How DVStation Creates a New Paradigm for Broadcast Monitoring Products

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Pixelmetrix, the global expert in Preventative Monitoring for digital broadcast networks, created DVStation as an entirely new paradigm for measuring signal quality, program integrity and information reporting.

Rather than adapt older designs of test and monitoring equipment originally created for research and development activities, Pixelmetrix designed a unique system from the ground up to acquire, process and present network data in the clearest, most accessible way. As a result, DVStation can monitor thousands of parameters within hundreds of digital television signals. All in real time, all simultaneously, all continuously, and all from one easy-to-use, self-contained device.

Our competitors all make products that can monitor various parts of the television signal. However, with their solutions, standalone components are needed for monitoring specific signal types. Though these competing products can do the job, the network operator misses the simplicity of a single monitoring device and the elegance of one comprehensive reporting and alert system that encompasses the entire broadcast chain.

Through a unique set of plug-in modules and a powerful parallel processing architecture, DVStation is the only all-in-one solution that can simultaneously monitor the global health of a network on multiple layers. Because all activity occurs in a single system, operators can control and monitor 21 ports at once and be instantly alerted to a deviation in any of thousands of parameters.

Pixelmetrix offers modules for ASI, SPI, RF and ATM. Two modules are available for monitoring video picture quality. An On-Air Service Content Validation feature insures that a misconfigured language or subtitle doesn't mar program integrity.

Because DVStation can be expanded with modules as the operator's needs change, it is the lowest cost per stream solution available on the market today. A single source DVStation costs as little as $18,500. To assemble the same monitoring

capability with competitive products, the user would have to combine several standalone components. Even then, the elegant reporting and alert functions of DVStation would be missed.

The visualization of complex information is a key part of the Pixelmetrix mission. DVStation offers a superior graphical user interface. Half of the Pixelmetrix engineering team worked to develop this industry-leading GUI design.

Making vast amounts of real time information accessible and easy to interpret is a huge challenge. Few companies have even begun to tackle it. Yet, the output of a good network sentry must be so user friendly that a non-technical operator can monitor its complex analysis through simple “red light-green light” alerts. At the same time the monitor must generate a comprehensive log that clearly explains which system threshold deviated from the preset norm. The quality of the human user interface is critically important in an effective preventative monitoring strategy.

DVStation reports the status of all ports, layers and parameters within a single integrated display. A touch panel on the LCD screen allows a fast drill down to problem areas. When a deviation occurs, the user simply touches the port showing red bars and all the relevant port status information is displayed. This GUI design sets DVStation far apart from vendors offering multiple components, each with its own display option.

Also, in an era when broadcasters are adopting the cost-effective strategy of integrating remote operations at a central location, data interpretation must be available where it’s most needed. Remote network monitoring means different things to different users. It ranges from the monitoring of signals from un-staffed remote sites to the convenient control of systems in a facility through a corporate LAN or over the Internet. SNMP trap alarms should be reportable to network management software. The system should be capable of sending a detailed e-mail alert to a pocket pager. Having a flexible system that can monitor several regional sites from a single location is an important asset.

"DVStation started as a new blank sheet design that was focused on solving the video monitoring problem. Everybody else came into the market with a lot of historical baggage," said Danny Wilson, president and CEO of Pixelmetrix. "Many of our competitors do testing. The testing company's first sales target are the R&D

industries, those whose business is designing and engineering video products. Then they try to retrofit their test equipment into something for operational monitoring. A retrofit is never a very good fit."

When comparing DVStation with competing solutions, it's best to take an holistic approach to preventative monitoring. Rather than monitor specific signal types with standalone devices from various manufacturers, a single, user-configurable system with outstanding graphical display and alert capability offers greater simplicity, reliability, cost savings and ease of use.

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