

Real Time Video Prosecution Unit

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ABSTRACT: *There is an alarming increase in crime rate all over the world. Considering this increase in general social problems, security has become more vital for every nation of the world, and for this reason, new security ideas are born on daily basis to solve this world menace.*

Real Time Video Prosecution Unit consists of a DVR System embedded to the WTMD main board, the camera assembly, camera and the SD Card storage media as well as the TC Out video connection sockets. Alarmed visitors images/video are automatically captured with a time-stamp and saved on 2 GB SD Card, up to ~30 000 images. System allows recording of all Visitors/Alarmed Visitors only with a time-stamp and queue number.

Keywords: *Video, Security, DVR, Camera, Storage Media, etc*

I. INTRODUCTION

The world has grown advanced enough to monitor crime at the instance it is being committed without allowing for any human witness to testify either for or against the accused, and also without giving the criminal any chance to escape after his criminal activities.

The Real Time Video Prosecution Unit works in such a way that it can follow a committer from the point of entering its target environment, records his activities and stores in real time, capable of dating back to it when the need arises.

With this technology being on 24/7 basis, the work of the human police is really minimized and well supplemented. Again, it is believed that some security authorities compromise sometimes, setting a guilty man free or punishing an innocent person. With this technology providing excellent evidence, only the right thing will be done in terms of punishing or setting a criminal free.

Another important motivation of this work is the idea of down-tracking people who travel far away from their cities to commit crimes in another area, believing there is no way to identify them. This technology has come to prove these set of people wrong as they will be caught at the instance of the action, and if for any reason escape, their video record will be used to track them down as it will be sent across to police in every junctions. With this technology, it will be very difficult for some prohibited or arms to be taken into some security conscious areas. The system will automatically detect it and sends signals for an action to be taken immediately.

II. APPLICATION

SIIE AMH1000 is an 18 detection zone high security walk-through arm detector with camera with picture & video capture function, when people pass through it, it can detect any small mass metal from head to toes, manually we can adjust its sensitivities for high sensitivity or low sensitivity to detect a small metal or a big metal. It is used widely in loss prevention and security inspection, such as: used in airports, courts, prisons, customhouse, gym places, plating factory, exhibition sites, electronic factory, hardware factory, amusement place, casino, seaports, military bases, embassies, and so on. It inspects persons, hand-held luggages & parcels, and can locate a small metal, IED-device, weapons, parts of weapons, bomb, etc., can also detect drugs packed with Tin Foil paper.

2.1 Connect a camera and a computer system:

SIIE Model No. AMH1000 is a long-distance surveillance body and metal detector with a camera, it has high-precision detection, and it has eighteen detection zones in metal detection, it is complete security detection & multi-zone alarm display, its output signal will connect to a computer, the system can achieve remote video surveillance and photos, and be on-site, may not need staff on duty.

2.1 Alarm Ways of the System

When the illegal metal on body is detected, its alarm voice and LED light show position will be given out, its camera can photograph immediately automatically, the human picture can be watched, captured and saved in the hard disc of this computer. Image storing: real time to store any image & process it in operational status. Image archiving: minimum 20000 images, installation standard hard disk: 500GB. Optional: a computer and hard disc capacity. Optional: Backup power supply: uninterruptible power supply (UPS) for two ~ three hours work.

III. FEATURE

1. Complete security detection, multi-zone warning display position, very high discrimination and detection speed, high immunity to external interferences. High reliability with double LED position alert. Alarm zones from head to toe are displayed in two sides of this door. Overall gate sensitivity adjustment for 100 grades, and each zone can also be individual adjustment sensitivity for 100 grades. Highly visible double display: Provide multiple location of weapons in transit.
2. Automatic calculating passer number and alarm number functions show on its top front operational panel, LED show digits. It has induction to all metals and has intelligentized recognising processing functions. Automatic checking and recovery function. It has 18 detecting areas, when carrying any small mass metal passes through it, it can detect this metal, its alarm will be given out, you can get an accurate warning location. Objective location alarm lights are displayed in two sides of this door. Outer adjustment sensitivity by hand.
3. Operating parameters can be set freely by remote control, (Optional). The parameters can be set for protection by the password, allows only responsible managing personnel to operate, to prevent unauthorized people from changing the parameters, no periodic calibration, no maintenance.

IV. TECHNICAL DATA

Sensitivity: 100 grade adjustment. Power supply: 100V ~ 240V ($\pm 10\%$), 50 / 60Hz. Power: 35W. Net weight: about 85kgs. Work environment: $-20^{\circ}\text{C} \sim 55^{\circ}\text{C}$. Overall exterior gate dimension: 2220 (H) * 830 (W) * 600 or 700 (depth) mm. Gate passageway interior dimension: 2000 (H) * 700 (W) * 600 or 700 (depth) mm through input rate 60 detection per minute.

Sensitivity adjustment program: adjustable from 100 steps. Fault Indication is automatic fault diagnostic. Calibration is internal automatic adjustment, outer manual adjustment.

Safety: High safety, good applicability, high sensitivity, and no harm to cardiac pace-maker carrier, pregnant women, floppy disc, film, video tape etc.. Storage image and data can be stored more than 10000 photos.

Programs: Five (5) independent programs designed to meet all installation. Indicator lights: International symbols located at entrance, all zones will be displayed with two independent columns of LED located on exit side. Interface rejection will be immune from external radio interference noise should have the provision for compensation of adjacent static metal. Alarms are Sound & light Archive features: AMH1000 WTMD has provision to interfacing systems for Real -Time video prosecution unit enabling recording Alarmed visitors' pictures / all visitors' pictures or video with time stamp to SD card and/or remote PC control system for sending / receiving change setting of audio visual alarms and for logging into hard disk. Number of detection zone will be multi zone with 18 Detection zones (consisting of both vertical and horizontal zones).

4.1 Technical standards:

1. Conform to EN 60950-1:2006+A11:2009 product safety international standard. Conform to EN 55011:2009 and EN 61326-1:2006 product safety international standards. Conform to EN61000-3-2:2006+A2:2009 and EN61000-3-3:2008 product safety international standards.
2. Conform to EN 61000-6-1:2007 product immunity international standard and radiation conforms to EN 61000-6-3:2007 product emission international standard. Be harmless to pregnant women and magnetic storage media.
3. Conform to existing walk-through metal detector GB15210-2003 standard. Conform to FAA 3 - gun testing standards & NILECJ-0601-00 safety standards.
4. European CE & EMC international security standard certificates.



V. WHERE TO USE

- Airports, seaports and public transportations
- Banks and financial institutions
- Schools and sports stadiums
- Churches and lecture halls
- Hospital ER and MRI room
- Hotels, conference centers and casinos
- Courthouses, police facilities and government
- Prisons and jails
- Embassies and broadcast studios
- Power plant and research center
- Military bases

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