



What's new in this release 7.1?

- MPEG4 (ASP) & H.264 Video Codec: New Video Compression Codecs.
- Video Mask Protection: Sensible Area Protection Filter.
- Advanced Motion Detection: Sensibility Calibration of Motion Detection.
- Scene Change Detection: Intelligent Tamper Prevention of the Camera.
- Control Center: Powerful Centralize Management Application with Remote Setting and Playback.
- Codec Storage Calculator: Precise Storage Analyzer
- PTZ Profile Utility: PTZ Dome's Profile Creator
- Swap HDD Utility: Extend DVR's Storage Manager
- New Profile Management: Fast Backup & Restore Manager
- Spot Monitor: Customize video channels for DSP controller's TV-Output.

Improvement from previous version

- Audio Playback in Smart Search
- 500 Subscribers Support in Center V2
- UPnP NAT, Webcam Remote Control
- New Schedule Planner Management

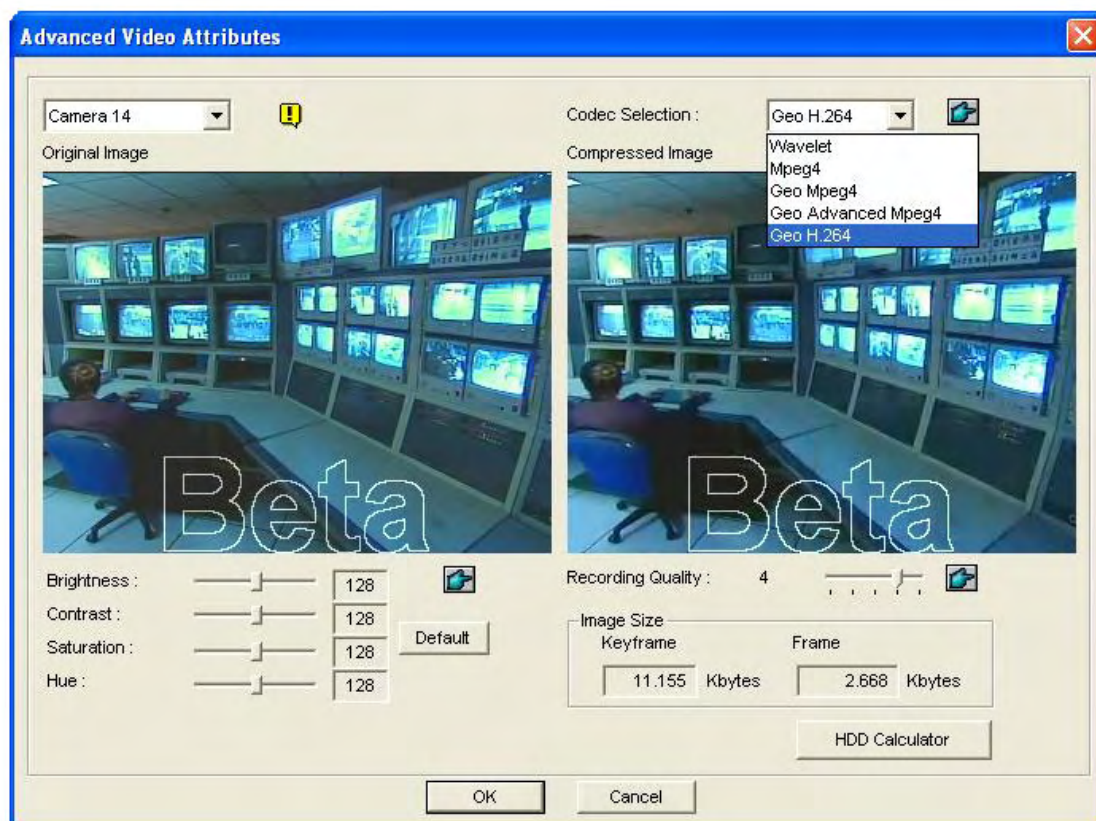
New DVR accessories

- Real-time MPEG4 hardware compression
- Data Capture V2E & POS Live viewer

New video codec Geo Advanced MPEG4 and Geo H.264

Two additional video codecs for compression have been added.

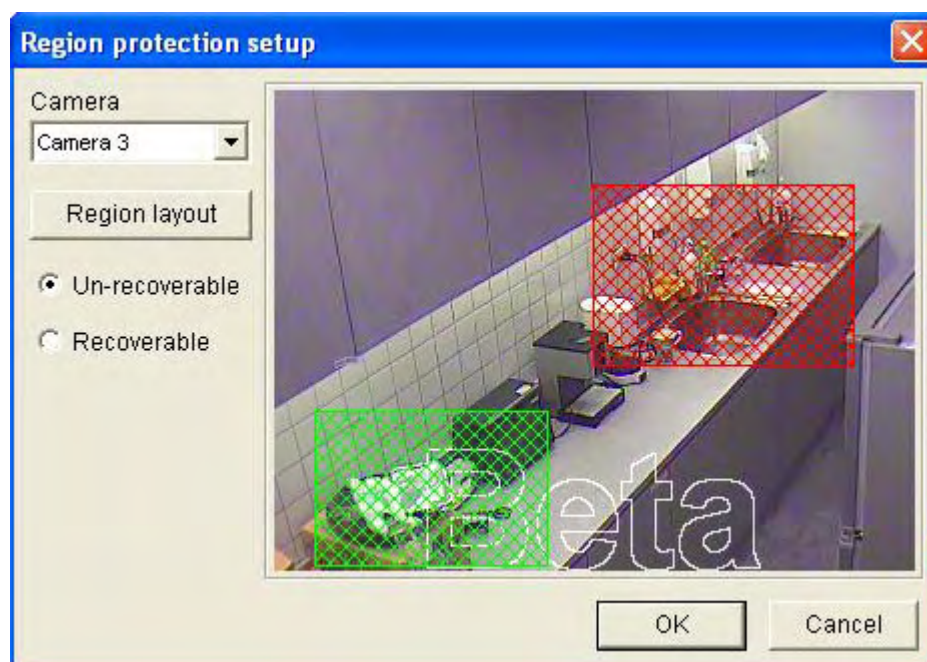
- **Geo Advanced MPEG4**: using Advanced Simple Profile (Defined in MPEG-4 Part 2) compression technique, you can achieve the same quality but using less disk spaces; the compression rate is 1.2~1.5 time compared to Geo MPEG4 Simple Profile.
- **Geo H.264**: using compression technique defined in MPEG-4 Part10, Geo H.264 delivers spectacular quality at remarkably low data rates. This means you see crisp, clear video in much smaller files, saving you bandwidth and storage costs over previous generations of video codecs.



Video Mask Protection

Using video mask protection you can set specific areas not to be viewable during playback, for example during the usage of ATM keypad. There are two methods of video mask protection.

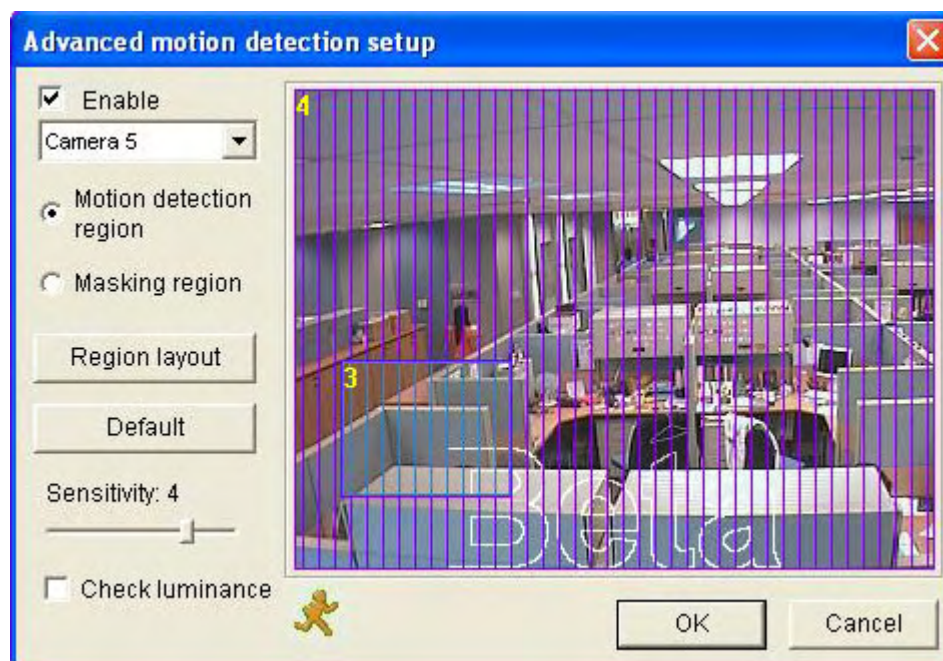
- **Un-recoverable**: The mask region is integrated in video archive and can not be retrievable.
- **Recoverable**: The mask region is password-protected using RSA encryption and is retrievable.



Advanced Motion Detection

Using advanced motion detection you can set sensitivity for a specific area, for example moving objects at large distances or approaching movement.

- **Motion detection region**: Set a region for motion detection and determine the level of sensitivity to use.
- **Masking region**: Set an insensitive region to prevent activation of false alarms.
- **Sensitivity**: Scale from 1 (less) ~5 (more)
- **Check luminance**: Determine the luminosity, if too low motion will be ignored.



Scene Change Detection

Using scene change detection, you can detect malfunction, obstruction or tampering of the camera, by change of the scene or clearness.

Ways of detection:

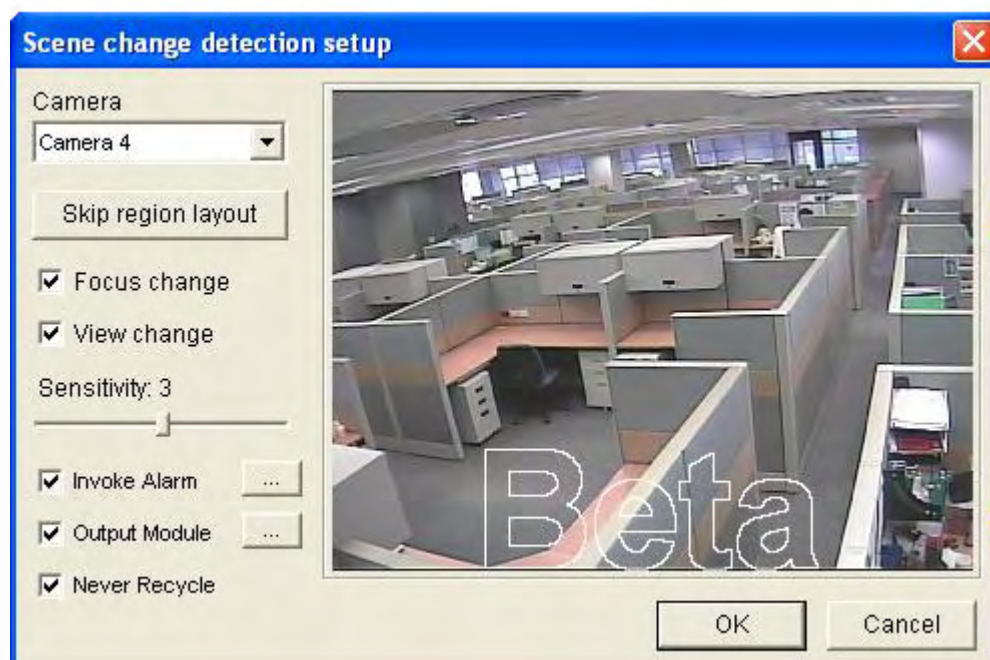
- **Focus change**: When the focus is lost or clarity is changed.
- **View change**: When the scene or panorama is changed.
- **Sensitivity**: Scale from 1 (less) ~5 (more)

Actions to take:

- **Invoke Alarm**: Play an acoustic alert sound (.wav).
- **Output Module**: Trigger predetermines peripherals.

Video file attribute:

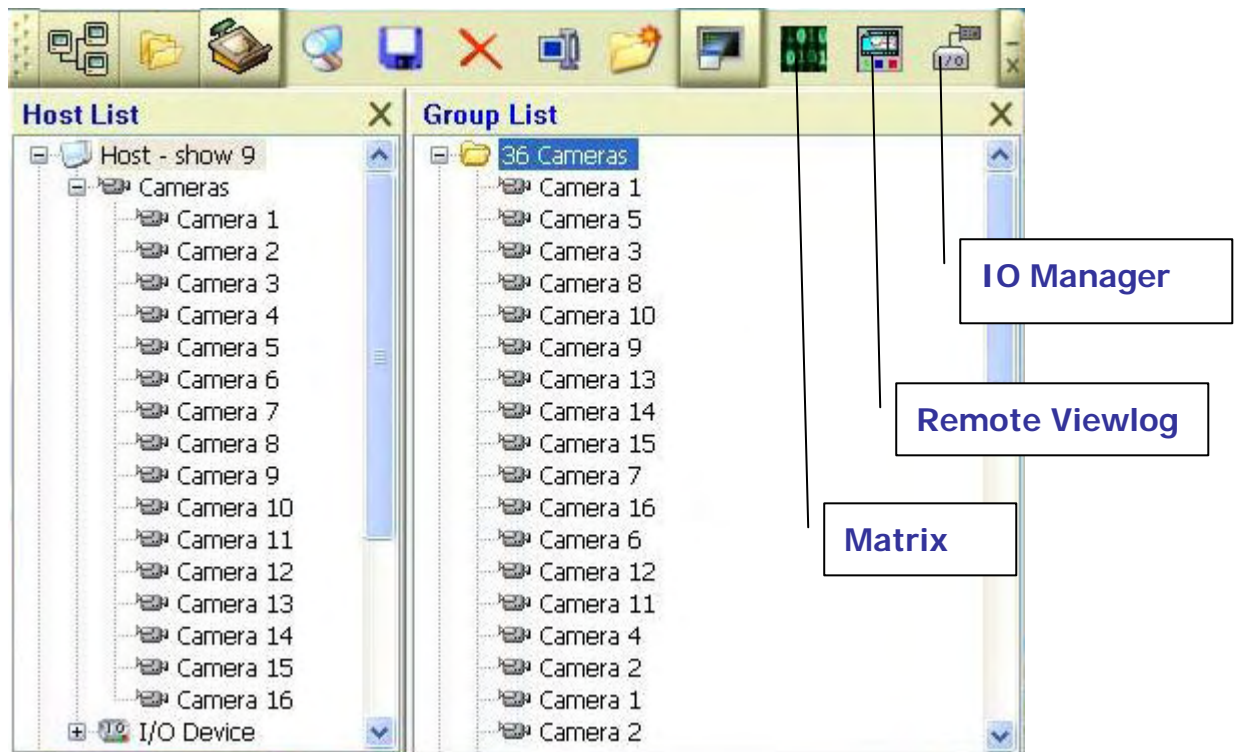
- **Never Recycle**: Prevent overwrite of the video file.



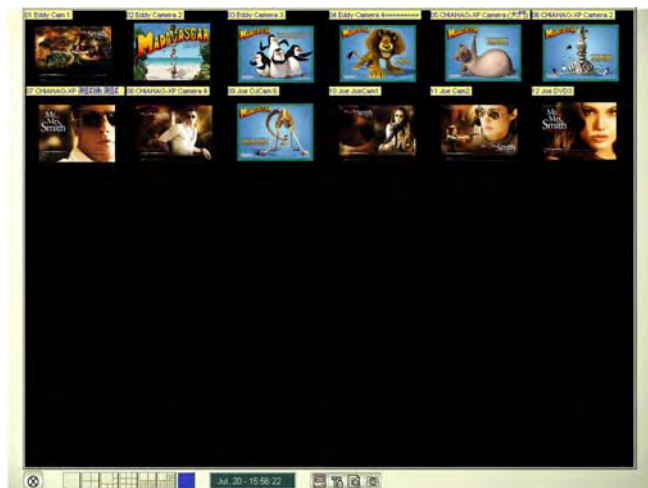
Control Center – Multi-DVR Control Center

In this new release, a new powerful control management application is integrated. Using Multi-DVR Control Center you can:

- Manage multiple DVR System from **one single workstation**.
- Monitor **36 cameras per screen**.
- **I/O Status overview** of all DVR System
- **Video playback** from all DVR System



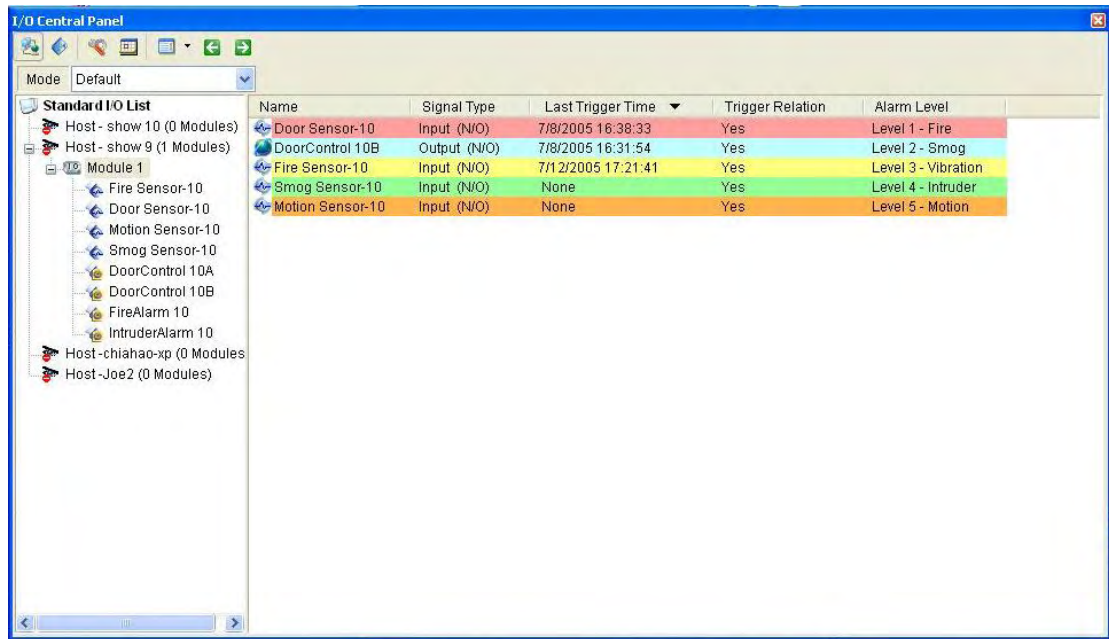
Matrix: This new application let you monitor and administer **36 cameras** per screen.



Remote Viewlog (IP Viewlog): This new application lets you playback all video sequences from the group. (LAN & Internet)

I/O Central Panel: I/O activation by group, by schedule, by trigger

Using I/O Central Panel, you can **group different input/output sensors or alarms**. For example: In case of fire, the smog sensor will trigger the alarm, open the emergency doors, inform the authority, send SMS alert to your cell phone and activate DVR at the scene, all the elements from the group at once.

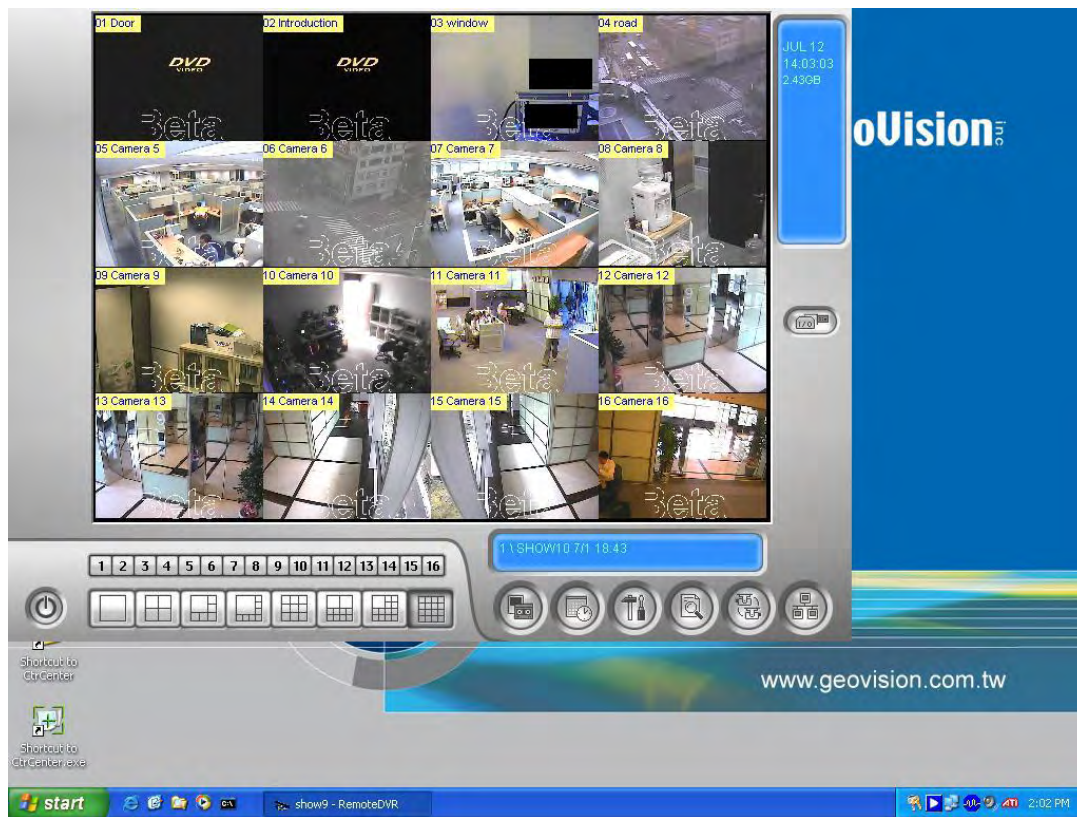


The screenshot shows the 'I/O Central Panel' window. On the left is a tree view under 'Standard I/O List' containing several hosts and a 'Module 1' folder with various sensors and controls. The main area is a table with the following data:

Name	Signal Type	Last Trigger Time	Trigger Relation	Alarm Level
Door Sensor-10	Input (N/O)	7/8/2005 16:38:33	Yes	Level 1 - Fire
DoorControl 10B	Output (N/O)	7/8/2005 16:31:54	Yes	Level 2 - Smog
Fire Sensor-10	Input (N/O)	7/12/2005 17:21:41	Yes	Level 3 - Vibration
Smog Sensor-10	Input (N/O)	None	Yes	Level 4 - Intruder
Motion Sensor-10	Input (N/O)	None	Yes	Level 5 - Motion

Enhanced Windows Remote Desktop & DVR:

The new Remote Desktop is much easier and more effective to manage. You can entirely administer your office DVR system without leaving your home (Remote DVR). It takes less than 180 Kbytes (vs. Windows XP Remote Desktop Connection that needs 2 Mbytes) and supports LAN & WAN.

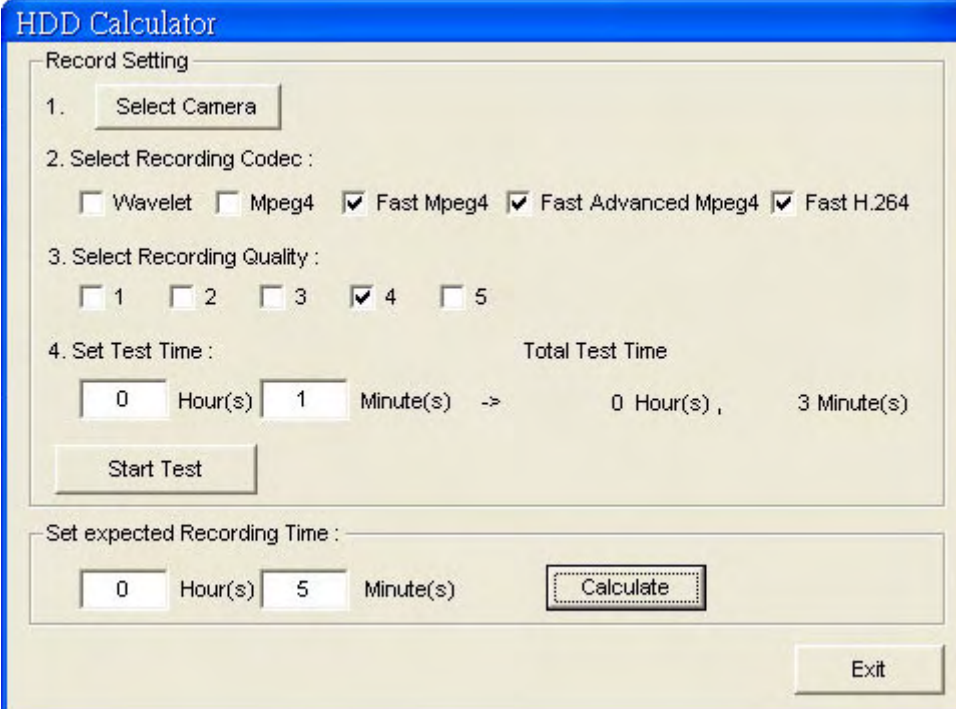


Codec Storage Calculator

Using HDD Calculator you can determine how much storage space is necessary with particular video compression codec. The test result is based on your actual PC configuration.

- **Select Camera**: Test camera selection.
- **Select Recording Codec**: Video compression codec selection.
- **Select Recording Quality**: Scale 1(low)~5(high)
- **Set Test Time**: Test interval (Real-time)

- **Set expected Recording Time**: Result of test time x recording time



The screenshot shows the 'HDD Calculator' application window. It features a 'Record Setting' section with four numbered steps: 1. 'Select Camera' (button), 2. 'Select Recording Codec' (checkboxes for Wavelet, Mpeg4, Fast Mpeg4, Fast Advanced Mpeg4, and Fast H.264), 3. 'Select Recording Quality' (checkboxes for 1, 2, 3, 4, and 5), and 4. 'Set Test Time' (input fields for 0 Hour(s) and 1 Minute(s) resulting in a 'Total Test Time' of 0 Hour(s) and 3 Minute(s)). A 'Start Test' button is located below step 4. Below the 'Record Setting' section is a 'Set expected Recording Time' section with input fields for 0 Hour(s) and 5 Minute(s), and a 'Calculate' button. An 'Exit' button is located at the bottom right of the window.

PTZ profile utility

Using this small utility you can create all the necessities parameters of your PTZ dome to be used with GV-DVR system.

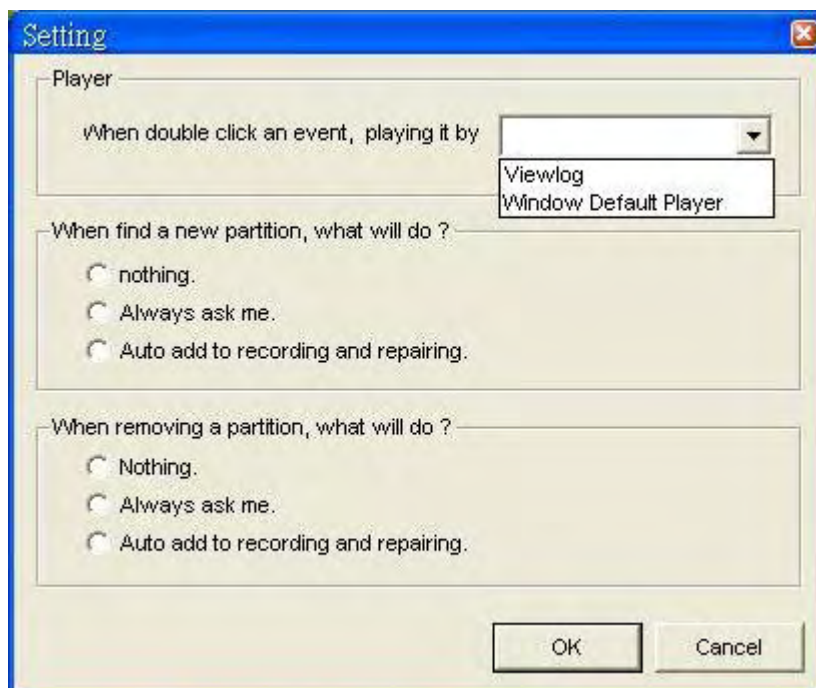
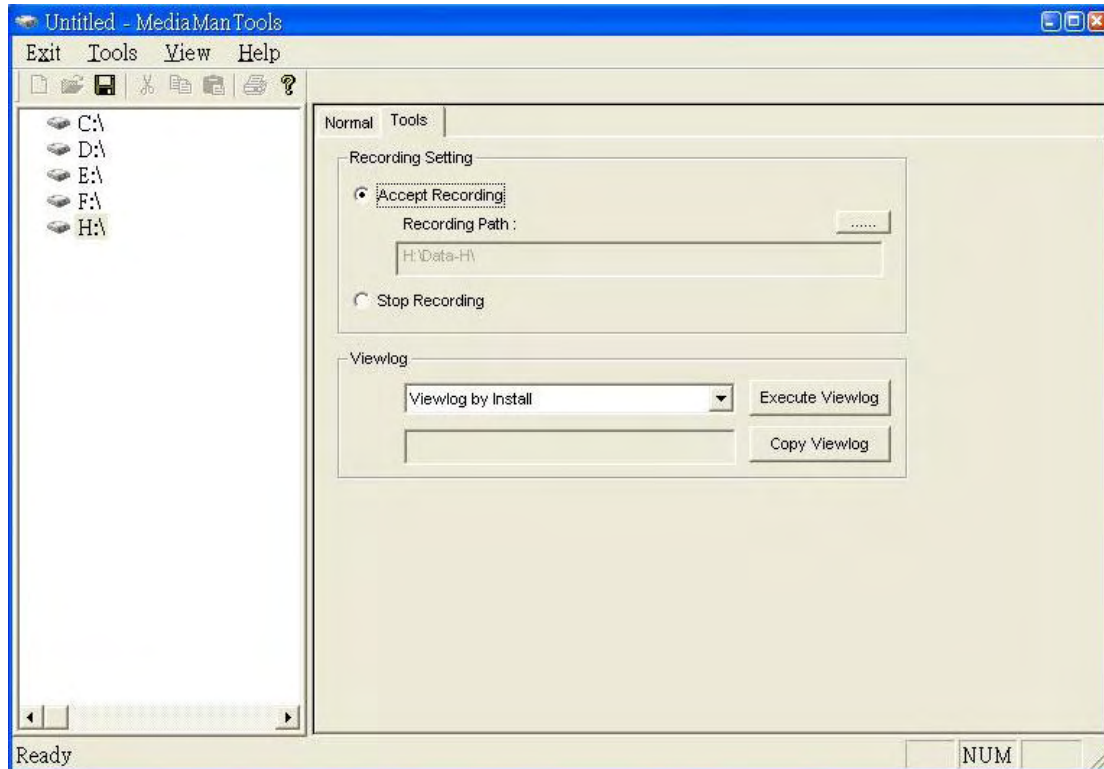
The screenshot shows a software window titled "Command Setting :". It is divided into several sections for configuring PTZ parameters:

- 1. Basic Setup**
 - 1. Baud Rate:** A row of checkboxes for 2400, 4800, 9600, 14400, 19200, 38400, 56000, 57600, 115200, 128000, and 256000.
 - 2. PTZ supported:** A row of checkboxes for Pan, Tilt, Zoom, Focus, Home, Auto Focus, AUX, PT Speed, Auto Speed, Zoom Speed, Preset, Auto Function, Position, and OSD.
 - 3. Stop Bit:** A dropdown menu set to "1".
 - 4. Parity:** A dropdown menu set to "Even".
 - 5. Command Interval:** A text box containing "50" followed by "ms".
 - An "Apply" button is located to the right of the Command Interval field.
- 2. General String and Value Setup**
 - Buttons for "Address Setup", "Preset Setup", "Local Speed Setup", and "Remote Speed Setup".
- 3. User define String and Value Setup**
 - Buttons for "Auto String Setup(Go)", "Auto String Setup(SET)", and "OSD Menu Setup".
- 4. Position Setup**
 - Button for "Position Setup".
- 5. Check Sum Select**
 - Button for "Check Sum Select".
- 6. Command Setup(Please make sure the previous setup(1~5) is set)**
 - Buttons for "General Command Setup" and "Advance Command Setup".

An "Exit" button is located at the bottom right of the window.

Swap HDD Utility

Using **MediaManTools** utility you can easily integrate and extend your DVR storage capacity (**without shutting down DVR System**), by implementation of an additional external enclosure (like USB, Firewire IEEE-1394a/b or Serial ATA)



New Skin, Group Function & Profile Management

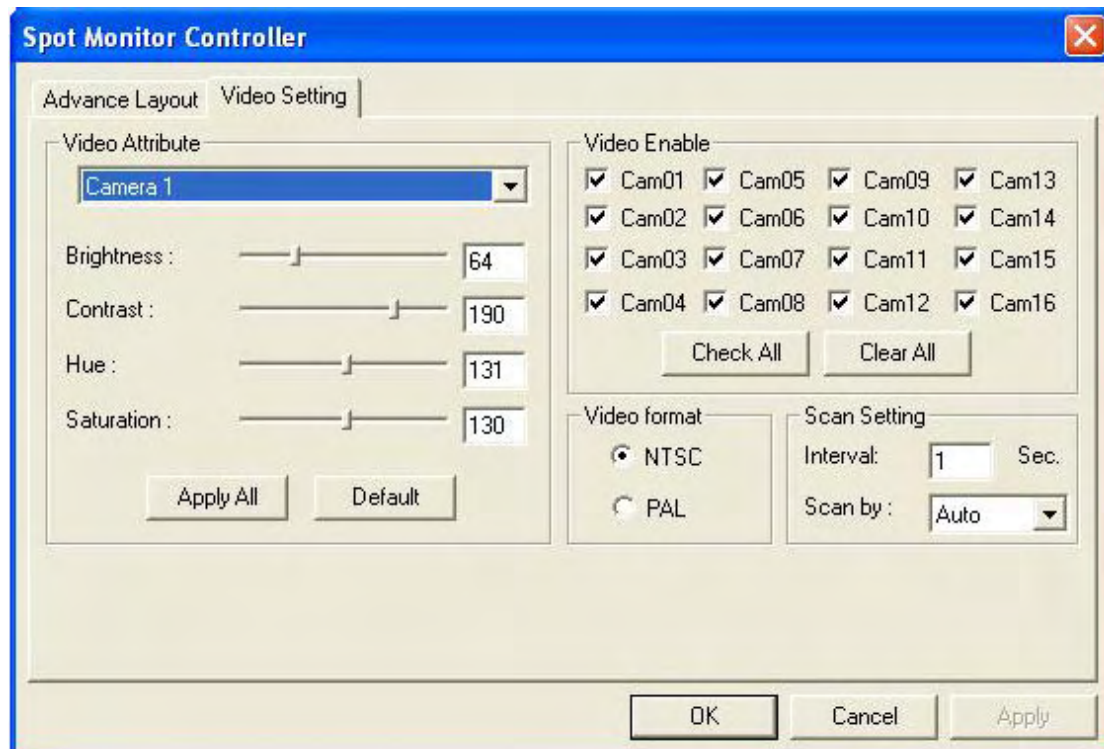
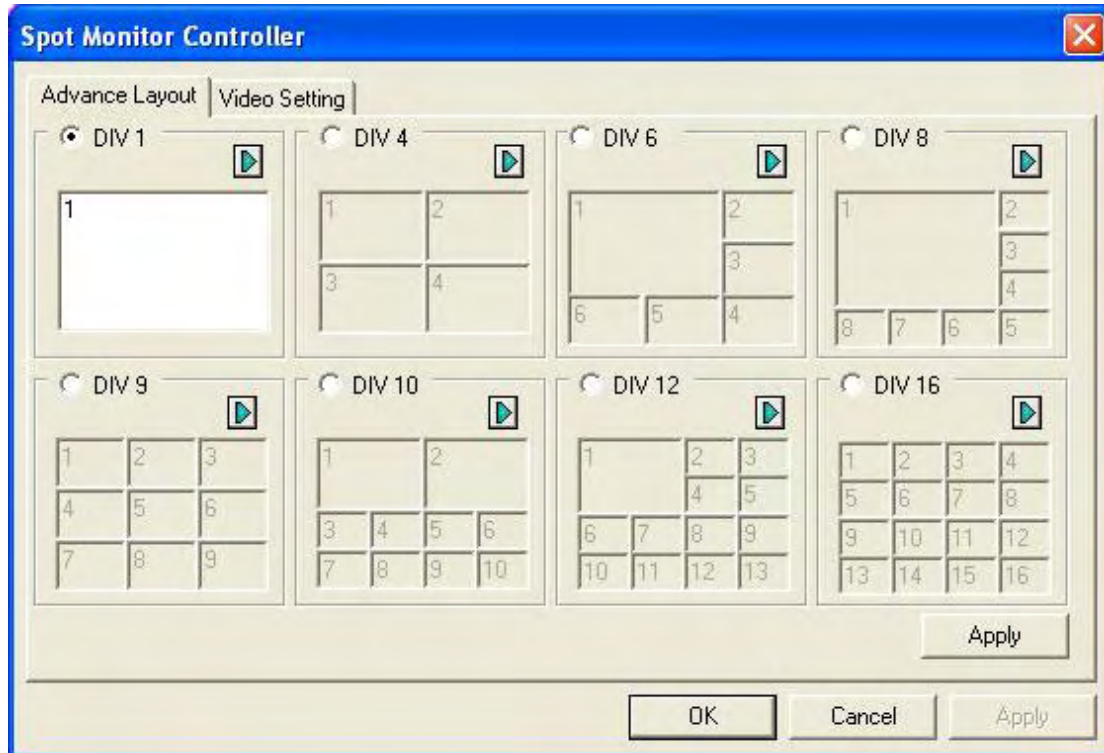
Using Fast Backup & Restore GV System you can do the following things:

- **Select Skin:** Use custom DVR's motif.
- **Group of function:** Assemble favorites DVR's applications for usage.
- **Packup GV System:** Backup your DVR's profile (Skin, Account, Setting, etc) and transfer to other similar DVR System. Using this utility you can easily create a similar digital surveillance system environment.



Spot Monitor

In combination with a **DSP controller** you can arrange the no. of video sources to be displayed on the TV (**TV-OUT**). You can customize in Single, Quad, Multi or **Any form** you desired. Using filtering feature you can prevent undesired video channels to be monitor by security personals.



Smart Search Audio Support

The new Object Search from Viewlog now supports audio playback.

Center V2

In this new release, total number of subscribers has been increased to 500.

UPnP NAT

If your internet gateway supports UPnP, then all necessary TCP/IP configurations are done automatically.

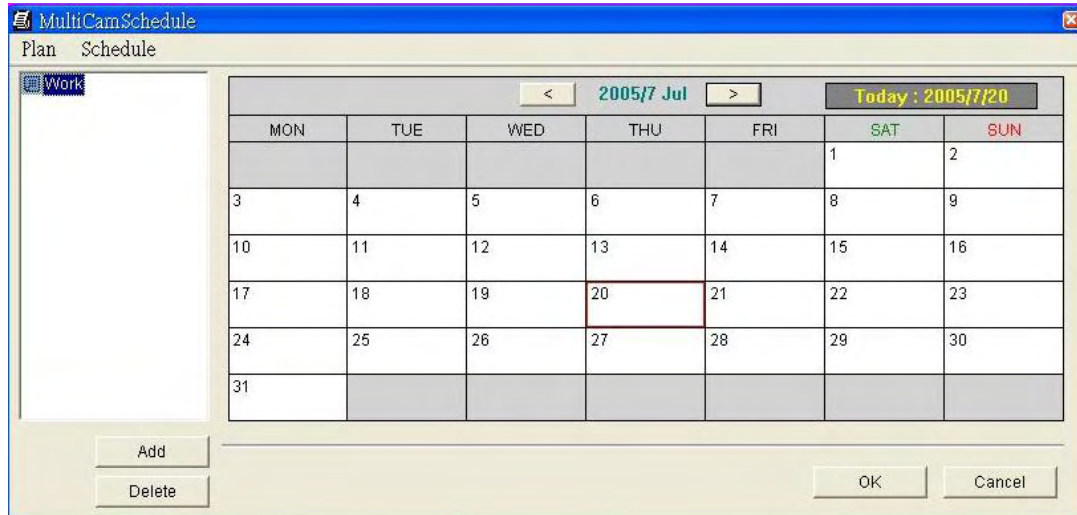
Webcam – Remote Control

The new IE webcam supports

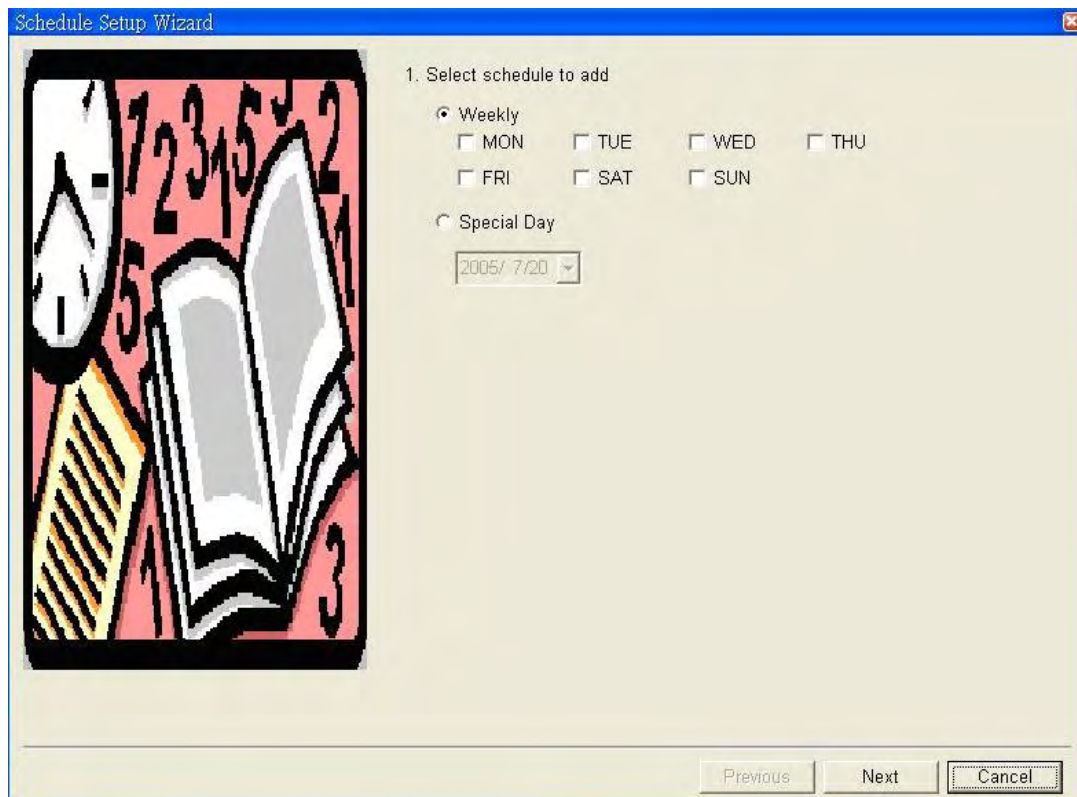
- Start/Stop DVR recording sequence
- Start/Stop I/O Monitoring
- Hue/Brightness/Contrast/Saturation Video Attributes Adjustment
- Start/Stop Schedule Planner recording
- Enlarge display windows size

New Schedule Planner

Configuring schedule for DVR System is now easier than ever.



- New intelligent **Schedule Setup Wizard**, you can arrange the recording time in **2 Steps**.



Advanced Settings: Implementation of 4 different recording applications

■ **Camera Monitor (w/Motion Detection)**

1. Configure individual camera's recording time by **drag & drop**.
2. Send **Alert Message**.
3. **Trigger corresponding output sensor**.

■ **IO**

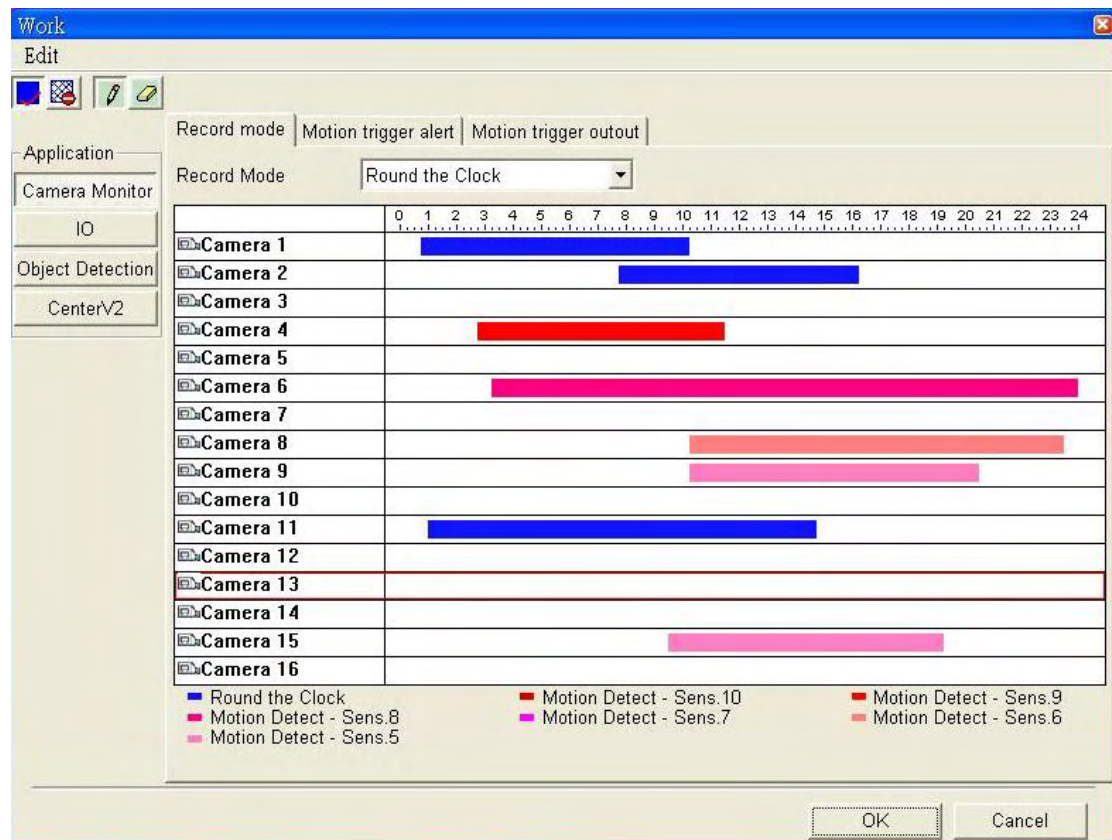
1. Configure **start of recording sequence** in case of IO trigger events
2. Send **Alert Message** in case of IO trigger event.
3. **Trigger corresponding output sensor**.

■ **Object Detection (Start featured recording)**

1. Use **Counter** feature.
2. Use **Object Missing** feature.
3. Use **Unattended Object** feature.

■ **Center V2 (Link to Center V2)**

1. Establish **connection link**.
2. Send **IO Event**
3. Send images when **Camera Motion** is present.



Realtime MPEG4 hardware compression

The new MPEG4 hardware compression is an additional companion for DVR-System. It compresses video sequences (720x480 / 720x576) in real-time and requires less disk spaces as MPEG-2.

Data Capture V2 – Ethernet & Live Viewer

The new Data Capture V2 for POS has the following new features:

- An additional **Ethernet Port** for LAN connection.
- Old Parallel port is replaced by **RS232 - DB25 (Male Connector)**.
- Support **Multiples** POS transaction's **Live view**.
- Arrange Transaction's view windows in **Group or Individual**
- Set no. **transaction items** per screen
- Customize transaction's **Text transparency**

