



catLite

Digital Surveillance System Entry-level Software

Features:

- User interface optimised for simple operation
- Clean and uncluttered
- Intuitive, responsive dome camera software joystick
- Separate Live and Review desktops
- VCR-like review controls
- Pre-optimised configuration reduces installation and setup time
- Custom system setup options
- Readily upgradeable



www.cathexis.co.za

catLite: The entry-level software for the Digital Surveillance System (DSS) range of products.



Standard features

- Connects seamlessly with **catPro**, **catSite**, **catBase** and **catAlarm**
- Software upgradeable via removable media or remote connection
- Synchronised video and audio recording (MPEG card option)
- Single, consolidated database
- Advanced motion detection event trigger
- Continuous time-lapse recording
- Remote unit management with system health status reporting
- Mouse control of dome cameras
- Optional video cards: VOM-1400/1500 video capture and scaling module (JPEG), VOM-2000/2100 wavelet video only module, AVM-3000/3100 MPEG audio and video module



Digital surveillance & beyond

Cathexis Technologies (Pty) Ltd • PO Box 1091 • Umhlanga • 4320 • KwaZulu-Natal • South Africa
1 Frosterley Crescent • Frosterley Park • La Lucia Ridge Office Park • 4051 • KwaZulu-Natal • South Africa
Tel: +27 (31) 566 7800 • Fax: +27 (31) 566 2993 • e-mail: info@cathexis.co.za

“Event” recording saves resources and storage space

Efficient use of resources and storage space by recording *only* the events of interest - the system remains passive until a “trigger” causes it to take “action”.

Time-triggered recordings enable time-lapse sequences

“Continuous recording” for cameras can produce time-lapse recordings of changes over time.

Alarm notification by remote connection

The system can be configured to contact one of four base stations (control rooms) with a technical fault or event alarm.

Simple Event Setup

Each event can be triggered by one configurable activity detection trigger or one hardware input. Pre-events (images captured prior to the event trigger), recording duration and the number of images per second can be set on the same screen, with the system automatically adjusting the recording settings for a realistic display of what is possible per video card.

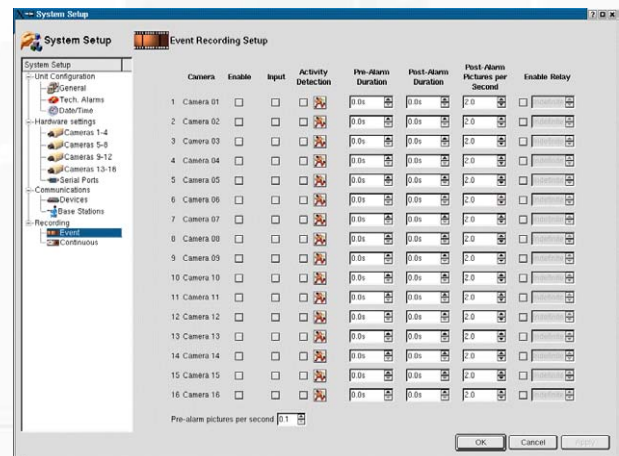
A relay can be set to switch for each event (e.g. for automatically switching lights, buzzers, doors or sirens).

Toggle Function User Interface



Review interface with review controls and analogue output controls

Logically Arranged Software Setup



Event recording setup, with 16 configurable events

Toggle between Live View mode and Review mode with the click of a button. Divide the camera display area into smaller display areas to display from 1 to 16 cameras simultaneously.

Simple setup screen with a vertical navigation pane to configure general system parameters, technical alarms, date/time, cameras, devices, base stations, event recording and continuous recording.

Simple Configuration

catLite enables a wide range of retail and industrial applications because it is customisable in its configuration, functions, hardware, graphical user interface, software modules and language

- Configurable as a recording or control station
- Different video cards provide options on recording speed and quality.
- Optional number and type of fixed or dome cameras
- Up to 4 hard drives (the single database will span all available space across the drives)
- Archiving to USB Key, internal CD Writer, or USB (portable) CD Writer
- Databases can be manually or automatically backed up to external USB hard drive
- Standard types of “triggers” that initiate a system response include
 - Digital video motion detection
 - Input on an I/O Card
- Types of “actions” that the system can take based on specific triggers include
 - Record single images at up to 25 ips (images per second) PAL / 30 ips NTSC
 - Enable a relay output to perform an action
- Additional special features may be unlocked with a simple software key, obtainable under license.

Strong technical support ensures proper system application

Support facilities include:

- Automatic supply of software upgrades distributed to remote machines electronically via TCP/IP or dialup.
- Complete remote system diagnostics - it is possible to have remote software configuration, diagnostics, maintenance, and upgrades performed directly by the product developer.
- Email-based Support Desk
- Website downloads

System stability enables reliable automation

This stability is essential for applications that rely on strongly automated functions. It is based on:

- Cohesive integration of the software into the NetBSD operating system
- Built-in tests perform continual self-diagnosis, ensuring that the system is quickly aware of anomalies or dysfunctions
- A Watchdog timer that auto-reboots the system

Remote operation and management

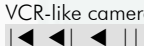
Given remote communications from either Windows PC or Digital Surveillance System, users can connect to remote units *from anywhere in the world* and

- | | | |
|---------------------------------|----------------------------------|---|
| • Configure events | • Enable dialup technical alarms | • Diagnose |
| • Fetch reports | • Replay recordings | • Upgrade software |
| • View live camera (with audio) | • Run camera tours | • Control dome cameras via PTZ controls |
| • Download recordings | | |

Financial benefits

Installation of catLite can result in financial benefits, including:

- Reduced maintenance, personnel and training costs
- Improved levels of customer service
- Increased profit

Specifications			
Model		Operating System	
CAT-4000 catLite Digital Surveillance System Entry-level Software		NetBSD 1.6.1	
Screen Display			
1-16 cameras display	Different configurations of 1-16 cameras can be displayed	Review controls	VCR-like camera review controls include:  , speed slider, manipulate image, search by time, display on monitor, archive
Fast resize	Camera views can be resized with simple mouse clicks		
Video			
General	<ul style="list-style-type: none"> • Digital video transmit, record, playback • Up to 4 independent video processing channels. 	Resolution	<ul style="list-style-type: none"> • Recording resolution is 720x288 single field • Remote display in Hi, Lo, B/W or H263
Video std	CCIR/PAL and EIA/NTSC	Video Card options	<ul style="list-style-type: none"> • VOM-1400, 1500 JPEG Module • VOM-2000, 2100 Wavelet Video Only Module • AVM-3000, 3100 MPEG Audio and Video module
Compression	JPEG, Wavelet, H263 or MPEG2, depending on AVModule.		
Events and Alarms			
Alarm triggers to initiate system Event actions	<ul style="list-style-type: none"> • Motion detection per camera • 1 input per camera, to a max of 16 	Automated alarm actions by the system	<ul style="list-style-type: none"> • Record a specified image sequence • Record synchronised video and audio (MPEG card only) • Enable 1 relay output per camera, to a max of 16 (close door, switch on lights, activate alarm, etc)
Technical alarm triggers to initiate system actions / remote maintenance team response	<ul style="list-style-type: none"> • Camera failure • Camera lens blockage / focus change • System technical errors 		
Automated Notifications for Technical Alarms	<ul style="list-style-type: none"> • Notification to Operator by audible sound and / or pop-up message • Notification to Control Station / Control Room by means of alarm queue, requiring action and acknowledgement 		
Activity (motion) Detection		Operator Diagnostics and System Monitoring	
Activity Detection	<ul style="list-style-type: none"> • Activity detection on all cameras. • Adjustable in sensitivity. 	Status Log (Sherlock)	Process for operator to export system configuration for emailing to support desk for remote diagnostics.
Advanced Activity Detection	<ul style="list-style-type: none"> • Customisation of algorithm per camera • "Intelligent" detection ignores repetitive movements 	Statistics Display	Dynamic statistics display of numerous system and communications processes.
System Configurations			
Export and Import	A system configuration can be exported or imported, enabling fast repeat set-ups across multiple units	Configuration Display	CPU, RAM, VGA, I/O, AV Modules, Fixed Drives, Peripherals, Removable Drives, Communications, Installed Modules, Framegrabber, Comm Ports, USB, Network.
Load Default	The default system configuration can be reloaded.	Operator and System Logs	Printable Audit Trails of all Operator and System actions

Recording and Playback General Specifications		Communications Optional	
Windows	<ul style="list-style-type: none"> • catViewer enables remote system operation and recording from Windows PC • catPlayer enables replay of recorded data from Windows PC 	General	<ul style="list-style-type: none"> • Remote unit monitoring and recording retrieval • Complete remote unit diagnostics and maintenance • Remote unit list management
Playback Rate	Playback is not video card related; it depends on system processing speed at the time of playback (this varies). Full-frame playback (25 ips PAL, 30 ips NTSC) is normally possible.	Archiving Specifications	
		Data export	<ul style="list-style-type: none"> • Selected recordings to floppy, USB key or CDR/W • Recordings can be saved across multiple disks
Search	<ul style="list-style-type: none"> • Recorded events can be searched by time. • Post-search locates the point at which image changed 	Off-line review	Replay with cat Viewer utility
		USB backup	Manual or automatic database backup to local USB2 hard drive
Recording modes	<ul style="list-style-type: none"> • Recordings can be image sequence, to 25 ips PAL / 30 ips NTSC • Event-controlled in combination with pre-event history, triggered via alarm input or motion • Continuous recording based on images per second. 	Software modules and updates	
		Modules	cat Pro, Digital Surveillance System Professional Software
		Updates	This is an evolving system with regular updates. These can be either remotely or manually installed.
Playback Modes	<ul style="list-style-type: none"> • Image sequence display with time/date • Motion clip replay with frame-by-frame selection and replay speed adjustment. • Local playback or remote over LAN/WAN. 	Archiving with signatures	When an image is archived a unique identifier 20 bytes long is algorithmically hashed onto it. If the image is modified it loses this identifier, and it is theoretically impossible to reproduce the identifier.
		Database	<ul style="list-style-type: none"> • One consolidated database of all available disk space. • No theoretical limit to size
Image Enhance	Replay images may be individually manipulated and enhanced with standard graphic filters for on-screen viewing only.		

Ordering Information

Product Code	Description
CAT-4000	cat Lite, Digital Surveillance System Entry-level Software Note: All software is loaded via an Installation Server
Options (see separate datasheets):	
UPG-5000	Upgrade to cat Pro, Digital Surveillance System Professional Software (see cat Pro datasheet)
CAT-5000	cat Pro, Digital Surveillance System Professional Software (see cat Pro datasheet)