# **NewTek**<sup>™</sup>

## **NewTek's Product Line**

NewTekU: How to Sell NewTek Technology



#### Live Production Systems



## Live Production Systems











#### **TriCaster Mini Models**



TriCaster Mini X



TriCaster Mini 4K



#### **TriCaster Mini Models**

Feature	TriCaster Mini X	TriCaster Mini 4K
Ext Physical Inputs	8 Total / 4x HDMI	8 Total / 2x Spark IO HDMI Modules
Max resolution	2160p29.97	2160p59.94
DHCP Server Feature	No	Yes
Network Ports	2x 1GbE	2x 1GbE & 4x 1GbE with PoE



#### **TriCaster Models**





#### **TriCaster Models**

Feature	TC410 Plus	TC1/TriCaster 1 Pro	TriCaster 2 Elite
External Inputs	8 Total / 4 SDI	16 Total / 4 SDI	32 Total / 8 SDI
Max resolution	1080p59.94	2160p59.94	2160p59.94
HD Outputs	2x SDI/NDI + 2x NDI	4x SDI/NDI	8x SDI/NDI
UHD Outputs	None	1x Quad-Link/NDI	2x Quad-Link/NDI
M/E's	4	4	8
M/E Capabilities	2L/2K + Re-entry	4L/4K + Re-entry	4L/4K + Re-entry
Skype TX	1	2	2
Live Call Connect	No	None TC1/4 Callers TC1 Pro	Up to 9 Callers
Network	2x 1GbE	1x 1GbE & 1x 10GbE	1x 1GbE & 1x 10 GbE
Power Supply	Single	Single	Redundant



#### **Premium Access**

Feature	Description
LiveGraphics™	Animated graphics created using Adobe After Effects and Photoshop.
Advanced Audio I/O	Supplemental outputs for each audio input and media player.
LivePanel	Remote control panel that run in a web browser on any device.
Pan and Scan	Every inputs offers RIO extraction from 4K sources connected to system.
Virtual Set Library	Additional virtual sets and music library.
Excel Macro Import/Export	Edit TriCaster macros offline using Microsoft Excel.
Live Story Creator	Teleprompter and Automation tool from Microsoft docx files.
Unlimited NDI Recording	Record as many video channels as system can support into NDI format.
Non-Standard Aspect Ratios	Work in vertical, square and other aspect ratios.
LiveMatte <sup>™</sup> Ultra	Additional chroma keying engine with easier to use controls.
Advanced DSK Compositing	Have DSK layers transition while merged into background video.
Force Bank Selection on CS	With 2S/4S control panel, display multiple banks on panel at once.
AND! Multiviewer Snapshots, Pre-Multiplied Alpha Support, Test Pattern Generator, As Run Logs	Image grab buttons in multiviewer viewports. Pre-multiped (and straight) alpha processing of SDI key/fill. Select test patterns and audio tone as input choice. Retrieve a log of what clips played at what times to check operation and reconcile billing for advertising.



#### NewTek TriCaster Storage

Model	Boot Drive	Media Drive	Media Storage
TriCaster Mini X TriCaster Mini 4K	1TB SSD (partitioned)	0	~800GB / 15 hours
TriCaster 410+	250GB SSD	1x 4TB	4TB / 80 hours
TriCaster TC1 TriCaster 1 Pro	250GB SSD	2x 4TB	8TB / 160 hours
TriCaster 2 Elite	250GB SSD	4x 1TB SSD RAID-0	4TB / 80 hours



## **Audio Mixing Capabilities**

Model	Audio Mixes	Audio Inputs	Channels per Input	Total Channels In/Out
Mini X & Mini 4K	2	8	2	16/4
TriCaster 410+	4	8	4	32/16
TriCaster TC1/Pro	4	16	4	64/16
TriCaster 2 Elite	4	32	8	256/32

- WDM and ASIO audio interfaces supported on all systems.
- ASIO mode typically allows more audio channels and lower latency.



#### **User Interface/Multiview Monitor Support**

Model	GPU Interface Ports	Maximum Number of 4K Displays	Maximum Number of HD Displays
TriCaster Mini X/4K	4	1	4*
TriCaster 410+	3	0	3
TriCaster TC1/Pro	3	0	3
TriCaster 2 Elite	4	2	4

\* TC Mini 4K – Maximum of 4 monitors in HD/SD session, maximum of 2 monitors in 4K session.



#### **TriCaster Considerations**

- KVM extension needs
- Display interface types: HDMI, DP, MiniDP, DVI
- Live Call Connect feature is recommended to be operated with a 4K display.
- 4K sources use NDI for input.
- Additional storage for recording.
  - Two channels per 'spinning' hard drive.
  - External storage for unlimited recording feature.



#### **Control Surfaces**



#### **Ethernet Control Panels**



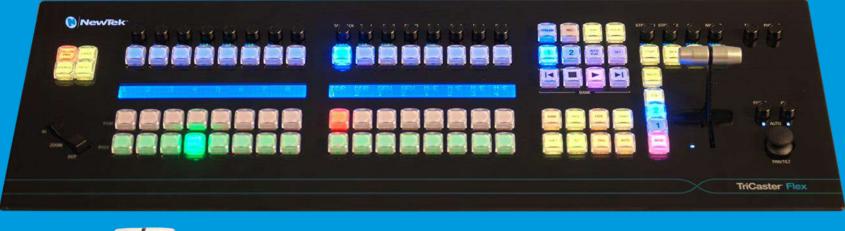
#### 4 Stripe Control Panel



#### 2 Stripe Control Panel



#### **NDI Control Panels**





**NewTek Flex** 



#### **USB Control Panels**



**TriCaster TC1SP Control Panel** 



Mini Control Surface



#### **Panel Differences**

Feature	MiniCS	TC1SP	Flex	2 Stripe	4 Stripe
Stripes	1	1.5	1	2	4
Cross-points	14	14 / 11	16 (RGB)	16 per stripe	24 per stripe
Footprint	16.6" x 8"	23.3" x 12"	25" x 9.1"	35.7" x 11.9"	42.4" x 21.3"
Audio Functions	None	None	Audio Mixer Adjust & I/O	None	None
LCD Displays	None	None	Cross Points	Cross Points & Media Player	Cross Points & Media Player
Key & Delegate Buttons	1 & 2	1 & 2	1 & 2	1 thru 4	1 thru 4
Joystick	None	3D	2D & Rocker (plus knobs)	3D	3D
Interface	USB 2.0	USB 2.0	1Gb Ethernet	100Mb Ethernet	100Mb Ethernet
Future Expansion			HDMI & USB		



#### **Control Panel Compatibility**

	4S-CS	2S-CS	Flex	TC1SP	Mini CS
TC2 Elite	✓	✓	✓		
TC1 Pro	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	✓
TC1	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	✓
410 Plus			$\checkmark$	$\checkmark$	✓
Mini 4K			$\checkmark$	$\checkmark$	✓
Mini X			$\checkmark$	$\checkmark$	✓

- Compatibility listed with TriCaster Rev 8 software.
- PTZ manual joystick control available on TC1SP, Flex, 2S-CS & 4S-CS.
- MiniCS does not have a macro button.



#### **Control Surface Considerations**

- USB control panel extension aspects.
- Ethernet panels need DHCP for default operation, but can be setup with static IP.
- Older panels may work with some systems, but future compatibly is not guaranteed.



#### Instant Replay Products



#### **3PLAY**









3PLAY 3P1



3PLAY 3P2



**3PLAY CS** 



#### **3PLAY Models**

Feature	3PLAY 3P1	3PLAY 3P2
Channel Count	6 (4 In/2 Out)	10 (8 In/2 Out)
Max resolution	1080p59.94	2160p59.94
Playlist Sharing	No	Yes
Pan and Scan	No	Yes
Session Cleanup	No	Yes
LivePanel	Optional	Included
Storage	3x 3TB HHD	5x 2TB SSD RAID-0



#### **3PLAY Considerations**

- KMV and Control Panel extension
- Products designed with operation using control surface, need to be comfortable using CS.
- 4K sources use NDI for input.
- Displays and interface type (up to 3 supported, 1x interface, 2x multiview).



#### **Connect and Spark**



#### **Connect and Spark**





#### **Connect Models**



NC2 Studio I/O



#### **Connect NC1 Models**

Feature	NC2 Studio I/O	NC1 IO (for comparison)
Max SDI Level	12G-SDI	3G-SDI
Channels	Up to 8 In/Out 3G-SDI, Up to 2 In/Out 12G-SDI	8 In/Out 3G-SDI, 2 In/Out Quad-Link SDI
Max resolution	2160p59.94	2160p59.94
6G-SDI Support	Yes	No
Network	1x 1GbE & 1x 10GbE	2x 1GbE
Rack rails	Included	Optional



#### **Connect Considerations**

- NC2 IO uses HD-BNC connectors, cable kit available from NewTek.
- Computer displays, a USB-C to HDMI adapter included.
- Storage for recording.



#### NewTek Spark



#### Spark Plus IO 4K



Spark Plus IO 12G-SDI



Spark Plus IO SDI



## NewTek Spark

Feature	Spark Plus IO 3G-SDI	Spark Plus IO 12G-SDI	Spark Plus IO HDMI
Input Video	3G-SDI	12G-SDI	HDMI
Max resolution	1080p60	2160p60	2160p60



#### **Camera Products**



#### **NewTek PTZ Cameras**



PTZ3



PTZ3-UHD



#### **NewTek PTZ Cameras**

Feature	PTZ3	PTZ3-UHD
Max. Video Format	1080p60	2160p60
Optical Zoom	20x	30x
Sensor	1 / 2.8" CMOS	1 / 1.8" Sony sensor
NDI	HX2 & HX3 (H.264/HEVC)	HD: HX2 & HX3 (H.264/HEVC) UHD: HX2 (H.264/HEVC)
Video Scanning	Progressive or Interlace	Progressive
Baseband Outputs	HDMI & 3G-SDI	HDMI (HD/UHD) & 3G-SDI (HD Only)
Shell Color	Black or White	Black

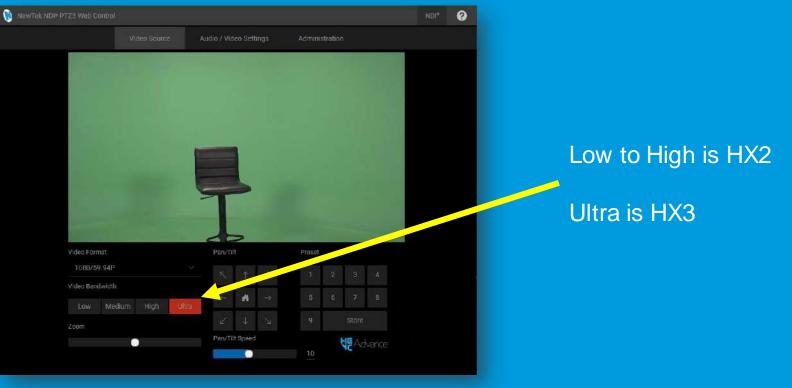


#### **NDI Implementations**

	NDI-HX2	NDI-HX3	NDI High Bandwidth
Bandwidth (Approx. for 1080p60)	Low / ~15Mb	Medium / ~80Mb	High / 132Mb
Quality	Good	Great	Great
Latency	Medium	Very Low	Very Low
Minimum NDI Version	NDI v4	NDI v5	NDI v1



#### **PTZ3 NDI Selection**





## **PTZ External Control**

#### **NDI Studio Monitor**

- Mouse
- Keyboard
- Windows Joystick

#### TriCaster

- Mouse
- WebInterface
- Macros

#### TriCaster Control Surface • 3D Joystick

Stream Deck



### **Studio Monitor PTZ Control**

PTZ Function	Studio Monitor shortcut
Pan/Tilt	Arrow Keys *
Zoom	Keypad Plus/Keypad Minus *
Focus	Page Up/Page Down *
Auto Focus	F
Exposure	Home/End *
Auto Exposure	E
Recall Preset	1 thru 9
Store Preset	CTRL + 1 thru 9

\* Hold CTRL for higher precision.



### **PTZ Considerations**

- PoE+, make sure amount of power is available.
- NDI support
  - NDI 4 for HX2: *Low* to *High* quality selection
  - NDI 5 for HX3: *Ultra* quality selection (HD resolutions only)
  - PTZ3 & PTZ3-UHD can use HEVC.
  - TriCaster Rev 7-3 adds HEVC decoding on Windows 10
  - More HEVC information at <u>https://www.ndi.tv/formats/</u>
- Mounting



#### **TalkShow**



#### TalkShow





### TalkShow VS4000





# Skype TX Features

- Clean Video Output
- Clean Audio Output
- Aspect Ratio Adjustment
- Display Snapshot at Minimum Resolution
- Audio Processing Control
- Centralized Control Interface



### **TalkShow Features**

- Professional I/O without breakout cables
- NDI Input and Output
- $\cdot$  Tally
- Color Correction
- Audio EQ & Compression
- Operator Talk-Back
- Call Recording
- 3<sup>rd</sup> party IP audio support



# Skype TX Compatibly

 Fully compatible with Skype on computers, tablets and mobile devices.

• Skype TX can communicate with *Teams*, but this capability must be enabled by admins.

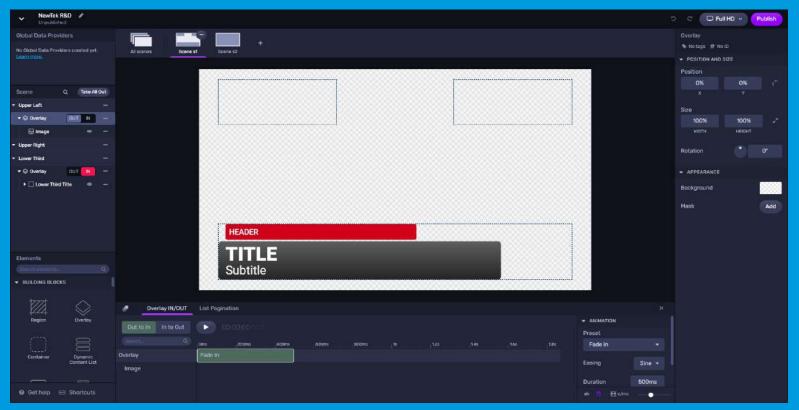
 Skype TX is not compatible with Skype for Business (which has been discontinued).



### **Flowics**

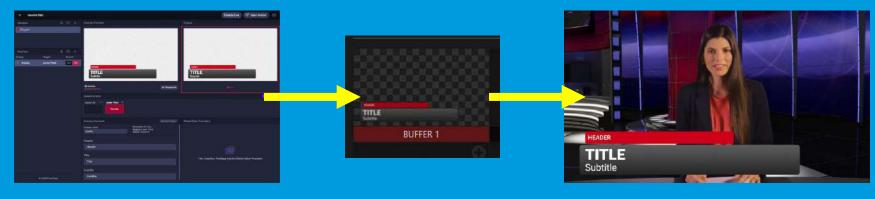


#### Flowics









Flowics Rundown Control TriCaster Live Link Buffer TriCaster Output



## NewTek Remote Storage



#### NewTek Remote Storage





# NewTek Remote Storage



NRS-D



NRS-8





### NewTek Remote Storage

- High performance NAS solution
- Based on SNS solution
- NDI playback of media on system
- NDI recording
- Sharebrowser MAM software included
- Supports all major NLE editing clients
- Clients available for Windows and OSX



#### **NewTek Remote Storage Considerations**

- Pre-sales consultation required.
- Typically, sell units with 10GbE interface.
- If not familiar with setting up shared storage, sell remote commissioning option.



#### **NewTek CaptureCast**



#### **NewTek CaptureCast**

#### TEMPLATES

#### SCHEDULE



#### ENRICHMENT

#### MANAGEMENT



# NewTek CaptureCast





### **Software Products**



#### **Connect Pro (Windows)**





## Virtual Set Editor (Windows)





## **Animation Store Creator (Windows)**





# NDI-HX Camera (iOS/Android)





#### TriCaster Camera (iOS/Android)





# **NDI-HX Capture (iOS)**

