Video Control
Product Catalogue
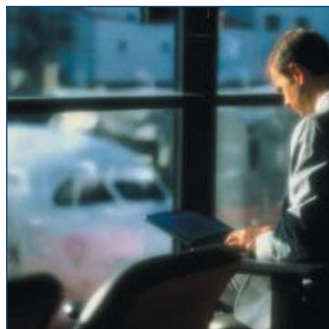
BEWATOR

Introduction

27 years of Innovative Video Control Solutions

Drawing from the internationally recognised Molynx and Videmech technologies, Bewator offers one of the most comprehensive ranges of video control systems, pan & tilt heads, housings, dome cameras and accessories.

Whether you specify, integrate or install security systems, you need solutions that are flexible enough to meet your requirements of today, whilst allowing for systems to be expanded or upgraded at a later date.
Bewator Video Control products are designed with your requirements in mind, and will help you get the best out of your Security System.

With innovative solutions, high quality products, and a strong commitment to customer service, Bewator is the partner of choice of Security professionals around the world.

BEWATOR

Bewator is a leading international security group that develops and markets products and systems within the area of Access Security.

The group focuses on 3 strategic business areas: Access Control, Video Control and Parking Control. Development and manufacturing expertise in these areas puts Bewator Group at the cutting edge of modern security practice, by combining diverse technologies and systems to provide fully integrated security solutions.

Bewator's UK division is an active member of the British Security Industry Association and is ISO 9001 approved. All our products meet international standards, including FCC, R&TTE and CE and ATEX.

Bewator's major shareholder is EQT, founded by Investor AB, a holding company in the Wallenberg Group, Investor AB also has controlling interests in other leading Swedish international companies such as SAAB, Electrolux, SKF, Atlas Copco, Ericsson, ABB and AstraZeneca.

With Bewator solutions you can relax, safe in the knowledge that a 27-year pedigree of quality and excellence will provide you with practical, cost effective security solutions, wherever you are in the world.
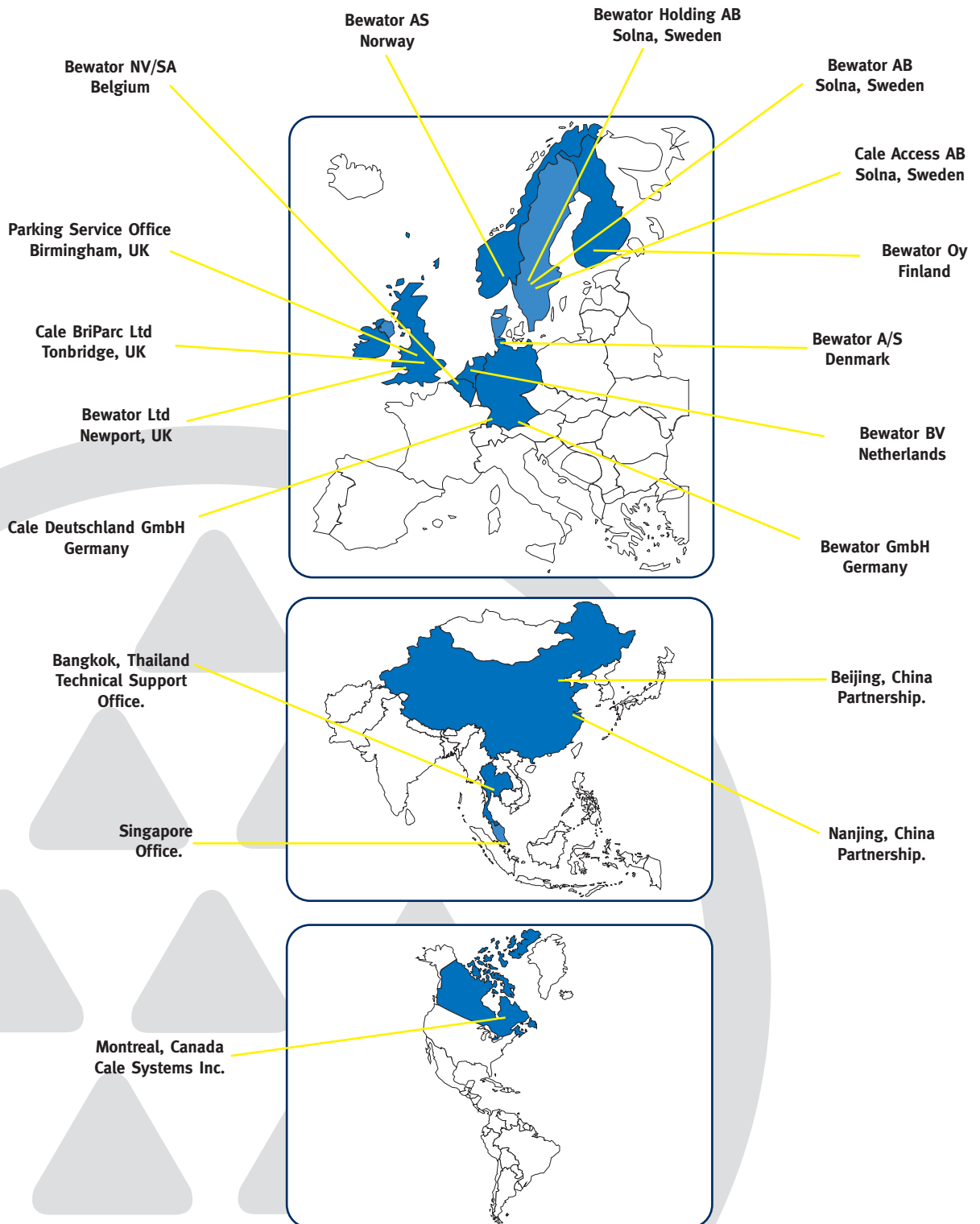
Bewator Leading the way to modern security systems

Index

Bewator, your partner around the world

Headquartered in Solna, Sweden, Bewator has over 350 employees servicing the security markets around the world, generating over 46 Million pounds turnover.

With subsidiaries in Sweden, Norway, Denmark, Finland, Germany, U.K, Belgium, The Netherlands, Canada, China, Thailand and Singapore, you can be sure to get professional advice and support wherever you are in the world.

Bewator Group is represented in another 40 countries by a strong network of local partners. The company works closely with carefully selected systems integrators and installers in all these countries.

Bewator, your partner around the world

Bewator AS
Norway

Bewator Holding AB
Solna, Sweden

Bewator NV/SA
Belgium

Bewator AB
Solna, Sweden

Cale Access AB
Solna, Sweden

Parking Service Office
Birmingham, UK

Bewator Oy
Finland

Cale BriParc Ltd
Tonbridge, UK

Bewator A/S
Denmark

Bewator Ltd
Newport, UK

Bewator BV
Netherlands

Cale Deutschland GmbH
Germany

Bewator GmbH
Germany

Bangkok, Thailand
Technical Support
Office.

Beijing, China
Partnership.

Singapore
Office.

Nanjing, China
Partnership.

Montreal, Canada
Cale Systems Inc.

Bewator, trusted security solutions

Government
- Gwent Police HQ
- HM Customs
- MOD
- RAF
- HM Prisons
- European Community Bldg (Geneva)
- SHAR Rocket Research Centre (India)
- French Nuclear Plants
- Inland Revenue
- Paris Police HQ

Commercial
- Beijing Telecom
- Tate Gallery
- British Gas
- Rover
- BICC
- ICI
- Aintree Race Course
- Kuwait Conference Centre
- Construction Bank of China
- Royal Bank Of India

Transport
- London Underground - Jubilee Line
- Periphérique (Paris)
- Bangkok Traffic Monitoring
- Beijing West Railway Station
- Tehran Traffic Control (Iran)
- Channel Tunnel Freight Terminal
- Singapore NEL
- Hong Kong MTRC

Oil
- Conoco
- Shell
- Petrobraz
- BP

Leisure
- Cardiff Millennium Stadium
- Nantes Football Stadium
- St Etienne Football Stadium
- Lens Football Stadium
- Silverstone Race Circuit
- Bolton Reebok Stadium
- Liverpool Anfield Stadium
- Rockingham Race Circuit.

Airports
- Cardiff
- Glasgow
- Jakarta Indonesia
- Gatwick
- Heathrow
- Eastleigh
- Luxembourg
- Birmingham
- Isle of Man

Retail
- Tesco
- Sainsburys
- Asda
- Debenhams
- Marks & Spencer
- Safeway
- Alliance and Leicester

Town and City Centres
- Aberdeen
- Airdrie
- Auckland (NZ)
- Bedford
- Blackpool
- Boston
- Bridgewater
- Camberley
- Cardiff Bay
- Coalville
- Colchester
- Crawley
- Cwmbrian
- Dover
- Glasgow
- Grangemouth
- Inverness
- Leicester
- London
- Newbury
- Newport
- North Lanarkshire
- Plymouth
- Portsmouth
- Reading
- Sheffield
- Skegness
- Stratford-on-Trent
- Warrington

Bewator, trusted security solutions

Bewator, your partner all the way

Bewator: 27 years of leading edge technology

At Bewator, we believe in providing high performance, practical solutions.
This is why we focus on 4 key areas when designing our security solutions:

- **Innovative hybrid technologies:** benefit from our Know-how in both analogue and digital video technologies.
- **Pro-active systems approach:** to minimise systems redundancy
- **Integration capability:** Most of our Video Control solutions support 3rd party equipment, and have built-in interfaces to the most commonly used protocols. You can also integrate some of our Bewator Access and Video Control solutions together, just contact us for more details.
- **High Quality:** delivery precision, product/service reliability, and customer support

Dedicated Customer Support Teams

Our Customer Support Centre is organised in 3 dedicated teams: UK Access, UK Video and Export Video. Each team has a direct telephone number, so you can be sure you'll get quick and efficient support every time!

Talk to the right person first time, every time, with our dedicated contact numbers!

UK Access   +44 (0)1633 820610
UK Video   +44 (0)1633 820620
Export Video +44 (0)1633 820640

Technical Support

Selling a product is only the start of our cooperation with our partners. With a full time team of 4 Technical support engineers, we make sure you get the best out of Bewator solutions.
Should you have a problem, help is just a phone call away, **+44 (0)1633 821600**

Technical Training

Technology evolves fast, and we know how important it is for security professionals to keep up with all the changes. With our training courses, you'll find something to suit all your needs.

- **Eventys DVMS-Foundation course**
- **Eventys DVMS-Advanced course**
- **Networking-basic skills**
- **V3i overview, VII+**
- **Bewator CCTV Product range Training ("PRT")**
- **Visilynx Operator Training ("V-User")**

And if you don't, we'll be happy to design a course, which meets your specific requirements.

For full details on these training courses and all available end-user training courses or to book, please call **01633 821600** or go to **www.bewator.co.uk/training.htm**

Tel: +44 (0)1633 821000 E-mail: sales@bewator.co.uk **www.bewator.co.uk**

All our Video Control solutions have built-in integration capability.
To find out more about how you can build high performance systems around Bewator
Video Control Solutions, 3rd party equipment, and even Access Control solutions, please
contact your local Bewator representative.

Products and Applications

Receivers from Bewator
Setting the standard for advanced Telemetry Control

◈ BEWATOR

Town and City Centres

Retail & Commercial Buildings

Airports and Mass Transit

Public places & Buildings / Leisure Areas

Chemical and Petrochemical

High Security Buildings

Asset Surveillance

Crime Control

Public Security

Bewator's Molynx Telemetry protocol has long been recognised as one of the world's most advanced formats for telemetry controls.
We capitalised on our vast experience in this specialised field to bring you a new generation of telemetry receivers, specially designed to meet the challenges of today's CCTV systems.

The Challenges

CCTV systems vary widely in size and complexity, but one fact remains: the increasing demand for pro-active, event-driven systems calls for increasingly fast response time from operators. The issue here is to have systems that enable operators to quickly identify the origin of the alarm (e.g. the area or camera), and be able to take control of the camera to respond to the event.

At the same time, as CCTV systems have found applications in public areas, where businesses or private homes are located, the need for privacy zones has increased.

Conventional Solutions

Conventional solutions often fail to enable operators to target precisely the views triggered by alarm activation. A slow response time means that by the time the operator finds the view, which triggered the alarm, it is too late to efficiently react or stop the event, hence hindering the benefit of having an event-driven system. Setting privacy zones is hard with conventional receivers, and it often requires engineers to be sent on extensive training courses.

Bewator Solutions

Bewator Receivers were designed with the installer and end user in mind. They give the flexibility required to enable event-driven systems to operate to their full level of performance: precise controls, tracking capability, presets positioning are just a few of the features you will find within our range of receivers. The latest addition to the range, RX3, offers the added benefit of easy-to-program privacy zone options. This is particularly useful in town centres to respect the privacy of inhabitants, but also in retail shops: Where credit and debit cards with **PINs** are used, there is a high risk of the PIN entry being overseen by cameras. Privacy zones eliminate this risk, without having to re-position cameras or separate any recording from till data.

Benefits
• **Easy-to-program privacy zones (RX3)**
• **Complete range**
• **Upgradeable**
• **Precise Camera Control**
• **Over the coax/twisted pair RS485 options included as standard**
• **Easy set up**
• **High reliability**

RX3: Helping keeping Reading Town Centre Safe

RX3 was specially designed to meet the challenges of today's CCTV systems, and is the solution chosen by Photoscan to support the Reading town centre security system extension.

Fully compatible with commonly used video control systems, RX3 provides the cost efficiency, flexibility and reliability necessary to successfully support the 18 cameras added to Reading's surveillance systems.

RX3:

Enhanced Multi-protocol receiver with Privacy Functions

Approved by Petards as a replacement for the 150 Receiver, RX3 now includes Universal Protocol.

It supports bi-directional telemetry, allowing remote alarms to be sent back to the controller, either over the coax or using a twisted pair cable.

The receiver will automatically optimise its drive characteristics to suit the P&T head it is driving, removing the necessity to order various versions of software to control different Pan & Tilt heads.

With RX3, you have found your cost-effective solution:

Variable speed for DC preset Pan & Tilt heads with privacy zones

- 99 Presets
- Easy to install
- Includes 62 dynamic electronic privacy zones
- Allows remote programming, using on-screen menus
- Gives operators a high degree of positional controllability
- Offers high reliability
- Can also be controlled from equipment using **Ernitec ERNA** and **Pelco D** and **P** and **Videmech Universal** telemetry protocols
- Video HF Lift control
- Video loss detection • 3 or 4 wire lenses • Diagnostics • NTSC Selectable

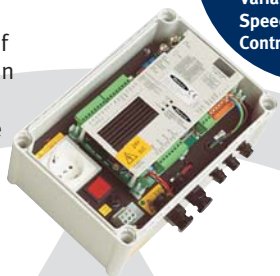## Industry Standard Receivers

RX217D - 17 function receiver with variable speed for DC preset Pan & Tilt heads

Precision Variable Speed Control

- 99 presets for precise targeting of views triggered by alarm activation
- Variable speed allows operator precise control with rapid response and tracking capability
- Maximum speed is proportional to the degree of zoom - automatically improving system usability
- Receiver automatically finds pan, tilt, zoom, focus end stops
- Compatible with continuous rotation Pan & Tilt heads with 2 wiper pan position feedback giving the shortest route to the scene. This improves response times to alarm events and has no pan preset 'dead zone'
- Ideal for use in town centre surveillance, stadia, prisons, etc.
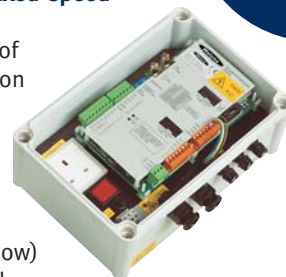- 'C' or 'D' type telemetry (see below)

RX217 - 17 function receiver for fixed speed AC preset Pan & Tilt heads

99 Presets

- 99 presets for precise targeting of views triggered by alarm activation
- Receiver automatically finds pan, tilt, zoom and focus end stops
- Compatible with all current Molynx telemetry controllers
- 'C' or 'D' type telemetry (see below)
- Ideal for industrial & commercial security applications

RX210 - 10 function receiver for fixed speed AC Pan & Tilt heads

Can Fit Into Camera Housings

- Board only option for mounting in HS01 'Super Connoisseur' camera housings
- 'C' or 'D' type telemetry
- All functions can be activated at the receiver for test purposes
- Typically used in petrol stations, retail and light commercial applications
- Pan Tilt, Zoom, Focus and two installer configurable functions e.g. wash & wipe or lamps / auxiliary
- Auto-Iris lens required

Telemetry Interface Options 'C' & 'D' type

Two options are available for the telemetry connection to the controller:

- 'C' Type (coaxial)
  Video and telemetry signals travel down the same coaxial cable in different directions, at different frequencies. It can operate at distances of up to 500m, depending on the cable specification
- 'D' Type (twisted pair)
  Telemetry signals are transmitted over a twisted pair cable and can operate up to a distance of 3km, with suitably rated cable. 'D' type telemetry interfaces conform to RS485 and are compatible with a wide range of fibre optic, microwave and other transmission equipment.
- All Bewator receivers are now supplied with both as standard.

All receivers are available as PCB only option

Matrix systems from Bewator
Modular and distributed systems

Town and City Centres

Retail & Commercial Buildings
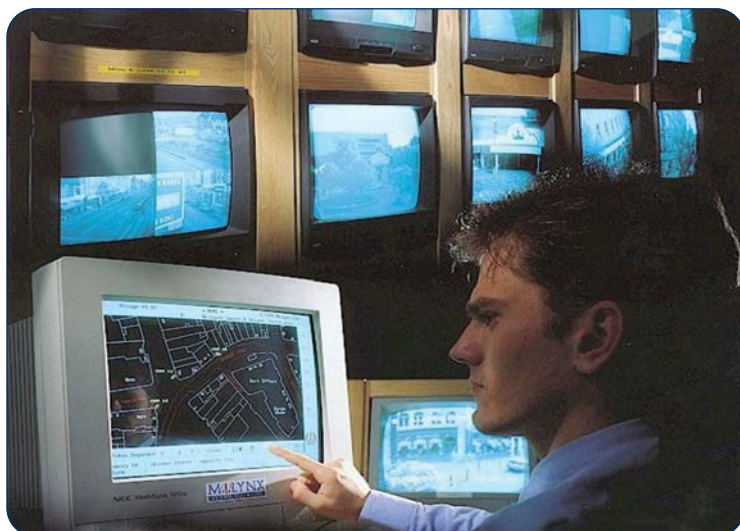
Airports and Mass Transit

Public places & Buildings / Leisure Areas

Chemical and Petrochemical

High Security Buildings

Asset Surveillance

Crime Control

Public Security

Go distributed

Conventional matrices quickly reach their limits when systems expand or increase in complexity.

On the other hand, distributed systems are flexible, easier to expand and upgrade, and offer the added advantage of not only making multi-site planning simpler, but also ensuring that if one area fails, the rest of the system continues to serve its purpose.

The Challenge

The design of security systems is a challenging match-making exercise, because there are so many requirements to take into account: the number of sites to be secured, the legacy systems and equipment in place, the staff's skills, future requirements, potential systems upgrade or expansions, technological advances, etc...

Conventional Solutions

This would be quite acceptable if you only had to do it once and for all. But systems evolve, and with traditional designs, you take the risk of reaching the breaking point very quickly when their size and complexity need to increase.
As new sites are added, or new equipment is installed, systems relying on a single matrix - no matter how powerful - face a tough challenge, technologically and economically. Firstly, you need the new equipment to talk to the old one. Secondly, you need to cater for all these added video messages.
This usually means more cable, more fibre equipment, more installation time... in other words: higher costs, and a big headache when it all starts to go wrong.

Bewator Solutions

Based on the Visilynx™ 3 matrix concept, which was developed for the Singapore's highly sophisticated MRT (Mass Rapid Transit) system, V3i is the ideal matrix with which to apply the 'distributed system' philosophy.
It is unique, and is equally at home when used alone as a local system, or in multiples, as part of a large distributed system.

Each Integrated System Unit (ISU) is feature-rich, and can be joined together in a variety of combinations, both locally and via a network of sub-systems, where images are sent down trunk cables to be processed by one or more similar ISU's forming the control centre.
This unique distributed matrix concept also offers substantial savings on cabling and installation time.

Benefits
- **Easy to expand and upgrade**
- **Straightforward system integration**
- **Reduced cable and installation costs**
- **Simplifies large / multi-site systems operation**
- **Increases systems' reliability and efficiency**

Visilynx 3: Mass observation on Singapore MRT

Safety, as much as security, was the driving force behind the specification of the North East Line (NEL), an extension to the already highly sophisticated Singapore MRT system.

The challenge was to link 500 cameras in 16 stations and another 350 on-board the 25 trains of the NEL to an operations and control centre as well as a stand-alone depot.
Visilynx 3 was created to tackle this challenge, and the resulting system delivers high picture quality despite on-board cameras moving through complex and highly-serviced underground tunnels. The central control system is designed to operate its own network control of each station, and can also be controlled by higher level systems that integrate other technologies, such as passenger information display and public address.
As the trains move between stations, the signal is received and distributed via the nearest station-based CCTV equipment to the operational and control centre (OCC) and local station equipment. At the OCC, monitors allow live carriage images to be viewed in conjunction with platform views and pictures from the numerous other cameras showing ticket booths, etc.

BEWATOR

V3i:

The Single Box Solution

Our V3i matrix proves to be very popular amongst specifiers and installers alike, and it's easy to understand why: One of the most comprehensive matrix systems on the market, it brings you exceptional video quality and is packed with user-friendly features. It genuinely can be used anywhere in the world, and has built-in interfaces to third-party equipment. Integrating multi-party equipment and securing large or multiple systems has just never been easier!

Dome protocols: Dennard - JVC - Ultrak - Vista Powerdome
Recording equipment protocols: DM Digital Sprite
Sony - Vista Columbus DVR's - Panasonic - Sony
VCR's - Panasonic - Montage Video Multiplexers.

Each V3i unit features:

- 32 loop-through camera or dome inputs (PAL or NTSC)
- C and D Telemetry control inputs/outputs (bi-directional with RX3)
- Video Loss detection on all inputs + covered camera detection
- 8 monitor outputs
- On-screen configurable text
- 128 alarm inputs (NC or NO)
- 4 programmable relay outputs
- 6 software configurable serial ports
- Field replaceable PSU
- 2 internal expansion slots for optional quad cards
- Can create a 64x16 matrix by linking 2 V3i units

For systems requirements ‹32x8 or › 256 x 16, please contact Bewator, or just contact us for advice on cost-effective systems design solutions!

Straightforward system integration...
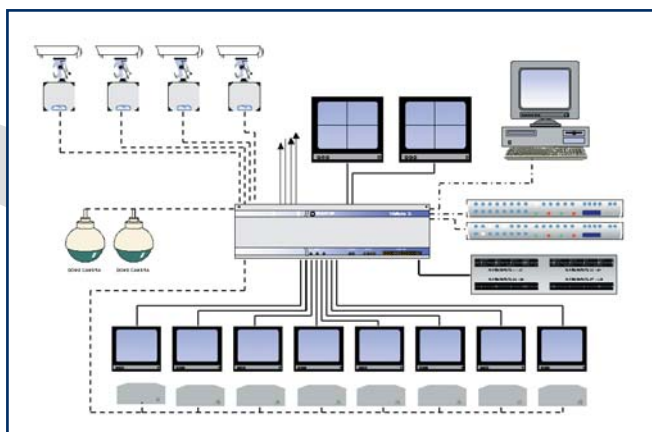
Fully populated ISU

Easy Set up via VisiPC
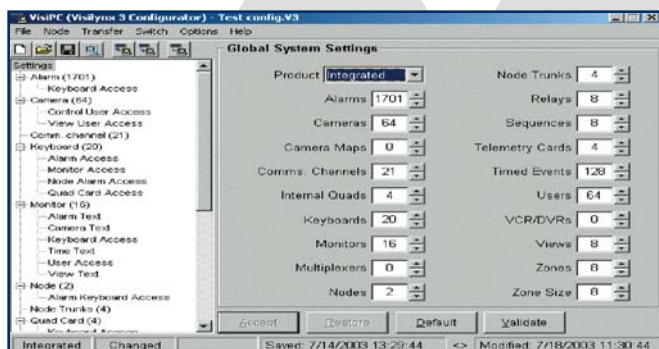
Thanks to its user-friendly on-screen windows facility, V3i is easy to set up and configure. This also allows the configuration to be downloaded onto a PC and stored. This makes system upgrades or configuration changes simple to conduct.

Cost-effective large or multi-site systems
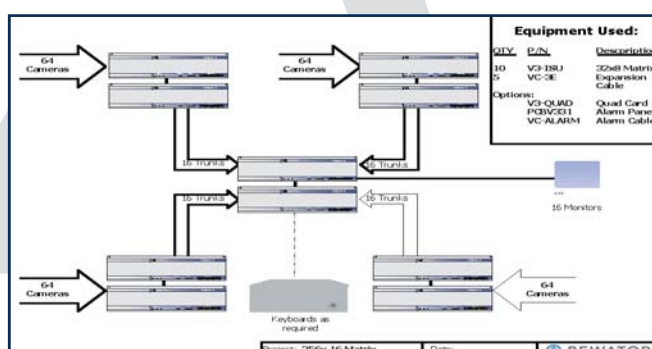
Save thousands on cabling with distributed systems. V3i can be used as a building block for systems with over 256 cameras, and the above is an example of how simple it is to design larger systems with V3i.

Digital Video Management Systems
Go straight to the action...

BEWATOR

Town and City Centres

Retail & Commercial Buildings

Airports and Mass Transit

Public places & Buildings / Leisure Areas

Chemical and Petrochemical

High Security Buildings

IP and analogue compatible

Powerful system connectivity and remote monitoring

Asset Surveillance

Crime Control

Public Security

A different kind of intelligence

Eventys range of DVMS offers more than Digital video recording. A real asset to any security system, each model delivers:
- **Advanced Audio Recording**
- **Unlimited Video Storage**
- **Simultaneous IP & Analogue Inputs**
- **Technology Breakthrough in Motion Detection**
- **Remote Data Mirroring and Storage**
- **Cutting Edge Search Facilities**
- **Unlimited Advanced Remote Monitoring**
- **Powerful Recording Features**
- **Easy Setup and Operation**

The Challenge

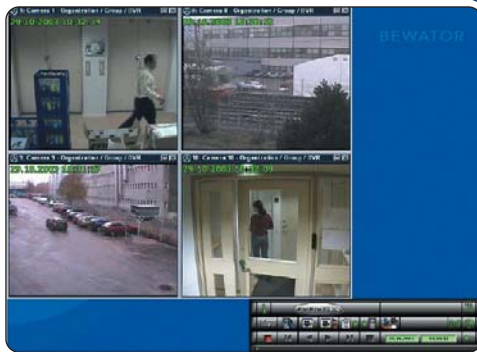The security industry is quickly moving towards digital technologies. As often with fast-paced technologies, Digital Video Recorders evolve very quickly, posing the threat of system redundancy. Designing a DVMS which can accommodate today's systems, whilst leaving room for future expansion and technological upgrade is the first hurdle. Furthermore, the technology is still new within the security industry which means that more often than not, implementing IP based systems requires specialist skills which general security installers or integrators do not necessarily have.

Conventional Solutions

Most DVRs or DVMS on the market cannot support IP and analogue cameras on the same system. As a consequence, system expansions or upgrades are rendered more complex and expensive by the need for add-on equipment to make existing and new equipment work together. More often than not, these also require involving specialist IT consultants to oversee the network side of systems. This again adds to the costs of implementing the system, and makes maintenance more difficult.

Bewator Solutions

The Eventys DVMS has the unique capability of supporting IP and analogue cameras simultaneously, and includes superior motion detection with frame progression and advanced search facilities. This versatile DVMS is also compatible with Bewator's analogue CCTV solutions and offers very powerful system connectivity and remote monitoring capabilities. Recorded video can be duplicated, sent and stored anywhere using standard IT and network storage solutions, resulting in very cost effective, secure, and virtually boundless storage capacity.

Benefits
- **Simpler Approach to Managing Video**
- **Secure & Cost Effective Data Storage**
- **IP Monitoring of Remote Sites Using Existing Cabling**
- **Ideal for Distributed Systems**
- **Powerful Search Tools for Quick Access to Incidents**
- **Increased System Efficiency**
- **Long Term Cost Savings**
- **Reduced Downtime**

Eventys: Seamless, Powerful, Reliable.

The high specification of the Eventys system means that each camera can be set individually to record in different modes at different times of the day or days of the week. This allows for added flexibility and can focus security where activity levels vary between night and day, and weekday or weekends. Eventys can even be programmed to automatically change recording modes for holidays. This makes it ideally suited for use in a wide range of situations including retail, corporate surveillance, museums, banks, education buildings and logistics centres.

Its flexibility also makes it a quick and efficient way for control rooms that are dealing with a large number of cameras - such as those in airports, casinos and sports grounds - to identify and investigate incidents.

Digital Video Management Systems
Go straight to the action...

EVENTYS

- 4, 8 or 16 video channels
- Audio options for 2 or more channels
- Advanced and easy to use replay features incorporating intuitive searching (graphical, event, motion, date & time)
- VGA and composite (BNC) main monitor output
- Built - in CD Writer
- Individual camera recording settings (frame rate and image quality)
- Individual camera recording scheduling (Continuous, motion-based or event-triggered)
- Advanced retrospective motion detector
- Integrates with Visilynx video matrices
- Compatible with Molynx protocol and 3rd party dome cameras,
- Configurable alarm input and output
- Image authentication
- MAMI - Material mirror - automatically pushes data to central server / storage at regular intervals for backup/archive/redundancy

Graphical search

- Date/Time
- Motion
- Event/Alarm

Networking with Eventys

Eventys offers very powerful system connectivity and remote monitoring capabilities. It offers a remarkable user accessibility platform across LAN, WAN or internet channels. Viewers can access real time or recorded data from any combination of accessible (password protected) camera or DVMS.
Eventys Controller (remote client software) allows authorised users to remotely configure the entire system, make settings changes and view live or recorded images from virtually anywhere in the world.

- Powerful network integration
- Unlimited network storage/NAT
- Powerful remote monitoring over network (including configuration)
- Supports network and analogue cameras (simultaneously)
- Multiple interfaces with 10/100 Base T Ethernet/ADSL/ISDN etc.

For systems examples please see page 23.

Motion search

Activity in a specific area can easily be identified by painting the target area. The system will search for the first instance of movement within an area. The system can also synchronise all cameras to the time of the incident to see where the target had been prior to and after the recorded movement.

Plug & Play

3 recording settings and 4 scheduling options give you the freedom to program each camera individually via the on-screen menus. To make it even simpler, an easy setup CD is supplied with each unit providing a set of pre-saved configurations to choose from.
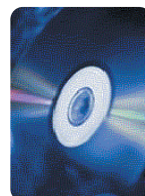
Advanced Audio Recording

As fully programmable as video recording, audio recording can be set on schedules, motion and audio detection, etc.
Audio channels can be stereo linked, synchronised with video, and used to generate alarms.
- Audio options for 2 or more channels
- Graphical audio and video management tools
- Stereo linkable - individual channel programming and scheduling
- Audio channels can be coupled to any video channel
- Hardware independent
- Full duplex audio
- Audio alarm management and advanced search
- Audio volume level search

Composite output for VCR or to feed into a matrix

Not everyone can process digital evidence, so Eventys has a Composite Video Output mimicking the VGA output. This allows footage captured to be copied onto VHS tapes easily.

Domes from Bewator
Style and performance made one

Town and City Centres

Retail & Commercial Buildings

Airports and Mass Transit

Public places & Buildings / Leisure Areas

Chemical and Petrochemical

High Security Buildings

Asset Surveillance

Crime Control

Public Security

Enhance your security system in style with Bewator Minidomes:

- **Superior optical quality**
- **High positional accuracy**
- **Long lasting performance (even in continuous mode)**
- **Perfect for interior and outdoor applications**
- **Privacy zone masking and day/night switching features (external versions)**
- **Superior weather protection**

The Challenge

Surveillance domes originate from the need for more "stylish" covert video surveillance, particularly in areas where aesthetic considerations are important, such as town centres, designer offices, shops, or even historical buildings. End-users can however be faced with a choice of style over performance: camera modules and lenses inside the domes need to be smaller, reducing the zoom range, and smoked spheres make surveillance under low light conditions more difficult by reducing the image quality. Ruggedness and durability can also be an issue, especially when cameras are used in continuous mode.

Conventional Solutions

Most domes provide some kind of answer to one or the other. It is rare however to find a dome which has the answer to all issues.
Low light conditions are still one of the biggest issues as far as domes are concerned, whilst resilience to harsh operational conditions continues in most cases to cause security systems to fail.

Bewator Solutions

Bewator domes offer a good compromise between style and performance. With an 8" diameter, they are small enough to blend in stylishly with their environment (whether on a pole, wall-mount or ceiling mounted), whilst being big enough to allow for an increased zoom range of up to 18:1, integral telemetry receiver, and day/night automatic switching option.
Being multi-protocol allows them to be added to other control systems eg: DM Sprite, or systems using Pelco, Ernitec or DM/VCL RS485 protocols.
Privacy zone masking options make them ideal for applications where a visible deterrent is needed, whilst privacy is an issue: used in retail shops as a till surveillance tool, the privacy zone masking allows customers to key in their PIN codes without being captured on camera.

Benefits
- **Suits a Wide Range of Applications**
- **Easy to Integrate**
- **Low Installation and Commissioning Costs**
- **Improved Operator's Camera Control**
- **Superior Image Quality for Evidential Recording**

Bewator Minidomes help secure Waltham Point

Waltham point is one of the three 24-hour, 364 days a year depots serving Sainsbury's stores in London and the South East. The challenge was to design and implement a system flexible enough to cover 700,000 square feet of warehouse on more than 40 acres, including 180 loading bays. The system features 102 cameras, most of which are Bewator domes.
Why?
Because they feature privacy zone masking for external cameras and the telemetry function offers full proportional speed at all times, regardless of the zoom position. This gives operators maximum control over the dome. Some of the 39 external day/night Bewator domes had to be positioned within sight of houses, but thanks to their privacy zone masking functionality, the residents' privacy is protected. 49 internal colour Bewator domes were installed within the warehouse.
Flexibility is key to the installation, and allows Sainsbury's own security staff to have optimum control over the day-to-day monitoring of the cameras. All the domes can be controlled from any of the control points, thus ensuring the system can be readily configured to suit changing requirements.

BEWATOR

Domes from Bewator
Style and performance made one

Indoor Dome Camera Assembly with Integral Multi-protocol Telemetry Receiver.

Available as wall mount, pendant mount or recessed ceiling mount, this 8" dome is ideal for indoor surveillance. Its 180 deg/sec Pan and 50 deg/sec Tilt, combined with the integral telemetry receiver (coax and twisted pair) ensure full proportional speed at all time. Its high resolution camera (Sony EXview 0.05 lux and 18x optical zoom, 12x digital zoom), with fully programmable tour sequence, dwell and speed, enables evidence to be captured at all times.

Outdoor IP66 Dome Camera Assembly with Dynamic Privacy Zones Masking

Complete with rainshield, fan and demister to ensure a clear picture at all times, this 8" dome is ideal for outdoor surveillance, especially when privacy can be an issue. Its 180 deg/sec Pan and 50 deg/sec Tilt, combined with the integral multi-protocol telemetry receiver (coax and twisted pair) ensure full proportional speed at all times. Its high resolution camera Sony EXview (automatic/manual day/night switching, 0.05/0.01 lux and manual 18x optical zoom, 12X digital), with fully programmable preset tour facility, enables evidence to be captured day and night, for ultimate security.
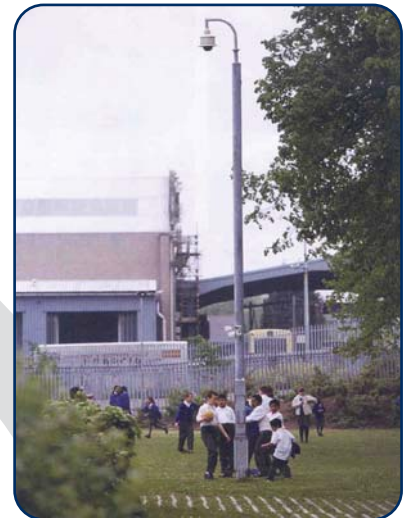
3rd Party Control

Bewator domes can be controlled via the following protocols:

Ernitec ERNA	Pelco D	+ Photon (contact tech support)
DM Sprite VCL	Pelco P	

- NTSC Selectable
- 110V versions available
- Wall-, ceiling-, pole-mount options

All domes include a PSU24-2 power supply, and a 3 year extended warranty*.
The outdoor versions also include pre-wired power, telemetry and video cables *conditions apply

Pan & Tilt Heads from Bewator
All you'll ever need from a Pan & Tilt!

Town and City Centres

Retail & Commercial Buildings

Airports and Mass Transit

Public places & Buildings / Leisure Areas

Chemical and Petrochemical

High Security Buildings

Asset Surveillance

Crime Control

Public Security

Performance goes a long way

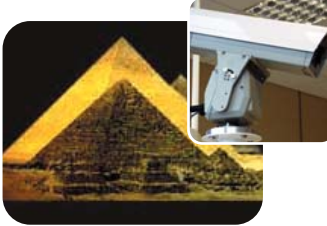**The Bewator range of Pan & Tilt heads suits every type of surveillance application. With proven reliability and performance, there is a model to fit even the most demanding security requirements without compromising usability, longevity, nor serviceability.**

Many of our Pan & Tilt heads have been in service for more than twenty years and are still on active duty today.

The Challenge

Pan & Tilt heads are expected to move cameras to their desired position in all kinds of weather, irrespective of temperature or wind speed.

The key measures of a Pan & Tilt performance lie in good weather resistance (IP66 min), low audible noise, load ability and low backlash.

Domes have become more and more popular, but the reality is, Pan & Tilts remain the best solution for certain types of applications, especially outdoor surveillance.
Domes however have set a trend with regard to what is considered good value for money, and it is difficult to find Pan & Tilts which offer top performance at a competitive price.

Conventional solutions

Demands for lower cost Pan & Tilt heads have forced many manufacturers to cut costs by downgrading the specifications of Pan & Tilts, or to stop any development to improve the designs.
As a result, performance has been reduced, and installation time and running costs have increased.

Bewator Solutions

At Bewator, we strongly believe that Pan & Tilt heads still have an important role to play in CCTV. This is why we continuously improve the design of our existing range, and continue to offer low cost solutions which are easy to install and run.

With 2 new additions to the range, P16 and P25, Bewator now offers the most comprehensive range of Pan&Tilt heads: top performance, with the full functionality you'd expect from high quality CCTV equipment, at an unbeatable price.

Benefits
- **Suits a Wide Range of Applications**
- **Easy to Install**
- **Proven Reliability and Endurance**
- **Flexibility**
- **Low Running Costs**

Guarding the Pyramids

To protect the 13km outer perimeter of the Pyramids in Egypt from vandalism, a state of the art security system was installed that includes 50 moving cameras fitted with Bewator Pan & Tilts and housings, and 150 fixed cameras.

**Most of the Bewator Housings are fitted with fan cooling kits for the extreme climate of the desert.
At the heart of the system is a Visilynx Matrix which consists of 256 inputs and 48 monitor outputs giving effective coverage of the area.**

The whole system can be operated remotely via 5 PC workstations, and interacts with a high performance perimeter alarm system and a digital video recording system.

BEWATOR

Pan & Tilt Heads from Bewator
All you'll ever need from a Pan & Tilt!

P16 Medium Duty Pan & Tilt with pre-wired leads

All P16 units are weatherproofed to IP67, supplied with 2m long pre-wired leads, and have a 5 year extended warranty (see terms and conditions).
Available with or without presets, the P16 range gives you the flexibility to choose a Pan & Tilt which will respond accurately to your systems requirements. Preset versions are fitted with heavy duty potentiometers, ensuring long lasting performance and positional accuracy.

AC and DC versions are available

16Kg Load

P25 Medium-heavy Duty Pan & Tilt with pre-wired leads and heater.

The P25 range is especially suited for heavier loads and all units are supplied with a sidemount platform as standard.
All P25 units are weatherproofed to IP67, supplied with 2m long pre-wired leads and fitted with heaters. They are covered by a 5 year extended warranty (see terms & conditions).
P25 units have presets as standard and are fitted with heavy duty potentiometers, but can be used even if presets are not required. A watertight cap is supplied with all AC units to seal the connections for when presets are not required.

Like the P16 range, P25 units give you the flexibility to choose a Pan & Tilt which will respond accurately to your system requirements.

AC and DC versions are available

25Kg Load

Specialist Pan & Tilt heads

P66 Light Duty
3kg load rating. Top load configuration. Available with or without presets

P55 Medium Duty
15kg load rating. Top load configuration. Supplied with presets as standard.
Integral Telemetry receiver option available

P60 Heavy Duty
50kg load rating. Sidemount configuration. Presets and heater as standard. DC only Available as top load configuration (40kg rated-load compensator required for loads over 25kg)

Camera Housings from Bewator
Compact or Super...the Connoisseur's choice!

BEWATOR

Town and City Centres

Retail & Commercial Buildings

Airports and Mass Transit

Public places & Buildings / Leisure Areas

Chemical and Petrochemical

High Security Buildings

Asset Surveillance

Crime Control

Public Security

For flexible camera housings, look no further.

The Bewator range of housings suits virtually all surveillance applications. Combining tough extrusion and castings, Bewator housings are durable and easy to install, and facilitate the camera/lens ongoing servicing.

Available in 3 standard sizes, the range can accommodate most common lens/camera combinations.

The Challenge

Ensuring the security of wide perimeters or areas (like city centres, stadiums, or even motorways) requires more powerful lenses and cameras than for indoor applications.

Finding a housing which will fit the size of the camera and the lens is not a given.
In addition, it is important that the camera and lens are well protected against the weather, yet easy to service should anything go wrong.

Conventional Solutions

Conventional housing solutions can be disappointing: finding an affordable housing usually either means compromising on one or more points, or accepting the fact that these necessary options like wipers and washer units usually come at a price.

The result? What started as a good price housing ends up as a fully equipped housing which is actually quite expensive.

True cable managed housings are also rare, and most of those on the market don't offer a cable management system which makes the housings easy to install and service, adding to running costs.

Bewator Solutions

At Bewator, we strongly believe that good housings help extend the systems life cycle. This is why we continuously improve the design of our existing range, to keep on offering low cost, easy to install and to run solutions.

Our housings can accommodate most common camera/lens combinations, so when cameras or lenses are upgraded, the same housings can be used. Easy to install and service, they offer a cost-effective solution for modern security systems.

Benefits
• **Suits a Wide Variety of Applications**
• **Easy to Install**
• **Proven Reliability and Endurance**
• **Flexibility**
• **Low Running Costs**

Bewator Housings on Tienanmen Square

**The largest city central square in the world, Tienanmen Square is not only the symbol of Beijing but also the symbol of China. This immense courtyard was the site of many historical events.
The square is surrounded by a variety of significant edifices: Chinese Revolution History Museum, Mao Mausoleum, Great Hall of the People, the elegant and beautiful Tiananmen (Heavenly Peace Gate), and Qianmen (Front Gate).**

To monitor the activity on such a wide space, and ensure the entrance to the surrounding historical sites was secure, a 2 part project was launched in 1999: a security system based on Bewator controllers was designed and installed. Bewator HS01 housings and pan & tilts were the solution of choice to accommodate the cameras throughout and around the square. Weather conditions can be quite harsh and Bewator Housings ensure high quality pictures every time.

Camera Housings from Bewator
Compact or Super...the Connoisseur's choice!

HS01 Super Connoisseur™

- Ideal for pan, tilt and zoom installations with larger zoom lenses
- Suitable for use with built-in RX210 series 10 function telemetry receiver
- Recommended system partners: P16 & P25 pan and tilt heads, VII+ or V3i
- Sunshield and demister fitted as standard
- Internal and external cooling fan options
- Optional mounting kit for large zoom lenses
- Usable Internal Dimensions: 400mm x 125mm x 110mm
- 110/230 Vac, 12/24 Volts

Integral telemetry receiver options

Ideal for cameras with integral lenses or camera modules

Sunshield and Demister fitted as standard

HS02B Compact Connoisseur™

- Full cable management
- Bracket allows low voltage cables to be insulated from power cables to fully comply with wiring regulations
- Unique Patented taper lock joint system (patent No GB2372290)
- Allows accurate positioning of camera without the need to hold it in position prior to locking
- Locks securely with a turn on a single Allen bolt for quick installation
- "Slide and hang" cover
- Provides easy in-situ access for installation and servicing
- Optional tamper switch and vandal resistant screws
- Unique Ceiling adaptor
- Sunshield & Demister fitted as standard
- Usable Internal Dimensions: 225mm x 85mm x 80mm
- Weatherproofed to IP67

Full Cable Management

HS03B

- A smaller size housing ideal for fixed cameras both internal and external
- Includes freely-adjustable wall bracket
- Usable Internal Dimensions: 180mm x 85mm x 80mm
- Sunshield and demister fitted as standard
- "Slide and hang" cover for easy in-situ access for installation and servicing
- Optional tamper switch and vandal resistant screws
- Ideal for use with cameras having integral lenses or camera modules
- Weatherproofed to IP67

Weatherproofed to IP67

Housing Brackets

Bewator makes a complete range of brackets, suitable for both wall and ceiling mounting, that can be used with most of the commonly used third-party housings and all of the Bewator camera housing range.
- BH15 - Wall bracket for use with HS01 and HS02 Suitable for loads up to 15 kg
- BH20Mk2 - Wall bracket for use with HS01 housings. Suitable for loads up to 20 kg.

Explosion-proof from Bewator
Security under extreme conditions!

BEWATOR

Town and City Centres

Retail & Commercial Buildings

Airports and Mass Transit

Public places & Buildings / Leisure Areas

Chemical and Petrochemical

High Security Buildings

⟨Ex⟩

Asset Surveillance

Crime Control

Public Security

Security in hazardous areas

Bewator is a world leader in the manufacture of explosion-proof housings and Pan & Tilt heads These are typically used in petrochemical, industrial, aerospace and offshore industries, and generally on sites where there is a risk of explosion because volatile gases, vapours, mists or dusts are present.
The Phoenix™ range is recognised and chosen internationally by customers who require the best engineered solution for security in hazardous areas

The Challenge

Threats of terrorist attacks on chemical plants and oil refineries, and the growing awareness of general security and processing safety issues in petrochemical, food & beverage and grain mills industries for example, call for Video Surveillance solutions which will not add to the risk of explosive gases, vapours or dusts being ignited.

Conventional Solutions

The need for flexible equipment is paramount in such specialised applications. Chemical or food processing plants often handle potentially explosive dusts or powders, which means most surveillance equipment can not be used due to the risk of it causing an explosion.
Even when suitable equipment is used, end-users are often faced with added costs or certification issues when they need additional functionality e.g. integral receivers, sunshields or wipers.

Bewator Solutions

Security threats and safety risks can run high on oil & gas and chemicals processing facilities, but an effective CCTV system can help dramatically reduce such risks.
Bewator's range of Phoenix™ Explosion-proof Camera housings and Pan & Tilt heads are ATEX certified by BASEEFA to Atex Directive 94/9/EC (IIB or IIC Gas and Dust, including hydrogen and acetylene). The units are designed to prevent external explosions by containing any sparks or flames generated by the equipment inside them.
This prevents potentially explosive atmospheres (gases, vapours etc) or materials outside the equipment from being ignited.
Phoenix™ Housings can have a wiper and integral Telemetry Receiver factory fitted, and the Pan & Tilts are fitted with preset potentiometers

Benefits
Used in conjunction with Bewator's range of CCTV solutions such as the V3i matrix and Eventys DVMS, they help deliver cost effective, high performance security systems with remote monitoring capabilities, reducing the need for costly and potentially risky visits to remote production sites.

- **Suits a Wide Range of Applications**
- **Easy to Install**
- **Proven Reliability and Endurance**
- **Flexibility**
- **Low Running Costs**

Phoenix™ around the world

Phoenix™ range of explosion-proof housings and pan and tilts are used around the world in oil refineries, petrochemical plants and even rocket launching sites. First launched in 1987, the range was chosen because of its engineering performance and reliability.
The New range of Phoenix™ takes this performance even higher, and is now not only the replacement of choice for upgrades and systems expansions, but is also more and more popular in the food processing industry dealing with volatile vapours or dusts, like flour or alcohol vapours.

BEWATOR

Explosion-proof from Bewator
Security under extreme conditions!

FP50B
Phoenix Pre-set Pan & Tilt

- ATEX approved for use in hazardous areas
- Certified to gas group IIB, zones 1& 2
- Weatherproofed to IP67
- Side mount only
- 40kg load capacity
- Presets
- 230Vac, 110Vac, 24Vac
- Speeds: 5°/S Pan, 5°/S Tilt

IP67 WEATHERPROOF

PRESETS

Ex

II 2 GD
(EEX d IIB T85°c)

ATEX Gas Group IIB zones 1&2

FPHC-40
Phoenix Camera Heads

- ATEX equipment certified for gas group IIC (hydrogen and acetylene), zones 1 & 2
- ATEX equipment certified for use in hazardous dust areas
- Pre-wired side-mount pan & tilt head
- Presets
- 182mm outside diameter, 210x186mm with sunshield
- Housing supplied complete with heater & sunshield
- Weatherproofed to IP67
- Factory pre-built
- Optional wiper
- Optional built-in telemetry receivers (see below)
- Optional tamper switch
- 230Vac, 110Vac, 24Vac

WIPER OPTION

PRESETS

IP67 WEATHERPROOF

CD TELEMETRY OPTIONS

Ex
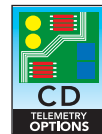
II 2 GD
(EEX d IIC T85°c)

ATEX Gas Group IIC zones 1&2

FH07B
Phoenix Camera Housings

- ATEX component certified for gas group IIB (ethylene and propane), zones 1 & 2
- ATEX component certified for use in hazardous dust areas
- 182mm outside diameter, 210x186mm with sunshield
- Two length options
    - FH07B-30 - 290mm internal
    - FH07B-40 - 420mm internal
- Weatherproofed to IP67
- Supplied complete with heater & sunshield
- Optional wiper
- Optional built-in telemetry receivers (see below)
- Optional tamper switch
- Optional factory pre-build and ATEX equipment certification
- 230Vac, 110Vac, 24Vac

IP67 WEATHERPROOF

CD TELEMETRY OPTIONS

WIPER OPTION

Ex

II 2 GD
(EEX d IIB T85°c)

ATEX Gas Group IIB zones 1&2

FH07C
Phoenix Camera Housings

- ATEX equipment certified for gas group IIC (hydrogen and acetylene), zones 1 & 2
- ATEX equipment certified for use in hazardous dust areas
- 182mm outside diameter, 210x186mm with sunshield
- Two length options
    - FH07C-30 - 290mm internal
    - FH07C-40 - 420mm internal
- Weatherproofed to IP67
- Supplied complete with heater & sunshield
- Factory pre-built
- Optional wiper
- Optional built-in telemetry receivers (see below)
- Optional tamper switch
- 230Vac, 110Vac, 24Vac

IP67 WEATHERPROOF

CD TELEMETRY OPTIONS

WIPER OPTION

Ex

II 2 GD
(EEX d IIC T85°c)

ATEX Gas Group IIC zones 1&2

Factory Fitted Optional Equipment for Camera Housings

- Wiper suitable for IIC gas group (230V, 110V and 24Vac)
- In-built telemetry receivers (eliminates need for ATEX approved receiver enclosure)
    - FH07-RX210 - 10 function
    - FH07-RX217 - 17 function with presets
- Tamper switch

IR Lamps from Bewator
For security round the clock!

BEWATOR

IR lamps enable suitably sensitive cameras to operate at night. These are available with 715nm or 830 nm filters for discrete or covert operation.

Ideal for internal use

IR50
Low power - 50W
• Use for small areas, or to enhance individual 'spots'
• Integral photocell available for automatic operation
• Operating range up to 20 metres (spot bulbs)
• Suitable for both internal and external use

Range up to 60M

IR300
Medium power - 300W
• Use for larger areas – 20-60 metres (spot bulbs)
• Separate photocell available for automatic operation

Range over 60M

IR600
High power - 500W
• Use for larger areas
• Operating range over 60 metres (spot bulb)

Compatible with P60 P&T heads

IR900
High power - 500W
• Use for larger areas
• Operating range over 6om (spot bulb)
• Flood and spot options

Replacement Bulbs
• Replacement bulb kits are available for all current and previous IR lamps
• Mounting brackets available - see IR Lamps Selection guide

BEWATOR

Electronic Accessories
For security systems in need of a boost!

Bewator provides a full range of those specialist installation items that make the difference between a valuable video monitoring system with clear, usable images on a collection of poor fuzzy images. From video distribution amplifiers that make installation easier, peak white inverters that enable a vehicles occupants to be seen at night even when the vehicles own headlights are aimed at the camera, through to those essential video transformers, the Bewator range is designed to enhance any system's performance.

Removes ground loops!

VT75-75
Video Transformer
Achieves ground loop isolation on a video cable, i.e. removes earth loops, VT75-75 – 75 ohm coax in / 75 ohm coax out. Compatible with 'C' type telemetry.

Enhances high contrast images

VID 149/D12
Peak White Inverter
Reduces intensity of bright white lights (e.g. headlights), so that details around light (e.g. persons in car) can be seen. Should be used only with a video auto iris lens.

16x5 buffered video outputs

VT148
RF Rejection Unit
Removes 'C' type telemetry to stop interference to a video signal of a fixed or twisted pair controlled camera connected to a telemetry controller.

Removes 'C'-Type Telemetry

2 buffered video outputs

TRX 482/D12
Network Expander
Can be used as an RS485 to RS422 converter or an RS485 repeater. It greatly expands the flexibility and networking capabilities of Bewator CCTV control and telemetry systems.
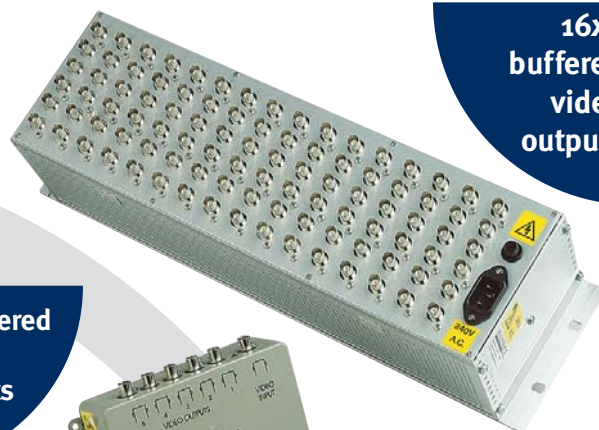
12Vdc

Video Distribution Amplifier
- Receives a video signal and provides multiple outputs, at same amplitude as input
- VID 151/D12 operates from a 12V dc supply and consists of 2 Video outputs
- VID 101 operates from a 240V ac supply and consists of 5 Video outputs
- VID 101R operates from a 240V ac supply and consists of 16 x VID 101, assembled to fit into a 19" rack

PCBT234
3 to 4 Wire Lens Adapter PCB
Suitable for interfacing 3 wire lenses, with the 4 wire lens control outputs from telemetry receivers.

PSU12D
Power Supply 12VDC (500mA)
Additional or replacement power supply unit, suitable for powering remote keyboards.

Systems Example:

CCTV/Access Control Integration
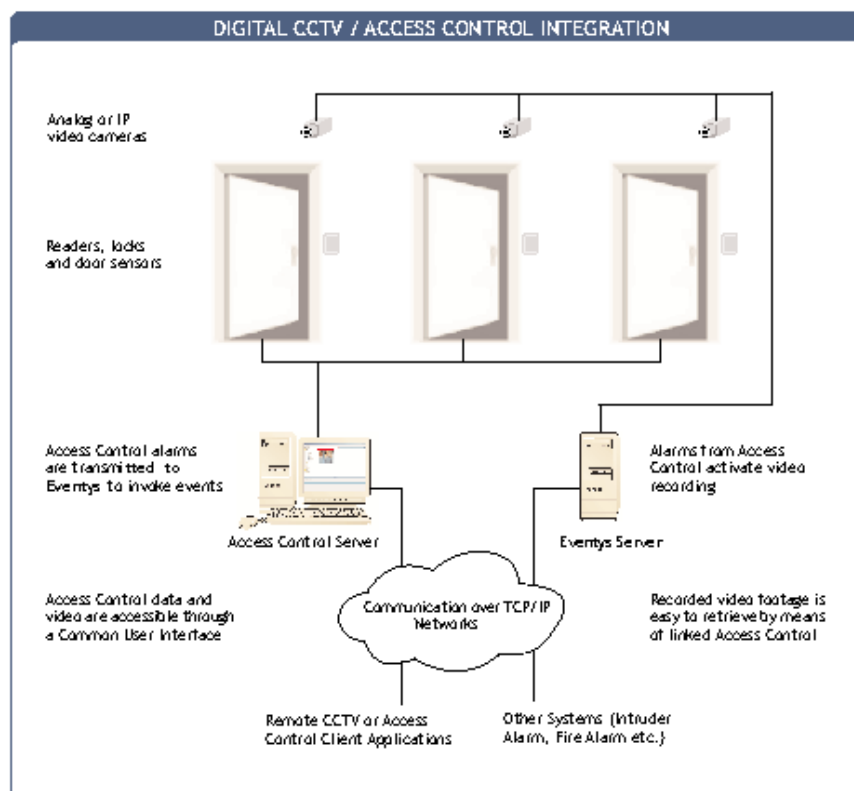
Remote Monitoring & Networking

BEWATOR

DVR

DVR

PCBV331

ALARM INPUTS 33 - 64

ALARM INPUTS 97 - 128

ALARM INPUTS 1 - 32

ALARM INPUTS 65 - 96

RS232

Visilynx 3i

Relay
Outputs

RS485

DOME CAMERA

DOME CAMERA

BEWATOR

Project: Fully populated single ISU   Date:
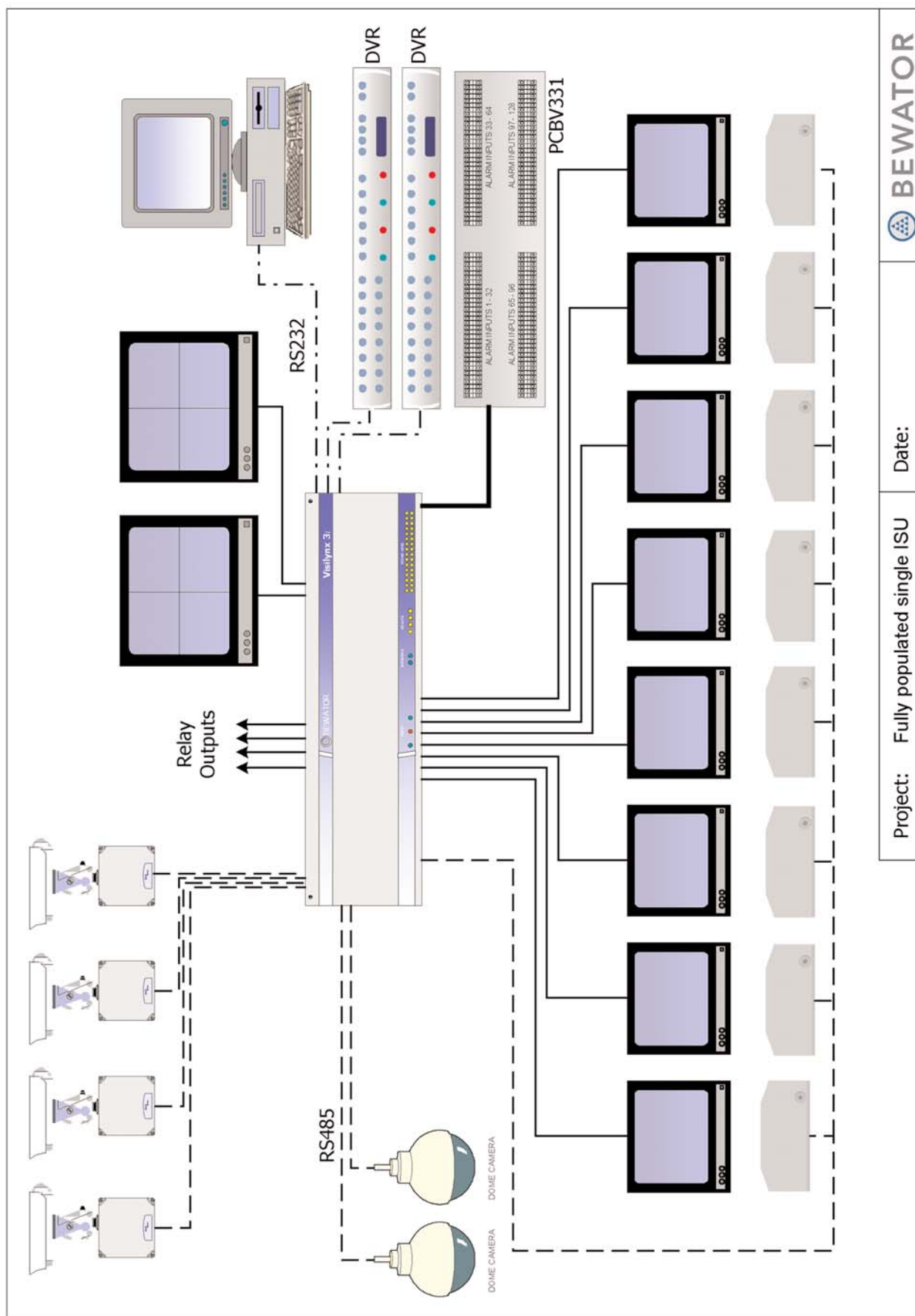
Systems Example: Stadium
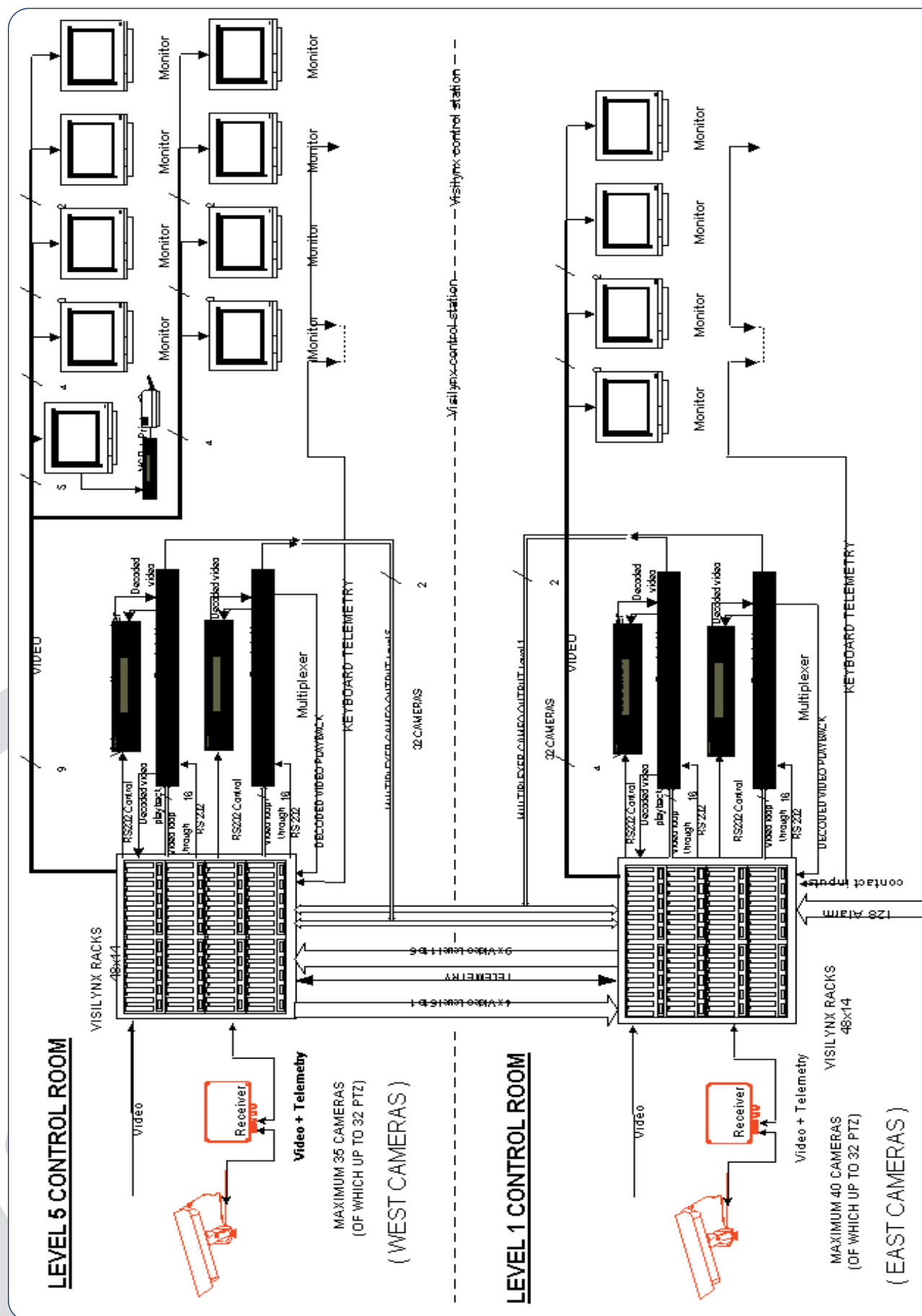
		RX210	RX217	RX217D	RX318DZ
Pan & Tilt Voltage		230-240V AC	230-240V AC	24V DC	24V DC
Dynamic Variable Speed Control				10:1	100:1
Continuous Pan Rotation				•	•
Zoom & Focus Voltage		12V DC	12V DC	12V DC	12V DC
99 PTZ Presets			•	•	•
Iris control			•	•	•
Dynamic Privacy Zones					62
Wash & Wiper Capability		•	•	•	•
Telemetry	Over the Coax	Uni-directional	Uni-directional	Uni-directional	Bi-directional
	Twisted pair	Uni-directional RS485	Uni-directional RS485	Uni-directional RS485	Bi-directional RS485 or RS422
High Current IR Light				Optional	Optional
Spare Aux		•	•	•	•
Video Gain & HF lift					•
On-screen setup					•
Alarm Inputs					•
Alarm Outputs					•
Auto Test		•	•	•	•
Telemetry Protocols					
Molynx	Coax or Twisted Pair	•	•	•	•
Videmech Universal (UP)	Twisted pair				•
Ernitec (ERNA)	Twisted pair				•
Pelco D	Twisted pair				•
Pelco P	Twisted pair				•
JVC Camera Setup				TK-C1360	TK-C1360/1460/1480
Power consumption of receiver		20VA	20VA	20VA	30VA
Maximum load current		5A	5A	5A	5A
Dimensions	Length	220mm	254mm	280mm	300mm
	Width	166mm	164mm	210mm	300mm
	Height	86mm	135mm	135mm	130mm
Unit weight	PCB	80g	500g	500g	350g
	Enclosure	1.5kg	1.75kg	1.75kg	5kg
Temperature range		-20°C to +40°C	-20°C to +40°C	-20°C to +40°C	-20°C to +40°C
Environmental (BS EN 60 529)	in enclosure	IP55	IP66	IP66	IP67
	in housing	IP66			
Power supply	in enclosure	230-240V AC	220-230V AC	230-240V AC	230-240V AC
	in housing	110-240V AC			
Warranty		1 Year	1 Year	1 Year	5 years*

* Extended Warranty. Conditions apply

Accessories

RX3-TKIT   Tamper switch kit for RX318DZ

RX3-AKIT   Alarm input PCB - 5 pairs of configurable N/C or N/O voltage free contacts

RX3-IRKIT   Solid state relay kit 230Vac, 15A switching. Suitable for IR lamps

RX3-150KIT   RX3 upgrade kit for Videmech 150MK3/Petards V1500P receiver.

                  Allows existing weather-proof enclosure and power supply to be re-used

RX2-PCBC   C'-type telemetry input module for RX2xx receivers

RX2-PCBD   D'-type telemetry input module for RX2xx receivers

RX2-PCB234   Adaptor PCB for 3-wire lenses with RX2xx receivers

RX217D-JVC14 KIT JVC 1460/1480 remote cameras set up kit ('D'-type telemetry only)

RX2-E   Euro socket adaptor for RX217/RX217D receivers

Matrix Systems Selection Guide

		V3-ISU	V-K
		V3i unit	Keyboard
Loop-through	Camera or dome inputs (PAL or NTSC)	32	
Monitor outputs	With on-screen display	8	
Telemetry	Bewator dome, P&T and camera control	Over the Coax	
	Bewator and 3rd party dome, P&T and camera control	Twisted Pair	
Video loss detection		●	
Alarm inputs	Alarm contacts into V3-ISU	128	
	Remote alarms via duplex receivers	●	
Programmable relay outputs		4	
Configuration	Non-volatile configuration	●	●
Software configurable ports	RS485/422 (keyboards)	1	
	RS232 (test/configuration)	1	
	RS232 (modem/DVR/MUX/VCR/PC-CON)	1	
	RS422/232 (DVR/MUX/VCR/PC-CON or networking V3i ISUs together)	3	
Preset support (per camera)		99	
Preset sequence		●	
Preset tour		●	
Expansion Capability	Maximum node size (using 2 V3-ISU)	64x16	
	Maximum number of ISU's in system	254	
Quad card		option (up to 2 per ISU)	
Configuration and Fault diagnosis software	VisiPC Windows software on CD-ROM	●	
Numeric keypad	Conventional selection of camera/presets		●
Selection of cameras	By name or number		●
Views	Named combination of a camera and preset		255
Dedicated keys	For key functions		●
Programme key	Unauthorised reprogramming restriction		●
PIN code	Unauthorised operation restriction		●
Video Sequences	Up to 63 camera pictures / presets per sequence		64
Warranty		5 years*	5 years*

* Extended Warranty. Conditions apply

For systems requirements outside V3i capabilities, please contact Bewator for advice.

Accessories

V3-QUAD　　Visilynx 3 quad card. Provide a colour quad screen video output from the V3-ISU in composite and Y-C format with on-screen text. Up to 2 quad cards may be fitted into each ISU. (Covered by 5 years extended warranty*)

VC-3E　　ISU expansion cable. Allows two ISU units to be linked forming a full cross-point switching 64x16 video matrix

V3-CONF　　Configuration and fault diagnosis software for Visilynx 3i

PCBV331　　Alarm panel (accepts 128 pairs of contacts)

VC-3K　　Keyboard cable, 3m (between V3/V3i and keyboard)

VC-ALARM　　Alarm cable between PCBV331 and V3-ISU

VC-PCCON　　RS232 cable used for remotely controlling the system from a PC (using PC-CON protocol)

VC-3CONFIG　　Configuration cable (between Visilynx 3/3i and PC)

	EV-R4	EV-R8	EV-R16
Camera inputs	4	8	16
Simultaneous IP and analogue cameras	●	●	●
Compression	MPEG (JPEG option)	MPEG (JPEG option)	MPEG (JPEG option)
Storage capacity Internal (at time of print)	900GB	900GB	900GB
External	Unlimited	Unlimited	Unlimited
Advanced Networking	●	●	●
Internal CD-RW	●	●	●
Recording modes - selectable per camera and by week/calendar schedule	Motion detection Continuous Event triggered	Motion detection Continuous Event triggered	Motion detection Continuous Event triggered
Covert camera option	●	●	●
Audio recording	6 channels	10 channels	10 channels
Multiscreen playback and live viewing	●	●	●
Dome / P&T telemetry	●	●	●
Record speed - system (max)	100fps / 25fps dependent on hardware	150fps / 50fps dependent on hardware	96fps / 64fps dependent on hardware
Record speed - single camera (max)	25 ips	25 ips	25 ips
Record schedule	●	●	●
Video data search	Date / time Graphical Retrospective Motion Alarm/Event	Date / time Graphical Retrospective Motion Alarm/Event	Date / time Graphical Retrospective Motion Alarm/Event
Alarm inputs	4	8	16
Optional I/O	8 optoisolated inputs 8 relay outputs	16 optoisolated inputs 16 relay outputs	32 optoisolated inputs 32 relay outputs
Remote Monitoring Software	Free	Free	Free
Multiscreen AND replay on spot monitor	●	●	●
Advanced Remote Control, Viewing & Alarm Handling	● (multi-site / multi-unit capable)	● (multi-site / multi-unit capable)	● (multi-site / multi-unit capable)
Visilynx Matrix Compatible	●	●	●
Warranty*	2 years*	2 years*	2 years*

* Extended Warranty. Conditions apply

IP inputs ordering guidelines

IP camera inputs may be substituted in groups of 4, e.g.

EV-R16-480-E4 = 16 channels - 12 analogue camera inputs and 4 IP camera inputs, 480GB storage

EV-R8-160-E8 = 8 channels - 8 IP camera inputs, 160GB storage.

Accessories

EV-S-RC   Eventys Controller software

EV-ARKIT   Alarm inputs, relay outputs kit

EV-232-485   RS232-485 converter

The standard 1 year warranty applies to accessories

Domes Selection Guide

		Internal Dome D08RX-X	External Dome D08RXE-X	Dummy Dome D08-EY	Ancillaries
Pendant mount		Option	Option	Option	BD08P
Wall Mount		Option	Option	Option	BD08W
Ceiling Mount		Option	Option	Option	BDC08
Smoked dome		●		●	
Clear dome			●		
230Vac-24Vac/2A PSU		●	●		
110Vac-24Vdc/2A PSU		Option	Option		PSU24-2/U
Pre-wired 7m cables			●		
Privacy zones			24		
Camera Module		Sony EXview	Sony EXview		
Sensitivity	Day	0.05	0.05		
	Night		0.01		
Zoom range	Optical	18X	18X		
	Digital	12X	12X		
Telemetry receiver		Integral, multi-protocol	Integral, multi-protocol		
	Over the Coax	Uni-directional	Uni-directional		
	Twisted Pair	Uni-directional RS485	Uni-directional RS485		
Telemetry protocols	Molynx	Coax or Twisted Pair	Coax or Twisted Pair		
	Ernitec ERNA	Twisted Pair	Twisted Pair		
	Pelco D	Twisted Pair	Twisted Pair		
	Pelco P	Twisted Pair	Twisted Pair		
	DM Sprite (VCL)	Twisted Pair	Twisted Pair		
Pan speed deg/sec		180	180		
Tilt speed deg/sec		50	50		
Presets	Fully programmable	64	35		
Switchable day/night			Automatic		
Warranty*	3 years*	3 years*	3 years*	1 Year	1 Year

* Extended Warranty. Conditions apply. Excludes Camera modules

Accessories

BD08W   Wall mount bracket for D08

BD08P   Pendant mount bracket for D08, 1.2m long

BDC08   Recessed ceiling mount kit for D08

PSU24-2   24Vac power supply for D08. 230Vac input

PSU24-2/U   As above but 110Vac input

Model	AC						DC							
	P16T	P16T/L	P16T-P	P16T-P/L	P25-P	P25-P/L	P16T/D	P25/D	P55T/D	P55-RX/D	P60H/D	P60TH/D	P66/D12	P66-P/D12
Load carrying capacity	16kg	16kg	16kg	16kg	25kg	25kg	16kg	25kg	15kg	15kg	50kg	40kg (with additional load compensator	3kg	3kg
Presets			•	•	•	•	•	•	•	•	•	•		•
Standard mount	top	top	top	top	Side	Side	top	Side	Top	Top	Side	Top	Top	Top
Heavy duty potentiometers			•	•	•	•	•	•						
Speed/Sec	6/3 deg	6/3 deg	6/3 deg	6/3 deg	6/3 deg	6/3 deg	48/24 deg	24/12 deg	58/12 deg	58/12 deg	32/10 deg	32/10 deg	10/4 deg	10/4 deg
IP rating	IP67	IP67	IP67	IP67	IP67	IP67	IP67	IP67	IP67	IP67	IP67	IP67	IP66	IP66
Backlash (+/-)	< +/- 0.1deg	< +/- 0.1deg	< +/- 0.1deg	< +/- 0.1deg	< +/- 0.1deg	< +/- 0.1deg	< +/- 0.1deg	< +/- 0.1deg	< +/- 0.1deg	< +/- 0.1deg	< 0.3deg	< 0.3deg	< 0.3deg	< 0.3deg
Heater	P16-HKIT	P16-HKIT	P16-HKIT	P16-HKIT	Standard	Standard	P16-HKIT	Standard	-	-	Standard	Standard	-	-
Pre-terminated 2m cable(s)	•	•	•	•	•	•	•	•						
Suggested Housing	HS01	HS01	HS01	HS01	HS01 BP40	HS01 BP40	HS01	HS01	HS01	HS01	HS01	HS01	HS02	HS02
Bracket	BP40	BP40	BP40	BP40	BP100	BP100	BP40	BP40 or BP100	BP40	BP40	BP100	BP100	BP04	BP04
Corner bracket	BP40 + BA01C	BP40 + BA01C	BP40 + BA01C	BP40 + BA01C	BP40 + BA01C or BP100	BP40 + BA01C or BP100	BP40 + BA01C	BP40 + BA01C or BP100	BP40 + BA01C	BP40 + BA01C	BP100	BP100	-	-
Built-in telemetry										Twisted pair Molynx or Videmech UP				
Power supply	230Vac	24Vac	230Vac	24Vac	230Vac	24Vac	24Vdc	24Vdc	24Vdc	24Vdc/ac	24Vdc	24Vdc	12Vdc	12Vdc
Warranty	5 years*	5 years*	5 years*	5 years*	5 years*	5 years*	5 years*	5 years*	1 year	1 year	1 year	1 year	1 year	1 year

* Extended Warranty. Conditions apply

Fixed Brackets

BP04 — 15kg rated, 258mm long - suitable for P66 (50mm pcd)

BP40 — 40kg rated, 460mm long - suitable for P16, P25, P55, etc. (standard 4" pcd)

BA01C — Corner-mount adaptor for BP40, BH20, BD08

BP100 — 100kg rated, 665mm long - suitable for P60, FP50, etc.

Accessories

P16-SCK — Safety cable kit for P16 pan & Tilt heads

P16-APAN — Retro-fit autopan card for P16, 230Vac, 50/60Hz

P16-APAN/L — As above but 24Vac

P16-HKIT — Retro-fit heater/thermostat kit 230Vac

P16-HKIT/L — As above but 24Vac/dc

P12-DC6 — Spare DC input connector

P00C-AC7F — Spare AC input connector

P00C-4F — Spare preset connector

P16CA-DC7F — Spare 2m pre-wired DC power lead

P16CA-AC7F — Spare 2m pre-wired AC power lead

P00CA-4F — Spare 2m pre-wired preset lead

P60-LCKIT — Additional load compensator kit for P60T models required for loads>25kg

P60C-14F — Spare input connector for P60 models

BAP66 — Mounting adaptor to convert base to standard 4" pcd on P66 models

P66C-10F — Spare input connector for preset versions of P66

Housings Selection Guide

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Type		HS01 External	HS01/L External	HS02B External	HS02B/L External	HS03B External	HS03B/L External
Internal Usable dimension	L	400	400	225	225	180	180
	W	125	125	85	85	85	85
	H	110	110	80	80	80	80
Bracket included				●	●	●	●
Fully cable managed bracket				●	●		
Optional fixed bracket		BH20mk2 or P&T	BH20mk2 or P&T	SUPPLIED	SUPPLIED	SUPPLIED	SUPPLIED
Toughened Glass		●	●	●	●	●	●
Sunshield		●	●	●	●	●	●
Demister		●	●	●	●	●	●
Power supply	110-230Vac	●		●		●	
	12-24Vac		●		●		●
Weight		6kg	6kg	3.54kg	3.54kg	2.54kg	2.54kg
IP Rating		IP66	IP66	IP67	IP67	IP67	IP67
Fan kit option (internal)		●	●	●	●	●	●
Fan kit option (external)		●	●				
Wiper option		●	●				
Warranty		1 year	1 year	1 year	1 year	1 year	1 year

Accessories

BHC02 — Ceiling mount bracket for HS02B

HS02-FKIT — Internal fan kit for HS02B and HS03B, 230Vac

PSU12D — 12Vdc 500mA PSU (fits inside HS02B and HS03B), 230Vac input

PSU12D/U — As above but 110Vac input

HS02-TKIT — Anti-tamper kit - tamper switch and secure fasteners

TOOL-PINEHEXSKT-6MM — Tool for 6mm A/F socket pin head secure fasteners

TOOL-PINTORX-4 — Tool for 4mm Torx pin head secur fasteners

WI01 — Wiper retro-fit for HS01-40

WI01/L — As above but 24Vac

WI01AB — Spare wiper arm and blade for HS01

HS01-CON — Connector PCB for HS01 to ease fully-functional camera assembly wiring

HS01-FKIT — Internal fan kit for HS01, 230Vac

HS01-FKIT/L — As above but 24Vac

HS01-TKIT — Anti-tamper kit- switch and secure fasteners

HS01-EFKIT — External Fan kit comprising replacement sunshield c/w external fan cooling and replacement connector PCB incorporating an internal fan, 230Vac

HS01-EFKIT/L — As above but 24Vac

LENS-KIT — Mounting kit for large zoom lenses

WIV-4A — Spare wiper arm for HV01-50

WIV-4B — Spare wiper blade for HV01-50

WIV-6A — Spare wiper arm for HV01-60

WIV-6B — Spare wiper blade for HV01-60

Washers

WA05 — 5L reservoir, 230Vac

WA05/L — As above but 24Vac

Swivel brackets

BH15 — 15 kg rated, 280mm long - Suitable for HS01 (check length) 4" pcd mounting

BH20MK2 — 20kg rated, 410mm long - suitable for HS01

Column spacers

BCS06 — 6" (150mm) column spacer, standard 4" pcd

BCS09 — As above but 9" (225mm)

BCS12 — As above but 12" (300mm)

Swivel mount adaptors

BS100 — 100kg rated (standard 4" pcd)

BS40 — 40kg rated (standard 4" pcd)

		FP50B	FH07B-30	FH07B-40	FH07C-30	FH07C-40	FPHC-40	
		Pan & Tilt	Housing	Housing	Housing	Housing	Camera head	
Approvals	ATEX	EEx d IIB T85C	EEx d IIB T85C	EEx d IIB T85C	EEx d IIC T85C	EEx d IIC T85C	EEx d IIC T85C	
Load rating		40kg					•	
Mounting		Side mount					side mount	
Presets		•	•	•	•	•	•	
Heater			•	•	•	•	•	
Sunshield			•	•	•	•	•	
Factory fitted Wiper			Option	Option	Option	Option	Option	
Optional in-built telemetry receivers	Factory fitted 10fn receiver		•	•	•	•	•	
	Factory fitted 17fn receiver		•	•	•	•	•	
Tamper switch			Option	Option	Option	Option	Option	
Dimensions							Housing	Pan & Tilt
External	L	448mm	545mm	675mm	545mm	675mm	675mm	448mm
	W	167mm	209mm	209mm	209mm	209mm	209mm	167mm
	H	286mm	186mm	186mm	186mm	186mm	186mm	286mm
Internal	L		290mm*	420mm*	290mm*	420mm*	420mm*	
	W		114mm*	114mm*	114mm*	114mm*	114mm*	
*Please note that specific dimensional and power restrictions apply to cameras, lenses and other equipment installed in the housings	H		94mm*	94mm*	94mm*	94mm*	94mm*	
Weight		19kg	10kg	11.8kg	10kg	11.8kg	11.8kg	19kg
Environmental	(BS EN 60 529)	IP67	IP67	IP67	IP67	IP67	IP67	
Power supply	230Vac	FP50B	FH07B-30	FH07B-40	FH07C-30	FH07C-40	FPHC-40	
	24Vac	FP50B/L	FH07B-30/L	FH07B-40/L	FH07C-30/L	FH07C-40/L	FPHC-40/L	
	110Vac	FP50B/U	FH07B-30/U	FH07B-40/U	FH07C-30/U	FH07C-40/U	FPHC-40/U	
Recommended Brackets	BP100	BP100 BS100 Swivel mount	BP100 BS100 Swivel mount	BP100 BS100 Swivel mount	BP100 BS100 Swivel mount	BP100 BS100 Swivel mount	BP100	
Warranty*		3 years	3 years	3 years	3 years	3 years	3 years	

* Extended Warranty. Conditions apply

Factory Fit Options

FH07W	Wiper kit for FH07 housings, 230Vac, 50/60Hz
FH07W/L	As above but 24Vac 50/60Hz
FH07W/U	As above but 110Vac 60Hz
FH07-RX210	10 function-receiver for mounting in FH07 housings 110-230 Vac
FH07-RX217	17 function preset receiver for mounting in FH07 housings 230Vac
FH07-TKIT	Tamper switch for FH07 housings
FH07-CERT	Factory Fit customer-supplied camera and lens* plus ATEX equipment certification for FH07 IIB housings (additional charge per housing)

* Bewator can supply and fit suitable cameras and lenses on request. Contact Bewator Customer Support for details.

Accessories

FH07-CGLAND	Atex II 2 GD (Eexd IIC) compound filler barrier gland for unarmoured cable, suitable for use with Phoenix IIC camera housings. M20 brass CZ121 threaded gland suitable for cables of the following specification: max. cores 14; max. over cores 12.5mm; max inner sheath 14mm; outer sheath min. 9.5mm, max 14mm.
WI01AB	Spare wiper arm and blade for FH07 housings.
BS100	100 kg Swivel mount adaptor (standard 4" pcd)

IR Lamps Selection Guide

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	IR50F	IR300	IR300-830	IR600	IR600-830	IR900	IR900-830	IR900-W	IR900-830W
Wattage	50 W	300 W	300 W	500 W	500 W	500 W	500 W	500 W	500 W
Filter	715nm	715nm	830nm	715nm	830nm	715nm	830nm	715nm	830nm
Filter type	Discreet	Discreet	Covert	Discreet	Covert	Discreet	Covert	Discreet	Covert
Angle type	Flood	Spot or Wide (using IR-WIDE)	Spot or Wide (using IR-WIDE)	Spot or Wide (using IR-WIDE)	Spot or Wide (using IR-WIDE)	Spot	Spot	Wide	Wide
Angle value	38 deg	20 deg / 65 deg	20 deg / 65 deg	20 deg / 65 deg	20 deg / 65 deg	9 deg	9 deg	60x20 deg	60x20 deg
Integral photocell	•			•	•				
Power supply	230Vac	230Vac	230Vac	230Vac	230Vac	230Vac	230Vac	230Vac	230Vac
Warranty	1 year	1 year	1 year	1 year	1 year	1 year	1 year	1 year	1 year

Accessories

IR900-BULB   Replacement bulb for IR900

IR900-PHOTO   Photocell kit for IR900 lamps

IR900-PCELL   Replacement photocell for IR900 lamps

IR-PHOTO   Separate photocell for IR lamps

IR600-BULB   Replacement bulb for IR600

IR-WIDE   Wide-angle converter (60x30) for IR300 and IR600

IR600-PSU   Replacement PSU for IR600, 230Vac

IR-715FA   Spare 715nm filter assembly for IR300, IR600

IR-830FA   Spare 830nm filter assembly for IR300, IR600

IR300-BULB   Replacement bulb for IR300

IR950-BULB   Replacement bulb for IR950

IR50-FBULB   Replacement bulb for IR50-F (Flood version)

IR50-SBULB   Replacement bulb for IR50-S (Spot version)

IR50-830KIT   830nm (covert) filter conversion kit for IR50

Mounting Brackets

BIR-PTX2   Dual IR lamp mount for P60T
BIR-P60   Single IR lamp mount for P60

BEWATOR

How To Find / Contact us...

**Head Office
Bewator Ltd
Albany Street
Newport, South Wales
NP20 5XW**

Directions By Road:
From the East. Join the M4 Westwards. Exit at Junction 25A. Feed into the left hand lane, and turn left when you reach the roundabout. Take the next slip road, down to a roundabout, with the Rising Sun Pub on your left. Take the first exit. At the next T-Junction, turn right. Follow the road almost to the end, where you will see our head quarters on the left :
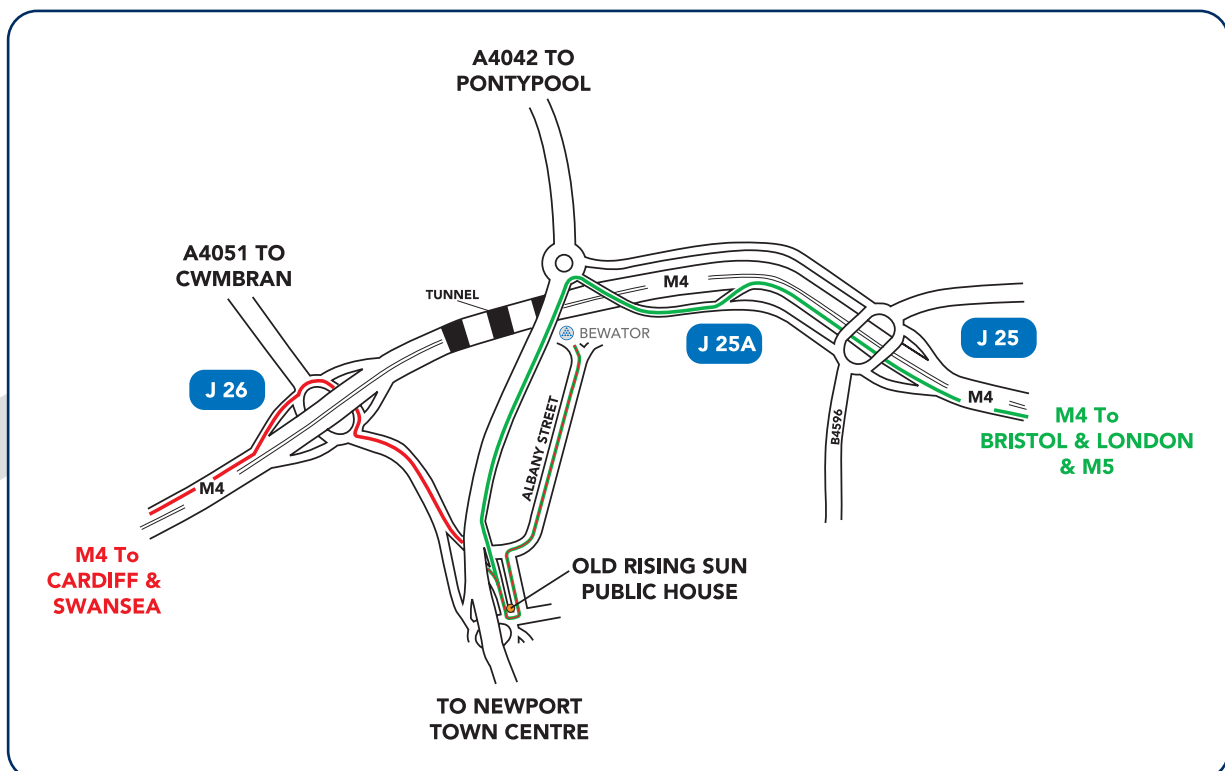
Contact Details

Telephone:
Main Switchboard: +44(0)1633 821000
UK Video Control: +44(0)1633 820620
Export Video Control: +44(0)1633 820640

Fax: +44(0)1633 850893

E-mail: **sales@bewator.co.uk**

Website: **www.bewator.co.uk**

Headquarters
Bewator Group AB
P.o. Box 1475
SE-171 28 Solna,
Sweden
Visiting address: Englundavägen 7
Tel: +46 (o)8-629 03 oo
Fax: +46 (o)8-98 32 31
e-mail: **info@bewator.com**
www.bewator.com

Bewator Ltd
Albany Street,
Newport,
South Wales,
NP20 5XW
UK
Tel: +44 (o)1633 821000
Fax: +44 (o)1633 850893
e-mail: **sales@bewator.co.uk**
www.bewator.co.uk

Bewator AB
P.o. Box 1275
SE-171 24 Solna,
Sweden
Visiting address: Englundavägen 7
Tel: +46 (o)8-627 oo 95
Fax: +46 (o)8-627 oo 96
E-mail: **info@bewator.se**
www.bewator.se

Bewator NV
Walderdonk 50
9185 Wachtebeke,
Belgium
Tel: +32 (o)9 345 86 90
Fax: +32 (o)9 345 86 87
E-mail: **info@bewator.be**
www.bewator.be

Bewator BV
Gangboord 7
4941 RE Raamsdonksveer,
Holland
Tel: +31 (o)162 522 682
Fax: +31 (o)162 515 086
E-mail: **info@bewator.nl**
www.bewator.nl

Bewator in China
Beijing office:
BWT (H.K.) Co.Ltd
701, 8 Building,
JuLong Garden,
No. 68 Xin Zhong Rd
Dong Cheng District
Beijing, P.R.C.
Tel: +86 10 6552 4386
Fax: +86 10 6552 4385

Hong Kong office:
BWT (H.K.) Co.Ltd.
1006, Cornell Center
No. 50 Wing Tai Rd.
Chai Wan,
Hong Kong
Tel: +852 2556 3881
Fax: +852 2556 7248

Bewator in Thailand
Bangkok office:
Bewator South East Asia
1211 Chartered Square Building
152 North Sathorn Road
Bangrak,
Bangkok 10500
Thailand
Tel: +662 6378468 +662 6378032
Fax: +662 6378034
E-mail: **molynx@loxinfo.co.th**

Bewator in Singapore
Block 10UBI Crescent
06-28/30 (LobbY B)
UBI TECHPARK
SINGAPORE 408564
Tel: (65) 6745 9949
Fax: (65) 6748 5567
E-mail: **molynxsa@singnet.com.sg**