





*TriCaster™*   *3Play™*   LightWave™

## NewTek.

**We make portable live production systems and special effects tools for the world.** Since 1985, our philosophy hasn't changed—to make available the live production and 3D products that help you realize your dreams. And distribute them for the whole world to see.

**Our products are professional, easy to use and cost-effective. That's simply the facts.** The number of people who create film, television, webcasts, and a variety of graphics for games, software, architecture, design and print, has grown, dramatically. Look to us for innovative technology. That's what we deliver.

**Be empowered.**

# Live stream.

TriCaster™ provides the tools you need to broadcast, live stream, project and record. No matter where your audience lives. Reach out. Build your brand. We make it easy and affordable. No matter where the action takes you.



## Broadcast and Webcast.

**Your message** – in network-quality HD. TriCaster is the solution of choice for broadcasters and webcasters. Single or multi-camera. On location. In the studio. Professional set or green screen. **Local. Or worldwide.**

## Sports and Education.

**Basic training** – is all you need. TriCaster is easy to learn. Flexible. And fits your budget. It's the perfect live production solution for school sports and events. **Higher learning.** It's more affordable than you think.



## Houses of Worship and Venues.

**Spread the word** – with the power of TriCaster in the house. Venues everywhere rely on TriCaster to deliver events near and far. Portable. Practical. Easy to learn. Produce. Live Stream. Project. Record. **All at once.**

## Government.

**Important news and emergencies** – need fast, reliable delivery. Especially when the news must reach a large audience. TriCaster gives agencies the confidence to distribute information in a manner that's **dependable and cost-effective.**



# Global impact.



“ We have the most downloaded podcast on the web. So, when we wanted to expand to include multi-camera live video, there was only ONE choice, NewTek's TriCaster. ”

*Danny Misraje, Executive-in-charge of Operations for Adam Carolla Entertainment*

TRICASTER

# Extreme.

**TriCaster 850 EXTREME**, a 24-channel, HD portable live production system that takes your programming to the extreme. IsoCorder™ technology lets you record up to eight channels simultaneously. Record in one resolution and stream in another—with the push of a button. In multiple formats, like QuickTime®, Apple® AirPlay® support. This is the good stuff.



**COMPREHENSIVE FEATURES LIST**



IsoCorder multi-track video recording technology that allows you to record up to eight live sources simultaneously in up to 1080p.



Apple AirPlay support that delivers video and audio into your live production, with iOS® devices like iPad®, iPod® and iPhone®.



Animation store transitions let you move from shot to shot with full-color animations with sound.



Multi-format recording that includes QuickTime, H.264, AVI, and MPEG-2, with adjustable audio headroom.



# DREAM BIG.

# Interface

- 1 LIVE DESKTOP MONITORS:** Integrated multi-view monitoring. Advanced alpha channel preview.
- 2 NETWORK INPUTS:** Go wireless with iOS devices, Apple® AirPlay® support. iPad®, iPod® and iPhone®.
- 3 PROGRAM MONITOR:** View current video output. See what your audience sees.
- 4 LOOK-AHEAD PREVIEW MONITOR:** Display your next shot. Now switch.
- 5 ONE-BUTTON RECORDING:** Capture live production and individual sources. Simultaneously.
- 6 ONE-BUTTON WEB STREAMING:** Use Adobe® Flash® or Microsoft® Windows Media® to stream.
- 7 LIVE PRODUCTION SWITCHER:** 24 channels. Up to eight live cameras simultaneously.
- 8 UTILITY ROW:** Assign sources to FX bus, DSK channels, and AUX output. Instantly.
- 9 UTILITY DELEGATE:** Total control of utility row. Easy reference source.
- 10 VIRTUAL INPUTS:** Assign complex switcher effects to one button. Fully customizable.
- 11 TRANSITION CONTROLS:** Transition individual or multiple video layers - on and off screen.
- 12 TRANSITIONS:** Broadcast-quality HD effects. Add interest and impact.
- 13 24 HD LIVE VIRTUAL SETS:** Achieve the look of a network-style studio. Anywhere.
- 14 VIRTUAL INPUT CONTROLS:** Configure virtual sets, double box effects and more.
- 15 DIGITAL MEDIA PLAYERS:** Two DDRs for video playback. Titles bin. Stills store. Sound player.
- 16 LIVE TITLES:** Give your production a network-quality finish. Graphics. Titles. Animated overlays.
- 17 AUDIO MIXING:** Seven-band equalizer. Compressor/limiter. Complete audio control.



TECHNICAL  
SPECIFICATIONS

“ I am now doing by myself what 22 people and a half million dollar control room did, thanks to NewTek TriCaster. ”

*Leo Laporte, Technology Journalist, TWiT*

# 4U.

Desktop or rack mount, **TriCaster™ 850** has the tools you need to deliver your show in network-quality HD. Connect up to eight HD or SD live cameras. Supports multiple formats, like QuickTime®. Apple® AirPlay® support. Set up is easy. Pair it with the TriCaster 850 CS hardware control surface for a hands-on connection to the system interface. Every source and function.



Support for up to eight live cameras. Mix and match. HD. SD. It just works.



One button for streaming live to the Web, and one button for recording. Unlimited recording and backup capability.



20 HD live virtual sets and advanced matte generation give sets real-time reflections. Smooth animated zooms and double-box effects.



TriCaster 850 CS hardware control surface gives you a physical connection to all sources and functions, allowing changes on the fly.



# NICE RACK.

## Big news.

TriCaster™ 450 EXTREME™ sports a slim design with abundant benefits. This 2U rack mount, 14-channel HD live production system has innovative features like IsoCorder™ technology to capture up to four video streams. Record in one resolution and stream in another simultaneously—with the push of a button. iOS devices, Apple® AirPlay® support. Advanced Animation Store Creator. Seven-band equalizer and compressor/limiter for tighter audio control. And so much more.



**COMPREHENSIVE FEATURES LIST**



IsoCorder multi-track video recording technology that allows you to record up to four live sources in up to 1080p simultaneously.



Apple AirPlay support that delivers video and audio into your live production, with iOS devices like iPad®, iPod® and iPhone®.



Animation store transitions let you move from shot to shot with full-color animations with sound.



Integrated seven-band equalizer and compressor/limiter included with audio I/O.



**NEW**

At only 28lbs, this unit fills an increasing demand for compact live production solutions that are very affordable, dependable, and packed with power. Easy to learn. Paired with the TriCaster 450 CS optional control surface, you have a hands-on connection to the interface. Every source. Every function.



## Small package.



**TECHNICAL SPECIFICATIONS**

2U.



**TriCaster™ 450** is cousin to TriCaster 450 EXTREME. A 2U rack mount, 14-channel HD live production system that provides one-button streaming and recording. Including Apple® AirPlay® support. Record module with adjustable audio headroom. Always 'on-air' multi-tiered software fail-safe. And much more.

It can also be paired with the TriCaster 450 CS optional control surface for a physical connection to the system interface. Every source and function.



Support for up to four live cameras simultaneously. Mix and match. HD or SD.



Apple AirPlay support that delivers video and audio into your live production, with iOS devices like iPad®, iPod® and iPhone®.



20 HD live virtual sets with real-time reflections.



TriCaster 450 CS hardware control surface gives you a physical connection to all sources and functions, allowing changes on the fly.

**Big value.**



## Go live.

**TriCaster™ 300** is the first HD live production system that fits perfectly in a backpack. With 13 channels, three external video inputs, DDR, network input, titles, stills and five virtual mix/effect-style channels – it's won more than its share of industry awards.

You get support for multi-definition video in up to 1080i and live streaming in up to 720p. 15 HD live virtual sets with real-time reflections and advanced matte generation. Media Players for video playback, titles and stills. Audio mixing. And much more.



## On the go.



## Muscle bound.

**TriCaster STUDIO™** is our SD live production workhorse. Switch six cameras. Get live virtual sets. Live titles. Audio mixing. Live stream. Record. And more. This is our standard definition model. Easy to use. Very affordable. The ideal solution for the live production of school sports and other events. Family, friends and fans can be part of every function, or watch at their leisure.

“TriCaster is an exceptionally well-designed and constructed portable multi-camera production system.”

TV Technology

## Take control.

**TriCaster™ 850 CS** gives you ultimate control of your HD live production. It's an optional hardware control surface that's mapped directly to the TriCaster 850 EXTREME or TriCaster 850. Live desktop. Source for source. Function for function. Now, you have a hands-on connection to your entire system. This powerful accessory fits seamlessly into your live production setup. In the studio. Or on location.

With back-lit buttons, twist knobs, a premium T-bar and three-axis joystick, you're eye-to-eye with your TriCaster interface. Control recording, streaming, delegates, overlays, virtual sets. Zoom. Assign switcher effects. Access media players, select video output. And transition, between multi-source compositions – with confidence.



## Hands-on.



**TriCaster™ 450 CS** is an optional hardware control surface that's mapped directly to the TriCaster 450 EXTREME or TriCaster 450 interface. Same instant connection. Perfect fit. For the control room. Or in the field.

Get the same convenient back-lit buttons, twist knobs, premium T-bar and three-axis joystick. Control it all. Tell your most challenging production – I got this.

## Connect.



**TriCaster™ LC-11** gives you a physical connection to each input during your live production. This hardware control surface works with the entire TriCaster product line, and has large, easy-to-read backlit buttons. You have zoom control for live virtual sets, and can quickly transition from one source to the next. With TriCaster LC-11, you don't need a keyboard or a mouse. And you have the flexibility to add members to your production team.



**TriCaster™ 850 TW** gives you control over all media playback capabilities. Including one channel instant replay. This flexible new control surface provides normal and fast jog modes. Preset buttons. Mark-in, mark-out controls. And it works with all TriCaster HD models, and aligns perfectly with either TriCaster CS. You get the same desktop profile, attention to detail, durability, and ergonomics. Plus, you can still operate each control surface independent of each other.

## Instantly.

## Customize.



**TriCaster™ Virtual Set Editor (VSE)** give your production a network studio look. Customize, create and rearrange a variety of virtual set elements. Quickly and easily. Get real-time reflections with a wide range of elements you can edit. Add custom backgrounds. Create double-box effects. And much more.

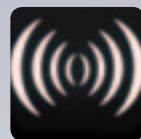
**LiveText™ 2** lets you share the workload. Get dedicated HD/SD titling to add pizzazz to your live production. Store and recall an unlimited number of custom data profiles, quickly. Adapting LiveText to your venue will light up the scoreboard and give you maxed out convenience.



**SpeedEDIT** is a resolution-independent video editor designed to work efficiently on any project. Mix HD and SD on the same timeline. In real-time. For complete flexibility. Get real-time up and down conversion. 3D position, size and rotation. Interpolated slow motion. And instantly playback image sequences for quick review. And much more.

## Replay.

HD slow motion instant replay. Replay the highlights from every angle. Use **3Play™** as a standalone. Or connect to any switcher and deliver. Local and national sports organizations. Educational institutions. Event facilities and arenas. Deliver your live video for instant viewing. Or archive it for later. Keep your audience on the edge of their seat.



### Broadcast.

Demand for HD slow motion instant replay is real and necessary in the world of professional sports. You've got to capture and replay – quickly and easily. 3Play helps you deliver what others may miss. Instant replay. In HD.



### Sports and Education.

Tight budgets sometimes call for a special strategy. 3Play is the easy-to-operate replay solution. Especially when everyone expects network-quality programs, featuring their favorite highlights.



### Venues.

Concerts, sports, seminars ... It's what 3Play does best. It's the slo-mo instant replay system of choice for many live event venues. Fast and efficient. Rock your replay with 3Play.

# REINVENTED.



“Running replay with the NewTek 3Play has raised our production to new levels, while bringing down the stress level for our tape operators.”

*John Powell, Event Producer for Turner Sports.*

# Score-10.

10-channels. Eight-in, two-out. **3Play™ 820**, with IsoCorder™ technology, lets you record from up to eight sources simultaneously – live, with full support for various formats. Capture and deliver compelling action, at a fraction of the cost of similar systems. If such things existed, that is. With 3Play 820, you can build a playlist of highlights on one channel, while playing out selected sequences from the other. Get pristine playback. Add soundtracks. Transitions. It's the most powerful, intuitive and affordable replay system in town. Any town.

And it comes with its own convenient control surface, too. For a hands-on connection to each and every play.



# It's unanimous.



**COMPREHENSIVE FEATURES LIST**



Record from up to eight simultaneous sources – live.



Play out from two fully independent channels. Instantly.



Deliver smooth, pristine slow-motion playback with ghost-free frames.



Get full support for a vast range of video formats and frame rates.







# MODEL. ANIMATE. RENDER.

**LightWave™** is the backbone of efficient 3D pipelines. It's super fast. And gives you the tools you need to get the job done. Whether you work alone, or not. LightWave plays well with other pipelines, too. So, you can hit those tight deadlines and client demands. Ultra flexible. Fanatically interactive. And oh-so affordable.

Television. Feature film. Indie and short film. Games and software. Architecture and design. Print graphics. And more. LightWave keeps you on time and on budget. Plus, LightWave artists have won more Emmy® Awards for visual effects and animation than any other CG artists. Cool, huh?

# LightWave IO



Image courtesy of Leigh Bamforth and Rob Powers



CSI - Image courtesy of Zoic Studios



Cargo - Image courtesy of Atlantis Pictures



Abiogenesis - ©2001 Fuzzy Realms Limited



Image courtesy of Fun Go Play



Khalid Al-Muharraqi



Illustration and image by Joe Zeff Designs at Splashlight

**Television.**

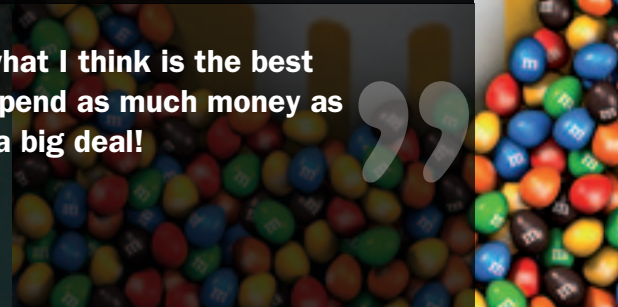
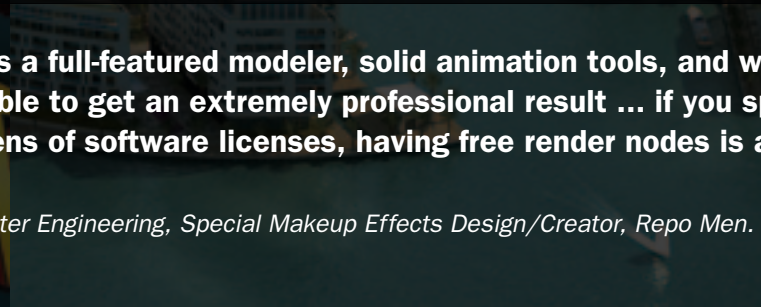
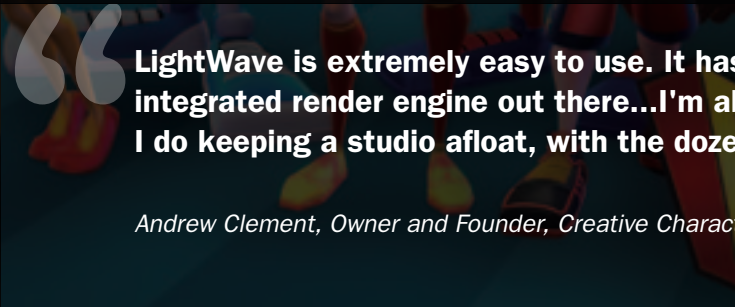
**Feature film.**

**Indie & Short film.**

**Games & Software.**

**Architecture & Design.**

**Print graphics.**



“ LightWave is extremely easy to use. It has a full-featured modeler, solid animation tools, and what I think is the best integrated render engine out there...I'm able to get an extremely professional result ... if you spend as much money as I do keeping a studio afloat, with the dozens of software licenses, having free render nodes is a big deal! ”

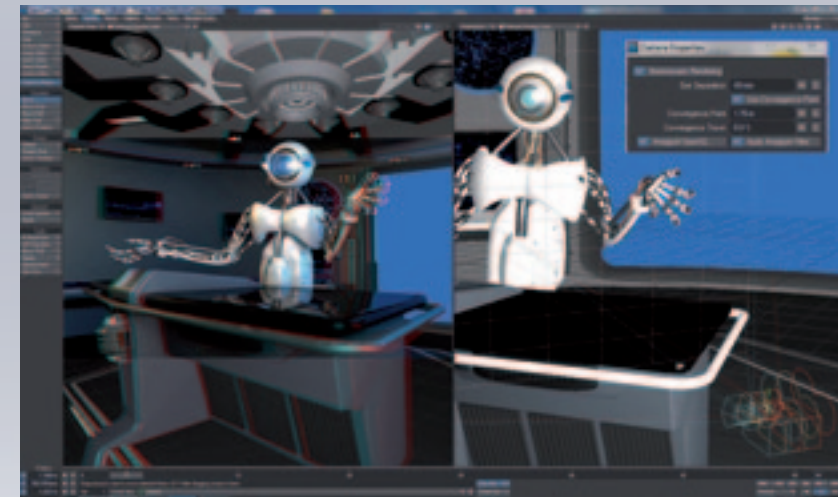
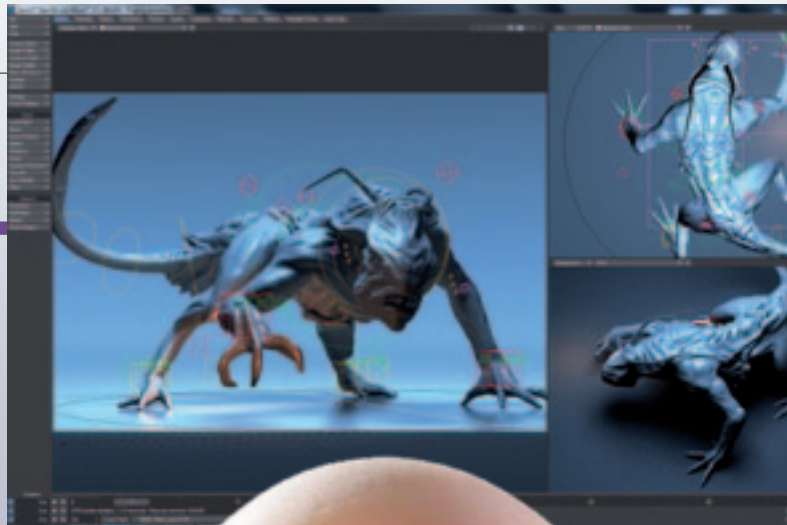
*Andrew Clement, Owner and Founder, Creative Character Engineering, Special Makeup Effects Design/Creator, Repo Men.*



# Create something.

Our LightWave engineers are constantly developing bold new features and enhancements so you can push your ideas toward reality. Faster and easier than ever before. Each update and revision to LightWave brings you closer to your creative goals. Imagine that.

Viewport Preview Renderer support for Clip Maps in the VPR render, Object and Distance Dissolve, Nodal Shaders, and Limited Region enhancements.



A new Camera Rig option that supports all three of the major stereoscopic camera rig types, including Parallel, Toe-in and Off-axis.

The freedom to move deformations and transforms between applications, allowing for an extremely flexible, extensible pipeline for animation, dynamics, effects and rendering.



A simple setup for replicating realistic skin with a proprietary model for the subsurface scattering shader that works fully with the VPR.

# Imagination. Reality.



# LightWave™

**SYSTEM REQUIREMENTS**



	TriCaster 850 Extreme	TriCaster 850	TriCaster 450 Extreme	TriCaster 450
<b>Video</b>	HD & SD (simultaneous output)	HD & SD (simultaneous output)	HD & SD (simultaneous output)	HD & SD (simultaneous output)
<b>Supported Standards</b>	1080/25p, 1080i, 720p, 576i, 480i HD-SDI, HD Component, SDI, Component, Y/C, Composite	1080/25p, 1080i, 720p, 576i, 480i HD-SDI, HD Component, SDI, Component, Y/C, Composite	1080/25p, 1080i, 720p, 576i, 480i HD-SDI, HD Component, SDI, Component, Y/C, Composite	1080/25p, 1080i, 720p, 576i, 480i HD-SDI, HD Component, SDI, Component, Y/C, Composite
<b>Number of inputs</b>	8 Live & 8 Virtual	8 Live & 8 Virtual	4 Live & 4 Virtual	4 Live & 4 Virtual
<b>Number of channels</b>	24	24	14	14
<b>Video Projector output</b>	DVI & HDMI	DVI & HDMI	DVI & HDMI	DVI & HDMI
<b>Multi preview (DVI out)</b>	Yes	Yes	Yes	Yes
<b>Mix HD and SD sources</b>	Yes	Yes	Yes	Yes
<b>Web streaming</b>	Yes, Flash, WMV, up to 720p	Yes, Flash, WMV, up to 720p	Yes, Flash, WMV, up to 720p	Yes, Flash, WMV, up to 720p
<b>Virtual sets</b>	Yes, animated zoom	Yes, animated zoom	Yes, animated zoom	Yes, animated zoom
<b>Chromakeyer</b>	Yes, LiveMatte HD	Yes, LiveMatte HD	Yes, LiveMatte HD	Yes, LiveMatte HD
<b>Downstream keyer</b>	2+1 virtual	2+1 virtual	2+1 virtual	2+1 virtual
<b>Animation store transitions</b>	Yes	No	Yes	no
<b>Real time Titling</b>	Yes, HD/SD	Yes, HD/SD	Yes, HD/SD	Yes, HD/SD
<b>Video DDR</b>	2	2	2	2
<b>Record Stream and PGM</b>	IsoCorder	Yes (PGM or Aux)	IsoCorder	Yes (PGM or Aux)
<b>IsoCorder</b>	yes, records up to 8 channels + stream	no	yes, records up to 4 channels + stream	no
<b>External Computer display in, PC &amp; Mac</b>	2 iVGA	2 iVGA	2 iVGA	2 iVGA
<b>Apple Airplay in</b>	Yes	Yes	Yes	Yes
<b>PGM freeze frame</b>	Yes	Yes	Yes	Yes
<b>Input PROC Amps</b>	Yes, including iVGA	Yes, including iVGA	Yes, including iVGA	Yes, including iVGA
<b>Vectorscope /Waveform</b>	Yes (colour)	Yes (colour)	Yes (colour)	Yes (colour)
<b>Non linear editing</b>	Yes, HD/SD	Yes, HD/SD	Yes, HD/SD	Yes, HD/SD
<b>Multi-standard PAL/NTSC</b>	Yes	Yes	Yes	Yes
<b>Time Code</b>	Yes, LTC	no	Yes, LTC	no
<b>Genlock in</b>	Yes	Yes	Yes	Yes
<b>Alpha channel</b>	in/out	in	in/out	in
<b>Tally</b>	Yes (db15)	Yes (db15)	Yes (db15)	Yes (db15)
<b>Audio</b>	SDI embedded, AES and Analog	SDI embedded, AES and Analog	SDI embedded, AES and Analog	SDI embedded, AES and Analog
<b>EQ / compressor /limiter</b>	Yes	no	Yes	no
<b>Network</b>	Gbit	Gbit	Gbit	Gbit
<b>Rackmount (optional rack rails)</b>	4U	4U	2U	2U
<b>Weight</b>	19 Kg /42 lbs	19 Kg / 42 lbs	13 Kg / 28 lbs	13 Kg / 28 lbs
<b>Dimensions</b>	48.3 D x 18.4 H x 54.6 W (cm) 19 D x 7.25 H x 21"5 W (in)	48.3 D x 18.4 H x 54.6 W (cm) 19 D x 7.25 H x 21"5 W (in)	53.3 D x 8.9 H x 44.5 W (cm) 21" D x 3.5" H x 17.5" W (in)	53.3 D x 8.9 H x 44.5 W (cm) 21" D x 3.5" H x 17.5" W (in)

Specifications subject to change without notice - TriCaster 450 and TriCaster 450 Extreme preliminary specifications.

	TriCaster 300	TriCaster Studio
<b>Video</b>	HD & SD (simultaneous output)	SD
<b>Supported Standards</b>	1080i, 720p, 576i, 480i HD-SDI, HD Component, SDI, Component, Y/C, Composite	576i, 480i (4:3 and 16:9) Component, Y/C, Composite
<b>Number of inputs</b>	3 Live & 5 Virtual	6 Live
<b>Number of channels</b>	13	10
<b>Video Projector output</b>	DVI	DVI
<b>Multi preview (DVI out)</b>	Yes	No
<b>Mix HD and SD sources</b>	Yes	No
<b>Web streaming</b>	Yes, Flash, WMV, up to 720p	Yes, Flash, WMV
<b>Virtual sets</b>	Yes, animated zoom	Yes
<b>Chromakeyer</b>	Yes, LiveMatte HD	Yes, LiveMatte
<b>Downstream keyer</b>	2+1 virtual	1
<b>Animation store transitions</b>	no	no
<b>Real time Titling</b>	Yes, HD/SD	Yes, SD
<b>Video DDR</b>	1	2
<b>Record Stream and PGM</b>	Yes	Yes
<b>IsoCorder</b>	no	no
<b>External Computer display in, PC &amp; Mac</b>	1 iVGA	1 iVGA
<b>Apple Airplay in</b>	Yes	no
<b>PGM freeze frame</b>	Yes	no
<b>Input PROC Amps</b>	Yes, including iVGA	no
<b>Vectorscope /Waveform</b>	Yes (colour)	Yes
<b>Non linear editing</b>	Yes, HD/SD	Yes, SD
<b>Multi-standard PAL/NTSC</b>	Yes	Yes
<b>Time Code</b>	no	no
<b>Genlock in</b>	Yes	no
<b>Alpha channel</b>	no	no
<b>Tally</b>	Yes, mini jack	
<b>Audio</b>	SDI embedded, AES and Analog	Analog
<b>EQ / compressor /limiter</b>	no	no
<b>Network</b>	Gbit	Gbit
<b>Rackmount (optional rack rails)</b>	no	no
<b>Weight</b>	7,3 Kg / 16 lbs	7,3 Kg / 16 lbs
<b>Dimensions</b>	44.5 D x 21.6 H x 26.4 W (cm) 17.5 D x 8.5 H x 10.4" W (in)	44.5 D x 21.6 H x 26.4 W (cm) 17.5 D x 8.5 H x 10.4" W (in)

	3Play 820	3Play330
<b>Number of channels</b>	10	6
<b>Supported standards</b>	1080/25p, 1080i, 720p, 576i, 480i HD-SDI, HD Component, SDI, Component, Y/C, Composite	1080i, 720p, 576i, 480i HD-SDI, HD Component, SDI, Component, Y/C, Composite
<b>Inputs</b>	8	3
<b>Outputs</b>	2 + Aux	3
<b>Included Control Surface</b>	820CS	3P10
<b>Replay DDRs</b>	2	1
<b>Time Code</b>	Yes, LTC	Internal clock
<b>Encoding</b>	MPEG-2 VBR, I-Frame	MPEG-2 VBR, I-Frame
<b>Video storage</b>	200 hours	30 hours
<b>Multi-format file import/export</b>	Yes	MPEG2
<b>Transitions</b>	Yes	no
<b>Soundtrack</b>	Yes	no
<b>Multi preview (DVI out)</b>	Yes	no
<b>Network</b>	Gbit	Gbit
<b>HD Removable bays</b>	4	no
<b>Multi-tiered Fail safe mode</b>	Yes	no
<b>Multi-standard PAL/NTSC</b>	Yes	Yes
<b>Audio</b>	SDI embedded, AES and Analog	SDI embedded, AES and Analog
<b>Genlock in</b>	Yes	Yes
<b>Rackmount (optional rack rails)</b>	4U	no
<b>Weight</b>	19 Kg /42 lbs	7,3 Kg / 16 lbs
<b>Dimensions</b>	48.3 D x 18.4 H x 54.6 W (cm) 19 D x 7.25 H x 21"5 W (in)	44.5 D x 21.6 H x 26.4 W (cm) 17.5 D x 8.5 H x 10.4" W (in)





**Be empowered.**

*Distributed in Europe, Middle East, Africa, Pakistan, Turkey - Russia by 3D Storm (NewTek Europe)*  
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