

# iControl Remote Station Monitoring

## CENTRALIZED, REMOTE STATION MONITORING SYSTEM



### DESCRIPTION

Designed for centralized station control and monitoring, iControl Remote Station Monitoring lowers operating costs for station groups and national broadcasters. It provides a high quality multiviewer of selected station signals, with audible audio and detailed signal status information. Leveraging multiple advanced electronic supervision technologies, including Monitoring by Exception, it allows broadcasters to streamline their operations while ensuring optimal performance of their multiple on-air transmissions.

### KEY FEATURES AND BENEFITS

#### High quality remote video monitoring

- › User interface allows multiple signals to be viewed simultaneously in multi-image format, using high quality streaming video
- › Remote layout and signal selection with full-screen mode
- › Instant access to signal information: operators can “drill down” through selected views to reach appropriate signals or alarms

#### Multisignal probing

- › Alarming for key video and audio parameters and thresholds
- › Error logging with time-stamped event and error entries

#### Easily scalable and configurable

- › Can extend from 1 to 16 remote locations
- › Provides real-time status of all signals
- › Customizable layouts with user-defined labels, signal formats and graphical components

#### Multiple signal formats

- › HD-SDI in 1080i and 720p
- › SD-SDI in 525 or 626
- › NTSC, PAL and SECAM
- › AES / EBU and analog audio

#### Monitoring by Exception

- › Monitoring by Exception ensures that the operator’s attention is drawn to faults, without distraction from correctly functioning channels.
- › Using Monitoring by Exception improves productivity, and helps reduce the Mean Time to Repair (MTTR)

#### Streaming bandwidth control

- › Bit-rate presets for effective use of available network bandwidth
- › Image quality pre-set controls
- › Image frame rate controls

#### Sounds with images for accurate monitoring

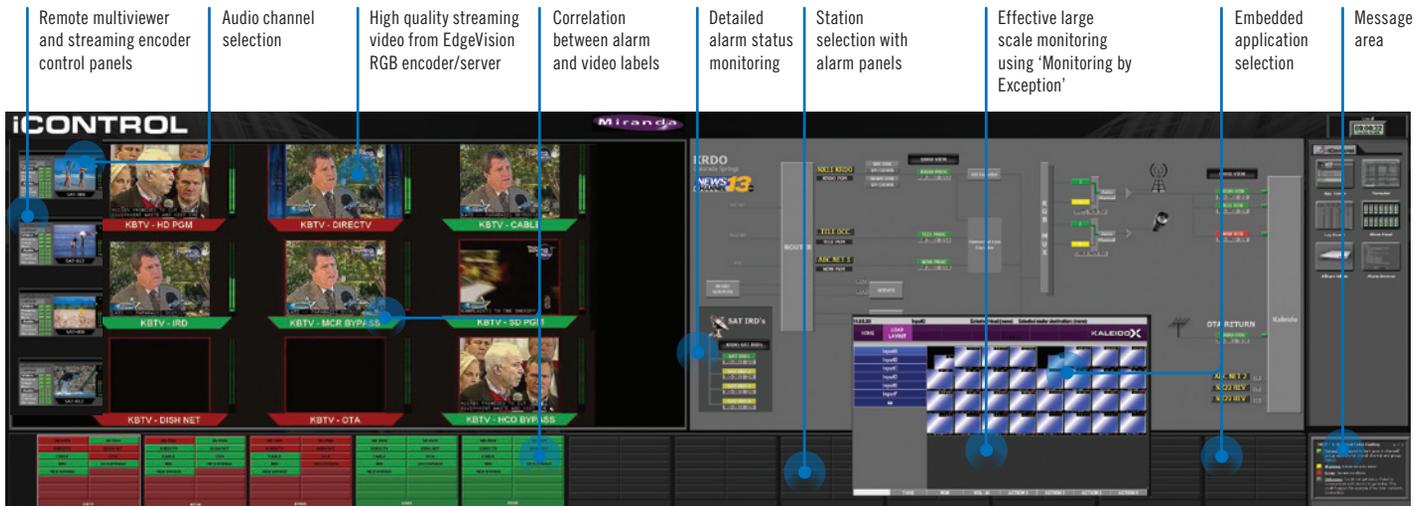
- › Provides convenient audio source selection with volume control
- › Selected audio signal is streamed back for acoustic monitoring
- › Audible alarms alert operators of error conditions

#### Easy installation and maintenance

- › Quick configuration for easy deployment and robust performance.
- › Customizable elements are configured using a Microsoft Excel spreadsheet, which dynamically updates the monitoring system

#### Lip sync monitoring

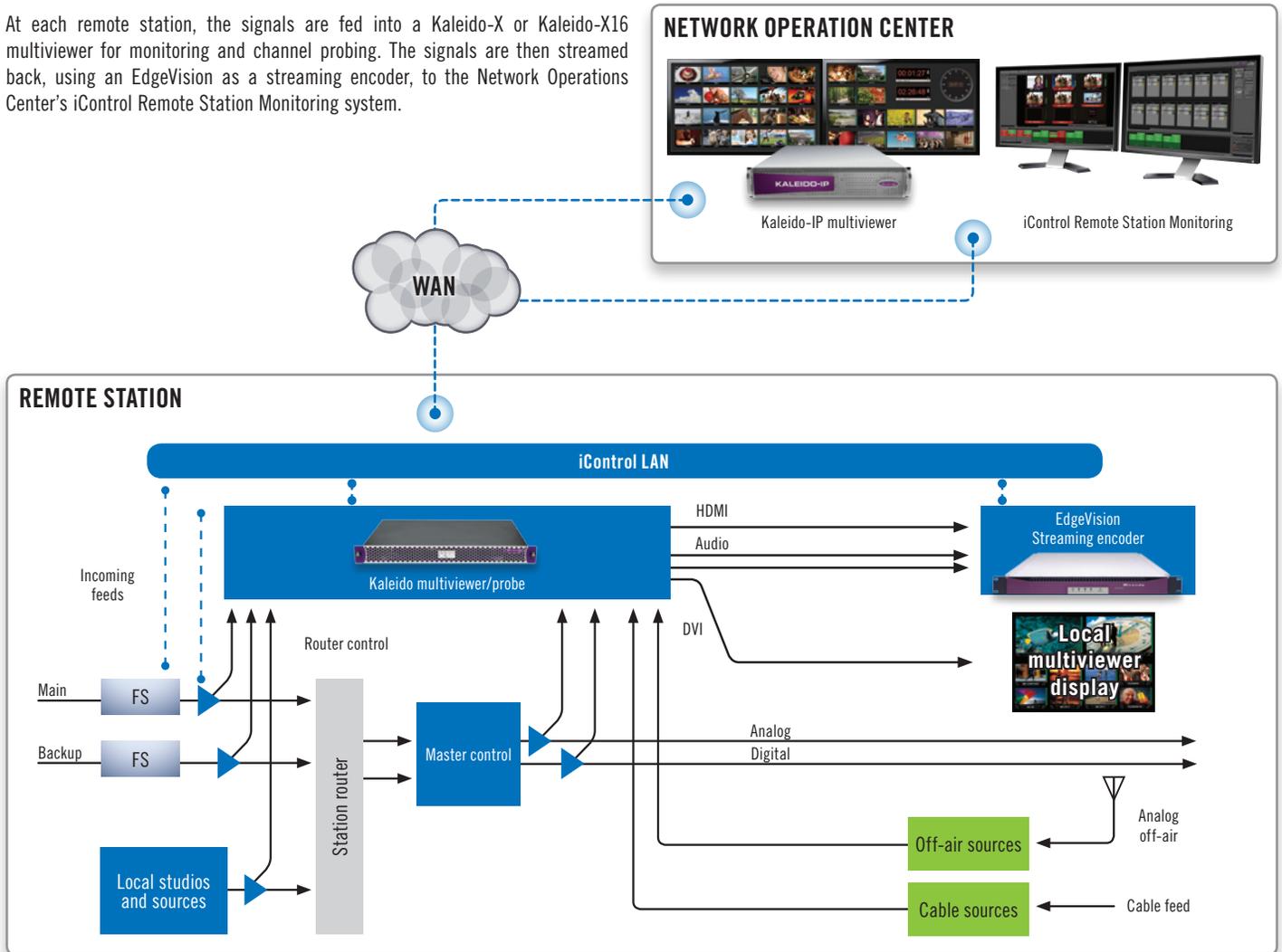
- › iControl Audio/Video Fingerprints option allows lip sync error detection and measurement to be performed, using Densité modular processing and probing cards



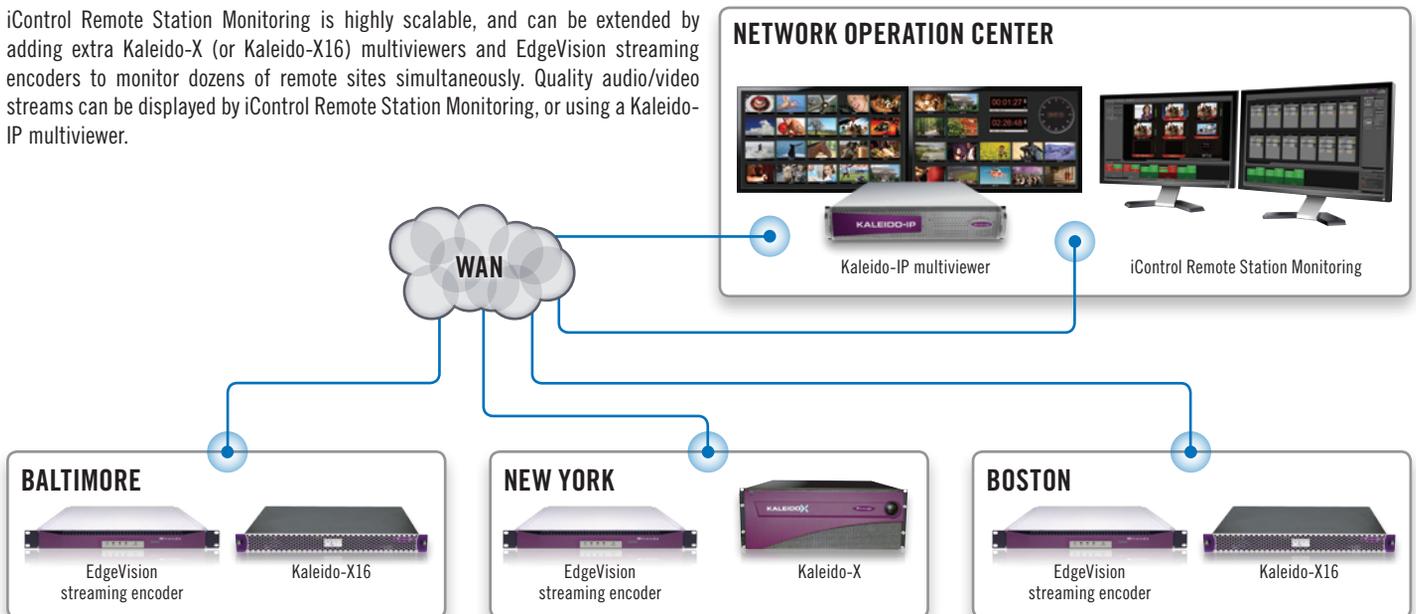
# iControl Remote Station Monitoring

Low operating cost remote station monitoring

At each remote station, the signals are fed into a Kaleido-X or Kaleido-X16 multiviewer for monitoring and channel probing. The signals are then streamed back, using an EdgeVision as a streaming encoder, to the Network Operations Center's iControl Remote Station Monitoring system.



iControl Remote Station Monitoring is highly scalable, and can be extended by adding extra Kaleido-X (or Kaleido-X16) multiviewers and EdgeVision streaming encoders to monitor dozens of remote sites simultaneously. Quality audio/video streams can be displayed by iControl Remote Station Monitoring, or using a Kaleido-IP multiviewer.



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# iControl Remote Station Monitoring

Multichannel monitoring

iControl Remote Station Monitoring's high quality interface allows multiple remote video and audio signals to be viewed over IP in a user-defined, multiviewer format, along with audio metering and acoustic monitoring. A sample of the monitoring views are shown here:



## Multiviewer monitoring panel

- Operator has full control over the multiviewer configuration
- Pre-configured layouts are "pushed" to the remote Kaleido-X / Kaleido-X16 processor
- Streaming quality is controlled with easy to use presets for the EdgeVision streaming encoder



## Closer monitoring of single source

- The viewport can present a single source for larger scale viewing
- The resolution of the stream can be set to reach 1920 X 1080, providing full HD-quality
- Lower resolution and bit rate streams can be used to respect network capacity
- Audio selector allows every signal with discrete or embedded audio to be listened to
- Convenient acoustic audio mute button



## Remote multiviewer control

- iControl Remote Station Monitoring provides remote layout control of all Kaleido multiviewers across a network
- Allows operators in the Network operations centers to focus on specific channels of interest
- Selection is made using dynamic representations of available multiviewer layouts

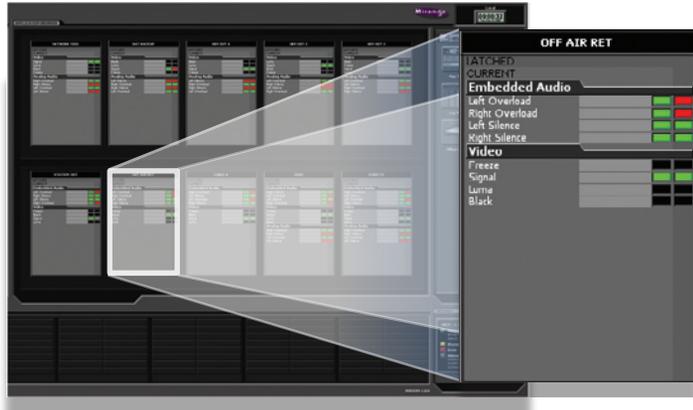


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# iControl Remote Station Monitoring

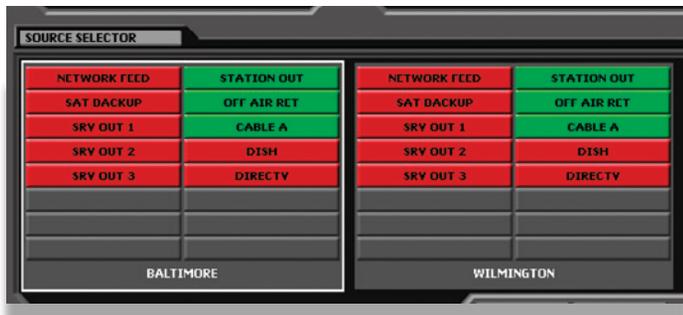
Extensive signal probing capabilities

Detailed, multichannel probing is performed simultaneously across multiple sites, using the signal analysis integrated in the Kaleido-X or Kaleido-X16 multiviewers. Some of the probing capabilities are shown below, see page 359 for more information:



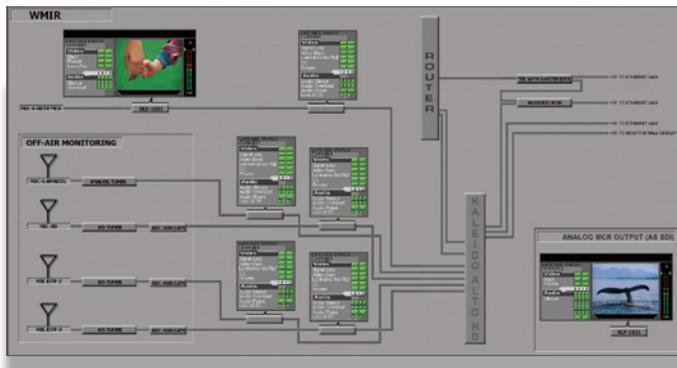
## Detailed error reporting

- > Detailed signal monitoring with video and audio parameter status for every monitored signal
- > Alarming for video signal loss, video freeze, audio silence, video black, video luminance, and audio overload
- > Advanced Metadata monitoring for CC/WST, AFD, and Dolby in all signal formats.
- > Error latching for missed events
- > Alarms can be temporarily turned off during maintenance activities



## Monitoring by Exception

- > Monitoring by Exception involves automated monitoring of signal parameters to see if they are within pre-determined limits
- > iControl Remote Station Monitoring immediately draws the attention of the operator to any faults, without distraction from correctly functioning channels
- > Monitoring by Exception improves productivity, and helps reduce the Mean Time to Repair (MTTR)



## Custom remote station view

- > iControl Remote Station Monitoring can be optionally configured to provide a detailed signal path view of remote stations with control of key elements

## ORDERING INFORMATION

IC-STATION iControl Remote Station Monitoring system featuring multi-station summary status and detailed interactive signal path views with embedded audio/video players  
 Requires: iControl base edition Application Server  
 EDGEVISION-1 Edge signal monitoring device - single channel \*

\* See EdgeVision ordering page for additional information

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