Version History

<table>
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<tr>
<th>Issue Number</th>
<th>Date</th>
<th>Comments</th>
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<tr>
<td>Version 1.0</td>
<td>24th July 2018</td>
<td>Author: R S Hawes</td>
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This manual covers the NetVu Enterprise ObserVer software product range and is effective as of July 2018. It supersedes all previous manuals, instructions and user guides.

Whilst every effort is made to ensure that his manual is accurate and up to date, NetVu Ltd. reserve the right to alter the products described herein without prejudice.

Errors and omissions excepted.

IMPORTANT
READ CAREFULLY BEFORE USE
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Introduction

Enterprise ObserVer is NetVu’s next generation video management and viewing software. Highly configurable and scalable with an intuitive user interface, it can be used as a simple viewer or a full building management and control system, making it a highly cost-effective solution.

Whether it’s on a remote laptop or in a control room environment, Enterprise ObserVer provides all the video surveillance management tools required and a lot more. It is configurable to the individual user’s precise requirements.

In addition to providing multi-segmented displays, customised alarm integration, stored camera pre-sets, Pan-Tilt-Zoom (PTZ) control and playlist evidence retrieval, Enterprise ObserVer also offers unique NetVu added value features. These include situational tracking with automatic switch to high resolution event recording, system diagnostics, adjacent camera on screen prompts with easy one touch switching, and exceptional High Definition quality. It also provides, instant de-warping of 360⁰ Fisheye camera display.

Enterprise ObserVer is both legacy and forwards compatible with many Dedicated Micros, FireVu and TransVu products and all new High-Definition (HD) cameras, so it brings together hybrid, analogue, HD and full HD IP management and control.

Enterprise ObserVer also offers powerscript support which allows the user to further customise their system to their precise needs. All this adds up to an extremely efficient, centralised video management system.

Background and Overview

Enterprise ObserVer software has been a highly respected system viewer which has provided live viewing, playback review, downloading, playing of downloaded files, event display and event and activity search.

Enterprise ObserVer is backward compatible and supports the latest Virtual NVR IP solutions and also Dedicated Micros DS2 systems from over 10 years ago.

Enterprise ObserVer was implemented on a Java platform, providing a high degree of cross platform support.

In 2016 NetVu is introducing Enterprise ObserVer. This new viewer and management tool is cross-platform supported on Windows, Linux and MacOS.

While maintaining many elements of the familiar environment, it supports a range of new features.

- Completely user definable worksheet layouts
- Stored Connections in individual worksheet layouts.
- Multiple simultaneous window layouts
- Advanced Activity and Event Search
- User Playlists
- Camera Icons showing location of other cameras near to the current scene.
- 360⁰ views supported, with stored presets and multiple concurrent views from the same source.
- Definable plugins for displaying system data and control
- Clickable Camera select maps
- Dials
- Bar Gauges
- Graph components
- Status LED
- Text Variable display
- Script IDE Editor and displayed
- GPS Maps
- Multiple loadable PAR file sessions
- Simultaneous playback from multiple units in single window or multiple windows
- Export with Graphical overlays

ObserVer supports multiple user defined worksheets, allowing different layouts for different scenarios.
Features and Functions

Enterprise ObserVer software is a dedicated application that offers single-site and multi-site control allowing an Operator to simultaneously monitor and control video from one image server or from several distributed sites.

The single-site function allows multiple cameras from the same image server to be viewed, in a multiscreen format, in live or playback mode. This ensures the Operator is aware of all potential events that may occur within the site they are responsible for monitoring. This function can be compared to an installation using analogue monitors and a keyboard, but with the advantage of locating the monitoring station anywhere on the network. This eliminates the limitations of a conventional wired system (i.e. maximum distances).

The software includes the necessary control functions for monitoring a video surveillance system for controlling PTZ cameras, establishing audio connections, camera switching, etc. It also allows a set of cameras to be saved as a display preset. These presets can then be programmed to sequence automatically at a pre-programmed time interval.

To enhance Enterprise ObserVer software, additional functions include multi-site monitoring capabilities. This is an ideal feature for central monitoring stations where video from multiple sites is routed across a network connection to a centralised location.

The software provides all the necessary controls required for a Central Monitoring application and with the introduction of *drag and drop*, the application now becomes even more intuitive, allowing Operators to access cameras with a single key command.

Enterprise ObserVer enables access to the event lists that are stored on the image server. These files are where all logged alarms, Video Motion Detection (VMD) incidents and system changes are stored, allowing the Operator quick and easy access to any event video recordings that are saved on the image server. *Events* that do not trigger alarms, but which are captured on video can be found using the search function.

Licences

There are three different levels of software licence available for Enterprise ObserVer, each with its own suit of features. These are summarised in the table below.

<table>
<thead>
<tr>
<th>Licence Type</th>
<th>Features and functions</th>
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<tbody>
<tr>
<td>Basic</td>
<td>Viewing, Playback, Telemetry control, Download of video from up to 4 DVRs, Performance data review.</td>
</tr>
<tr>
<td>Standard</td>
<td>Viewing, playback, Telemetry control, Download of video from unlimited DVRs, Keyboard and Joystick control (KBC2/U), Maps, Performance data review.</td>
</tr>
<tr>
<td>Premium</td>
<td>All the features of the basic and standard versions plus: integrated basic alarm receiving package. Transport applications. FireVu applications.</td>
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System Requirements

<table>
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<tr>
<th>Minimum System Requirements</th>
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<tbody>
<tr>
<td>Operating System</td>
<td>Microsoft Windows 7 to Windows 10.</td>
</tr>
<tr>
<td>Processor</td>
<td>Intel i3 dual core.</td>
</tr>
<tr>
<td>Memory</td>
<td>4GB RAM.</td>
</tr>
<tr>
<td>Graphics Capability</td>
<td>OpenGL 2.0 (or above) compatible graphics card.</td>
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Recommended System

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating System</td>
<td>Microsoft Windows 7 to Windows 10.</td>
</tr>
<tr>
<td>Processor</td>
<td>Intel i5 or i7 quad core.</td>
</tr>
<tr>
<td>Memory</td>
<td>4GB RAM.</td>
</tr>
<tr>
<td>Graphics Capability</td>
<td>Integrated GPU or an OpenGL 2.0 (or above) compatible graphics card.</td>
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Restrictions on Use (Intended User)

The equipment is intended for use in non-domestic premises by suitably trained and qualified persons of at least 16 years of age.

Limitations of Liability

This software must be installed and configured in accordance with NetVu Limited's instructions. NetVu Ltd. cannot be held liable for any incidental or consequential damages resulting from loss of property or damages due to misuse of NetVu Ltd. products.

Errors and omissions excepted (E&OE). NetVu Limited assumes no responsibility for errors or omissions within this document.

NetVu Ltd. reserve the right to make product improvements at any time.

If in any doubt whatsoever, please contact NetVu Limited to confirm that your understanding is correct.

Intended Use

Enterprise ObserVer is intended to be deployed as video surveillance system control and viewing software.

This software MUST NOT be modified in any way, shape or form except by a trained NetVu Ltd. Engineer or agent with express permission from NetVu Ltd.
Installation Guide

Installing the Software

Ensure that your system meets at least the minimum system requirements (see above). Also ensure that your computer is connected to the Internet.

1. Open the e-mail that you will have received from NetVu containing your licence details etc.
2. Click on the link in the e-mail.
3. Download the software.
4. Run the .exe file.
5. Follow the on-screen prompts from the installation wizard.
6. Click ‘Finish’ to complete the installation process.
7. An icon containing a shortcut to Enterprise ObserVer will have been created on your desktop.
8. Open Enterprise ObserVer.
9. Click ‘Help’ on the top menu bar and then click ‘Unlock’.
10. A small window will pop-up that will contain your e-mail address and code to unlock your copy of Enterprise ObserVer. Click ‘OK’.
11. You should now close Enterprise ObserVer. From now on, when you open Enterprise ObserVer it will unlock automatically.
12. You have now completed installation and are ready to enjoy the benefits of Enterprise ObserVer.

Setting Up the System

On first opening up Enterprise ObserVer the screen above will appear.

Once you have thoroughly read, understood and agreed to the licence terms and conditions, the following screen will appear.
A default demonstration site is listed under ‘Stored Image Servers’.

You are now ready to drag and drop your chosen layout onto the white screen from the assortment shown top right. Once this is done you can start adding your own sites as outlined below.

**Adding Sites**

Multiple images servers (sites) can be controlled using Enterprise ObserVer. To add a site, simply type into the box in the bottom left hand corner of the screen the Domain Name (DN) or IP Address (IP) of the server to which you wish to attach. Then click ‘Add’. The Server’s name will now be added to the list on the left-hand side of the screen. The new site will be up and running straight away in the default layout. Layouts are fully customisable, as outlined later in this manual.

Click the triangular “twisty” expansion button (►) next to the name of the server to expand the site tree and display a drop-down list of all the cameras that can be viewed via that server.

Clicking on the any displayed camera name will open the view from that camera into the currently active window in the current worksheet.

**Remote Monitor Selection and Control**

Facilities exist to allow the monitor of a unit to be streamed to Enterprise ObserVer, Web browsers and other equipment.

This is achieved by creating a Monitor Display in a worksheet using the monitor icon. The Monitor display can then be assigned to a Site ID and monitor for a channel.
Multiple monitors can be displayed on a single worksheet, and keypresses can be sent to the selected display. A USB keyboard (KBC2/U) connected to the device running Enterprise ObserVer can then control the remote unit.

The five coloured ‘soft keys’ can be selected using F1 to F5 on a PC keyboard, and camera selections made using the numeric keys F6 to F10 select the playback keys ||, <<, > & >>.

A sample layout showing displays from four different units is shown to the right.

On NVR’s supporting multiple digital display outputs, such as SD Advanced HD, the second monitor or Spot monitor can also be displayed.

The configuration is found in the Monitor display Properties menu as shown to the right.

**Enabling Alarms and Audio**

Click on ‘Settings’ at the top of the screen. A drop-down menu will appear. This will allow you to ‘Enable’ the alarm receiver for the camera currently under interrogation. You will also be able to set your preferred audio options using this menu.

**Use of KBC2/U keyboards**

The KBC2/U USB Telemetry and Control keyboard can be used in conjunction with Enterprise ObserVer in a choice of two operating methods.

When used in conjunction with a Monitor Plugin, all keypresses are passed through to the unit shown on the highlighted plugin (Red select outline around the Monitor plugin).
When used with a viewer plugin, the keyboard now provides a local User Interface similar to the Console interface found previously in embedded products, characterized by the coloured button interface, providing soft keys in the bottom right corner of the display.

The Telemetry joystick provides control of physical PTZ units, electronic zoom on static cameras, and also ePTZ on 360° immersive cameras.

**Menu Bar and Keyboard shortcuts**

The five coloured buttons can be accessed from a standard keyboard, using F1 to F5.

Various KBC2 keys can be accessed with keyboard shortcuts including the following:

- C – Camera Select
- P – Preset Select
- S – System Select
- <Enter> - OK or complete Camera select.
- <Arrow keys> - Select within System list etc.

**Camera Selection**

There are a number of different methods by which a camera or series of cameras can be selected.

**Single camera, or sequence of cameras**

If the video window is a multiway display, and a camera is selected, then by default the following segments will be completed with cameras sequential from the selected server, starting from the top left corner.

If, however, a specific segment is selected – indicated by a red border – then just that segment will be updated.

**Selecting individual segments**

An individual segment can be selected either by a mouse click on the required segment, or, using the Segment menu line from the coloured keys.

A segment can also be deselected with a mouse click.

The Segment key bar can be selected from either the Play or Live Goto / Event Menu, by selecting the Blue <Seg> key as below

This takes you to a Segment Select key bar as below
The highlight can be moved Up, Down, Left or Right. Stepping of the screen in any direction leaves no segment selected.

Once a segment has been selected this key bar can be existed with the <Finish> key.

Creating Tabs

New worksheets can be created, customised, used in the current session and saved for future reuse. This is achieved by creating new tabs.

Click on the + tab, top left. This will create a new tab, called ‘new’. Click on the ‘new’ tab to open it. This will reveal a new worksheet with a plain white screen. Drag and drop your chosen format for the new worksheet from the ‘Layouts’ selection displayed in the top right-hand corner of the screen. Your new worksheet will now be populated with your chosen number of segments. Right click on the ‘new’ tab and select the ‘Rename’ option. Type in your chosen name for your new worksheet. Chose a name that describes what you have chosen to save in that particular tab.

You can now select a camera to display its view in each segment of your new worksheet as described above.

Once you have connected a camera to the segment, you should right click the mouse on the screen and enable the “Preserve Connection” option. Once you have completed the entire worksheet, save it by right clicking on the screen and then clicking the “Update Stored Connections” option.

Tabs can be used for a number of purposes. These include displays of specific cameras, Diagnostic data, Remote Monitors and Powerscript programming. The “non-camera” functions in each segment are set-up by dragging and dropping the “Plug-ins” in much the same way as the camera images. Once you have dragged and dropped a plug-in into the active segment, right click the empty icon on the screen. A drop-down menu will appear. Select ‘Settings’. A dialogue box will the appear in which you can add the feature that you wish to view (e.g. Julian time) in the format of your chosen icon (e.g. dial). So, for example, ‘Julian Time’ in a ‘dial’ will produce a de-facto clock. Controls can be set-up using sliders and “up-down arrows” for examples, whereas data can be displayed in dials, histograms and graphs.

Load Display Preset

Individual worksheets can be configured for ‘Preserve Connection Details’ such that the current connections are reloaded when that worksheet is selected.

Selecting between different layouts is only a matter of selecting the required named worksheet tab at the top of the screen.

This feature also can be applied with 360° immersive view cameras, with the same source channel saved in multiple screens segments, each remembering the last ePTZ position.

The stored selection can be changed. However, it will be reloaded when the tab is reselected.

The stored connections can be updated by selecting ‘Update Connection Details’ in the view context (right click) menu.
Camera Select Icons

On-screen arrows can show the location of adjacent camera scenes. Up to 8 arrows can be defined per view, defining the position, angle of rotation and camera number to select.

To show the Camera Select Icons the appropriate entry should be selected in the view context menu (right click on the image to open the menu).

The Camera Icons details are stored on the individual servers or cameras and are immediately available to all Enterprise ObserVer workstations.

NOTE: If on occasions a red ‘shadow’ appears across the image, either partially or completely covering the image, this may be as a result of un-initialised camera icon arrows on the server, which are set to be very large. This can be resolved by first selecting ‘Default’ in the above menu, and then configuring as appropriate.
The above screenshot demonstrates the use of gauges and text boxes. In this instance it is being utilised as a diagnostic tool, providing access to CPU load statistics for the motherboard and each Video Co processor and its DSP, while also displaying the internal debug stream recorded internally on the unit.

This means that detailed diagnostics of internal operation, external Network diagnostics and system performance can be reviewed both live and retrospectively.

These capabilities can also be used for a variety of process metadata, (e.g. freezer temperatures). Full PSIM integration can easily be displayed as required.

Enterprise ObserVer also supports the same advanced PowerScript as is supported in the IP cameras and servers. This allows for critical post processing of metadata remotely. For example, searching for a potential new fraudulent activity that may have been identified. This can be performed playing back direct from a unit, or directly from stored PAR files.

Equally, the script can be used to control other peripherals, so the scripting can be used to perform complex process control and PSIM tasks, with various different display presentations available and defined by the user.

Historically, DVR / NVR solutions have been used in retail environments in conjunction with matrix systems. Typically, this is to provide access to specific cameras at remote workstations, such as a Security Guard plinth at an entrance. A fixed worksheet layout with a map covering the required cameras implemented with an embedded version of Enterprise ObserVer on a VESA mount on a monitor can provide a highly effective solution, adding the benefit of an instant event replay, as well as just Live viewing. Also, critical alarm events within the store can also be relayed to the workstation.
Alarm Handling

Displaying Alarms

Active alarms are displayed on the left-hand side of the screen in the task bar, below the Stored Image Servers and the Cameras. Click the triangular “twisty” expansion button (►) next to the name of the alarm to expand the site tree and display a drop-down list of alarms from the camera currently being scrutinised. Clicking on the listing will display the recorded video from the point at which the alarm was triggered. Right-click on the listing to clear the alarm.

The sequence for queued alarm is that the first alarm received is displayed and all subsequent alarm are stacked up in the order in which they were received. Once the first alarm is cleared, then the second alarm received will be displayed, and so on.

Full alarm integration is included, so a full central station management solution can be implemented, with detailed interaction with individual sites.

PowerScript can also be used to create drivers of additional external devices, such as interfacing to Alarm panels and similar devices. A script can also be executed as a result of user operation or alarm receive handlers.

Powerscript Programming

PowerScript is provided to give adaptability to function add-ons.

A Countdown soft key is provided that can be used, for example, as an automated timer to acknowledge alarms.

This can be initialised with text, a flashing colour, and a script variable, and an initial value to count down from when activated.

In the timed alarm auto response PowerScript example, the key is triggered with -

```
setSoftKey ( "alarmTimer", "Alarm : ", alarm_duration ,BUTTON_RED);
```

And results in a button in the top right-hand corner as below -

![Alarm : 4](image)

The counter will count down to zero, stored in the global system variable alarm Timer. When the indicator is clicked it will exit and set the variable to zero.

There are also four user defined menu keys provided. A sample command such as

```
setMenuKey ( 1, "tabSeqKey","Tab Seq",0);
```

results in an additional line appearing in the menu bar sequence, with up to four slots.
When the key is selected the associated global system variable, in this case tabSeqKey, is incremented. The label can be updated. If all four keys have blank labels, then the bar disappears from the menu sequence.

### Freestyle Mode

The basic display mode has a Site Index to the left-hand side and controls across the bottom. In addition, the Event list, Playlist and Layout controls appear on the right-hand side.

The layout of each of these is highly configurable and is saved independently for each worksheet. This includes the choice and position of individual controls.

In Enterprise ObserVer a completely new mode is supported, where there is no overall framework, and every component can be positioned independently without constraint.

This allows for very simple displays with only one or two elements, or a display whereby the full available area is available for video display.

This is particularly appropriate if Enterprise ObserVer is being utilised as part of a decoder wall or static display.

This can also be used in conjunction with the KBC2 Joystick Keyboard for operators who are uncomfortable with a PC style Graphical User-Interface (GUI).

Above is a full screen screenshot of such a mode, being controlled from a KBC2 Keyboard.

The example screenshot shown above shows a Quad Layout with just a Resolution select control.

By preserving the connection to the first channel of a given site, a very simple interface on screen can be used, with the majority of functions driven from the Telemetry Keyboard or PC keyboard as required.

The ‘System Select’ or ‘S’ key will call up an on-video display list by Site ID and includes sub-folders.

This allows different sites to be selected using just the KBC keyboard.

In Freestyle mode (selected under menu option View>Freestyle Mode), rather than dragging items from the right hand ‘Display Objects’, menu option Settings>Customise displays to Customise Tool Pallet.

This consists of four sections with a number of grouped functions in each section.
**Layouts**
Full, Quad, 6-way, 9-way, 12-way & 16-way display view

**Gauges**
Dial
Horizontal Slider
Vertical Slider

**Graph**
X-Y Graph
Steering wheel (Vehicle Options)
Disc level indicator
Increase / Decrease control
LED Strip
VAL System Value display
PowerScript C Script Editor
GPS Tracking (Vehicle Options)
Camera Site Map
Remote Monitor Display

**Panel Displays**
Site and Camera tree
User Toolbar
Event List
Play List

**Controls**
Resolution Select
Playback Controls
‘GoTo’ Select
Event Controls
Playlist Controls
Telemetry Preset Controls
Telemetry PTZ Controls
Telemetry Aux Controls
Audio Controls
Events

Event Search Review

Above is a screen layout, as identified by the tab at the top, suitable for event review. In this example Activity Search is being utilised to search for any events around the carpark entrance, and when search is selected will populate the event list with the events based on the defined activity area.

In this way, searches can be performed retrospectively, for example identifying when a specific object, such as vehicle in a car park arrives or leaves.

Camera Select Map, Event List and Playlist
In the next screenshot above, the Camera Select map is shown, with both Event list and a user generated playlist being displayed.

The camera select map can be used to easily track an incident across a site. For example, in retail applications this may be following a suspected shoplifter through the store.

When the Playlist record is selected, the sequence of camera selections are recorded as the operator selects the cameras, whether from the site tree or using the map.

Once a sequence has been completed the playlist can be saved, and also the relevant video downloaded and a DVD created.

If another person with direct access to the system wishes to review, and potentially update the playlist, just the playlist can be sent to that person, loaded into Enterprise ObserVer, and review of the incident undertaken by either playing the full list, or selecting individual entries within the list.

If no access is available, then the relevant video PAR files can be loaded and then reviewed using the playlist.

Multiple sessions can be loaded concurrently, potentially from adjoining sites, and played synchronously.

As an example, in a transport environment, if an incident were to happen both in the field of view of the vehicle, and also on a building, then both can be loaded and played together controlled by the same time stamp.

**Playback Video**

In addition to selecting a recording from a Playlist or Event (see above), it is possible to playback any chosen video recording by selecting it directly.

Select the camera who's recording you wish to view by selecting the segment displaying the view from that camera (i.e. the segment with a red frame, see above).

Use the ‘Go to’ tool in the bottom left hand corner of the screen to select the date and time from which you wish to see the recording from that camera.

Use ‘playback’ tools to view the recording as desired.

**ePTZ and Immersive 360° Cameras**

Enterprise ObserVer now has extensive electronic zoom support.

For a conventional, non-PTZ camera, up to 999 presets can be stored. These are save by Site ID and Alias camera number, independent of the Site tree, such that they remain available when replaying PAR files.

However, the last ePTZ position used is not stored, unless explicitly stored as Preset 0, such that a new instance will start un-zoomed.

For an immersive 360° camera, the last position used is always stored, such that a new connection to a camera always has a defined position, rather than perhaps looking straight down at the floor.

When the current positions are stored the resolution for a layout is also stored, such that an immersive view in a multi-screen starts in the correct resolution.

To allow configuration of static cameras over telemetry, by default a view will enable ePTZ option, however, in Full-screen the ‘Telemetry Setup’ option allows for commands to be sent to auto focus / remotely varifocal cameras, and also Coax OSD cameras instead of performing ePTZ control.
Resolution Selection

Although the resolution of the video from an image server can be configured with the Properties option the ObserVer application also provides the ability to select the resolution of the images being viewed in Live and Playback modes.

This feature is useful when a slow speed link is being utilised for remote monitoring, reducing the resolution will reduce the amount of information that is being transmitted from the image server, and can provide faster image update providing easier control of telemetry cameras or more coherent viewing.

A resolution request is sent from Enterprise ObserVer application to the image server, the unit will then apply the resolution settings stored within its configuration to the images being transmitted to the viewer. The resolution settings are made up of the maximum file size and image size as configured in the Camera Set-up page.

Note: The selected viewing resolution (high, medium, low) applies to all cameras being viewed.

Note: Image servers are able to re-compress, or transcode, recorded images during the playback process; this will reduce the size of the video image when using a slow remote link.

High resolution is the optimum video image that will have a set resolution and files size associated

Medium is a lower quality video stream that is sending less information with a reduced file size

Low is the lowest video quality and has a low file size allocated.

Note: If the Live web page of the image server is used for viewing it is possible for multiple Operators to make connections to the unit and view the same camera at different resolutions.

Audio Control

Image servers support bi-directional audio communication.

The audio controls in Enterprise ObserVer allow audio connections to be established between the application and an image server allowing live audio to be transmitted and received.

These controls can also be used in playback mode if audio has been recorded alongside the video. The Operator can then select the speaker buttons to hear the audio while reviewing the video images.

The audio buttons are latched and allow the Operator to switch the audio on (establish audio connection) or off (drop audio connection).

Speaker 1 enables the operator to listen to the associated audio from the site. This channel will always play audio input 1 with camera 1 and audio input 2 with camera 2, in live or playback mode.

Speaker 2 enables the operator to listen to the audio from ObserVer which has been transmitted to the site. This only operates in playback mode and can be used to check what an operator has broadcast to a remote site's external loudspeakers.

Mic 1 enables the transmission from a microphone on the monitoring station to loudspeakers on site. This is to enable operators to challenge people on site or issue warnings.

Note: Please note when viewing video through a firewall it may be necessary to select inline audio mode if audio is also required. Audio will be sent as part of the TCP video stream.
Freeze on a Single Image

It is possible to use the VCR pause button in live mode to freeze the images that are being displayed. This allows an Operator to view in more detail the frozen image to determine if an incident is occurring. Freezing the live video will not affect the recorded images.

The pause button operates in the same way when in playback mode, pressing the pause button will pause the video being reviewed.

Live Mode Controls

This section describes the controls that are available to the Operator when Enterprise ObserVer is in Live mode only.

Live Mode

This switches the viewer into live mode operation, all images displayed will be live video from the image servers being controlled.

Note: These controls are only displayed when a camera that has been configured (on the image server) for telemetry control.

The image servers support a number of Pan, Tilt, Zoom (PTZ) manufacturer protocols ensuring the system can be easily integrated into any application. It is possible to select and control any PTZ or Dome camera connected to an image server from within Enterprise ObserVer. It is also possible to send ‘star commands’ directly via this console using the numeric keypad.

Note: you will need to refer to the manufacturers documentation to ensure the PTZ / Dome camera supports these functions.

The PTZ controls supported by Enterprise ObserVer are:

Pan and tilt control; move the camera by using the pan and tilt buttons, the arrow shows the direction the camera will move,

Zoom control; zoom in on an object, zoom out for full view.

Numeric keypad; This is used in conjunction with presets and patrol mode. To select a preset, select which camera is to be controlled, either in single view or by highlighting a segment in the multi view. Press the required preset position on the numeric keypad.

Focus control; Focus on an object close to the camera (near), Focus on an object in the distance (far).
This will override any autofocus function on the camera.

Iris control; Open iris to let more light into the image, Close iris to reduce the amount of light.
This will override any auto iris function on the camera.
Auxiliary control; Wash the glass on the camera housing, wipe any water from the glass on the camera housing, switch lamps on and off. The fourth auxiliary can also be used for other functions such as gate control.

Patrol Mode; A patrol mode can be stored within the PTZ or dome camera. Select the patrol number from the numeric keypad and then the patrol key.

Autopan; automatically move the camera between two pre-defined preset positions.

Direct Telemetry Control; Allows star commands to be sent directly to the camera. The Preset window above the telemetry keypad changes to a command input window. Commands are input via the numeric keypad.

Save preset; allows the operator to save preset positions for functional cameras. This will only be active if enabled in the application.
Glossary

ARC  Alarm Receiving Centre
BMS  Building Management System
CCTV Closed-Circuit Television
CIF  Common Intermediate Format
CIP  Closed Internet Protocol
CIPTNET Closed Internet Protocol Telnet
DHCP Dynamic Host Configuration Protocol
DNS Domain Name Server
DoS Denial of Service
DVR Digital Video Recorder
dWDR Digital Wide Dynamic Range
EDP Electronic Data Processing
EOL End of Line
FACP Fire Alarm Control Panel
FoV Field of View
FQDN Fully Qualified Domain Name
FSV Fail-Safe Video
FTP File Transfer Protocol
GUI Graphical User Interface
HLC High Light Compensation
ICR In-Camera Recording (Edge Recording)
ICR Filter Infra-Red Cut Removable Filter (for night-time use and true colour in daylight)
ID Identity
IP Internet Protocol
IR Infrared
IRE A unit used in the measurement of composite video signals
LAN Local Area Network
MAC Media Access Control
MTU Maximum Transmission Unit
NVR Network Video Recorder
ONVIF Open Network Video Interface Forum
OSD On Screen Display
PAR files Video Partition files
PPS Pictures Per Second
PTZ Pan-Tilt-Zoom
### Appendix A – Ordering Information

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENVO/BAS/S</td>
<td>Basic, single user.</td>
</tr>
<tr>
<td>ENVO/BAS/M</td>
<td>Basic, master site licence.</td>
</tr>
<tr>
<td>ENVO/STD/S</td>
<td>Standard, single user.</td>
</tr>
<tr>
<td>ENVO/STD/M</td>
<td>Standard, master site licence.</td>
</tr>
<tr>
<td>ENVO/PRE/D</td>
<td>Premium, fully featured, time expired, demonstration only.</td>
</tr>
<tr>
<td>ENVO/PRE/S</td>
<td>Premium, single user.</td>
</tr>
<tr>
<td>ENVO/PRE/M</td>
<td>Premium, master site licence.</td>
</tr>
</tbody>
</table>