NetWatch® Intelligent Video Solutions

Advanced Research & Technology Ltd

MIST™ Moving Image Separation Technology

Imagery Library for Intelligent Detection Systems
Sterile Zone Monitoring
2013 Evaluation
Advanced Research & Technology
Netwatch MIST
Version 10.9

CPNI® Centre for the Protection of National Infrastructure

MIST is a leading object detection and target tracking system capable of providing an early indication of intrusion from targets approaching, entering or moving through restricted areas. MIST is an approved CPNI iLIDS Primary detection system and is included in the Catalogue of Security Equipment (CSE).

MIST detects and classifies objects, if these objects conform to strict rules they become targets which are then tracked. A target that interacts with 'Virtual Sensors' placed in the video image, cause the system to raise an alert.

Alarms are presented to the operator both visually and audibly. The system also makes available, to the operator, a clear and precise visual historic record of the cause of the alert, pre through to post event.

Used in conjunction with the NetWatch CCTV product range, MIST can activate hi-resolution normal vision PTZ cameras to home in on and record the virtual sensor activation. AR&T provide a comprehensive SDK for third party developers that allows MIST to offer the same level of functionality to their Control Station Clients.

MIST can operate with multiple targets, showing tracks of past positions and predicted future routes based on general heading and speed. Path prediction maintains object tracking even when an object is temporarily obscured or target collision occurs.

User Benefits

- Fully integrated with the NetWatch product range
- Compatible with most Visual Spectrum & Thermal Imaging cameras
- Operator notification when Tracked targets interact with Virtual Sensors
- Detection rules configurable to suit user application requirements
- Extremely low false trigger rate
- Extremely high detection rate
- Improved site vigilance
- Minimal operator interaction required
- Quicker response to potential threats
- Reduced operating costs

When equipped with TI cameras, MIST detectors can provide reliable 24-hour intruder detection under all weather conditions on land, sea and air at ranges of up to 30kM.

Applications include: asset protection, long range target approach, search and rescue, process control.

In conjunction with NetWatch and or third party SDK runtime clients, MIST can be built into large corporate or military networks. Such systems can then detect remote events and distribute the resulting video data to all locations on the network.

All the surveillance system management tools available with other NetWatch products are equally applicable to MIST. MIST servers may be retrofitted to existing video systems to improve performance and reduce operator stress. The visual displays are easy to understand and simple to operate

AR&T engineers support our clients in the project design stages through to commissioning MIST systems on the end user sites. AR&T provide training and support for all of our products.

Contact: Sales *Tel: 01489 892030 Email:sales@ar-t.co.uk Web:www.ar-t.co.uk*

NetWatch® *Intelligent Video Solutions*

Advanced Research & Technology Ltd

MISTâ *Continued*

NetWatch MIST

NetWatch MIST is a three stage video analytical engine. The first stage is a noise discriminator and object classifier, this stage is responsible for determining the wanted true objects in the scene and rejecting the background clutter or unwanted subject matter. The second stage is a target classifier, responsible for determining which objects are of interest and rejecting those that are not. The third stage is the virtual sensor rule and target interaction logic engine, it is responsible for determining when a target has violated a specific rule (the cause of an alert) and the resultant conditioned output to convey the violation (the effect of an alert).

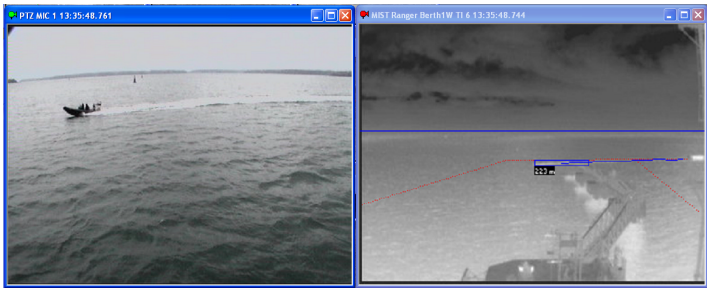
Conditioned Output Responses include:-

- Control Station client visual indication; flashing icon, icon colour changes
- Control Station client audible indication; tones, pre-recorded messages local and PA over IP
- Digital outputs activating, sirens, lights, barriers
- Alert and status notifications to SDK run time clients
- SNMP mib table state changes and alert traps

MIST Classifier Features

Rejection filters:-

- Light scintilation
- Random interference and hum
- Vibration / picture displacement
- Lighting changes
- Water surface movement
- Grass and foliage movement



MIST Target Rule Features

NetWatch MIST has a powerful scripting language built in that allows us to modify and or generate new rules to suit the needs of our clients. The standard rules provided accommodate for the needs of most installation requirements, the following list describes these:-

- Virtual trip wires, uni or omni directional
- Early warning or approach zones
- Detection cages
  - Target entering area – never leaves
  - Target leaving area – acquired in area
  - Target passing through area – authorised
- Loitering zone areas
- Speed trap markers
- Target last known position marker
- Auto PTZ dynamic tracking
- Range, bearing from camera
- Target real world coordinate position

Contact: Sales *Tel: 01489 892030 Email:sales@ar-t.co.uk Web:www.ar-t.co.uk*