

UTAH-100/UDS

Universal Distribution System



The UTAH-100/UDS is a revolutionary approach to signal distribution, combining the flexibility of a multi-rate digital routing switcher with the economy of simple distribution amplifiers for use in signal distribution applications in all types of facilities.

This modular system is based on I/O modules with 16 ports, interconnected by a crosspoint fabric that allows any input signal to feed any number of output ports. The economical design of the modules makes it possible for a 4RU frame to feed up to 144 output ports at a fraction of the cost and power consumption of alternative DA packages – with the benefit of being able to assign input signals to each output individually.

This amazing new unit's flexibility is extended even further through the use of Utah's award-winning FLEX-I/O modular I/O system which allows the signal format of each I/O port to be selected from a complete range of options including analog video, digital video over fiber or coax at any rate up to and including 3Gbps, DVI, HDMI, or IP-encapsulated DVB-ASI streams.

UTAH-100/UDS FEATURES

- MODULAR DISTRIBUTION AMPLIFIER WITH ROUTABLE INPUTS
- SD / HD COMPATIBLE -- INCLUDING 3Gbps FORMATS AND DVB/ASI
- WEB BROWSER CONFIGURATION AND CONTROL
- MIX FIBER AND COAX CONNECTIONS IN ANY OF THREE FRAME SIZES
- FLEX-I/O OPTION PROVIDES ANALOG, DVI/HDMI, IP INPUTS and/or OUTPUTS
- WEB CONTROL PANEL STANDARD -- OPTIONAL HARDWARE PANELS



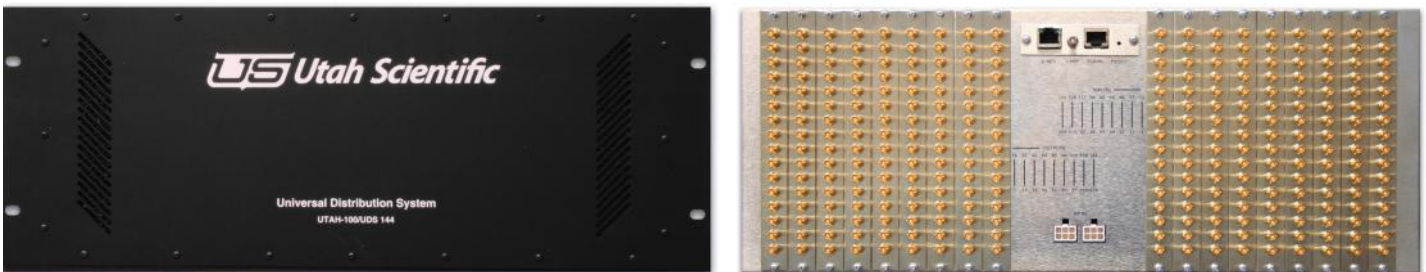
The UTAH-100/UDS is available in three frame sizes: a one RU frame that can hold a 32x32 matrix, a two RU frame for 64x64, and a four RU frame that will house a 144x144 system.

Each frame has dual DC input connections and a Reference Video input for vertical interval switching. The frame also holds a controller module with Ethernet and Serial ports for system connections. The controller module can optionally be replaced with an MX-Bus module which allows the UDS frame to become part of an SC-4 control system.

The standard multi-rate video I/O modules are fitted with HD-BNC connectors for maximum density and the highest possible performance at all data rates. These 16-port modules can be replaced by modules fitted with 8 dual-port SFP cages, providing a means to use any of the wide range of FLEX-I/O interface modules for fiber, HDMI/DVI, or IP-video signals.



The UTAH-100/UDS is controlled and monitored through a built-in web interface. External hardware control panels and virtual control via Ethernet can extend the functionality of the system to local and remote users as necessary. In addition to system configuration, monitoring, and control, the web interface provides a way to group any combination of output ports into an Output Block. Once the block is created, any input signal can be routed to that block with a single selection. This feature can be extremely useful in dubbing applications, or where reference signals need to be switched to a complete studio system or edit bay.



The UTAH-100/UDS web interface includes applets for controlling the router from any web browser. This control can be from a the full-function user interface or from a dedicated applet that provides an on-screen representation of the optional hardware control panel.

UDS-4K

The UTAH-100/UDS 4K Routers bring a cost-effective signal management solution to the growing world of ultra-high definition television. These routers, available in 32x32, 64x64, and 144x144 matrix sizes take advantage of new component technology that supports the 6Gbps data rate of the single-link 4K signals.

This modular system is based on I/O modules with 16 ports, interconnected by a crosspoint fabric that allows any input signal to feed any number of output ports. For mixed-signal applications, the 4K routers can also be fitted with the 3G cards from the UTAH-100/UDS family, providing a full range of connectivity options including coax, fiber, IP-video and DVI/HDMI interfaces.

The UDS routers are controlled and monitored through a built-in web interface that allows the system to be operated from a web browser for local or remote control.



There are two hardware control panels available for the UDS family. The UDS-CP provides a low-cost solution with 32 programmable buttons which can be assigned to sources or destinations. Multiple pages extend the panel's capabilities.

The UTAH-100/UDS-XY Control Panel brings a very flexible means of control to the UDS family. Designed to provide full-matrix control for larger routers up to 144x144, the UDS-XY features a crisp high-resolution display with easy to use scrollable menu-based operation for quickly selecting sources and destinations.



The Utah Router Control Apps for iPads and Android tablets offer yet another control solution for Utah Scientific routing systems.

The apps connect directly to the system controller and automatically download router configuration, labels, and status for quick operation wherever a WIFI connection to the controller is available.

Panel layout, button assignments, button colors, and even button icons are user-configurable to make the virtual control panel a vital tool for operations or for maintenance of the routing system.



UTAH-100/UDS

Frame Specifications

- Width: 19" Rack Mount
- Depth: 3.4"
- Sizes: 1RU -- Capacity: 32 inputs, 32 outputs
Power Consumption: <30W
- 2RU -- Capacity: 64 inputs, 64 outputs
Power Consumption: <50W
- 4RU -- Capacity: 144 inputs, 144 outputs
Power Consumption: <100W
- Power Supply: External,
Redundant supply optional
- Control Connections: RJ-45 Ethernet
RJ-45 Serial
Vertical Interval Reference

I/O Module Specifications

- Multi-Rate Digital Input Card
 - Number of ports per card: 16
 - Formats supported: From 3Mbps up to 3Gbps
 - Input Equalization: >100 Meters of Belden 1694 or equivalent cable
 - Reclocking: All SDI rates up to 3Gbps
 - Connector Type: HD-BNC
- Multi-Rate Digital Output Card
 - Number of ports per card: 16
 - Formats supported: From 3Mbps up to 3Gbps
 - Connector Type: HD-BNC
- FLEX-I/O Option
 - Number of ports per card: 16 (8 SFP cages)
 - Dual-Channel SFPs support the following:
 - SDI up to 3Gbps on coax
 - SDI up to 3Gbps on fiber
 - PAL / NTSC Analog composite video
 - DVI/HDMI (single-port SFP)
 - IP-encapsulated DVB-ASI signals

FOR FURTHER INFORMATION
 on the other products in the UTAH-100 family, please refer to the detailed data sheets that are available on our Web Site:
www.utahscientific.com