

NITRO



VOISYS AUDIO INTELLIGENT ANALYSIS SYSTEM



VOISYS AUDIO INTELLIGENT ANALYSIS MATRIX CONTROLLING SYSTEM

Audio analysis matrix control system is totally new designed security management system, it focuses on the audio source detection, audio signal analysis, alarm triggering, and system integration. NITRO Security is the first manufacturer introducing the VOISYS intelligent audio analysis system in the world, the audio alarm analyzer can act as microphone to capture the audio source and can detect the strength of that source for providing alarm output triggering, this can be used for other third party system integration. The complete VOISYS system composes of GS-AID Audio Alarm Analyzer, GS-ADD Audio Matrix Controller and GS-AIM Audio Intelligent Manager.



GS-AID
Audio Alarm Analyzer



GS-ADD
Audio Matrix Controller



GS-AIM
USP Audio Intelligent Manager

Product Features

GS-AID Audio Alarm Analyzer



GS-AID Audio Alarm Analyzer consists of an internal microphone, specific audio analysis CPU and device setting dip-switch. The algorithm allows self-learning and adaptation to different environmental noise.

GS-ADD Audio Matrix Controller



GS-ADD Audio Matrix Controller receives both audio and alarm signal from the GS-AID Audio Alarm Analyzer and then acts as a complete audio matrix and alarm processing system. The system is able to work together with other video matrix system and integrate with other third party devices.

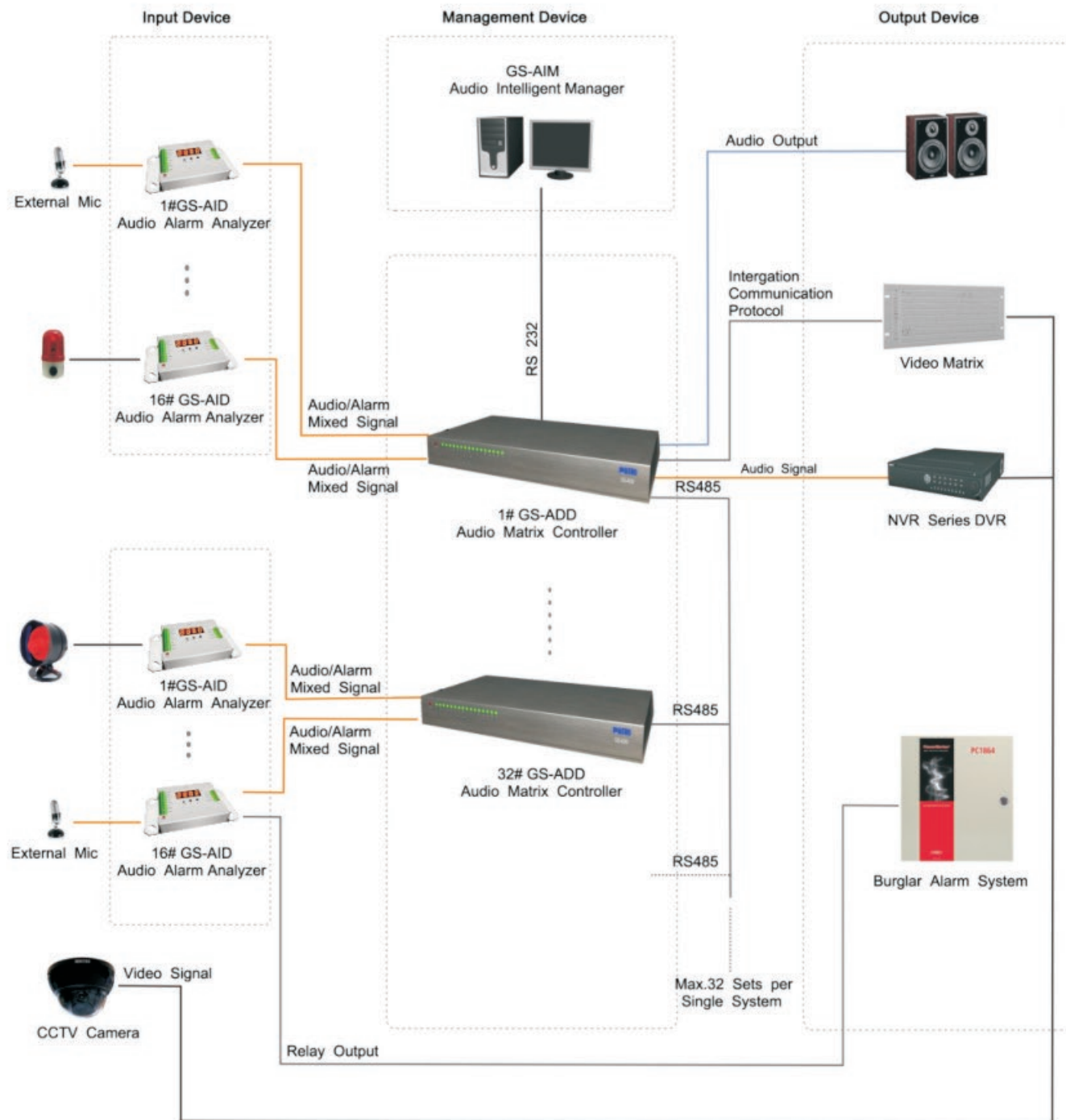
GS-AIM USP Audio Intelligent Manager



GS-AIM Audio Intelligent Manager is the system management and alarm monitoring platform. The platform connects to GS-ADD Audio Matrix Controller via RS232 interface. It also allows set up of groups of GS-ADD controllers. -

- Built-in Audio Analysis CPU;
- Support Multiple Audio Alarm Mode :
 - Max. Audio Source Level Mode
 - Environmental Background Noise Analysis Mode with Auto Self - Learning Operation
 - Combined Audio Analysis Mode ;
- Support Alarm Sensitivity Adjustment;
- Support Audio Input Gain Control;
- Alarm Audio Output Options :
 - Local Alarm Output : NC/NO Relay Output ;
 - Remote Alarm Output : Connection to GS-ADD Audio Matrix Controller via Audio Signal Cable; Providing Audio Channel Switching and Audio Alarm Status Monitoring Functions;
- Provide Audio Signal Output to Other Audio Input Device, eg. Audio Recording for DVR;
- Provide Specific External Microphone for Suitable Audio Detection;
- Max. Audio Signal Transmission Distance: 2000 meters
- Audio Signal Detection Range : 75db ~ 125db
- Power Input : DC 12V ±10%
- Audio Input Channel : 16 Ch
- Audio Loop Out : 16 Ch
- Audio Output Channel : 8 Ch
 - 7 Ch Single Audio Output
 - 1Ch Mixed Audio Output
- Alarm Status Output Port : RS232
- System Communication Port : RS485
- Third Party Integration Options :
 - NO/NC Relay Output;
- Alarm Status Monitoring - Zone Arm, Zone Disarm and Zone Bypass;
- System Structure : GS-ADD System Group, Partition and Zone;
- Multi-layer E-Map with Alarm Event Pop-Up;
- Each GS-ADD System Group supports up to 128 group of Mixed Audio Input Setting and Switching ;
- Alarm Audio Output Options :
 - RS485 : Support User Define Protocol Setting ;
- Audio Spot for Local System Maintenance : 1 Ch
- 16 Bi-colour Status LED : Red (Alarm)/ Green (Normal)/ NA (By-pass/Failed)
- Power Input : DC 12V ±10%
- Each GS-ADD System Group supports up to 512 Zone, system can be upgraded by extending the number of GS-ADD System Groups ;
- Support Manual and Auto Zone Arm/Disarm ;
- Support Third Party Integration Interface ;
- Support GUI Virtual Keyboard for easy operation ;
- Multiple Operator Access Level;
- Operating System : Microsoft® Windows XP
- Database : MSDE or Microsoft SQL Server 2000

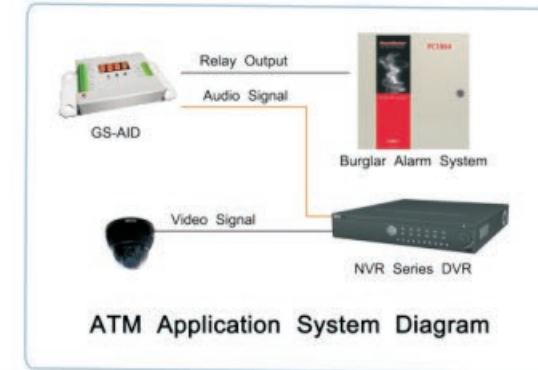
System Diagram



Audio Source is fed to the GS-AID Audio Alarm Analyzer using its internal or external MIC, The internal CPU will process the signal analysis section and trigger the alarm output signal if necessary. The audio will and alarm signals are sent to GS-ADD audio matrix controller. GS-ADD provides audio loop output and audio matrix switching output, these outputs are designed for looping out to video matrix controllers, third party audio recording and/or integrating with other system.

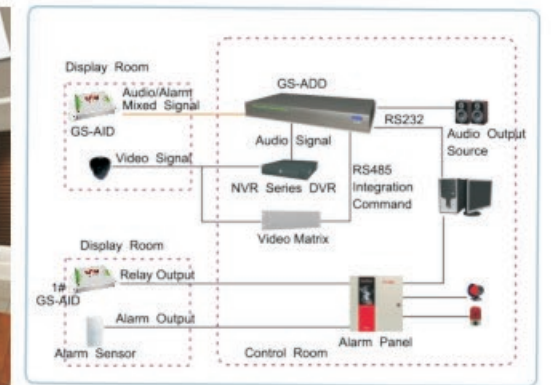
ATM Application

For Self-Service Banking Centres, detection of exceptional audio activities allows quick pre-alert warning. This form of pre-alert warning is intentional to assist Duty Guards in identifying potential distress situation which may be a crime in action. The VOISYS audio analysis system can quickly detect audio distress and draw attention specific Duty Guards. While a conventional alarm system may not be able to detect such cases for protection, whereas the VOISYS audio analysis system can act as the prealert warning signal to enhance the usage of CCTV surveillance system. If the alarm monitoring centre receives the pre-alert warning, they can be able to take immediate response for the cases with the help of remote CCTV video.



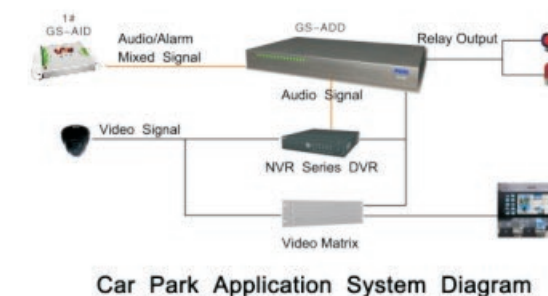
Museum Application

High value antiques and exhibits are worthy of such having special protection in the museum. Apart from traditional intrusion prevention, audio monitoring can also provide quick environmental noise scan which is useful for getting evidence of the events. The GS-AID audio alarm analyzer can be used in standalone mode for integrating with the video pop-up function of DVR and the alarm triggering function of the burglar alarm system.



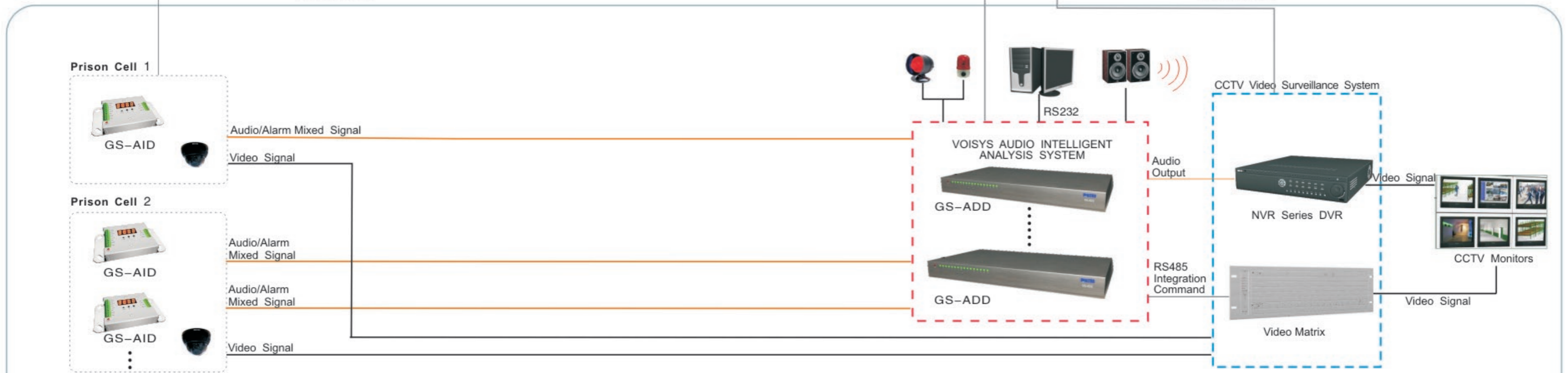
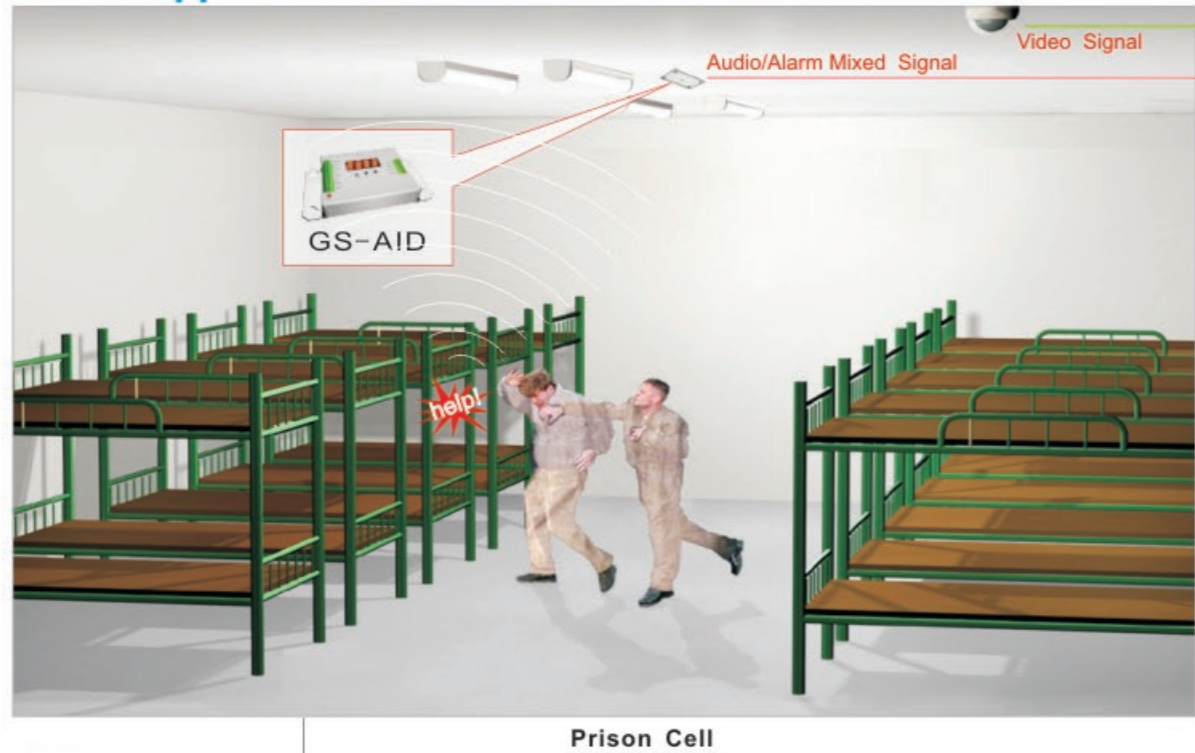
Car Park Application

Vast indoor underground car park area is not easy to be monitored by only the CCTV system, as the car park can be a huge area and the alarm system inside the car cannot provide any obvious visual indication to the CCTV system. In order to provide the actual pre-alert to the security guard, audio alarm input with video pop-up is a very effective way for prevention of car stealing and notification of car accident cases. Property management company can reduce man-hours or resources in patrolling and can reduce some of the legal liability if any accidental cases happen.



Car Park Application System Diagram

Prison Application



CCTV video surveillance system is commonly used in prison, and there are so many cameras used in the system. Such huge amount of cameras cannot be monitored at the same time easily. With the help of VOISYS system, warden can be able to check if there is any commotion in the prison cell. The system can be operated with the functions as below.

- in the case of having any abnormal sound in the prison cell, GS-AID detects the noise signal and then gives out alarm output after signal processing finished;
- activating the siren for alarm notification;
- sending the audio alarm for integrating the CCTV system, and then performing the video and audio live monitoring;
- acting as a multi channel audio matrix system via different combination of GS-ADD system;
- mixing multiple audio source from GS-AID analyzers, so as to perform the audio monitoring for complete area.



VOISYS

YOUR EFFECTIVE ALARM MONITORING SYSTEM



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