

Challenge : Real time Video & Intercom transmission between remote sites & central

Main Features

Features

- ◆ 250 remote sites
- ◆ 4 Central Control Systems
- ◆ Video + Intercom transmission via LAN/Modem
- ◆ Remote Alarm Monitoring
- ◆ Remote P/T/Z control



Power Substations

The system comprises of four cameras in 250 Regional Offices (RO's). These cameras are each recorded to a local hard disk contained in one or more NetServer DVRs (Digital Video Recorder's), located in the RO's.

The multi-functional NetServer DVR simultaneously caters for video surveillance, recording, playback, motion detection, alarm/pre-alarm handling, pan/tilt/zoom video transmission, remote monitoring and central control, without degradation of any one of the specified performance parameters.

The NetServer's hard disk is calculated to store images for up to 90 days. When the hard disk capacity reaches the specified minimum, automatic overwriting of the oldest data occurs. The NetServer DVR can also be pre-programmed to perform continuous recording during office hours and periodic alarm recording, in conjunction with motion detection or external alarm triggering devices, after normal office hours. This minimises the recording of unwanted video data and reduces hard disk usage.

Remote, Unet Client Workstations (UCW's) are located at each of the Central Security Control Centres (CSCC's) and are used for remote monitoring of the NetServer DVR's via PSTN and Ethernet, providing pan/tilt/zoom control and a common user-friendly GUI (Graphic User Interface).

The remote client workstation at the SCC and RO also permit instant recording of any camera onto the local hard disk

UCW operators at each location are afforded different access levels, which limit their ability to control/view specific cameras within the system. Normally this facility is used to restrict access to cameras within each RO operator's area.

The UCW provides: Alarm Alert Messaging, outputs from motion detection or alarm dry contact inputs which is automatically annunciated and duplicated (or mimicked) on all the CSCC and RO UCW operators workstations. Each may be optionally annunciated together with live video pop-up if required. Upgraded recording on reception of an alarm event for a pre-specified time period up to 25fps (PAL) and a pre-alarm period which captures the video stream before the alarm event actually occurs, by using a buffer period of looped recording at the NetServer DVR itself, is optionally pre-programmable.

Performance using the only available means via PSTN lines nonetheless still provides a refresh rate of about 1 frame per second at 384 x 288 resolution per camera. In some cases an Ethernet connection is available and thus a maximum real-time refresh rate of 25 frames per second at a resolution of 284 x 288 (PAL) per camera is achieved.

Pan/tilt/zoom control is restricted, by permitting only limited access to specific camera(s) etc. by remote users at the four CSCC's and the two hundred and fifty RO's.

