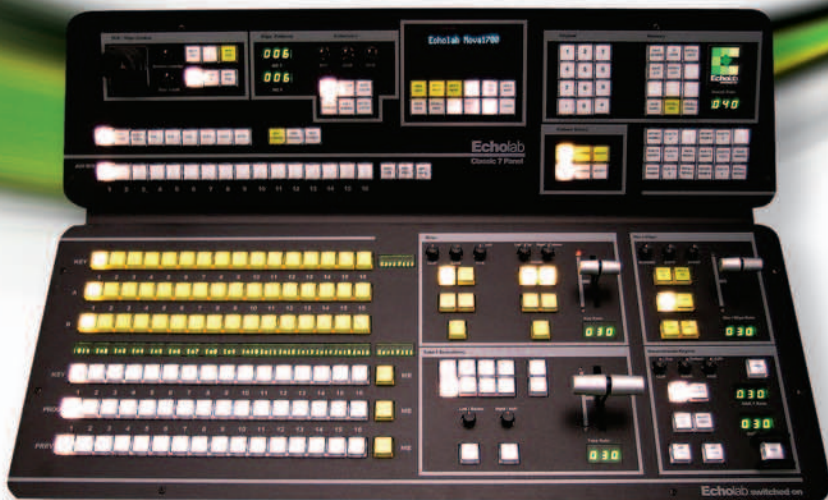




Nova 1716 / 1732

Digital Format



Pictures shown are not to scale.

The world's most user friendly 1.5ME SDI Video Production Switcher.

Based on our popular 1.5ME design, the Nova 1716 / 1732 SDI switchers are tailored for ultimate creative control of multiple live sources. Standard features include two on-board DVEs, a library of organic wipes, and the Echolab CK4 chromakeyer on each and every keyer. Echolab's industry leading System on Chip architecture assures you of a technological platform that will be as relevant and commanding in future years to come as it is now.

Full of functionality, a vital component of this professional live video production switcher is the Classic 7 Panel, Echolab's most popular and successful control interface to date. With 16 direct and 16 shifted cross points this is without doubt the switcher of choice for small broadcast studios, OB Vans and medium size venues.

The Nova 1716 delivers broadcast quality 10-bit NTSC / PAL Serial Digital Video providing flexible and powerful creative control for every production.

Nova 1732 comes with an additional 16 Inputs still in the ultra-compact 5 RU Chassis.

Included as standard:

- Classic 7 control panel
- Nova 32 or 16 chassis
- 10-bit (4:2:2 NTSC/PAL)
- Up to 32 SDI inputs
- 16 SDI outputs
- 2 effects keyers
- 2 downstream keyers
- 4 chromakeyers
- Still store frame buffer with alpha channel
- 2 pattern generators
- 2 matte generators
- 2 floating 2D DVEs
- 2 DVE border generators
- Organic wipes
- Adjustable transition rates
- Redundant dual power supply (optional)



Echolab Interface / Converters

We have developed our range of Echolab Converters to give you freedom of choice. The move to the digital platform can sometimes be difficult and expensive one. Echolab Converters bridge the analog and digital divide as well as resolve wide screen formatting issues now common in everyday production.

Echolab Converters have been specifically designed to complement the Echolab Nova SDI range of remarkable System on Chip next generation switchers allowing you to seamlessly upgrade your existing infrastructure while retaining many of the expensive analog devices still so crucial to your production environment.

Echolab Converters can also be coupled with almost any brand and type of switcher as standalone interface. The Converters are bundled with Echolab Converter Frames that provide smart control and power supplies in 1, 2, 4 RU or Desktop units.

Echolab Converters separate themselves from the crowd by delivering superb 12 BIT conversion, providing true 10 Bit conversion output. Ask any of our competition if they can match this and we make sure you will see that only our converters deliver 100% reliable, BEST 12 Bit in 10 Bit OUT QUALITY conversion against broadcasting standards.

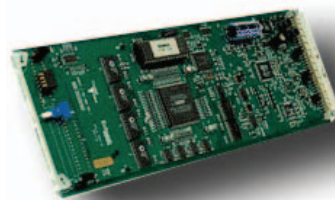
Discover the unmatched power and flexibility of our Nova SDI Range now with full conversion gear for those with remaining analog infrastructure.

Analog to Digital (AtoD) Card
converts NTSC/PAL, composite, Y/C or YUV video to SDI.

Digital to Analog (AtoD) Card
converts SDI into flexible combinations of NTSC/PAL, Composite, Y/C, YUV or RGB video using a high quality 12 bit encoder.

Aspect ratio Converter (ARC) Card
The Echolab ARC converter performs two conversions - 16:9 to 4:3 Full Screen and 4:3 to 16:9 Pillarbox.

Echolab Conversion products are a space-saving 4 x 10.5 inches module which can be housed in the Echolab smart frame for your application.



Echolab frames also house all Crystal Vision interface gear. Please visit their site for more information:
www.crystalvision.tv

SPECIFICATIONS NOVA 1716 / 1732

Video Processing 10-bit 4:2:2 Serial Digital
Standards 525/60 NTSC or 625/50 PAL
External Reference Digital

Inputs

Number of Inputs 16 (1716)
Number of Inputs 32 (1732)
Input Type SDI
Input Timing Requirement plus / minus 18uS
Equalization Auto, 280 meters maximum
Return loss 15dB minimum

Outputs

Number of Outputs 16
Output Type SDI
Output Signal level 750-850 mV p-p
Rise/Fall Time 400 pS min / 800 pS max (20% - 80%)
Overshoot 8% maximum
Additive Jitter 25 pS typical
Pgm Outputs (2) SDI
Pww Output SDI
Pgm Clean Feed Out SDI
Optional Aux Outputs (12) SDI
Aux Output routes Any source, Pgm, Pww
& Clean feed for both DSKs

Connectivity

Edit port Yes (Used for Integration)
Serial Port Yes (Integration / diagnostics)
Ethernet Yes (Used for Network Integration)
XML-RPC Server Yes (Integration / diagnostics)
Tally 32 / 8 (4 wiring blocks)
GPIO 3 in, 2 out / User programmable
External memory Compact Flash
Status indicators Yes
CF operation LEDs Yes
Panel display Yes
Power status With Redundant PSU option
User Configurations
Number of user Modes 8
User Mode selection Yes, hardware
User Mode interface PC based editing
Source naming Yes
Source mapping Any source to any x-point
M/E 1 Flip-flop On/Off
GPIO events User programmable
Lamp saver mode User programmable
NTSC / Pal switchable User programmable
Network settings User programmable
Redundant power supply Yes, Optional

Operation

Layout Program / Preset
Effects take to air Fader bar, auto take, cut
Transitions Mix or Wipe
Transition rates Adjustable
M/E 1.5
M/E take Fader bar, auto take, cut
M/E transitions Fader bar, auto take, cut
M/E transitions Rate adjustable
M/E Memory / Recall Yes
Main Pattern Generators 2 (1 per ME)
Basic Wipes 22
Organic Wipes 100 (optional 400 more)
Pattern adjustments Positioning, Symmetry (basic wipes)
Wipe borders Yes

Border sources	Any source
Width	Variable
Softness	Yes
M/E Keyers	2
Key take	Auto take, cut
Key transition rate	Adjustable
Key types supported	Luminance, Linear, Shaped, Chroma
Key masks	1 for each keyer (2)
Key Mask resets	Yes
Key Memory / Recall	Yes, referenced to fill source
DS Keyers	2
Key take	Auto take, cut
Key transition rate	Adjustable
Key preview	Yes
Key types supported	Luminance, Linear, Shaped, Chroma
Key masks	Yes
Key Mask resets	Yes
Key Memory / Recall	Yes, referenced to fill source
Chromakeys	4
Hue adjustment	Yes
Luminance suppression	Yes
Viewable matte	Yes
Key lift (spill suppression)	Yes
Ckey Reset	Yes
Fade to Black	Yes - transition rate adjustable
Color Matte Generators	2
Frame Buffers	1
Input Modes	Pass-through, Freeze, Capture, Recall
View modes	Frame, Field 1
Capture to Frame Buffer # of stills based on CF storage capacity	
Alpha support	Yes
Import to Frame Buffer Software option for XP, imports .tga & .jpg	
DVE	2 (2D)
DVE	Resets Yes
DVE	Memory / Recalls Yes
DVE	Move keyframes 2 per "Move"
DVE	Move length Adjustable
DVE border color generator 2, 1 for each DVE	
Programmable Effects Memory	
User Modes	8
Panel Saves/Recalls	99 per User Mode
Timeline Sequencing User programmable macro automates any switcher functions to occur as a timed sequence of events and allows for user intervention . Total Timeline Sequences 65535	
Active Timeline Sequences	10

Panel

Panel Echolab	Classic 7 Panel
Direct Crosspoints	16
Shifted Crosspoints	16
Crosspoint button type	Heavy duty switch
Panel display Interactive	LED
X-point display (sources)	Yes, LED
Transition rate displays	Yes
Fader bars	3
3-Axis Joystick	Yes
Incremental Adjustments	Rotary encoders / + and - switches
On-air indicator	Highlighted switch illumination / LED's
Selection bus	Panel - for Keyers, Aux routing, etc.
Numeric keypad	Yes
Mix / Wipe transition	Select = Switches with indicators
DSK transition selectors	Pww, Take, and Cut
Lamp Saver	Yes
Remote Auxiliary Panel	Optional

Echolab 'X' Models

Echolab 'X Model' switchers harness the power of networking to maximize automated workflow efficiencies for an integrated live studio.

'X' is the nomenclature for the "extended functionality" models of Echolab switchers. 'X' models are dynamically bundled with a customized PC workstation providing the ability to integrate device options. There are also protocols available to control 360 Systems Image Servers, Compix Media CG's, Avitech Multiviewers and automation of other studio devices.

Echolab Commander

Through the integrated server, X Models provide unique ability to control devices internally or over a network via the unique Echolab Commander.

The Echolab Commander is a versatile auxiliary panel that extends the switcher's control to internal and networked devices providing easily customizable shortcuts to all switcher and studio functions.

Designed for LIVE production, the Echolab Commander linked to the Nova Series XP Server gives you easy access to many production tools normally run by a mouse and keyboard. VTR control, CG or Still Store Sequence control, and total switcher emulation are all available on user customizable "pages" of buttons.

Whether you need more control for a single operator, or remote control away from the main panel, the Commander is the ideal user interface. With up to 255 user designed pages of 18 buttons and 4 rotary encoders, VTR control buttons, menu driven support, and an interactive display, the Commander is exactly what you need it to be.

PCI based Options

X Model System upgrade	Yes
Integrated Media Server 360 Systems	Yes
Integrated CG Inscrber, Compix	Yes
VTR control V-LAN	Yes
Avitech Multi-monitor interface	Yes

400 Additional Wipes

Over 400 additional wipes, effects, transitions and dynamic mattes

Graphics Utility Tool - CD Rom / Software
Import / Export / Transfer images between Frame buffer and PC Includes Photoshop plug in to create native Nova (.nov) files
Supports alpha channel, resizing and ethernet import/export

3 Year Full Warranty

Plus lifetime guarantee of free upgrades to the core software



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