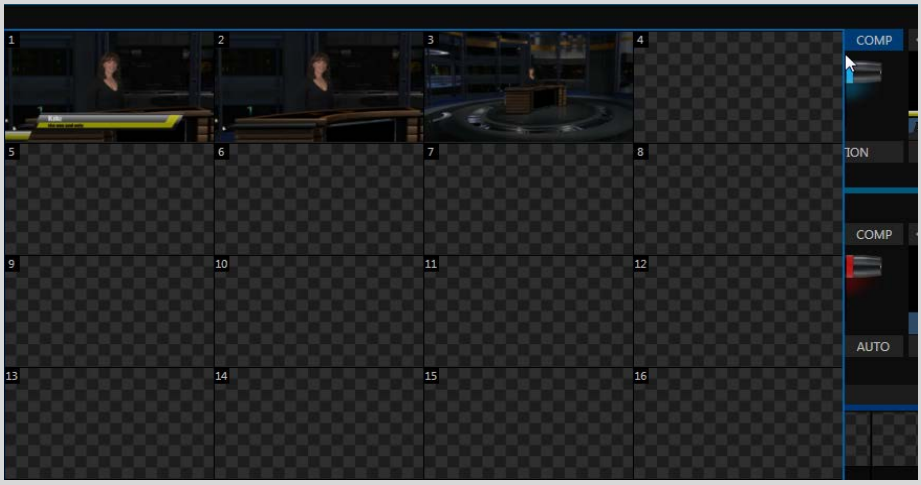



Figure 5

[JUMP TO INDEX]

To save a Comp, simply click the *COMP* button to open the *Comp Bin* (**Error! Reference source not found.**). Click on an available slot (clearing and updating are discussed later in this section). That is all there is to it. To recall any of these saved settings is as simple as opening the *Comp Bin* and clicking on the thumbnail icon.

The bin has 16 *Comp* slots. Each can be named, cleared and updated by right-clicking and selecting the desired operation from the popup menu (see Figure 6). Updating can also be done by clicking on the camera icon visible in the upper-left corner of each thumbnail on mouse-over.

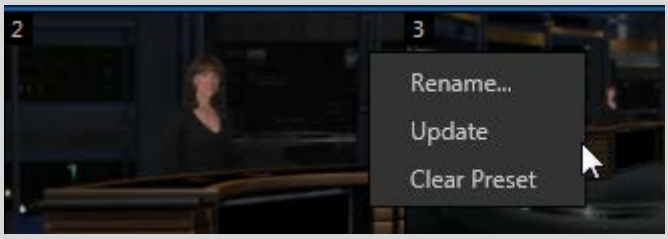



Figure 6

## Augmented Reality

*LiveSet* scaling and render quality has been *dramatically* improved – but that improvement could almost go unnoticed given the splash appearance of a further *M/*E upgrade:

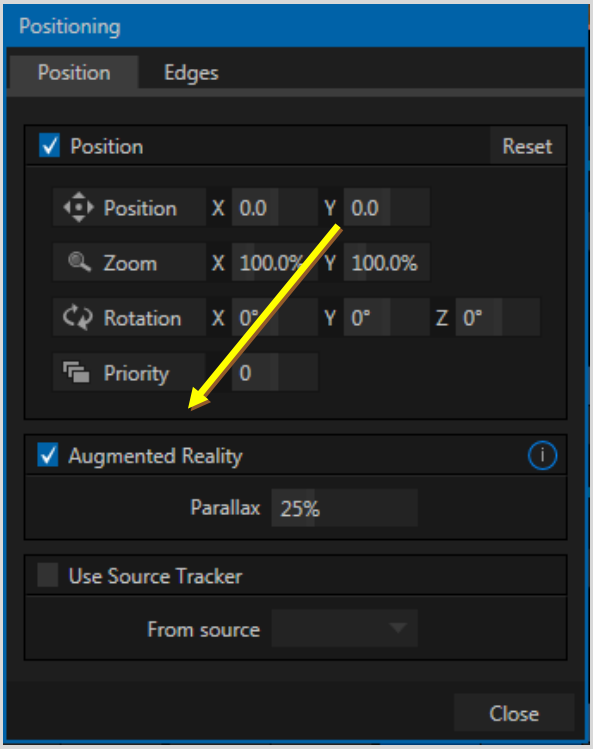



Figure 7

*KEY* layer *Positioner* panels also sport an option labeled *Augmented Reality* (Figure 7).

[JUMP TO INDEX]


Figure 8

Any *KEY* layer with the *Augmented Reality* switch enabled is treated differently from a normal KEY layer in several respects:

- First, it does not merely appear *above* the main *M/E* layer composition you configure at left, as a typical *KEY* channel would. Instead, it is treated like another main layer added above the standard M/E layer rows.
- Thus when you zoom or pan the *M/E*, the *KEY* layer zooms and pans right along with it, making its content appear as though it were embedded in the scene.

  (This lets you effectively add one or more virtual layers to a *LiveSet* composition at any time, with complete control over positioning within the composition.)
- With the associated *Parallax* setting at 0%, the *KEY* source is locked to the background formed by the layers below it in a 1:1 relationship. When the 'camera viewpoint' changes, the *KEY* layer moves in exactly the same amount and direction as the background.

## Borders

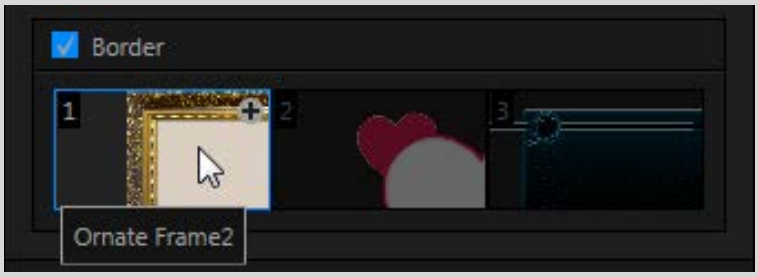



Figure 9

The *Positioner* panels for each *DSK*, *KEY* and *M/E* layer now sport quick access *Border* preset slots (Figure 9) along with the existing scale, rotation, edge and other controls.

These powerful border effects (Figure 9) can include full color overlays, backgrounds, matte layers for 'keyhole' effects, and shadows.

[JUMP TO INDEX]

In addition to hundreds of supplied borders, users can easily create their own elaborate custom effects using Photoshop (a template PSD file is supplied, at C:\TriCaster\Effects\Borders).

Figure 10

Figure 11

Further, since these are per-layer *Positioner* effects users can now easily create custom multi-box compositions in TriCaster's M/Es (Figure 11).

This allows freely scaling, positioning and rotating various sources, adding custom borders, overlays, shadows, and so-on, above custom backgrounds or even live sources – all without resorting to *Virtual Set Editor*.

## New Mix Effects


Figure 12

By popular request, two brand new fade transitions have been supplied:

- *Additive Fade*
- *Non-additive Fade* (Figure 12)

These effects supplement the standard fade and add subtle yet eye-catching appeal to your productions.

## New LiveSet Effects

In addition, two new LiveSet Utility effects have been added:

- *Inhibit Matte – hold out a 'foreground' portion of the LiveMatte key*
- *3-Layer Multiply – Multiply two upper layers and add a background*

[JUMP TO INDEX]

## Switcher Input Comments

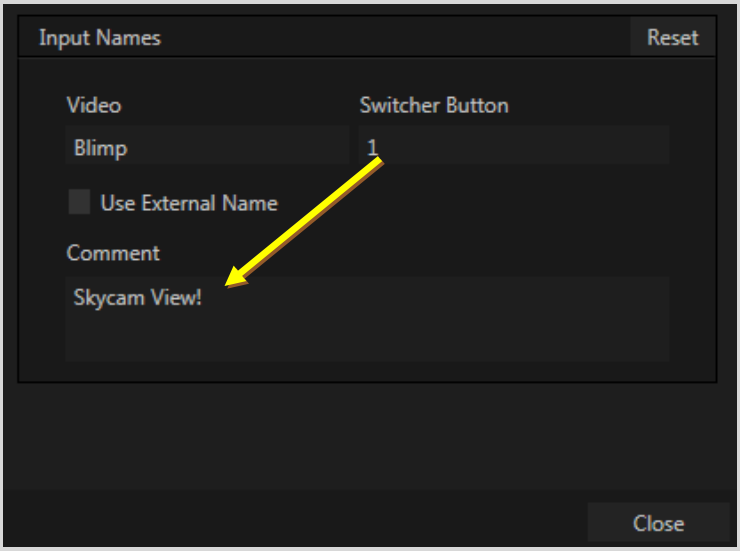



Figure 13

Now you can not only rename *Switcher* inputs, you can add detailed comments about them. (The value of this feature becomes apparent in connection with the addition of native *DataLink* support, discussed later).

## Router Support for All Pro Models

The title says it all. Formerly, upstream router support was exclusively limited to TriCaster 8000. Now any model can have the same router capability.

## Input Names from Routers and NDI sources

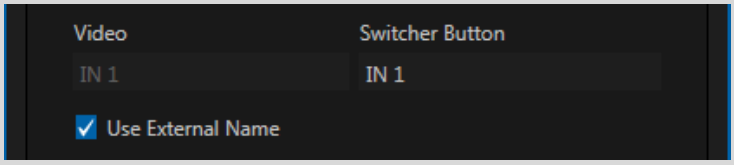



Figure 14

Speaking of *Switcher* input names, for both NDI sources and external routers supporting individual names for their inputs, the new *Use External Name* switch allows TriCaster's input name to be updated automatically when the user changes to another source.

## Improved Switcher Memory Gauge


Figure 15

As part of a general cleanup of the *Dashboard*, the *Switcher Memory* gauge (which monitors usage of graphics memory on the system) has been simplified and relocated to a location immediately

below the *Program* monitor (Figure 15) to associate it visually with the array of effects controls just beneath.

## Monitoring Enhancements

### Multiview Scopes

What's better than scopes? *BIG* scopes, that's what!

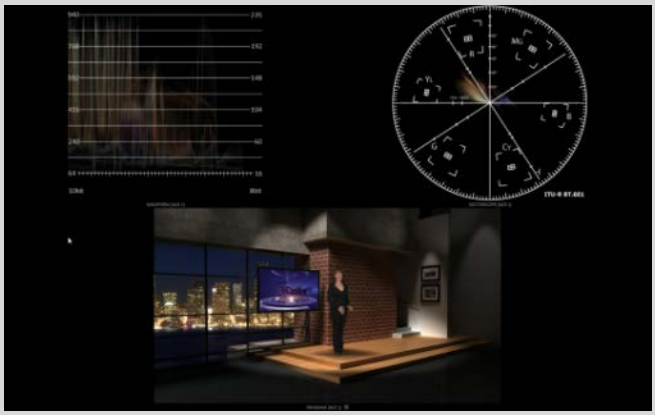


Figure 16

Now you can display large scopes on Multiview, complete with a full color preview monitor and selectable source.

### Updated Tally Notification


Figure 17

By popular request, tally notification is now provided by borders around both *Interface* and *Multiview* video monitors.

### Program & Preview Source Identification

To enhance convenience and confidence, labels beneath Program and Preview monitors now identify the currently selected source.

[JUMP TO INDEX]

## SDI Auto-Detect

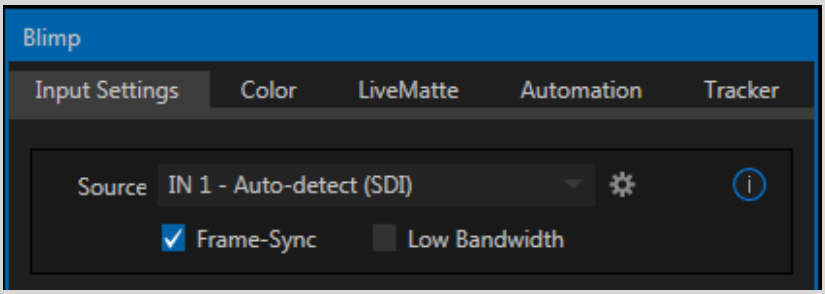



Figure 18

TriCaster's new Auto Detect feature makes configuring SDI sources a breeze. Most users will simply connect a camera and see the signal from their SDI sources immediately, without any need to set resolution and framerate options.

## Buffers

Animated buffer support has been extended to all models running the "Pro" version software – now including both TriCaster 410 and TriCaster Mini. The number of animated buffers available varies by TriCaster model:

- TriCaster 8000 offers 10 animated buffers, plus 5 more 'still/title-only' buffers.
- TriCaster 410, 460, 860 and TriCaster Mini provide 5 animated buffers, plus 10 'still/title-only' slots.

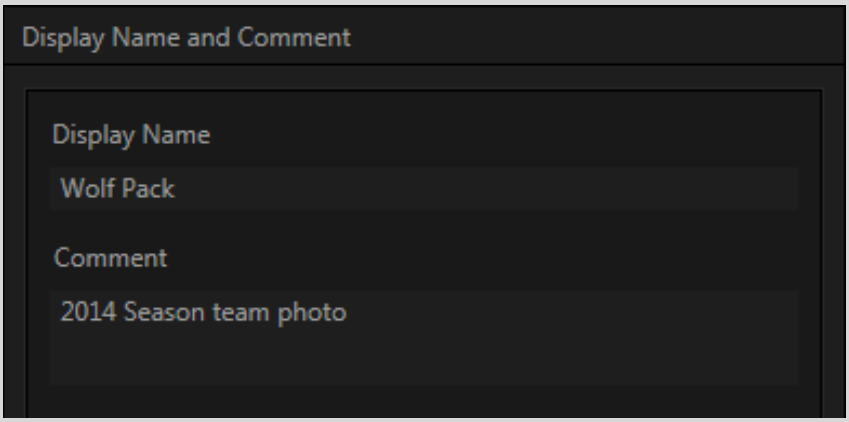



Figure 19

- As well, just as for *Switcher* inputs, each buffer slot now has a unique comment field (Figure 19), useful with *DataLink* for titling, or simply for memo purposes.
- Also new, the *Buffers* context menu now provides direct access to the configuration panel (to adjust Proc Amp, etc.) for any buffer slot.

[JUMP TO INDEX]

## LiveMatte Lumakey

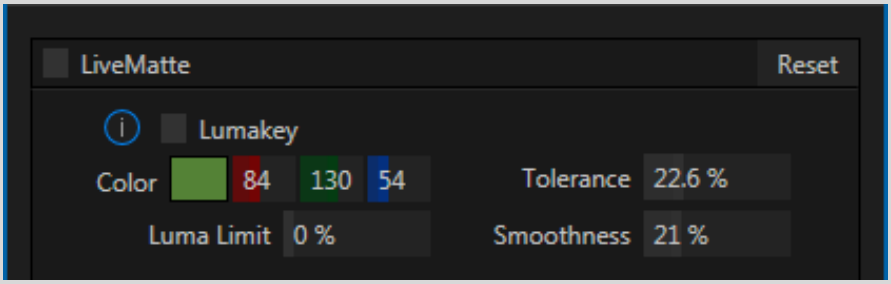



Figure 20

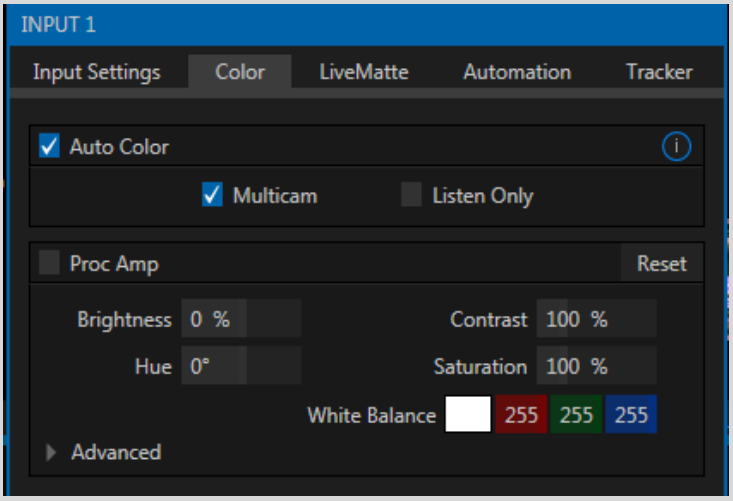
The addition of *Lumakey* support to LiveMatte will be a welcome addition to those using this long-serving method of overlaying keyed imagery to the scene.

## Auto Color

*Auto Color*, previously exclusive to 3Play, is now available in TriCaster Advanced.

Anyone who has done outdoor live production knows that during any event over an hour long, lighting conditions change constantly.

Compounding this color nightmare is the fact that virtually all modern production is multi camera, and those cameras may well include many different makes and models, let along not being uniformly color balanced.




This all poses truly difficult problems, requiring significant cost and effort to ensure that color does not shift when you switch from one angle to another, or that sources do not suddenly undergo erratic and jarring brightness adjustments when evening falls or a cloud obscures the sun briefly.

Traditionally, the broadcast industry handles these problems by employing a full time color grading operator, who monitors scopes and makes manual adjustments to ensure colors match.

Figure 21

TriCaster's new *automatic* color correction observes the individual feeds from cameras attached to the system and correctly adapts their characteristics to current lighting conditions and camera settings.

*For many productions, simply clicking "Auto Color" is all it takes to produce a show that looks amazingly consistent.*

[JUMP TO INDEX]

Although very simple to use, this capability adds significant advanced features, including the ability to auto-correct cameras one by one, have a single reference camera that you use to correct all others, and more.

Advanced users will be delighted to know that they can still apply manual adjustments downstream of the new *Auto Color* system.

This means they retain the option to tweak color settings for a specific "look" they want their show to have, even as Auto Color eliminates the headaches caused by both camera diversity and the unpredictability of both outdoor and indoor lighting conditions.

## NDI

The NDI protocol is a new open standard for live production IP workflows over Ethernet networks. A bi-directional standard that can operate over a GigE local area network, NDI allows systems and devices to identify and communicate with each other, and to encode, transmit, and receive high quality, low latency, frame-accurate video and audio over IP in real time.

TriCaster *Switcher Inputs* and *Audio Mixer Inputs* now support NDI™ (Network Device Interface), allowing you to assign them as a source under any position. This has the effect of providing more, and more flexible source options to your Switcher and M/E rows. TriCaster Mini, Mini SDI, 410 and 460 now support 8 external sources, compared to the prior 4 plus 2 network-only inputs. For TriCaster 860 and 8000, the external source count has risen to 12.

Beyond this, NDI support provides many additional workflow benefits.

With NDI location and distance are no longer obstacles. You don't have to directly attach devices, wrangle cables when changing locations, or sacrifice sources for limited hardware inputs.

You can even borrow inputs from other switchers in the facility and switch them from a different location, all over the network. ware inputs. You can even borrow inputs from other switchers in the facility and switch them from a different location, all over the network.


Unlike expensive, dual-10Gbps Ethernet networks typical of many emerging IP architectures, a standard GigE LAN infrastructure is all that's needed to accommodate NewTek's efficient, live IP video workflow.

For more information on NDI and workflows go to: http://www.newtek.com/solutions/advanced-ip-workflow.html

[JUMP TO INDEX]

## Streaming

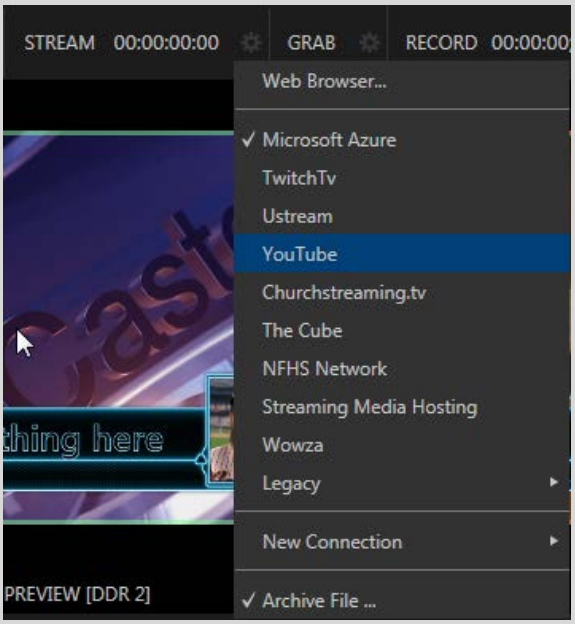



Figure 22

The streaming workflow in TriCaster Advanced has been completely redesigned, and the new encoder provides dramatically improved streaming video quality and efficiency. Much friendlier streaming setup, and streamlined integrated web browser.

- More popular streaming services are directly supported by TriCaster Advanced, now including dedicated plugins for your Microsoft Azure® ShowCaster™. TwitchTV™, UStream™, and YouTube™ Live accounts, along with custom RTMP, RTSP options and more.
- Create as many custom streaming account presets as you like, and then send TriCaster Advanced output to *multiple* accounts simultaneously (Figure 22).

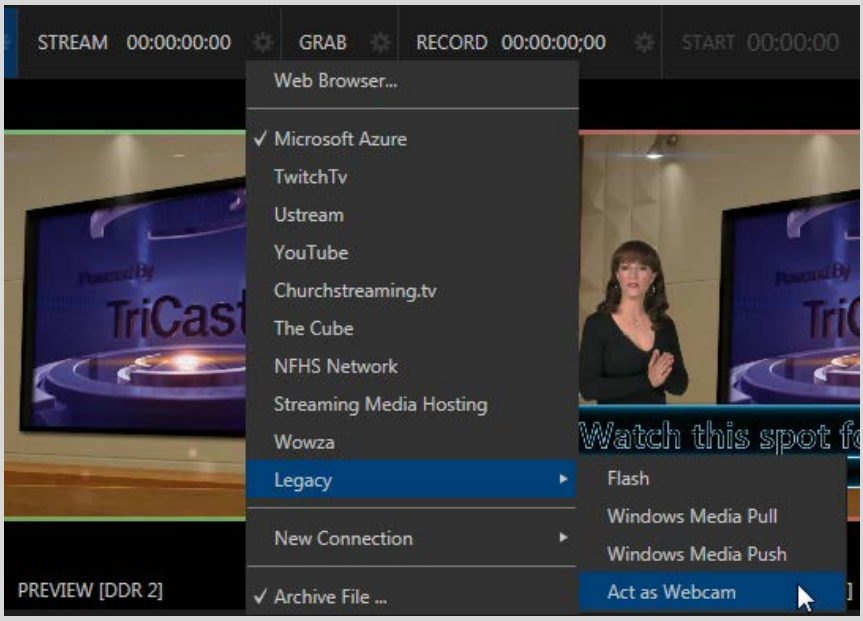



Figure 23

[JUMP TO INDEX]

## Export

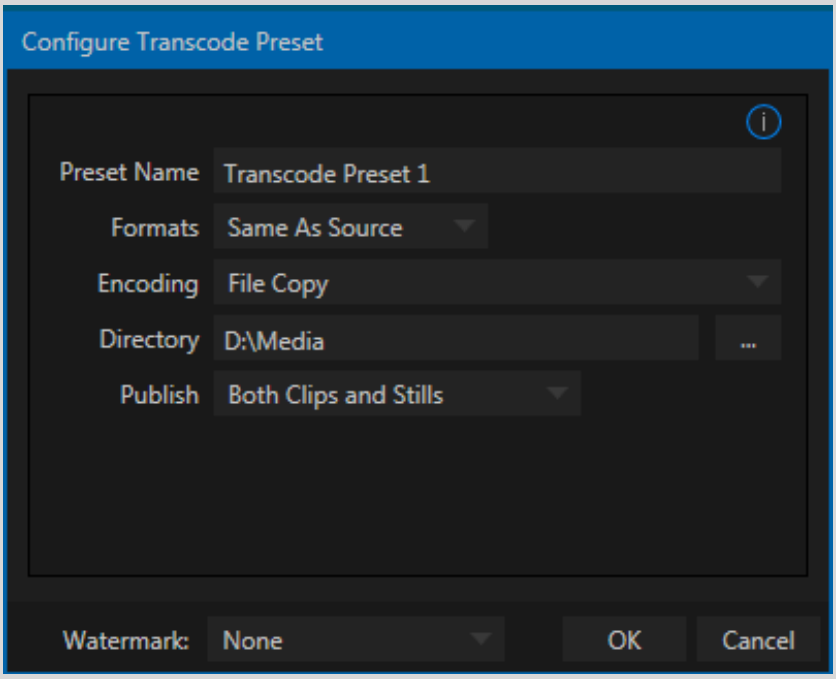



Figure 24

Now prominently located in TriCaster's *Dashboard*, the updated *Export* feature (formerly referred to as *Publish*) includes:

- Many more social media targets (including Dropbox™, LinkedIn™, Tumblr™, Twitch™, Vimeo™ and more).
- Extensive transcoding options, similar to the *Export* feature in the standard TriCaster software.

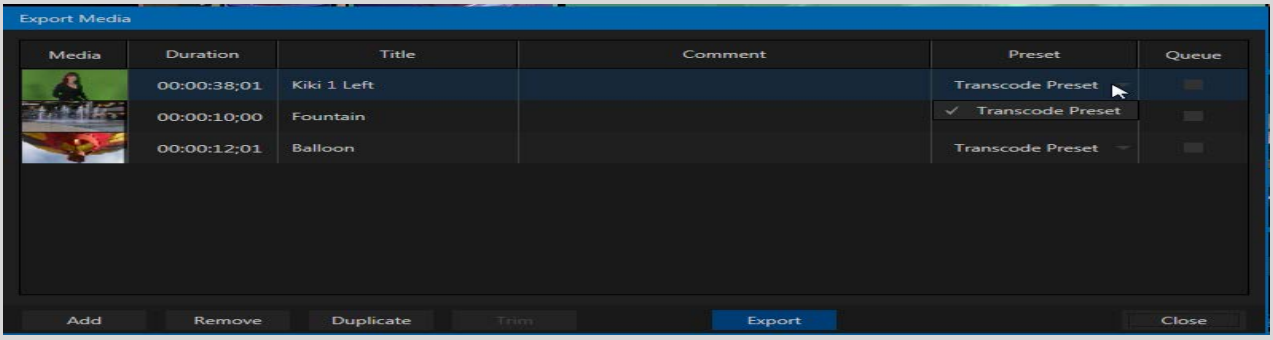



Figure 25

- Export to multiple destinations (including multiple accounts on a single service). Or publish clips transcoded to multiple formats to *local or FTP storage, with or without a custom watermark as you please.

  * You may recall that standard TriCaster software does support deep internal transcoding options while live.

[JUMP TO INDEX]

- The updated *Export* workflow is very similar to TriCaster's new, friendlier *Streaming* feature, enhancing ease of use.

Progress of items in the queue can be directly monitored in the *Export Bin*, of course but, in addition, an activity light (similar to the one that indicates a macro is running) appears under the main *Export* button in the *Dashboard*.

[JUMP TO INDEX]

## Import

The convenient *Import* module in TriCaster Advanced can automatically detect and transcode media files that are in formats unsuitable for realtime playback.

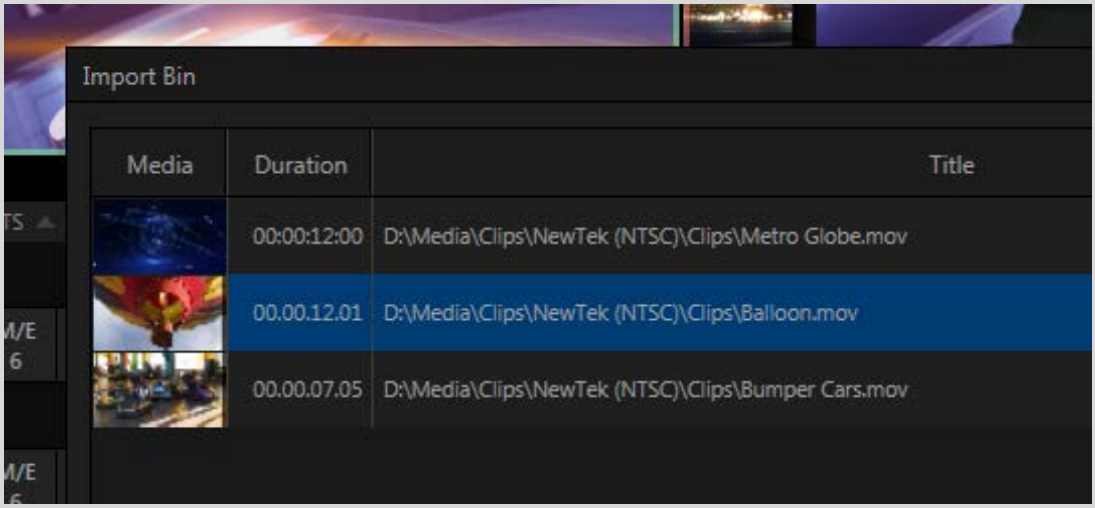



Figure 26

This all new *Import* module is available right on TriCaster's *Live Desktop*. This means you can access it at any time to add media to your session in friendly formats.

Now listed in the *File* menu at left in the *Dashboard*, *Import* is actually all new under the hood, and it employs the same fast, high quality transcoding engine used by *Publish*.

After adding a list of media files to the *Import Bin*, simply press the *Import* button and you can rest assured that they will be automatically collated into the appropriate media file folders for your current session, and converted automatically to the best format for realtime playback in TriCaster Advanced *Media Players*.

[JUMP TO INDEX]

## IsoCorder™

NewTek's industry leading *IsoCorder™* feature gets important enhancements and notable changes in TriCaster Advanced Edition.

### Dashboard VU Meter

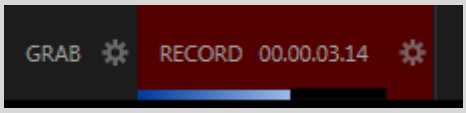



Figure 27

A new *VU meter* beneath the Dashboard *Record* button provides added confidence that you're getting a generous helping of audio along with the video you capture.

### Audio Options

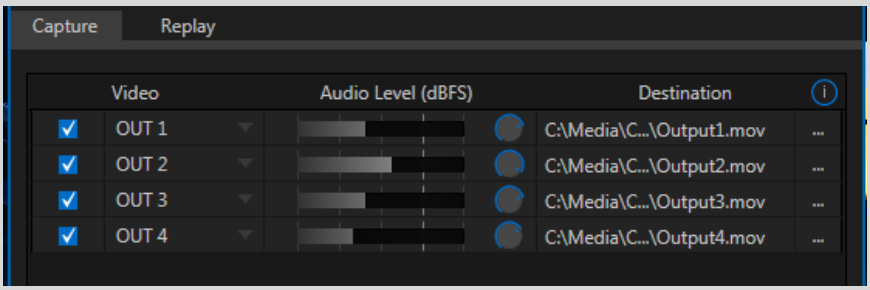



Figure 28

Audio output mixing is now controlled from the *Routing* tab in the *Input* settings panel found in the *Audio Mixer*. Each recorder in the *IsoCorder Capture* panel includes its own VU meter and volume control.

### Video Replays


Figure 29

The standard TriCaster *IsoCorder* features were augmented with additional instant replay power in version 2-4. TriCaster Advanced now adds even more exciting enhancements to this important area of TriCaster's toolset.

- *Session* folders – All media recorded during the current session is now conveniently located for easy *Media Browser* access inside a virtual *Session Recordings* folder.
    - Clips are further sub-divided into *Complete* and *In Progress* groups, so you can determine which files were captured previously, and which are still being actively recorded.

[JUMP TO INDEX]

- *Replay Pad* – The *Record* control in TriCaster's *Dashboard* expands to show an integrated *Replay Pad* (Figure 29), which provides a button for each active IsoCorder recorder you have configured.
    - Clicking a *Replay Pad* button adds the corresponding clip to the playlists you pre-selected in the *Replay tab (*and more, as discussed next).
- *Replay tab* (*Record Configuration* pane, Figure 30) – hosts powerful new additions to TriCaster's replay toolset.

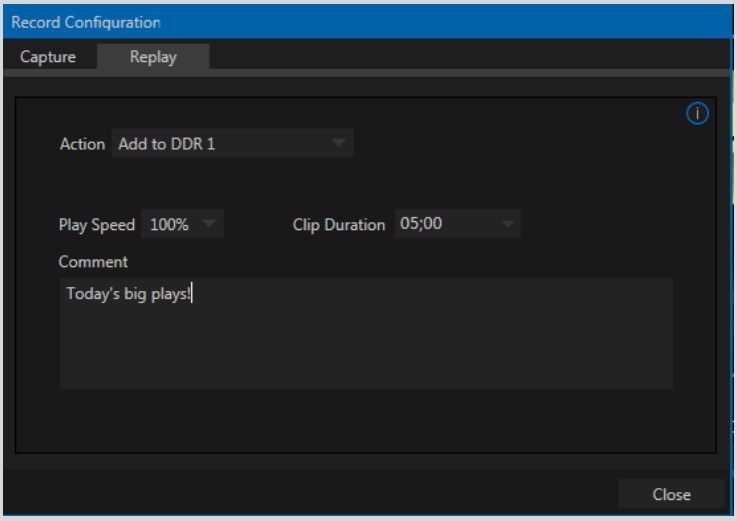



Figure 30

    - *Clip Duration* – Choose how long your newly added instant replay clips will be.
    - *Play speed* – Set the speed your instant replays will run at when played in the *DDR*.
    - *Action* – Determines what clicking a Replay Pad button (or pressing the corresponding numbered button) does. You can simply add a clip to the target Media player, or maybe send it to the Export Bin, or even automatically trigger an instant replay using the Media Player's Show feature.
- *DataLink* support – A special %DL mouse cursor appears whenever you roll the mouse over the *Base Name* or *Comment* fields to denote the fact that you can enter *DataLink keys* into these text boxes.

  Smart *DataLink key* entry makes this a breeze, too; simply enter the percent sign (%) to see all available *DataLink* keys in a drop-down menu (Figure 31).

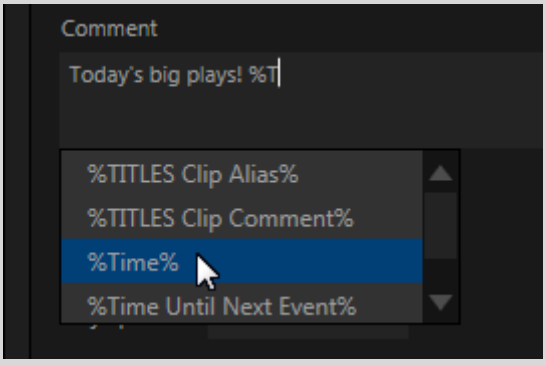



Figure 31

    - To quickly find the particular one you want, just add another character or two to show matching keys. For example, to

append the current time at the moment of capture to the *Comment*, just type "%T", and select "%Time%" from the menu.

- This means that metadata associated with your clips (and since *Grab* now has the same functionality, still images, too) can be automatically updated at the moment of capture (or when newly added to a *Media Player* playlist) from all manner of *DataLink* sources, whether internal or external.

Consider the possibilities:

- Automatically tag clips and stills with current score and game time data from an external scoreboard, and immediately upload them to Twitter (etc.) using the *Add to > Export* feature.
- Or tap into these rich metadata capability for post-production purposes.

There's even more, but we'll leave that for the *DataLink* section coming up.

Looking for more *IsoCorder* goodness then you may want *IsoCorder Pro* details on current features can be found at NDI.NEWTEK.COM

[JUMP TO INDEX]

## Automation

The power of TriCaster's macro system has previously been harnessed to provide automated functionality. For example, the *Hotspot* implementation runs macros triggered by motion on the screen. Now, TriCaster Advanced extends automation functionality in new and exciting ways.

### Switcher/Tally Macros

*Hotspot* controls have been relocated to the new *Automation* tab in *Input Configuration* (Figure 32), and supplemented by a new set of *State Change* triggers.

Macros can now be selectively assigned to run on specific *Switcher* operations, such as:

- *Program* or *Preview* row selection
- Displaying/ hiding the source in a *DSK* or *KEY* channel
- Selecting/de-selecting it on an M/E's A row
- Or any M/E row, or …
- Showing or hiding a source on the *Program* or *Preview* output.

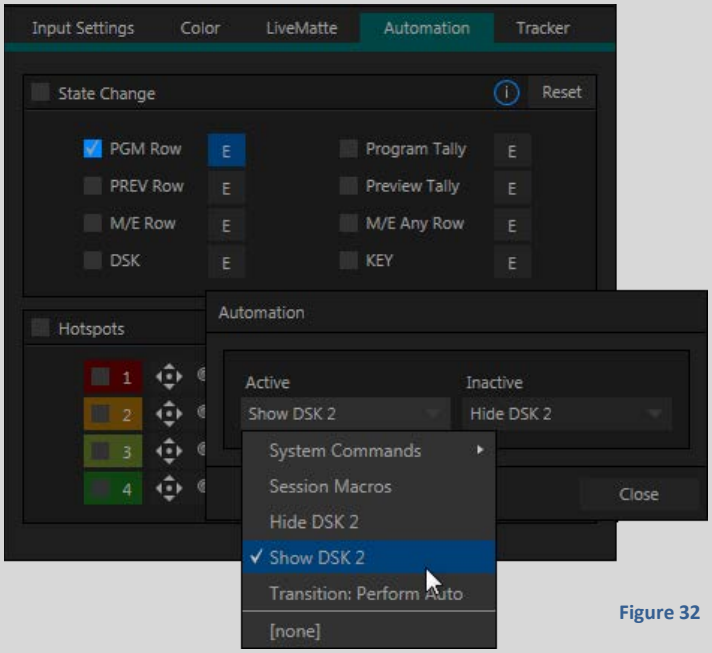



Figure 32

This is immensely powerful, and lends itself to all manner of applications, such as (to name just a few):

- Automatically fly in a title whenever you switch to a remote source
- Then remove it after it is displayed for a specified time.
- Or automatically select a different *Audio Mixer* preset when you switch from viewing a source in the B monitor of a virtual set on *Program* to displaying it full-screen
- And then change back to the original audio setup when you switch back to the anchor desk.

The possibilities are truly endless.

### Media Player Macros

Naturally, *Media Players* get automation support like other *Switcher* inputs, as described above. We didn't stop there, though.

Now, *every* item in a playlist – every clip, still image, audio file or title page – has its very own automation features.

[JUMP TO INDEX]

- Any macro you can record or create can be executed automatically on either playback or end of play for any and every individual playlist item.
- Improved multi-selection support in the playlist makes it a breeze to assign macros to multiple items.
- Automatically show titles for certain types of clips and not others
    - Give them different title page types
    - Use macros to electively adjust Proc Amps per-clip
    - Or enable LiveMatte keying automatically when needed for certain items.

(There are a lot of other important new *Media Player* features, too, and we will come to them soon.)

## Audio Threshold Macros

In similar fashion, automation has been added to TriCaster's *Audio Mixer*.

New 'audio threshold' macro support allows toy to specify a value in decibels to serve as a trigger.

Whenever the sound level on that input rises above the threshold, or falls below it, designated macros will run (transients such as a brief cough are filtered out).

In this manner you could, for example, automatically perform a 'hands-free' camera switch to show someone who begins speaking, and then switch back again when he stops.

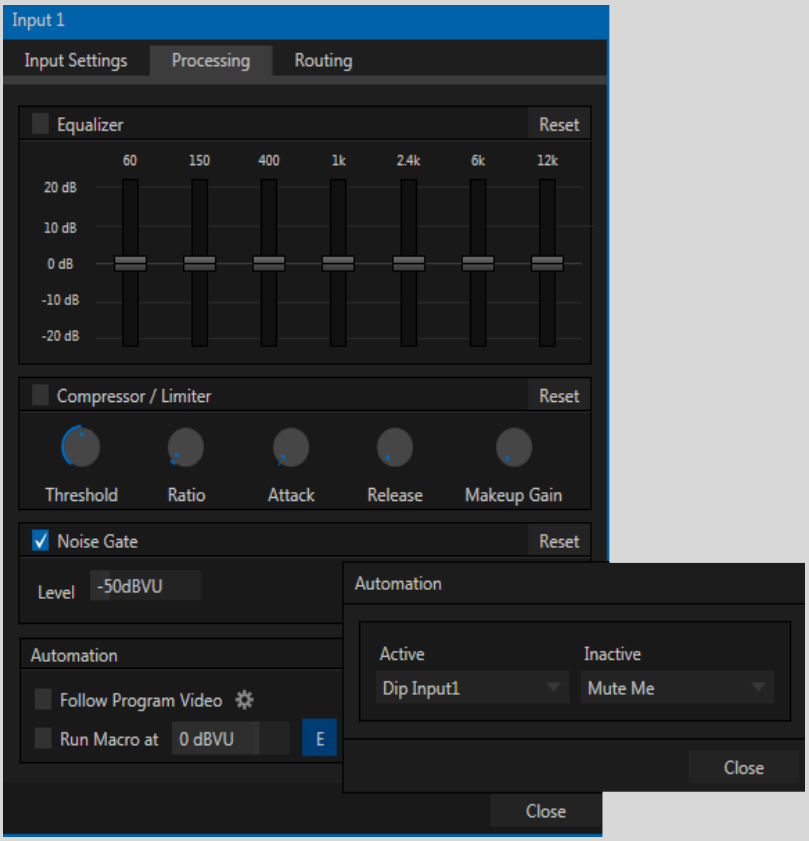



Figure 33

## Multi-Step Macros

TriCaster's *Macro Editor* now permits you to create and execute multi-step macros. Adding the line "#waitforcontinue" (or simply, "#pause") to a macro using the *Macro Editor* causes the macro to wait for user input at that step in its execution.

The new *Continue Paused Macro* shortcut, assigned by default to the backtick key (`) serves to resume playback.

This feature can be used in endless ways, as for example to allow a user to step dynamically through a series of animated CG overlays on demand.

[JUMP TO INDEX]

## Session Macros

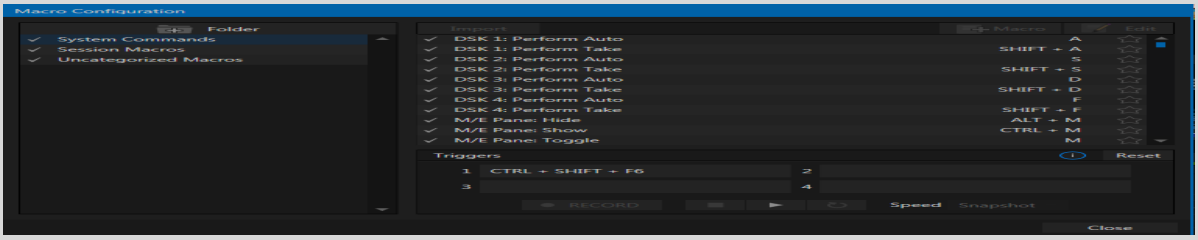



Figure 34

Now it's easy to keep macros designed for use with a specific production organized and easily accessible, thanks to the new "Session Macros" folder in the *Macro Configuration* panel. Macros in this group are exposed within that session only (or new ones based on it, if the operator uses template sessions).

## Expanded Gesture Support

In any current TriCaster model, powerful macros can be triggered by any number of different means, including keyboard shortcuts, control surface operations, MIDI buttons, and more. TriCaster Advanced now allows you to assign multiple triggers to your macros (Figure 35), making them more accessible than ever.

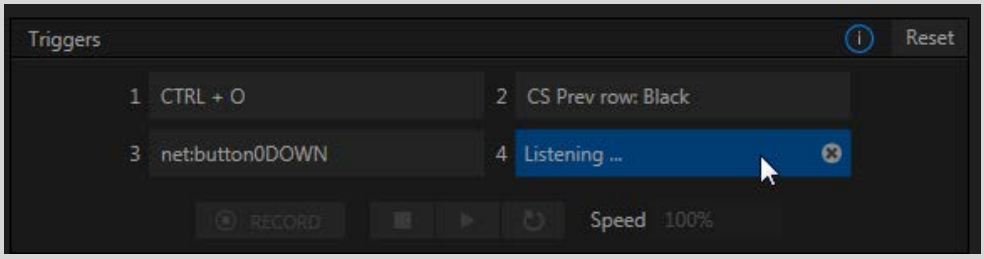



Figure 35

The expanded Triggers section now allows you to use up to 4 different mechanisms to address a single macro.

## Conflict Management

Of course, with the possibility of so many different ways to trigger a macro, keeping track of them all to avoid assigning a single trigger to multiple macros can be tricky.

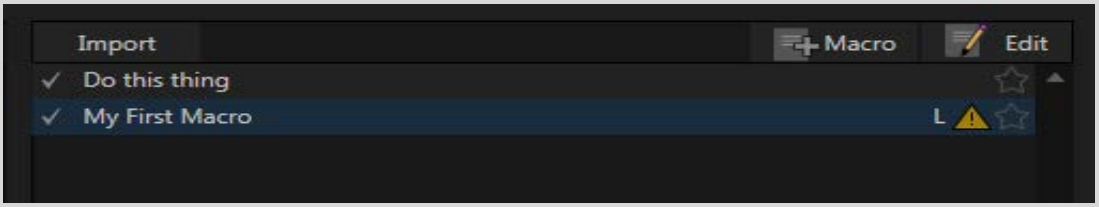



Figure 36

Now, macros with conflicted trigger assignments are shown with a 'bang' in the *Macros* lister.

Clicking a bang symbol advances through the list to the next macro with the same trigger. This allows you to quickly skip through all of your of macros, making isolated corrections as you see fit.

[JUMP TO INDEX]

## Media Players

The enhancements to *Media Players* delivered in TriCaster Advanced are many, and powerful. Without question, TriCaster provides the most powerful DDRs in the industry.

### Clip Speed

Playback *Speed* can now be set locally, per clip. The clip context menu item *Speed* offers a secondary menu showing 25%, 50%, 75%, 150, and 200% (Figure 37).

This allows you to freely mix slow motion clips in with items that run at normal speed. (Note that this clip *Speed* setting is the one that is set by the *Play Speed* control in the *Record Configuration* panel's *Replay* tab.)

Multi-selection is supported, making it easy to adjust the playback speed for a group of clips in one easy operation. Of course, as before, the *DDR* footer tools also include a global *Speed* setting. Adjustments here *further* modify the clip's playback speed (just as in 3Play's playlists.)

Also as before, the (global) DDR Speed can be controlled by the T-Bar on a TimeWarp control surface, providing extensive and dynamic operator control over speed.

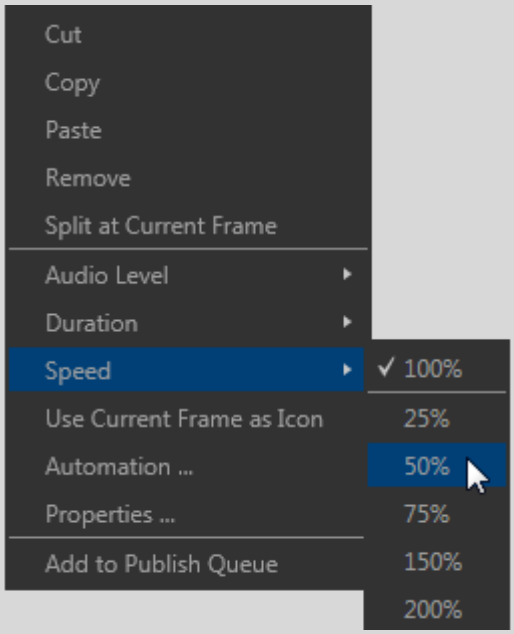



Figure 37

### Split Clips

Complementing the recently added ability to include 'growing; (still being actively recorded) clips in *DDR* playlists (Ver. 2-4), any clip can now be easily split.

The context menu item *Split at Current Frame* (or equivalent hotkey "/") divides the clip at the current playhead position. You can now quickly jog through a long clip to splitting it into just the bits you want, and then trim them to perfection using the revised marking tools discussed next.

### Keystroke Shortcuts

Previously, different keystroke shortcuts were required for each *Media Player*. For example, "u" would toggle AutoPlay in DDR1, and "k" would stop its playback, but you had hold down ALT to accomplish those same things in DDR2, or SHIFT when you wanted to control GFX1. Now, one set of simple shortcuts applies to the *Media Player* that has keyboard focus, making hotkey control a much simpler and more reliable operation.

### Revised Trimming

The *DDR* footer has been completely reworked, and provides numerous powerful new features. Among these are completely updated *Scrub Bar* and trimming tools.

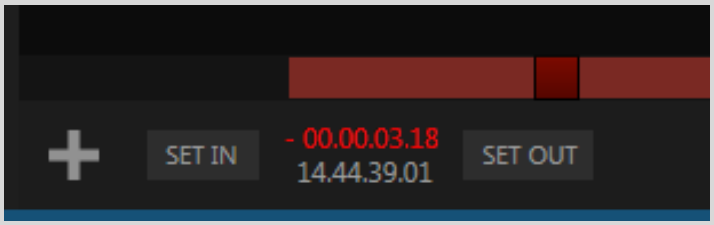



Figure 38

- Freely drag the *Scrub Bar* knob to any point in a clip, even outside the bounds of already its established In and Out points.
- Then click the new *Set In* or *Set Out* buttons (Figure 38), or simply press the keystrokes "I" and "o" at any time to do the same thing.
- Press the "g" key to instantly set the *In* and *Out* points to the actual first and last frames of the file on disk.

Note that the *Set* buttons are separated by two different timecode displays (Figure 38):

- *Countdown* – The upper display counts down from the *In Point*, showing long the clip has to run before playback stops.
- *Timecode* – The lower display tells you exactly where the playhead is with respect to timecode embedded in the clip.
- *Go To* – Click either field to type into it, then press enter to update the playhead position.

## Time Shifting

By the way, it's possible to use TriCaster's support for 'growing' clips to perform 'time shifting'. For example:

- Assign *DDR 2* to *Output 2*.
- Set *Record* to add a clip automatically to *DDR 2*, and begin capture.
- Select the newly added clip in *DDR 2* and press "g" on the keyboard to clear its *Out Point.*
- Trim the clip's *In Point* to taste, if desired.
- Wait the desired length of time, and begin playing the clip

(Of course, all of this could easily be committed to a macro, for single button ease.)

## Comments

We've seen how comments can be added to new clips and stills in *Record* and *Grab*.

Along with the item's *Display Name* (playlist alias), comments can now also be viewed and edited by selecting the *Properties* item in the *Media Player* context menu.

Clip *Comments* can be entered manually or served from supporting third party Asset Management solutions. In turn, they can be used not only as memos, or to complement social media uploads via *Publish*, but also arguably even more important task in connection with *DataLink*, to be discussed shortly.

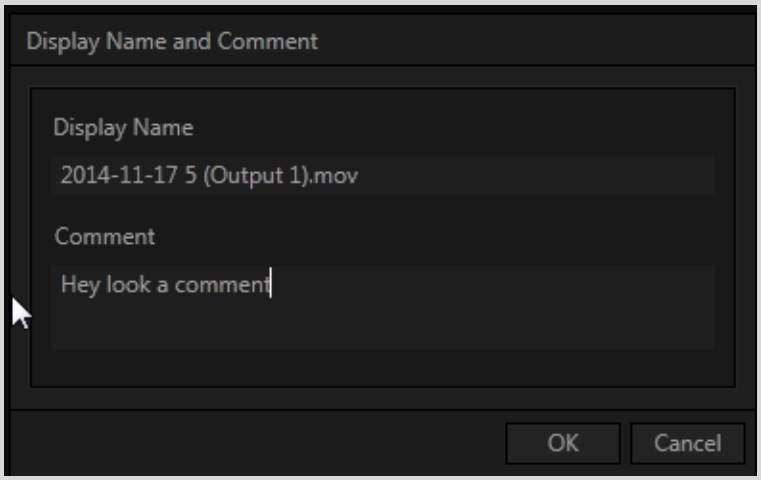



Figure 39

## Transitions

The addition of support for direct support for transitions in *Media Players*, including TriCaster's powerful *Animation Store* transitions which feature full color overlays and sound effects, further strengthens the world's most powerful *DDRs*.

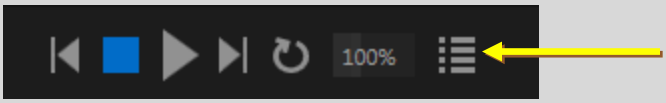



Figure 40

In a related change, *Media Players* are now in what was formerly known as *Single* mode full-time. A new button (Figure 40) enables *Playlist Mode.* In this mode, transitions are optionally applied between playlist items (otherwise, they are ignored).

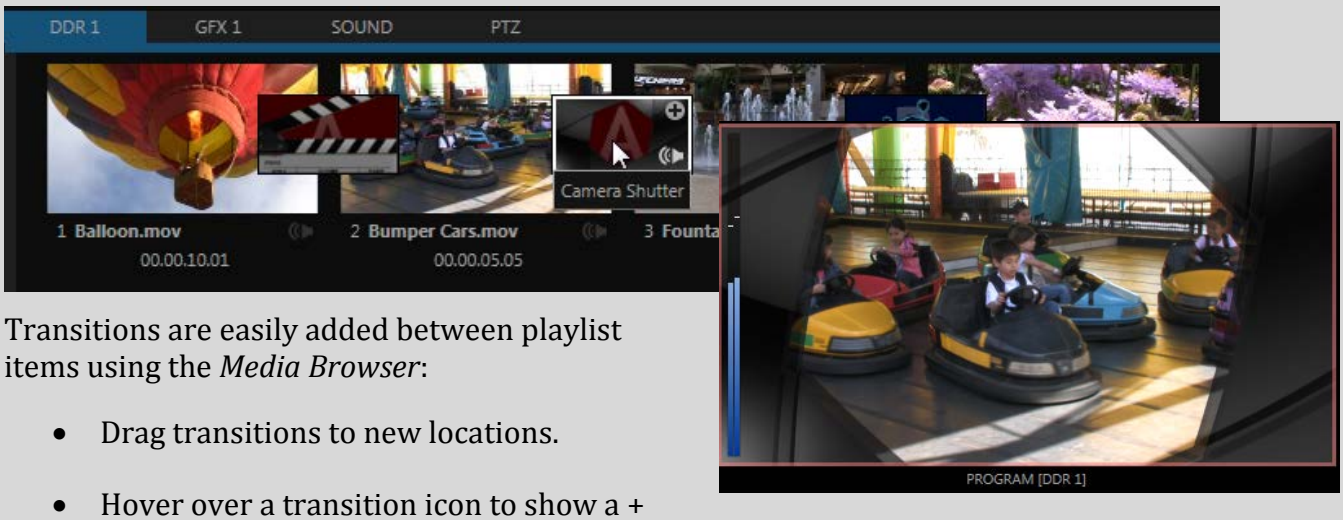



Figure 41

Transitions are easily added between playlist items using the *Media Browser*:

- Drag transitions to new locations.
- Hover over a transition icon to show a + gadget that opens a preset bin for quick selection, or to change an effect.
- Click the speaker icon to adjust the audio level for Animation Store effect.

[JUMP TO INDEX]

- Multi-select playlist items to insert transitions between them all (press *CTRL + a* to select *all* playlist entries).
- Multi-select different transitions in the *Media Browser* to insert them, rather than repeating one effect.

Media Player transitions fully support transitions between clips with alpha.

## Presentation Workflow

Figure 42

TriCaster Advanced's *Media Player's* transition support enables us to provide another very special new feature that we refer to as the "presentation workflow".

With *Playlist* mode enabled, click the *NEXT* button to immediately transition from the current playlist item to the next one, using the effect you placed between them. Click PREV to transition back to the *In Point* of the playlist item to the left. This implementation, which works whether playlist items are playing or stopped, provides TriCaster with 'Power Point' like functionality.

Users can now simply export their Power Point™ or Keynote™ slides as images, drop them into a *Playlist*, add transitions, and use them along with all of TriCaster's other incredible tools. (Of course, it is a very simple matter, too, to control the presentation interactively using macros with external control devices that communicate with TriCaster Advanced.)

## Show on (Instant Replay)

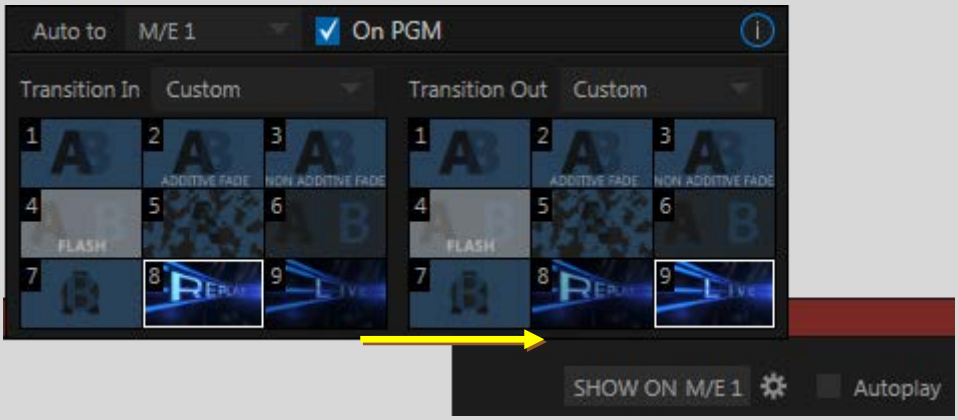



Figure 43

*Media Players* also feature integrated instant replay support that is both powerful and flexible.

- Click the gear gadget beside the *SHOW ON* button (in the DDR's footer - Figure 43) to display configuration options.
- Use the *Auto to* menu to designate where the replay will be shown – whether on *PGM,* in a selected *M/E*, or even in an M/E displayed on Program (allowing you to display a complete scoring display with your replay in one smooth operation).

[JUMP TO INDEX]

- Use the transition menus below to specify whether the replay will *Transition In* and *Out* using:
    - *Cut,*
    - The current *Background* effect,
    - Or a *Custom* effect chosen from the preset bin *below.

    * The preset bins are synchronized with the *Background* presets of the *Auto to* target

You can, of course, manually click *SHOW ON* at any time to initiate instant playback and display of the current *DDR* clip. Wouldn't it be great, though, if you could harness this feature to perform an instant slow motion replay of something you just watched, or maybe even show a different angle of the scene.

Now you can do all of this (with a single button press), thanks to the combined power of TriCaster Advanced Edition's enhanced *IsoCorder* and *DDRs*.

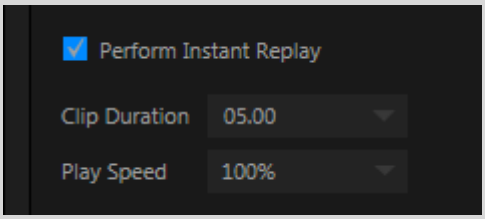



Figure 44

We saw previously how the new *Replay* tab in *Record Configuration* allows *IsoCorder* clips of specified *Duration* to be added to a target playlist with a custom playback *Speed* setting, and how the *Replay Pad* (or corresponding number pad keys!) can selectively add angles from different recorders.

We also mentioned the *Instant Replay* switch. Let's talk now about the immense power this feature delivers. When *Instant Replay* is enabled in the *Record Configuration* panel, the new *Show On* feature in the *DDR* is automatically activated each time a clip is added. This means that a single click on the *Replay Pad*, or a single number pad key punch, can do the following:

1. Add a clip of specified duration to a designated *DDR*.
2. Reveal the clip with a custom ("Replay!") *Animation Store* transition - with built-in sound effect.
3. Run it at the desired speed.
4. Remove it when done, using another custom ("Back to Live!") effect.
5. Automatically return to the original source
6. And reset the original *Background* transition.

[JUMP TO INDEX]

## Default Media File Level

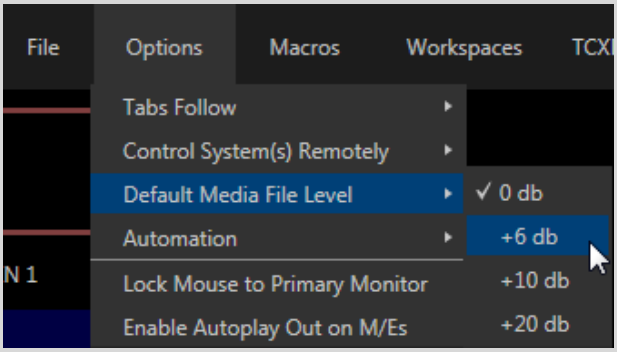



Figure 45

Users can save time when adding files with embedded audio to a Media Player now, thanks to the new option to set a default audio level to be applied to non-native clips and sound files.

## Multi-Selection Support

We've mentioned multi-selection several times while talking about new *Media Player* features. This useful ability has been extended quite a lot compared to earlier TriCaster versions. Now its easier and faster to manage media in your playlists (for example, now you can easily change the audio volume or playback speed of many clips at once).

## New File Formats

Still image file support has been extended to include many new formats, such as JPEG2000, JPEGXR, WebP, and more.

[JUMP TO INDEX]

## DataLink and Titles

Since the advent of HD TriCaster's, to take advantage of the power of *DataLink* required an external LiveText system whose output was directed to one TriCaster's *Net* inputs.

TriCaster's new native *DataLink* implementation changes all of that, with truly dramatic benefits to end users.

### Standard DataLink Sources

Naturally, TriCaster's *DataLink* solution provides complete support for all the same sources you are accustomed to using with an external LiveText graphics station – and more!

(We'll discuss some wonderful new DataLink sources momentarily.)

Standard sources such as (supported Daktronics, OES, Whiteway, DSI, and Translux) hardware scoreboards, MySQL database queries, and RSS feeds are set up and managed in a brand new *DataLink Configuration* app (Figure 46) accessed from the *Add-Ons* menu in *Startup*.

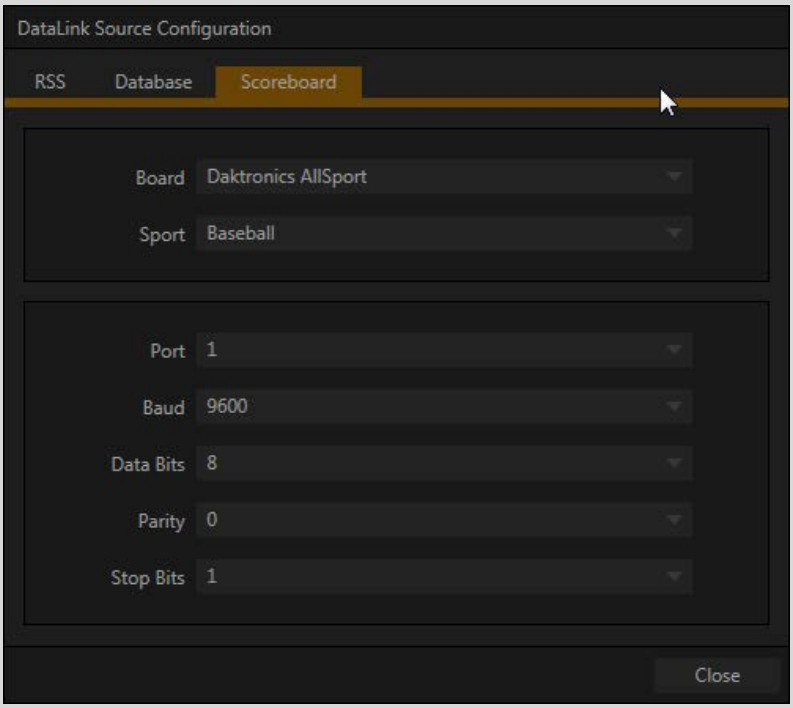



Figure 46

### Datalink and Automation

Let's consider how the new native *DataLink* implementation extends TriCaster's integrated title system.

You already know how *DataLink* can serve information from a wide variety of internal and external sources (such as the system clock, external third part scoreboard systems, SQL servers, watch folders, ASCI text files, and so on).

And earlier we discussed how *DataLink* can add up-to-the-minute metadata into file names and comments associated with *Media Player* clips and stills, as well as individual *Switcher* inputs.

In turn the *Properties* (*Alias* and *Comments*) of *Media Player* items (clips, stills, and even titles), as well as the similar *Properties* of *Switcher inputs,* are also available to DataLink.

What this means to a TriCaster user is that title pages can automatically show correct, item-specific data – entirely without user intervention. Combine these capabilities with the new *Automation* features (such as *Tally* and *DDR macros*) and you can have a 'self-titling' production.

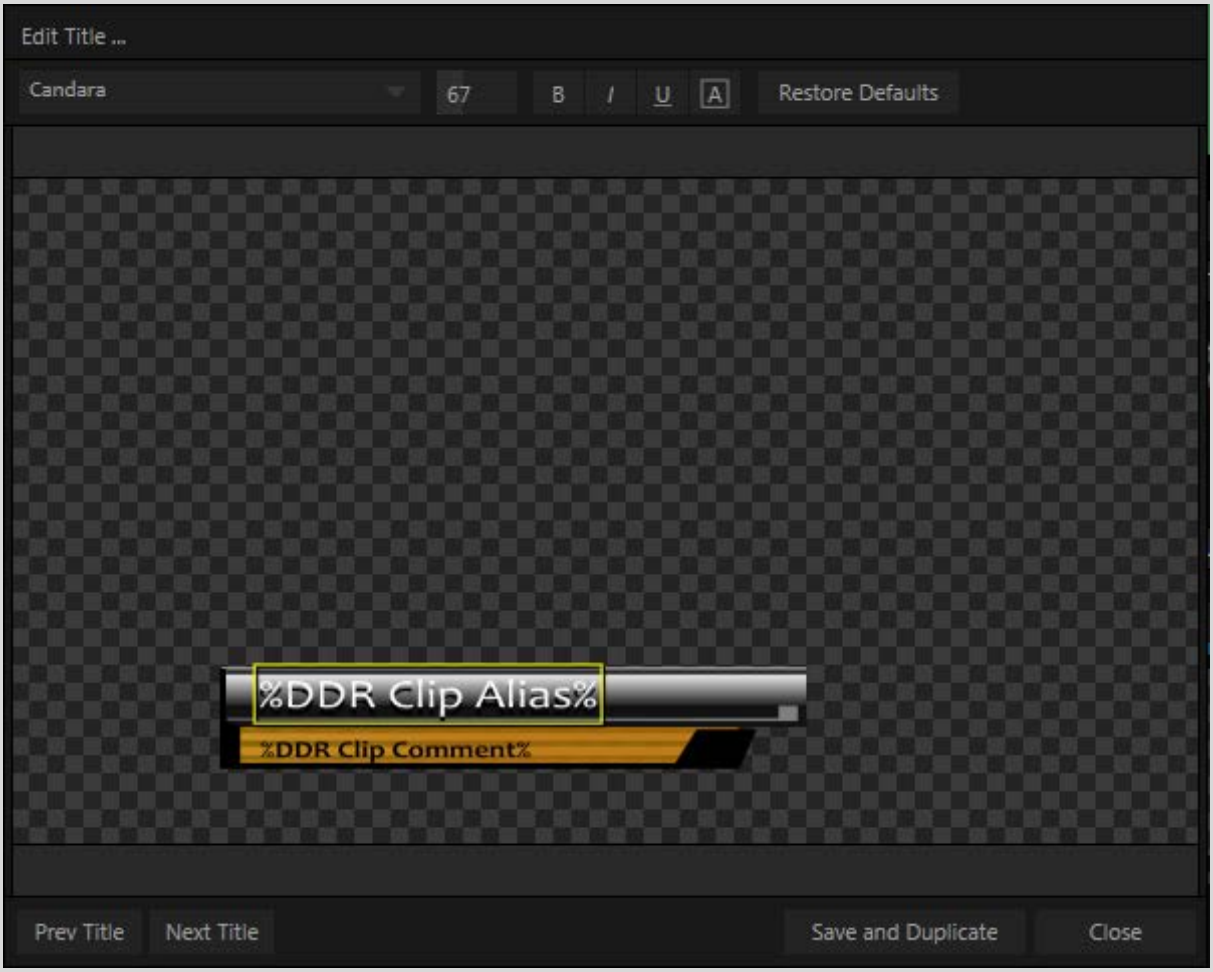



Figure 47

For example:

1. It takes seconds to create a macro that displays *DSK 1* using a specified transition for (say) 3 seconds and then removes it.

2. A few seconds more in *DDR 1's Input Configuration* panel ties the macro to *PGM* row selection state.

3. Setting up a single title page as shown in Figure 47 takes just a few additional seconds.

Now, if your *DDR* playlist items are supplied with suitable *Properties*, each time you display DDR 1 on program, a title page with correct information will automatically be transitioned in, then – after 3 seconds – out of view. Of course, you could skip the macro, and simply *Auto* the *DSK* manually, with the same assurance of correct information being displayed.

Clip after clip, show after show, every shot perfectly, reliably, and dynamically titled – using just a single title page.

And of course, the same process can be applied every time you switch to a specific camera, briefly identifying talk-show guests, special interest sports shots, etc.)

[JUMP TO INDEX]

## All New Datalink Sources

### Session Keys

In certain cases, you might not even need to modify default title content. Of particular interest in corporate settings (though not only then), new session-specific internal *DataLink* sources (Figure 48) are used provide the default text line content and imagery for title pages.

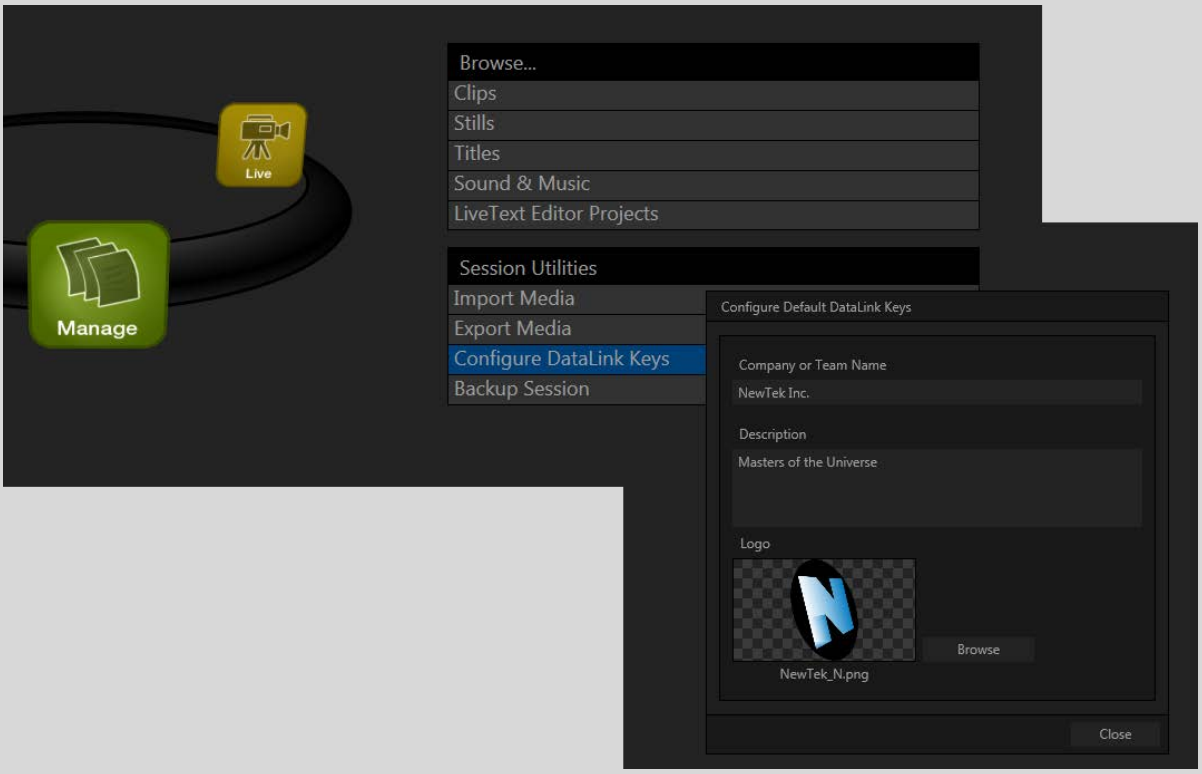



Figure 48

By default (i.e., without any editing at all), the text you entered as *Company or Team Name* and *Description* in the *Startup>Session* screen, along with the accompanying *Logo* image automatically supply the Name, Description and default image for suitable title pages (Figure 49).


Figure 49

In corporate settings where these static items may be reused time and time again, you can load title pages from any theme pack with minimal or even no modification whatsoever required. And since these are session-specific, each session can have its own unique defaults too.

[JUMP TO INDEX]

## More Session Info

Also included is DataLink support for other session information, including session name, type, encoding, and aspect. A host of time and date keys will be very useful, and these even include keys that count down until upcoming events or the end of the current show.

### CSV, XML and ASCII Support

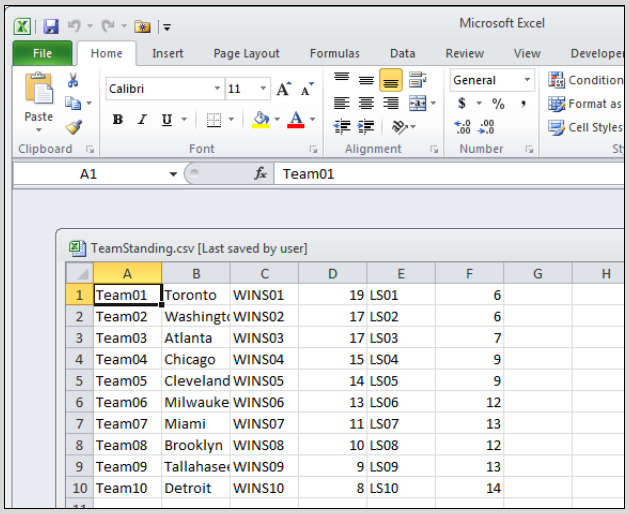



Figure 50

Imagine using common spreadsheet functions to manage complex sport statistics, then pushing the results to a title page with a single keystroke. That's all possible now, thanks to *DataLink's* new CSC (Comma Separated Value) and XML support, which greatly extends the ASCII text support in earlier DataLink implementations.


Figure 51

For example, simply save changes in the CSV file to TriCaster's network-shared *DataLink Watch folder*, and *DataLink* parses the keys and values it contains, then immediately updates the title page, even if it is on display at the moment.

[JUMP TO INDEX]

## Paragraph Text


Figure 52

Title pages can now optionally hold paragraph text, too, allowing for more natural and pleasing compositions. Paragraph text will come in especially handy in connection with the next new feature to be discussed.

## DataLink™ Web

DataLink™ Web is a new plugin for the popular Chrome™ web browser that allows you to easily populate both text and image *DataLink* keys from webpages. And, as we've seen, *DataLink* values are immediately available for use in TriCaster title pages, and elsewhere.

Simply select some text, or an image, and use the right-click context menu (or better yet, a hotkey) to update a *DataLink* key you have defined – and, just as you'd expect, any title page using that key will immediately update.

Setup is easy, and permits you to select which TriCaster to communicate with, supply custom key names, and decide whether keys will hold image or text values.


Figure 53

Multi-selected text lines can be applied as paragraph text or used to populate multiple successive keys. All of this is perfect, of course, for use with social media feeds and other web-based data.

[JUMP TO INDEX]

## More Output Options

Version 2-4 brought TriCaster users two new hardware Display outputs, but these are limited to certain video sources. On 4 RU models, Output 3 likewise supports a limited set of source options.

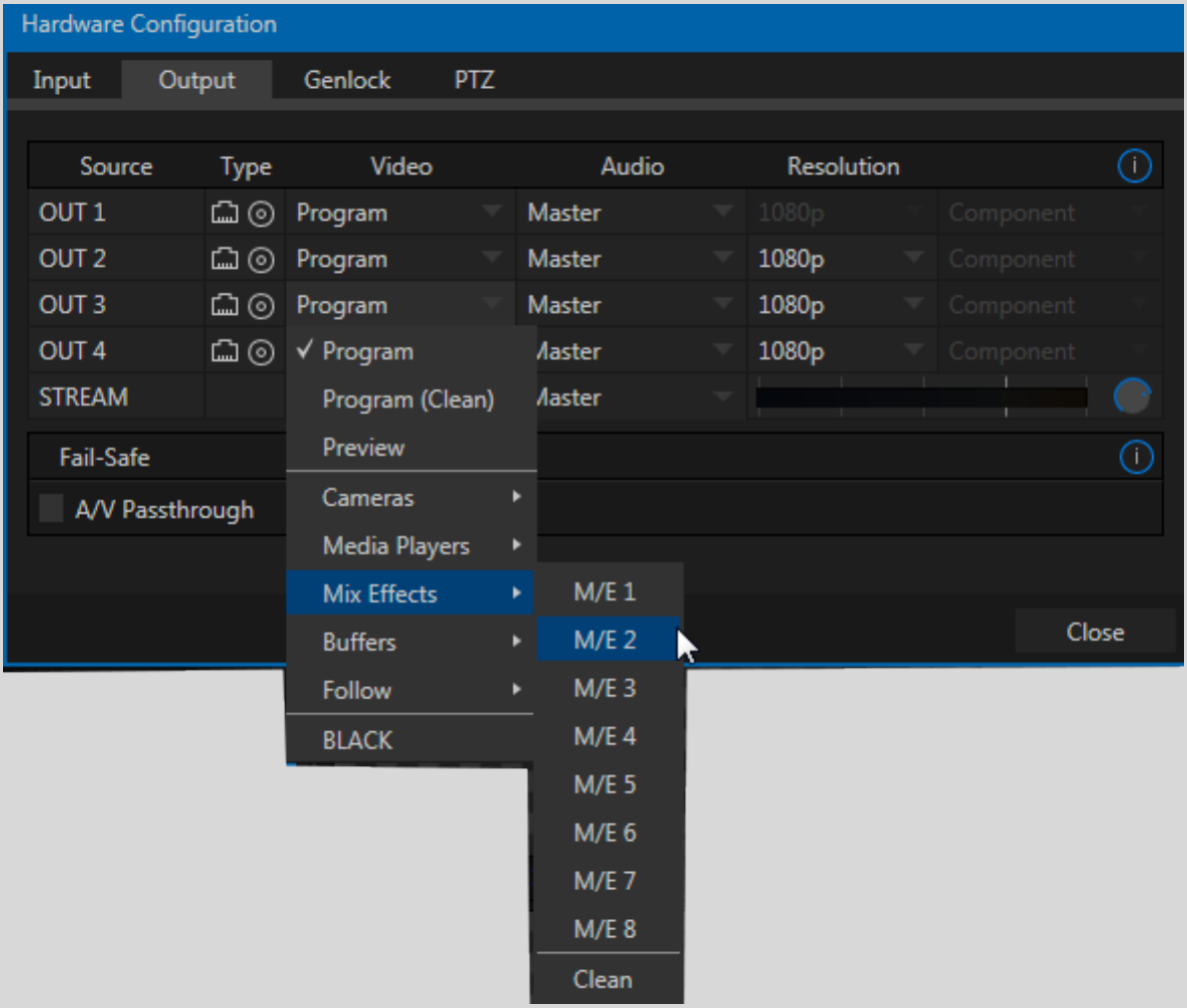



Figure 54

In TriCaster Advanced, all hardware outputs, including primary (SDI/Analog) outputs along with the recently added *Display* outputs, can be freely assigned to any source (including M/Es!). Naturally, this much greater flexibility is easily put to use for various creative purposes and valuable video distribution applications.

[JUMP TO INDEX]

## Audio

Manny important audio enhancements have been provided in TriCaster Advanced Edition.

### Dante

With this upgrade, users get fully integrated support* for the extremely powerful and use Dante™ network audio system from Audinate™.

Dante sources on the network can be freely selected to provide sound for any audio input (requires an inexpensive Dante user license from Audinate™).

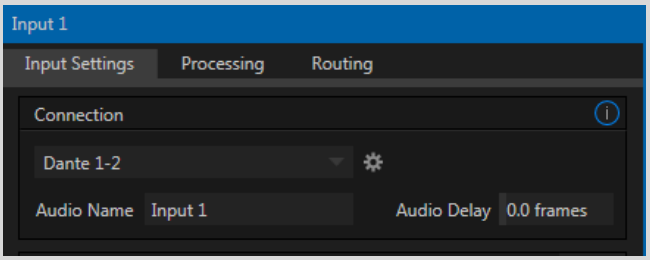



Figure 55

### Noise Gate

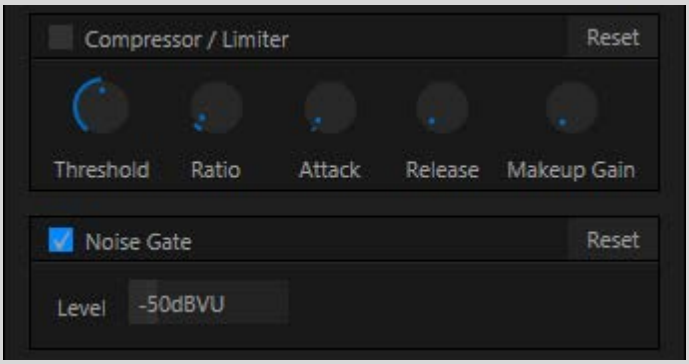



Figure 57

The *Audio Mixer's* advanced options panel now adds an integrated configurable *Noise Gate* for each audio source as well as all outputs. This lets operators ensure that unwanted low-level sounds are prevented from inadvertently intruding into the mix.

### Improved Metering

TriCaster operators who have been accustomed to *analog* audio pipelines often struggle with the nuances of *digital* audio.

TriCaster Advanced's newly re-designed *Audio Mixer* is not just more attractive. It makes things clearer and reduces concerns and quality issues raised by lack of familiarity.

- VU meter gradient colors have been adjusted to reduce anxiety and make it easier to discern 'safe' levels.
- Also, the channel label shown above every VU meter now flashes red to warn of 'clipping'.

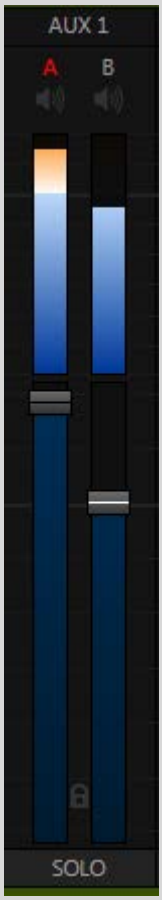



Figure 56

[JUMP TO INDEX]

## Routing

Located under the *Input* configuration panel (See Figure 58), *Routing* provides a greater degree of control per input and per channel. Here you can dictate the assignment of input to output for *Master, Aux 1, Aux 2, and Aux 3 buses.*

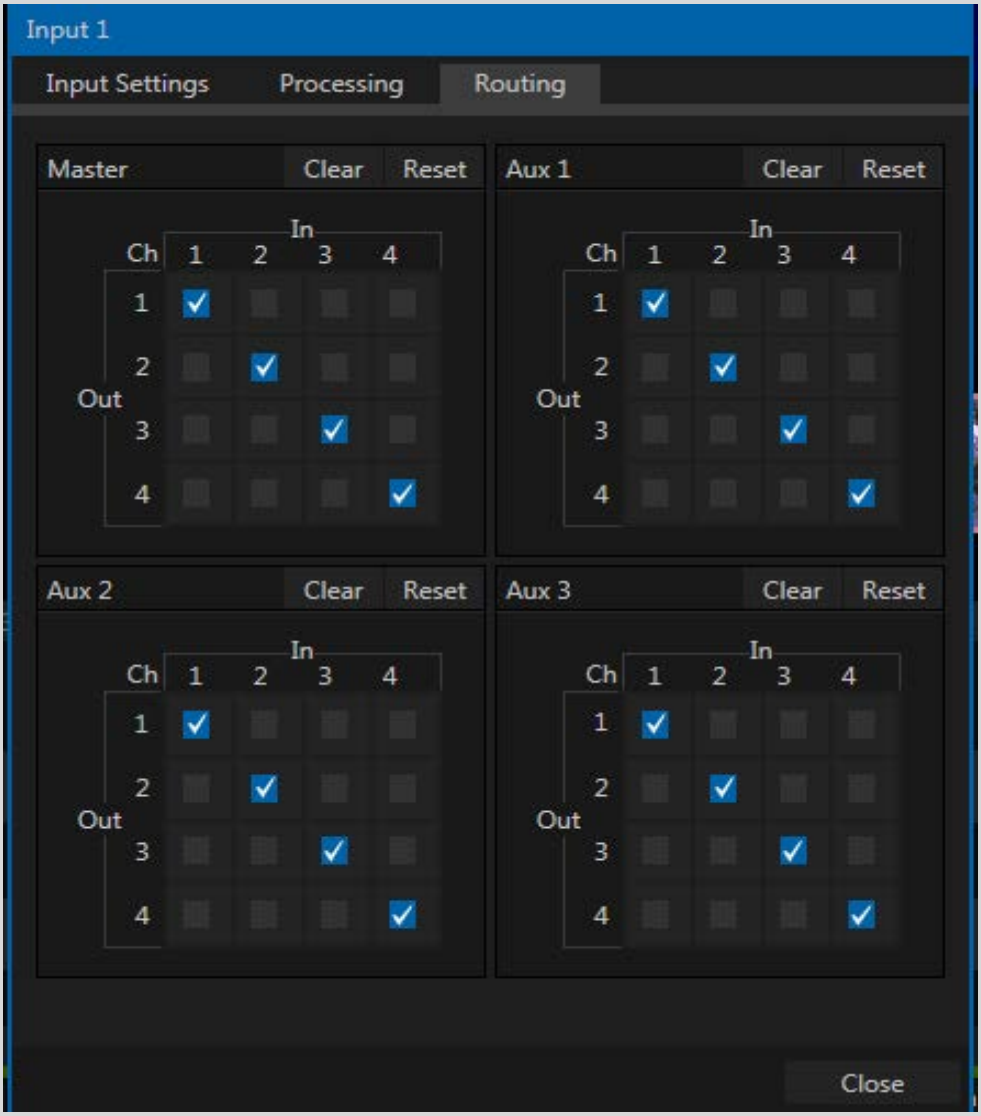



Figure 58

This makes it possible to configure all manner of sophisticated mixes, and of course you can switch between them on the fly using Audio Mixer *MEM* presets, even doing so automatically using *Macro* triggers.

[JUMP TO INDEX]

## Audio Outputs


Figure 59

By popular request (and to match external hardware audio mixer practice), the *Master* audio mixes and *Aux 1* mixes (supported by most TriCaster models) are now *always* supplied to the first two analog audio output group connectors, respectively.

This helps TriCaster users ensure consistency and avoid risk of error. Other audio output types continue to be freely assignable.

### Master and Aux

In an earlier TriCaster advanced Edition version, Master and Aux busses were subdivided and treated as several stereo pairs. Now, every audio output handles four channels. The primary audio busses – Master, Aux 1, 2 and 3 – can be independently sent to as many physical output connectors as are provided on a given TriCaster model, and are always available for NDI output.

For example, a TriCaster 8000 features two analog output rows, each with 4 XLR connectors (Figure 59). As discussed above, analog connectors are always assigned *to Master* and *Aux 1*. A TriCaster 460 or 410, however, has two analog output connectors. These units supply the first two channels assigned to *Master* on the first two and, likewise, the first two channels assigned to *Aux 1* on the second pair.

Digital (embedded) audio output is not limited in the same way, however. An NDI, SDI or HDMI output can always carry all four channels from any selected audio bus, as configured in the *Hardware Configuration* panel.

> *Note: It's important to consider the impact of the changes described above. For example, Aux 2 is no longer a stereo pair sent to the third and fourth connectors in analog output row 2. Instead, those connectors will carry channels 3 and 4 from Aux 1. This is just one example to demonstrate that in some cases you may need to modify audio routing, either by using the audio routing capabilities described above, or by physically updating cable connections.*

[JUMP TO INDEX]

## Control Surfaces

### NDI and Other Additions

The addition of NDI changes brings many benefits, but inevitably impacts control surface mapping.

- We took the opportunity to fully support two banks of sources for each *Switcher M/E row*. Among other benefits, where a CS model has sufficient buttons you can now access individual *Buffers* directly, without needing a menu to modify what is assigned to a button.
- All Control Surfaces can now be used with any TriCaster model running Advanced Edition. Details on the new mapping for each CS can be found in Chapter 21 of the TriCaster manual (this includes how to use the new *Previz* and *Comp* with a CS).

### Lock CS buttons

In response to user requests, it is now a simple matter to lock out buttons on the CS, to prevent accidents.

- Locked buttons can still be assigned to macros, but their normal functions are disabled.
- Pressing a locked button causes it to flash, as an indicator of its disabled state.
- Holding down CTRL + SHIFT briefly lights all locked buttons.
- Holding down CTRL + SHIFT for a few seconds allows you to toggle lock on/off for CS button

### More

- 8000 CS, 860 CS, 460 CS – It is now possible to assign the A and B rows of *M/Es* as well as the main *PGM* and *PREV* rows to *color groups* by turning the respective *Select* and *Rate* knobs with the *Shift* button held down.
- Artist Mix™ – Independent *Pan* is now provided on channels c and d for four channel Mixer input types.

[JUMP TO INDEX]

## Documentation and Help

### New Automation and Integration Guide

An all-new, 80+ page, Automation and Integration Guide included with TriCaster Advanced complements the TriCaster manual. This manual and provides a wealth of information, starting with basic information about macros, then continues to reveal the full gamut of integrated production and automated control using NewTek live production systems. Third party solutions are also discussed.

### TriCaster Home Page

TriCaster now has its own network 'home page' that you can access in a web browser on any other system on the network, including wireless tablets, laptops, etc.

It's easy to access TriCaster Advanced documentation, and more, even while production is underway. No more third party app are needed, or QR codes to be scanned.

Instead, just connect your device (really, any platform with a browser) to the same network as TriCaster Advanced, and enter its Windows® machine name or IP number (e.g., "MyTriCaster") as a URL: you're all set!

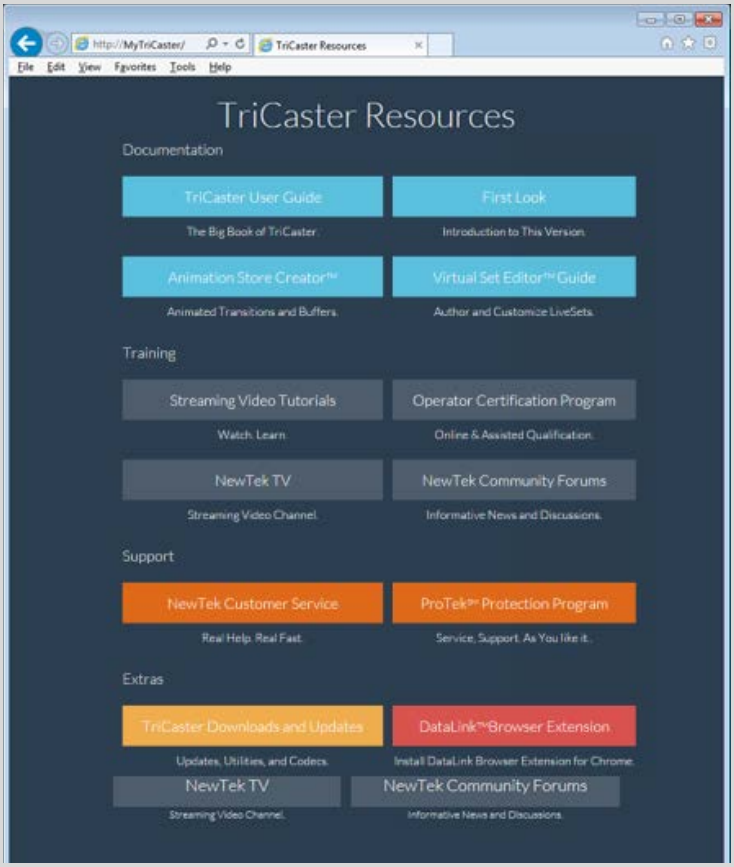



Figure 60

Your TriCaster Advanced's *Home Page* has a wealth of links to all sorts of resources. These include:

- the TriCaster Advanced User Guide
- an all new Automation and Integration Guide and 'First Look' pages
- *Virtual Set Editor* and *Animation Store Creator* manuals
- great streaming video tutorials
- user forums
- Customer Service (including live chat)
- software updates

[JUMP TO INDEX]

- downloadable utilities and codecs
- and even the new *DataLink™ Web* utility (announced elsewhere in this document).

## Tooltips

Even the little Info Widgets (a.k.a., 'tooltips) used for this purpose have been improved for TriCaster Advanced.

Now, the first few times a user opens a panel, the Info gadgets that describe new features animate to draw the eye. On rolling the mouse over the (i) gadget, helpful text is shown to explain the advantages of the new feature and provide helpful usage tips.

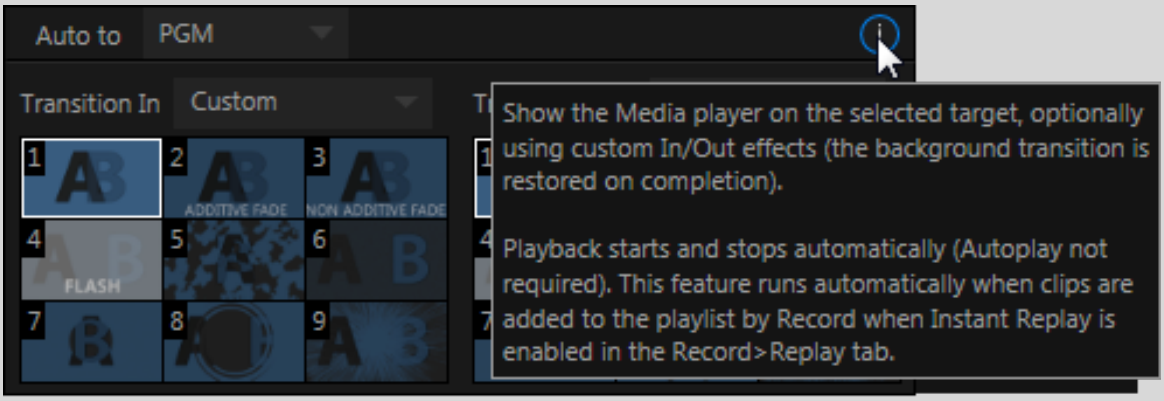



Figure 61

TriCaster Advanced has so many new features it seems only fair to make it easier for the user to discover them, and learn to use them.

Now you'll find generous helpings of easily accessible, clear information provided just where and when you need it. This makes the TriCaster experience friendlier, and will help you to discover creative possibilities you might otherwise have overlooked.

## Developer Library

One of our greatest assets is our wonderful third party Developer Network, and TriCaster Advanced gives these important allies more to work with than ever before. The newly revised Developer Library not only delivers new tools and examples, it makes it far easier than ever before to communicate with and control TriCaster.

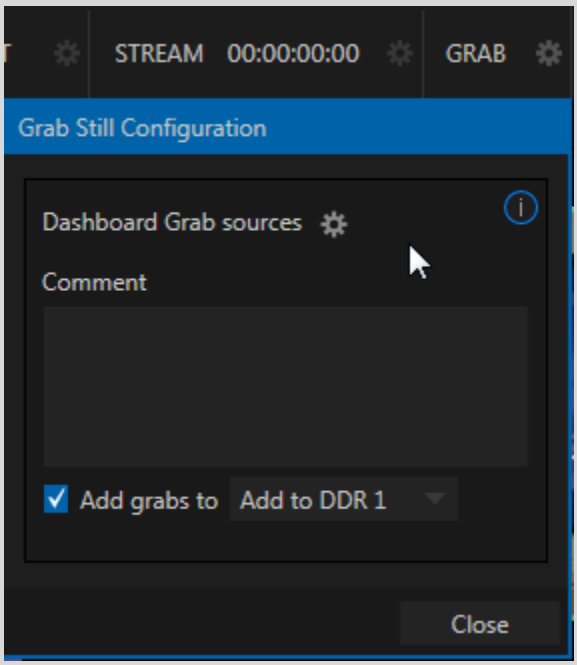
Really, it is no exaggeration to say that – with the arrival of TriCaster Advanced – anyone with a copy of Notepad and a little time can now create powerful extensions to the NewTek live production ecosystem. And those will higher level skills will find ample room to exercise them for fun and profit.

## And Even More

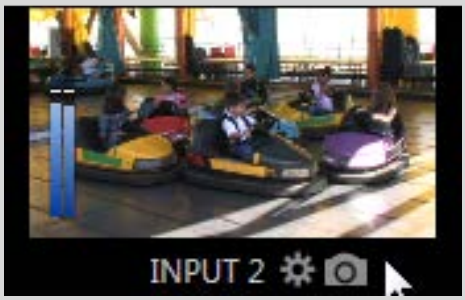
### Grab

Grab images from sources with embedded alpha complete with their transparency information. Need to cover dashboard sources, comments, add grabs to.

- Grab Output- At times, all you really want to capture is a still image from the current *Program Output* video stream. This is the purpose of TriCaster's *Grab* function located in the *Dashboard* across the top of the *Live Desktop*. Click the *Configure* button (gear) next to *Grab* in the *Dashboard* at the top of the *Live Desktop* to open the *Grab Still Configuration* panel.




- Grab Input- To grab images from a switcher source, click the camera icon beneath its preview monitor.

o 


### Network Tally

Tally notification is now supported by TriCaster's network inputs, so that connected systems, including both 3Play™ and Talkshow™ can display tally information when their output is being sent to TriCaster across the local network.

[JUMP TO INDEX]

## Image Processing Upgrades

Still image support has been extended and display quality enhanced. As well LiveSet scaling and render quality has been significantly improved.

## Web Browser Update

The integrated web browser version has been updated to Internet Explorer 11, for best feature compatibility with external sites, including CDNs.

## Blue-Only option

Long-standing practice when using color bars to calibrate video signal color attributes requires special video monitors with 'blue only' (or 'blue-gun') displays. TriCaster's new *Blue Only* viewport option (context menu, *Overlay* group) means you can now use any color monitor for this purpose. (See HTTP://WWW.GLENNCHAN.INFO/BROADCAST-MONITORS/MONITOR-CALIBRATION/MONITOR-CALIBRATION.HTM for more information.)

## Monitor Proc Amps

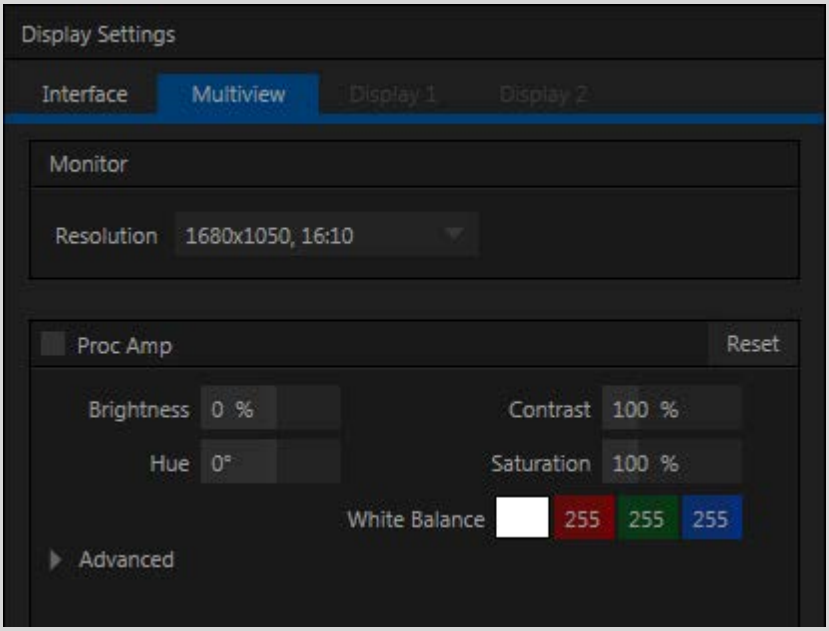



Figure 62

[JUMP TO INDEX]

Now the color balance of every screen, including the *Interface* monitor, *Multiview*, and the two supplemental *Displays*, can be customized from the TriCaster *Live Desktop.*

This is useful not only for correct calibration, but in settings (such as trade shows or seminars) where an IMAG projector needing adjustment for local lighting conditions is difficult or impossible to reach.

## User Interface Enhancements

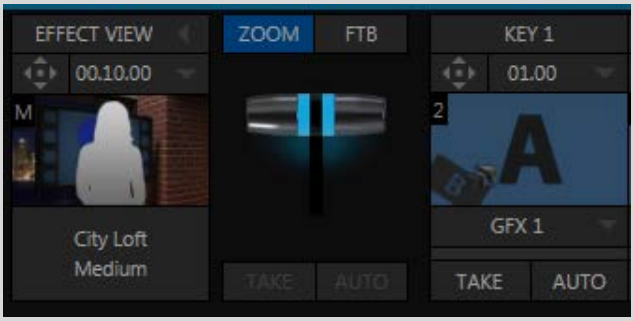



Figure 63

Really, there are countless aesthetic and practical interface updates in addition to those mentioned elsewhere in this document. These include subtle styling and shading improvements, faster control and overall system response.

Among the many such 'small touches', *DSK*, *KEY* layer and *Effects* controls have been redesigned to be more consistent, resulting in better 'muscle memory' support . And then there are items that are just icing on the cake, like our beautiful new 'illuminated' *T-Bar*, which mimics the color feedback featured on the 8000CS.

[JUMP TO INDEX]