

# TV TECHNOLOGY

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## IP ROUTING

# Utah Scientific Model UTAH-400 iP

by Joey Gill

As broadcasters upgrade equipment around their stations, it is obvious that much of the replacement equipment requires an Ethernet network to function.

Until recently, most IP switching or routing arrangements used in broadcasting had migrated directly from the computer industry into the broadcast arena.

Although traditional IP switchers are very reliable and fairly straightforward, they lack certain subtleties that would make them truly

and port speed on Ethernet networks. Its built-in control panel gives an operator the ability to control switch parameters instantly, without having to hook up a PC to gain control of the switch. Bandwidth for each port, group assignments (VLAN), and QoS (Quality of Service) can all be managed from the front panel. Other features on the 24-port Gigabit switch include Dual 5 Gbps uplink ports and redundant power supplies.

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## FAST FACTS

### Application

IP routing in broadcast applications

### Key Features

Built-in control panel, ease of operation, ease of configuration, flexibility, speed

### Price

MSRP for a 24 port switch with a control panel is \$8,000

### Contact

Utah Scientific Inc.

801-575-8801

[www.utahscientific.com](http://www.utahscientific.com)



The Utah Scientific model UTAH-400 iP router

broadcaster friendly. Having recognized this fact, Utah Scientific has developed an IP switch that takes managing Ethernet resources to the next level. Their UTAH-400 iP router is one of the first user-friendly switches to hit the broadcast market. This router is not just user-friendly, but is also versatile, and very powerful. Utah Scientific has been manufacturing audio and video switchers for over 30 years. The transition into IT network switching was the next logical step.

## FEATURES

The UTAH-400 iP offers unique management functionality, giving users real-time on-the-fly control of port priority, security groups

and port speed on Ethernet networks. Its built-in control panel gives an operator the ability to control switch parameters instantly, without having to hook up a PC to gain control of the switch. Bandwidth for each port, group assignments (VLAN), and QoS (Quality of Service) can all be managed from the front panel. Other features on the 24-port Gigabit switch include Dual 5 Gbps uplink ports and redundant power supplies.

On the early model I tested, the unit was housed in a single chassis, which occupied 2 RU spaces. However, due to popular demand, the control panel has been separated from the switch for remote mounting. Remote control is achieved using a serial interface, but according to Utah Scientific, it is likely that future versions will be connected via Ethernet. The port chassis can be mounted to accommodate cabling from either the front or rear. Either configuration allows the dual power supplies to be accessed from the front of the unit. These supplies are easily removed from the chassis for service and are hot-swappable.

Traditional methods of managing network attributes have included IP TOS (type of service), DiffServ, VLAN segmentation and

ingress/egress cue management. All of these techniques work well, but they are usually set when the network is installed, and changing them is not easily done in a matter of minutes.

This IP switch allows network managers to not only assign priority and bandwidth to groups and ports, but they also add ease of operation. With simple button pushes, it is possible to assign full Gigabit speed to your edit suites and limit reporter's desktops and workstations to speeds as low as 10 Mbps, or to turn it completely off. This would provide for maximum file transfer speed for editors, while limiting "wasteful" bandwidth usage. However, for special projects or situations, the bandwidth could be expanded or repurposed in the time it takes to walk to the network room.

In addition to front panel controls, browser-based control is included with the UTAH-400. Using the browser-based management tool is typical of traditional IP

