UDS Compact Series

Economical Compact Routers

The UDS Compact Series is ideal for small applications. The series consists of SDI 8x32 configurable distribution amplifiers, SDI 10x10, and 20x20 routers.

Since 1977, Utah Scientific has been an industry leader in the design and manufacture of world class signal routing and processing.

With our line of Compact UDS routers and configurable distribution amplifiers, we've applied that same expertise and quality to products which are uniquely designed for small-scale applications. While small in size at only 1RU, nothing has been compromised in features, functionality or durability. The Compact Series is designed, first and foremost, to provide mission critical routing and distribution, but their size also makes them ideal for virtually any application or environment - from broadcast, mobile trucks, flypacks, production, post-production, and rental houses to corporate installations.

Facility integration for automation or third-party device control is easily accomplished using our industry standard Utah Scientific RCP-1 serial and RCP-3 Ethernet protocols.

All products come with standard inline power supplies with the option to add a redundant power supply if required.

The Compact Series supports all current broadcast signal formats (SDI, HD-SDI, 3G SDI, DVB-ASI) with 4K Dual or Quad Link for multiple input and output configurations. Signal equalization and reclocking with automatic reclocking bypass for non-standard formats is included in all products.

All SDI routers include a local control panel for fast, simple operation, using dual-color illuminated buttons for convenient router source and destination labeling.

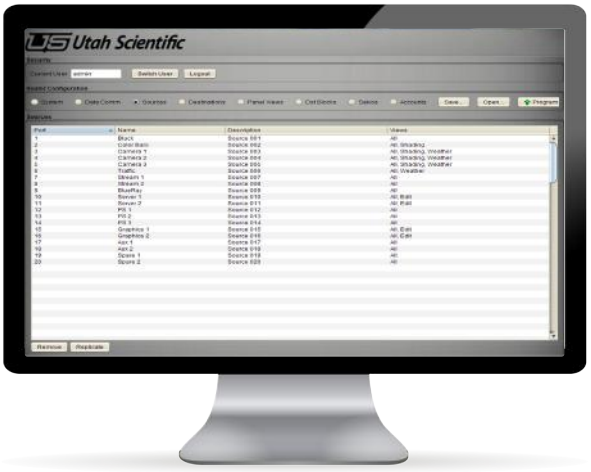
10 Year Warranty

Two optional router control panels are available for users who desire additional hardware control: CP Button Control Panel and XY Full Matrix Display Control Panel.

Optional iPad™ and Android™ 10” tablet control apps are also available with an easy to use control panel that automatically syncs to your router configuration. The Pro version gives you full editing features to customize your control panel to fit the way you work.

The UDS Compact Series includes a native internal web server which requires no additional software downloads and operates on standard web browsers. This value added software provides users with powerful features not traditionally available on compact routers.

Internal web server control panel



Internal web server router configuration

Internal web server login

Web Server Features

- **Naming of sources and destinations**
- **Password protection for login and user rights**
- **Custom user views for sources and destinations**
- **Salvos for storing multiple tasks**
- **Macros for recalling multiple tasks on user PC**
- **Destination blocks for grouping as DA’s**
- **User selectable skins for background and logo**
- **Lock and protect outputs**
- **Logging status of control activity**
- **Destination reset mode**
- **Destination all mode to select all destinations**
- **Direct take or preset mode**
- **Color-coded sources for easy identification**

UDS 10

SDI 10 input by 10 output router.

UDS 20

SDI 20 input by 20 output router.

UDS DA

Configurable 8 input ports and 32 output ports distribution amplifier.

UDS CP

Optional button control hardware panel.

UDS XY

Optional full-matrix control hardware panel.

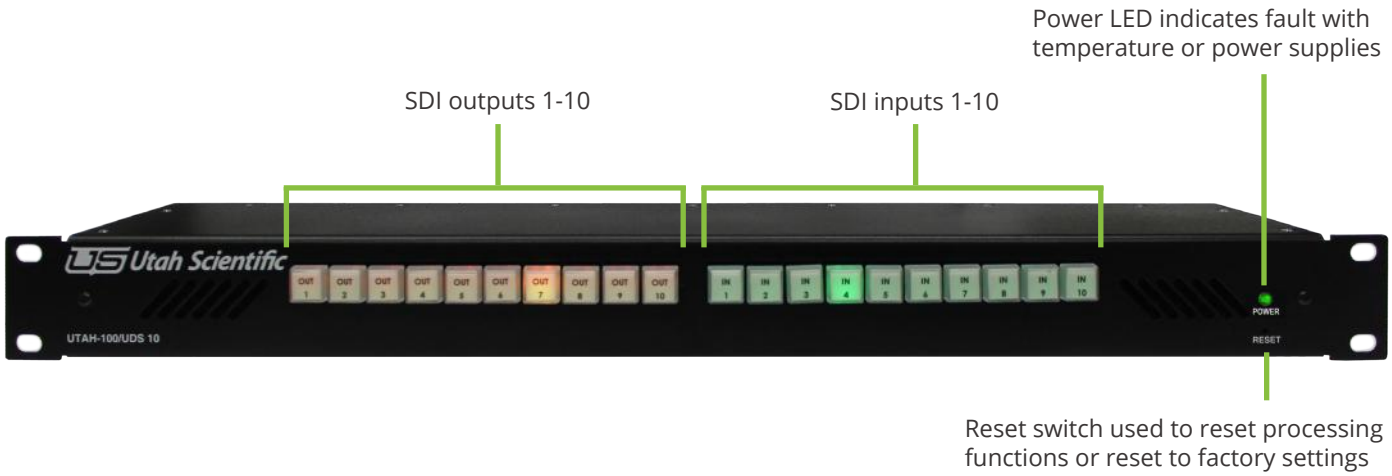
UDS-GPIO

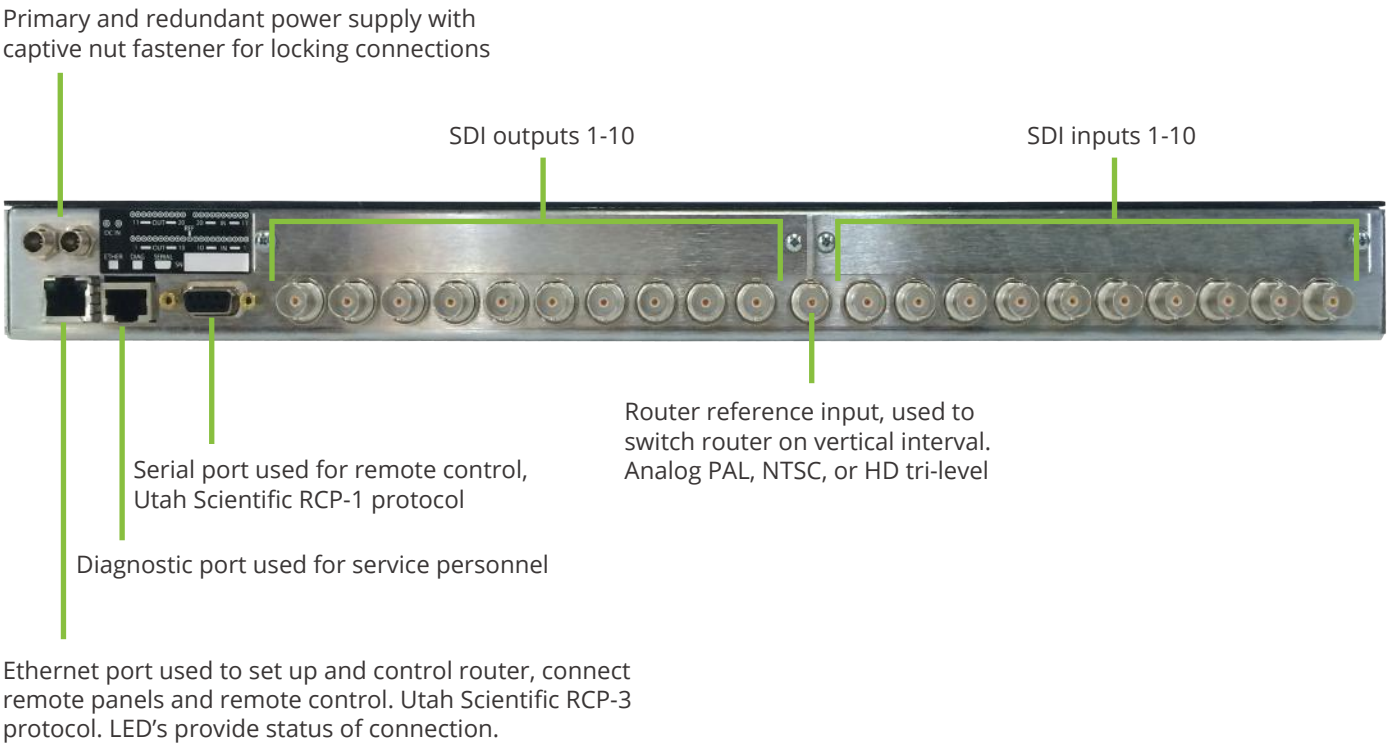
Optional 16 GPI and 16 GPO unit.

UDS 10

SDI 10x10 Router

At only 1 RU in size, the UDS 10 is the perfect product for small applications requiring 10 inputs and 10 outputs or less of SDI routing. Includes a native web server, local control panel with easy-label buttons and our DA 'output block' feature. Optional remote hardware panels and downloadable tablet control software are also available.

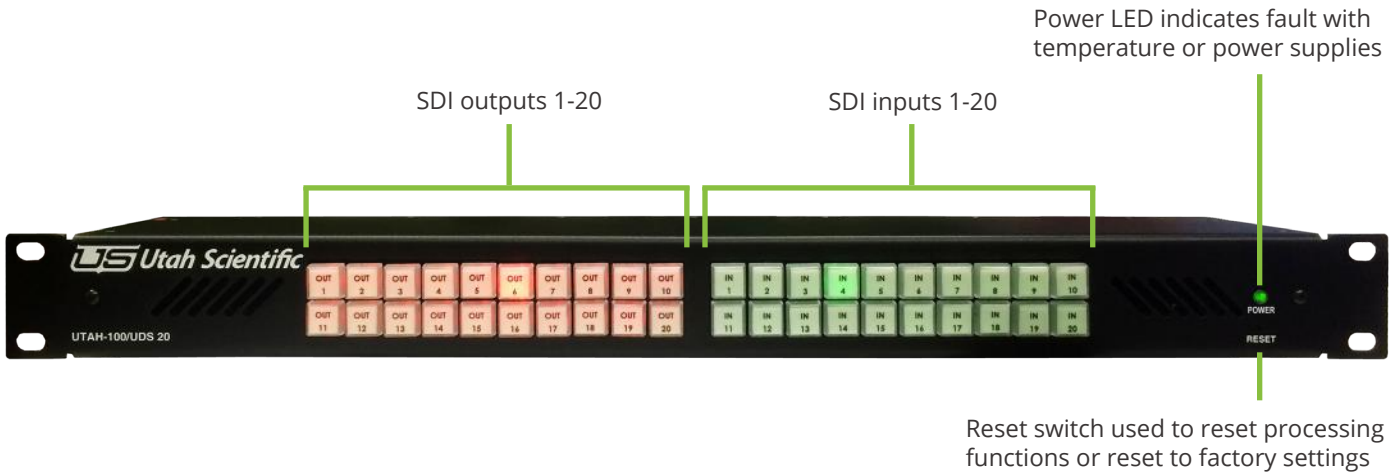


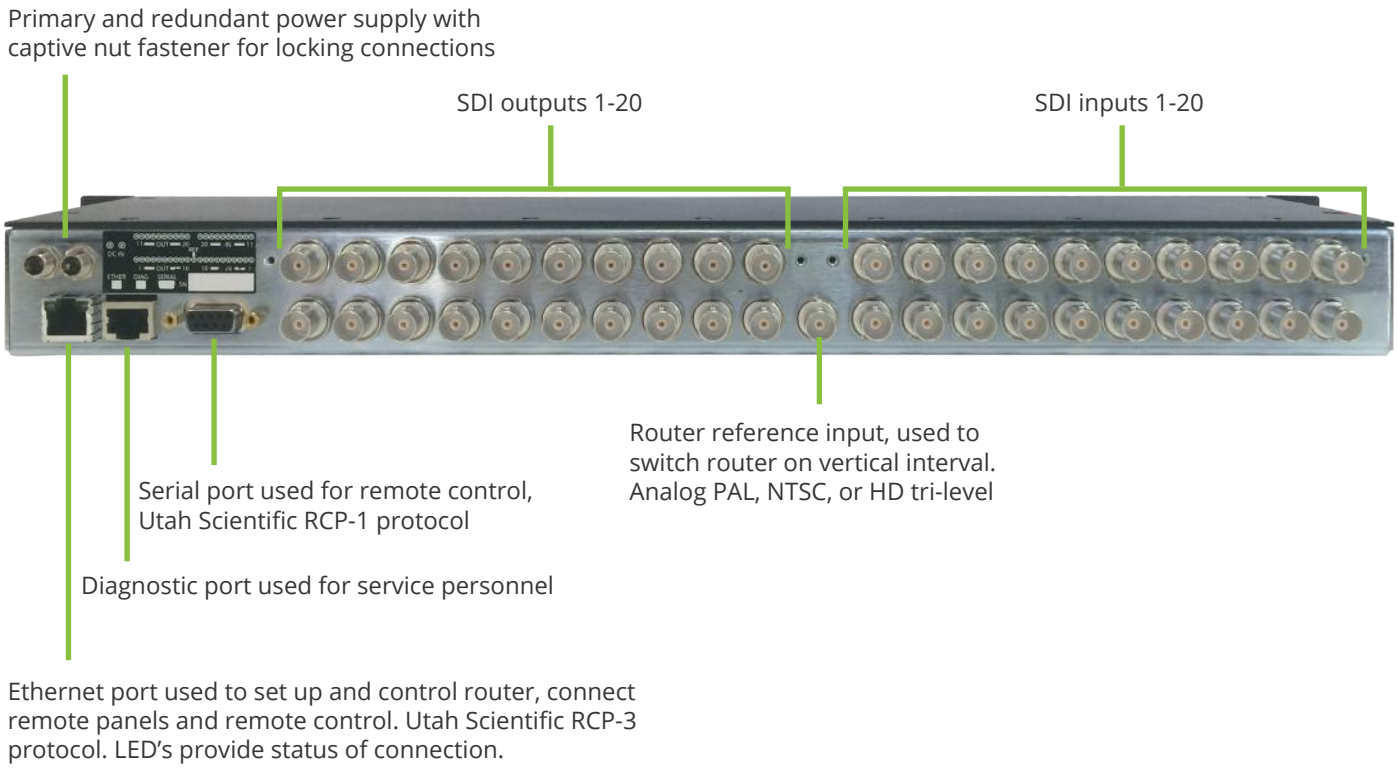


UDS 20

SDI 20x20 Router

Still contained in only 1 RU, the UDS 20 is designed for applications with space limitations that require more inputs and outputs of SDI routing than our UDS 10. Includes a native web server, local control panel with easy-label buttons and our DA 'output block' feature. Optional remote hardware panels and downloadable tablet control software are also available.





UDS DA

SDI 8x32 Configurable Distribution Amplifier

The UDS DA offers a flexible, cost-effective distribution package contained in 1RU. Each DA provides 8 input ports and 32 assignable output ports. With the native web server configuration, each output port can be assigned to any input port allowing for complete operational flexibility.

Power LED indicates fault with temperature or power supplies

Reset switch used to reset processing functions or reset to factory settings

Primary and redundant power supply with captive nut fastener for locking connections

SDI outputs 11-20

SDI inputs 30-21

SDI inputs 1-10

SDI outputs 32, 31

SDI inputs 8-1

Serial port used for remote control, Utah Scientific RCP-1 protocol

Diagnostic port used for service personnel

Router reference input, not used for DA

Ethernet port used to set up and control router, connect remote panels and remote control. Utah Scientific RCP-3 protocol. LED's provide status of connection.

UDS CP

Button Control Panel (Optional)

The UDS CP button control panel includes 36 programmable buttons that can be assigned to sources, destinations, salvos, and button functions. Page Up and Page Down buttons increase the panel capabilities by 2 pages for a total of 3 pages, providing 32 additional functions per page. The native web server operates with standard web browsers for simple set up. A GUI replica of the hardware panel is included.

Function buttons illuminate red
- Page Up / Page Down
- Direct Take or Preset Take
- Output Lock
- Panel Lock

Destination buttons illuminate orange
Assign destinations to any button on panel

Source buttons illuminate green
Assign sources to any button on panel

Router reference input - not used

Reset switch used to reset processing functions or to factory default settings

Power Supply with captive nut fastener for locking connection

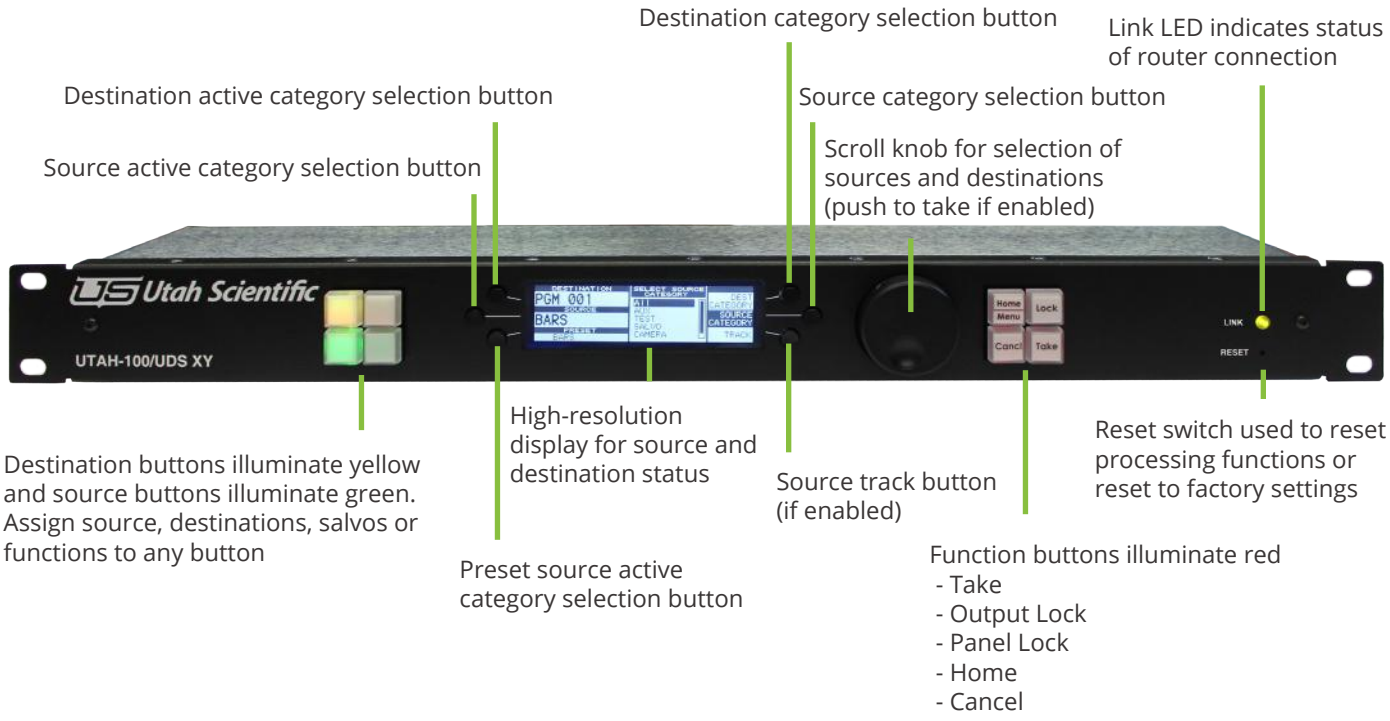
Serial port - not used

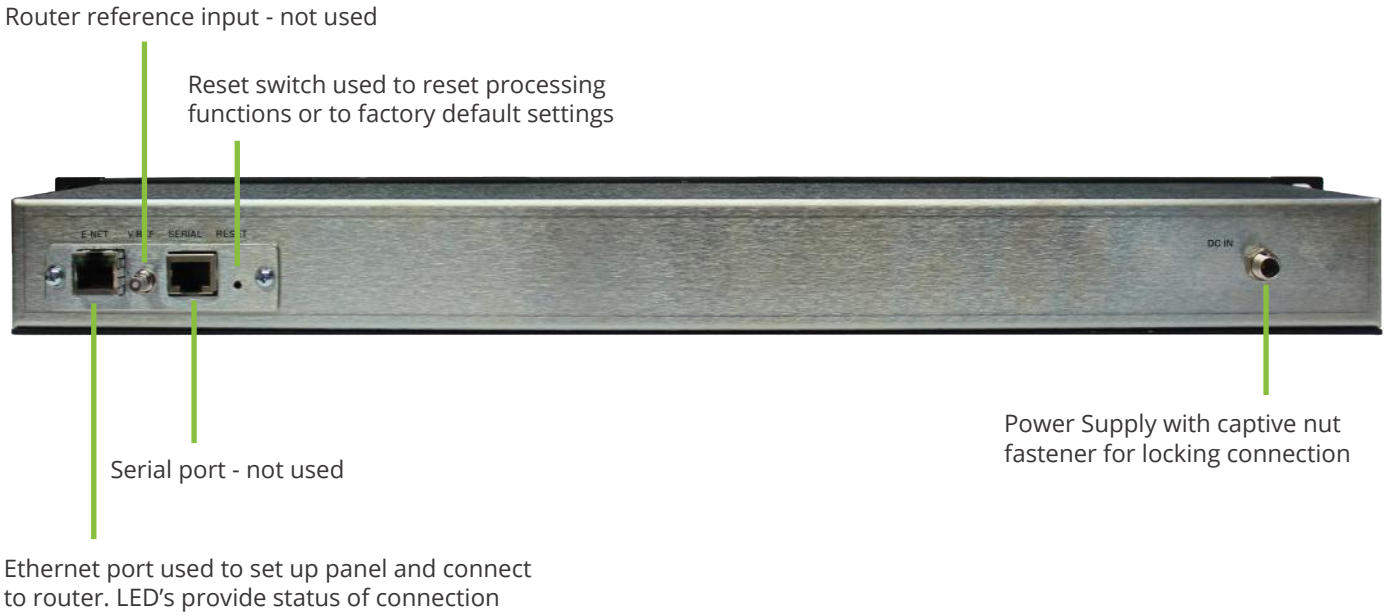
Ethernet port used to set up panel and connect to router. LED's provide status of connection

UDS XY

XY Control Panel (Optional)

The UDS XY control panel is designed to provide full-matrix control with limited labeling. It includes a high-resolution display with scroll knob for quick selection of sources and destinations. Source and destination categories can be set up for device listings for even more flexibility. The native web server operates with standard web browsers for simple set up.

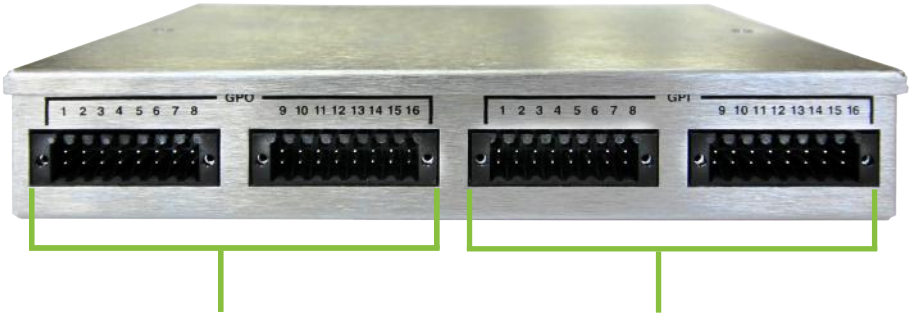




UDS-GPIO

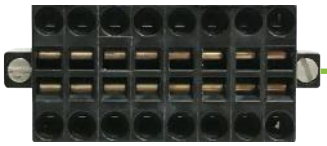
Universal GPIO Unit (Optional)

The UDS-GPIO control unit is designed to extend the operation of the router controller to external devices by means of contact closures. The unit provides 16 in-bound contact closures GPI's and 16 out-bound GPO's with each GPI and GPO assigned to a source-destination. The GPI's can be configured for latching or revert operation. In revert (Joystick Over-ride) operation, the crosspoint associated with that contact is activated as long as the closure is active, When released, the router output is switched back to the previous source. The GPO's are provided by relays, allowing external devices such as tally lights or other indicators to be activated when a specific source-destination combination is active in the router. The native web server operates with standard web browsers for simple setup.

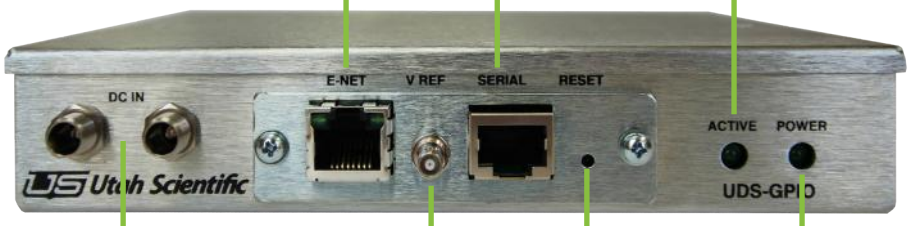


1-16 GP0's - Assignable to any source-destination combination

1-16 GPI's - Assignable to any source-destination combination



Detachable terminal blocks included



Ethernet port used to set up panel and connect to router. LED's provide status of connection

Serial port - not used

Active LED indicates status of router connection

Primary and redundant power supply with captive nut fastener for locking connections

Router reference input - not used

Reset switch used to reset processing functions or to factory default settings

Power LED indicates status of power supplies

Sample Configuration

Each device has a unique IP address, user selectable

Control up to 10 remote connections per router. Includes automation systems, hardware control panels, and software control panels

Set up modes
- Stand alone network
- House Network

Web server for configuration and control.
Can be operated via wireless network

Specifications

Video Standards
SMPTE 259M-C, SMPTE 292M, SMPTE 425M-A, SMPTE 425-B, SMPTE 310M, DVB-ASI compliant

525i 29.97, 625i 25
720p 50, 59.94, 60
1080i 25, 29.97, 30
1080PsF 23.98, 24, 25, 29.97, 30
1080p 23.98, 24, 25, 29.97, 30, 50, 59.94, 60

Embedded Audio
20-bit synchronous 48 kHz to SMPTE 272M-C
24-bit synchronous 48 kHz to SMPTE 299M

Video Inputs & Outputs

Formats:	Auto select for simultaneous operations of SD, HD, 3G SDI, 2K, and DVB-ASI
Connector:	BNC, 1 per input and output
Reclocking:	Automatic for all standard signal rates 270Mbps, 1.485Gbps, 2.970Gbps, DVB-ASI Automatic bypass for non-standard signal rates 18Mbps-2.970Gbps
Equalization:	Automatic 400m at 270Mbps, 220m at 1.485Gbps, 200m at 2.970Gbps with Belden 1694A or equivalent cable

Reference Input

(1) BNC:	Analog PAL, NTSC, or HD tri-level

Control

(1) RJ-45:	10/100 Ethernet - Embedded web server - Utah Scientific RCP-3 Ethernet protocol
(1) RJ-45:	Diagnostic port
(1) 422/232:	DB-9F Subminiature - Utah Scientific RCP-1 serial protocol

Power
90-240VAC 50/60Hz external +12V DC - (2) Captive nut fastener
Power consumption 30 watts max

Physical

Width:	19” (48.26cm)
Depth:	DA & Routers 4.25” (10.80cm) - Panels 3.75” (9.53cm)
Height:	1RU, 1.75” (4.45cm)
Weight:	DA & Routers 4.8lb (2.1kg) - CP 3.8lb (1.7kg) - XY 4lb (1.8kg)

Environmental
Operating temperature 32-104 degrees F, (0-40 degrees C)
Relative humidity range: 0-90%, non-condensing

Warranty
10-year limited warranty, 24/7 service support

Ordering Information

UDS DA	SDI 8 input ports and 32 output ports. Includes single power supply
UDS 10	SDI 10 inputs by 10 outputs. Includes single power supply
UDS 20	SDI 20 inputs by 20 outputs. Includes single power supply
PS/UDSV	Redundant power supply (optional)
UDS CP	Programmable button hardware control panel. Includes power supply (optional)
UDS XY	Full matrix hardware control panel. Includes power supply (optional)
UDS-GPIO	16 GPI and 16 GPO unit. Includes single power supply (optional)

The complete UDS Series offers the largest selection of low cost routing on the market.
Please see our additional brochures for more information.

Since the introduction of our first analog router over three decades ago, Utah Scientific has been an industry leader in the design and manufacture of world-class signal routing and processing.

Hybrid technologies enable integrated frame sync, clean-quiet outputs, SMPTE ST 2022, A/D and D/A conversions, fiber optic conversion, audio embedding/de-embedding, and MADI transport. By design, Utah products are the most energy efficient on the market.

Utah Scientific has the most experience in the design and manufacture of routing switchers and associated distribution products in the market. We take pride in knowing that the reliability and performance of our products are second to none and are backed by industry leading service and support.

Utah Scientific

Worldwide Headquarters
4750 Wiley Post Way - 150
Salt Lake City, UT 84116

USA & Canada 800.453.8782
International 801.575.8801
www.utahscientific.com