





Introduction

NetEye Gold is a family of products that offer the most cost-effective solution for remote alarm verification requirements. Video and Audio are transmitted through regular analog telephone lines automatically upon alarm activation or on demand, by calling to a site with the help of a PC with a standard modem.

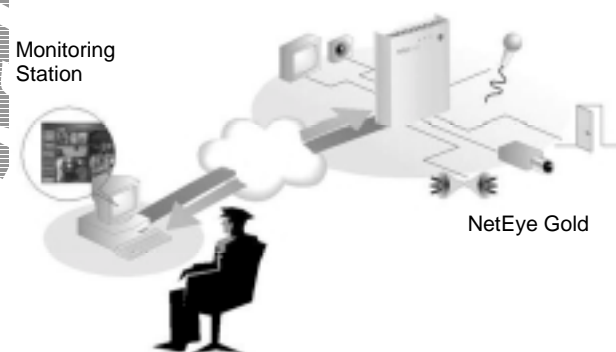
Video and Audio streams from the remote locations can be viewed and heard at a remote PC using the **Video Shield Monitoring Station** application, a part of the innovative Video Shield product (detailed information exists at <http://www.vdomain.com>). The product consists of a remote unit that includes all the video and audio acquisition, compression and transmission modules as well as alarm trigger inputs and dry contact outputs.

NetEye Gold is a fully stand-alone computer optimized for Video and Audio remote surveillance and observation. The **NetEye Gold** incorporates state-of-the-art technologies together with a powerful multimedia processor. The product is powered by an AC wall adapter and an optional backup battery.

-  Supports **up to 8 cameras, 8 alarm triggers and 8 external devices**. Easy and on-the-fly peripheral management is available using the remote software.
-  **2 Video outputs**. Each one of the 8 cameras can be connected independently to 2 outputs. The first output is a reserved digital output. The second output can be used for viewing sequenced cameras on an external monitor, without interfering with the video transmission process.
-  **Internal 8x1 Audio matrix**. Each one of the 8 audio inputs can be connected to the internal audio processing module. These inputs can also be all mixed together.
-  **VideoShield Monitoring Station**: Works with our field-proven, feature rich application today used worldwide with our PC based **VideoShield** product. Monitor cameras video and audio, retrieve alarm snapshots, records movies, maintain debriefing information of unlimited multiple sites and much more features. Work with the same user-friendly interfaces with PC based and Stand-alone based protected sites.

Method of Operation

The video and audio input signals are digitized by the video and audio decoders, and then transferred to the multimedia processor. Taking advantages of the processor real-time multimedia-processing engine, the source image is smoothly scaled down to a size that matches the common requirements of the users. The two digital streams are compressed in real-time and sent over the communication link to a remote observation system.



The processor also decompresses received audio stream from the remote station, and plays it to the speaker output.

Arbitrary remote requests for snapshots can be processed concurrently. The processor can perform still compression on the digitized video input, and send it to the observation site, without interfering the running process of the video and audio stream transmission.

Monitoring and control of the general purpose I/O for alarm detection, relays control, camera switching and audio mixing, is also performed concurrently.

The grabbed video stream can also be recorded to a file while the video stream is displayed on the Windows desktop area at the remote site. Snapshots are also recorded in event files, all handled graphically and displayed to the user in a friendly manner.

Modes of operation

Disarm	Monitoring station can dial for distant monitoring of any camera view. Relays activation. Remote setup and updating.
Arm	Automatic pre and post alarm video captures on alarm trigger. Automatic call on alarm. Up to 4 telephone numbers. Also accepts incoming calls.

Video

Streaming video image size	QCIF- 176x144 CIF- 352x288
Frame rate (for 56K modem)	QCIF Up to 20 FPS CIF more than 10 FPS
Video inputs	Up to 8 composite video inputs using BNC connectors.
Input signal	Composite video (CVBS)
Input impedance	75 Ohm or High-Z (Selectable)
Video standard	EIA/CCIR, NTSC and PAL, B/W and Color
Video output	1 BNC connector for displaying digital video generated by the processing unit (reserved for future use).
Video output pass through	1 BNC connector for software-controlled video pass-through, cycling all the 8-video inputs.

Audio

Audio quality	Same as telephone quality
Communication	Full duplex digital stream
Audio inputs	Up to 8 RCA connectors for software controlled audio-in, selectable out of any of the 8 inputs or all mixed.
Input signal	Base band
Input impedance	Line level
Audio output	1 RCA connector, line level (1V Peak to Peak).

Communication

Modem device	Internal PCMCIA 56K included in the package. Also supports various external modems through RS232 port such as the Siemens M20 GSM Terminal.
Line interface	RJ11

Terminal Block General Purpose I/O

Inputs	8 inputs, isolated by an opto-coupler, can be used for alarm triggering
Outputs	8 software controlled relays, dry contact.
Control Panel Arm/Disarm	Non-isolated input for Control Panel ARM/DISARM signal, pulse driven.

Internal Optional Expansion Modules

PCMCIA slots	2 Type-2 PCMCIA connectors used for connecting a PCMCIA expansion Boards.
RS 232/485	2 Standard DB-9 female connectors. The external port can be configured to support RS485.
Optional backup battery	Backup Battery connection, can be used with LiO, NiCd, or NiMH rechargeable batteries

Miscellaneous

Real-time clock	On-board real-time clocks for internal clock management and time stamping of alarm events.
Watch Dog	Automatic crash recovery circuit.
Test switch	Diagnostics switch
Factory default	Reset to factory default switch



Monitoring Station Requirements

Minimum system requirements are as follows:

CPU	Pentium II 230Mhz or higher.
RAM	32 Mega bytes recommended
Graphic Adapter	VGA adapter with at least 16 bit color depth
Display resolution	800x600, 16 bit colors depth minimum.
Sound card	Standard Full Duplex Windows sound card.
Modem	Windows compatible modem
Operating systems	Windows 95, Windows 98 Windows NT 4.0 or Windows 2000

Preliminary