A complete range of CCTV Observation Systems

ESP Witness

2003 EDITION 4

Carefully created to balance aesthetics, performance and reliability
ESP Witness observation systems are now a firmly established CCTV solution offering reliability, comprehensive capability and ease of use.

Demand has been strong for a higher specification monochrome system, we are pleased to feature in this years catalogue the ESP Witness DMQ, a metal cased quad system built around an impressive 17” screen.

More new releases are planned for 2003 including a long awaited 8 channel system and the first ESP Witness DVR. As always simplicity and capability will be the main focus when developing these new exciting items.
ESP Witness DCQ
Digital Colour Quad Observation System

FEATURES & FUNCTIONS
- 14" colour monitor
- Suitable for up to four cameras
- Integral "real-time" quad processor
- Multi picture (picture in picture, picture out picture)
- On screen set up facility
- Full alarm function
- 8 character ID generator
- Two way sound
- Camera input via mini DIN or BNC
- Freeze frame function
- Video loss warning
- Monitor stand-by facility
- Spot monitor outputs
- Slave monitor output
- Bi-directional VCR connections
- Built in time and date generator
- Infra red remote control
- Integral PT dome control

SYSTEM COMPRISSES
ESP Witness DCQ monitor, single CAMCOL2 c/w electronic iris, 4mm lens, bracket & 20m cable

OPTIONAL ACCESSORIES
- CAMCOL2 Additional Colour Camera c/w 4mm lens bracket & 20m cable
- 24/960 HR3 Time lapse VCR (see page 11)
- EXT1 1m cable c/w din connectors
- EXT4 4m cable c/w din connectors
- EXT10 10m cable c/w din connectors
- EXT20 20m cable c/w din connectors
- EXT40 40m cable c/w din connectors
- COUPLER Cable coupler (separate item) Suitable for all ESP Witness systems
- HOUS2 External use camera housing c/w bracket. Heated version available see page 10
- SLAVEC Connects to master monitor, max 2 per master. Can receive signals from two masters.

MONITOR
- Picture: 14" CRT, 0.6mm stripe pitch, 90° deflection
- Horizontal Resolution: Single Picture: 420 TV lines
- Video In / Out: 4 composite in / out (through/BNC), VCR in / out (BNC), Monitor out (BNC), 4 Camera Multi DIN or BNC
- Audio In / Out: 1/2/3/4 DIN or RJ, VCR, Monitor (RCA), -5dBu, High Impedance
- Sub Carrier Frequency Sync. Range: 4.433618 MHz ±500Hz
- Horizontal Frequency Stability: 15.625 kHz ±500Hz
- Vertical Frequency Stability: 50Hz ±5Hz
- High Voltage: 24V±1.0kV
- Speaker Power: 1W Max
- Power Input: AC90V~240V (50Hz / 60Hz)
- Power Consumption: 70W Max
- Dimensions: 365(W) x 339(H) x 353(D) mm
- Weight: 14kg
- Input Channel: 4 Channel
- Camera Input: Composite 1.0V p_p 75Ω
- Monitor Input: Composite 1.0V p_p 75Ω
- VCR PB Input: Composite 1.0V p_p 75Ω
- VCR Output: Composite 1.0V p_p 75Ω
- Picture Memory: Max 12 Fields
- Alarm Input: 4 Input, Low Active Alarm TTL Level
- Alarm Output: N.O / Com / N.C
- Alarm Hold Time: 0 to 120 Seconds Adjustable
- Channel Title: Each Channel indicates 8 Characters

CAMCOL2
- Pick-up device: 1/3" Colour CCD
- No. of picture elements: 512 (H)X492 (V): NTSC
- Light sensitivity: 3.5~30,000 Lux
- Spectral sensitivity range: 400~1,000 nm
- Signal to noise ratio: >48 dB
- White balance: Auto TTL, 2,599~6,500ºK
- Built-in microphone: Electric
- Lens type: C mount
- Lens viewing angle: 59ºH x 46ºV
- Lens relative aperture: F1.2
- Power supply: DC 12V (via system monitor)
- Alarm connection: 4 Pin. terminals
- Synchronisation: Gen Lock
- Power consumption: 4W
- System cable: 6 Wire twisted pair DIN cable
- Ambient condition: Ammonia resistant
- Temperature (operating storeage): -10ºC~+50ºC/-25ºC~+70ºC
- Cabinet: Plastic
- Weight: 200g
ESP Witness DC
Digital Colour Observation System

FEATURES & FUNCTIONS
- 14" colour monitor
- Suitable for up to four cameras
- On screen set up facility
- Full alarm function
- 8 character ID generator
- Two way sound
- Camera input via mini DIN or BNC
- Video loss warning
- Monitor stand-by facility
- Spot monitor outputs
- Slave monitor output
- Bi-directional VCR connections
- Built in time and date generator
- Infra red remote control
- Integral PT dome control

SYSTEM COMPRISES
ESP Witness DC monitor, single CAMCOL2 c/w electronic iris, 4mm lens, bracket and 20m cable

OPTIONAL ACCESSORIES
- CAMCOL2 Additional Colour Camera c/w 4mm lens, bracket & 20m cable
- 24/960 HR3 Time lapse VCR (see page 11)
- EXT1 1m cable c/w din connectors
- EXT4 4mable c/w din connectors
- EXT10 10m cable c/w din connectors
- EXXT20 20m cable c/w din connectors
- EXT40 40m cable c/w din connectors
- COU10 10m cable c/w DIN connectors
- COU20 20m cable c/w DIN connectors
- SLAVEC Connects to master monitor, max 2 per master. Can receive signals from two masters.
- HOUS2 External use camera housing c/w bracket. Heated version available see page 10

COMPLETE WITH REMOTE CONTROL

Monitor
- Picture: 14" CRT, 0.6mm stripe pitch, 90º deflection
- Horizontal Resolution: Single Picture: 420 TV lines
- Video In / Out: 4 Composite In / Out (Through)BNC
- VCR In / Out (BNC)
- 4 Camera Multi DIN or BNC
- Audio In / Out: 1/2/3/4 (DIN or RJ), VCR (RCA), Monitor (RCA)
- -5dBu, High Impedance
- Sub Carrier Frequency Sync. Range: 4.433618 MHz ±500Hz
- Horizontal Frequency Stability: 15.625 kHz ±500Hz
- Vertical Frequency Stability: 50Hz ±5Hz
- High Voltage: 24V ±1.0V
- Speaker Power: 1W Max
- Power Input: AC210V~240V (50Hz / 60Hz)
- Power Consumption: 65W Max
- Dimensions: 365(W) x 339(H) x 353(D) mm
- Weight: 13kg

CAMCOL2
- Pick up device: 1/3" Colour CCD
- No. of picture elements: 512 (H)X492 (V): NTSC
- 512 (H)X582 (V): PAL
- Horizontal resolution: ≥300 TVL
- Light sensitivity: 3.5~30,000 Lux
- Spectral sensitivity range: 400~1,000 nm
- Signal to noise ratio: >48 dB
- White balance: Auto TTL, 2,599~6,500ºK
- Built-in microphone: Electric
- Lens type: C mount
- Lens viewing angle: 59ºH x 46ºV
- Lens relative aperture: F1.2
- Power supply: DC 12V (via system monitor)
- Alarm connection: 4 Pin terminals
- Synchronisation: Gen Lock
- Power consumption: 4W
- System cable: 6 Wire twisted pair DIN cable
- Ambient condition: Ammonia resistant
- Temperature (operating storage): -10ºC~+50ºC/-25ºC~+70ºC
- Cabinet: Plastic
- Weight: 200g
**ESP Witness Colour Compact**

**Colour Observation System**

**FEATURES & FUNCTIONS**
- 10" colour monitor
- Suitable for up to four cameras
- Full alarm function
- Integral “action function”
- Two way sound
- Monitor stand-by facility
- Slave monitor output
- Bi-directional VCR connections
- Gen locked to avoid picture roll

**SYSTEM COMPRISES**
ESP Witness Colour Compact monitor, single CAMCOL2 c/w electronic iris, 4mm lens, bracket and 20m cable

**Picture tube**
- 10" 90° deflection, 0.63mm pitch

**Resolution**
- >500 TVL (bandwidth 7MHz)

**TV standard**
- PAL: 625 TV lines, 50Hz

**Functional modes**
- Display cameras, VCR replay

**Camera selection**
- 1-4CH (WJ-700) / 1CH (WJ-700A)

**Audio**
- Two-way prepared 200mW
- Built-in microphone: electric

**Main power supply**
- PAL/NTSC AC90-250V, 50/60Hz
- Power consumption: 65 Watt

**Camera power supply**
- DC 12V, short-circuit protected (max 0.5A)

**Max. camera cable length**
- 100M

**System cable**
- 6 Wire twisted pair DIN cable

**Ambient temperature**
- (operating/storage) -10°C to +50°C / -25° to +70°C

**Cabinet**
- Plastic

**Weight**
- 9Kg

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**OPTIONAL ACCESSORIES**

**CAMCOL2**
- Additional Colour Camera c/w 4mm lens, bracket & 20m Cable

**EXT**
- 1m cable c/w DIN connectors
- 4m cable c/w DIN connectors
- 10m cable c/w DIN connectors
- 20m cable c/w DIN connectors
- 40m cable c/w DIN connectors
- 80m cable c/w DIN connectors

**HOUS2**
- External use camera housing c/w bracket.
- Heated version available

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**MONITOR**

**Pick-up device**
- 1/3" Colour CCD

**No. of picture elements**
- 512 (H) x 492 (V): NTSC
- 512 (H) x 582 (V): PAL

**Horizontal resolution**
- >500 TVL

**Light sensitivity**
- 3.5 to 30,000 Lux

**Spectral sensitivity range**
- 400 to 1,000 nm

**Signal to noise ratio**
- >48 dB

**White balance**
- Auto TTL, 2,599 to 6,500ºK

**Built-in microphone**
- Electric

**Lens type**
- C mount

**Lens viewing angle**
- 59° H x 46° V

**Lens relative aperture**
- F1.2

**Power supply**
- DC 12V (via system monitor)

**Alarm connection**
- 4 Pin terminals

**Synchronisation**
- Gen Lock

**Power consumption**
- 4W

**System cable**
- 6 Wire twisted pair DIN cable

**Ambient condition**
- Ammonia resistant
- (operating/storage) -10°C to +50°C / -25° to +70°C

**Cabinet**
- Plastic

**Weight**
- 200g
ESP Witness DMQ

Digital Mono Quad Observation System

FEATURES & FUNCTIONS
- 17" monochrome monitor
- Suitable for up to four cameras
- Integral "real-time" quad processor
- On screen set up facility
- Full alarm function
- 8 character ID generator
- Two way sound
- Camera input via mini DIN or BNC
- Freeze frame function
- Video loss warning
- Monitor stand-by facility
- Spot monitor outputs
- Slave monitor output
- Bi-directional VCR connections
- Built in time and date generator
- Gen locked to avoid picture rol
- Infra red remote control

SYSTEM COMPRISES
ESP Witness DMQ monitor, single CAM42K c/w electronic iris, 4mm lens, bracket & 20m cable

OPTIONAL ACCESSORIES
- CAM42K
  Additional Mono Camera c/w 4mm lens, bracket & 20m Cable
- 24/960 HR3
  Time Lapse VCR (see page 11)
- EXT1
  1m cable c/w din connectors
- EXT4
  4m cable c/w din connectors
- EXT10
  10m cable c/w din connectors
- EXT20
  20m cable c/w din connectors
- EXT40
  40m cable c/w din connectors
- EXT80
  80m cable c/w din connectors
- COUP2
  Cable coupler (separate item)
- SLAVE 17
  17" mono monitor for use as slave or spot monitor with ESP Witness DMQ
- HOUS2
  External use camera housing c/w bracket. Heated version available (see page 10)

FEATURES & FUNCTIONS
- 17" monochrome monitor
- Suitable for up to four cameras
- Integral "real-time" quad processor
- On screen set up facility
- Full alarm function
- 8 character ID generator
- Two way sound
- Camera input via mini DIN or BNC
- Freeze frame function
- Video loss warning
- Monitor stand-by facility
- Spot monitor outputs
- Slave monitor output
- Bi-directional VCR connections
- Built in time and date generator
- Gen locked to avoid picture rol
- Infra red remote control

SYSTEM COMPRISES
ESP Witness DMQ monitor, single CAM42K c/w electronic iris, 4mm lens, bracket & 20m cable

OPTIONAL ACCESSORIES
- CAM42K
  Additional Mono Camera c/w 4mm lens, bracket & 20m Cable
- 24/960 HR3
  Time Lapse VCR (see page 11)
- EXT1
  1m cable c/w din connectors
- EXT4
  4m cable c/w din connectors
- EXT10
  10m cable c/w din connectors
- EXT20
  20m cable c/w din connectors
- EXT40
  40m cable c/w din connectors
- EXT80
  80m cable c/w din connectors
- COUP2
  Cable coupler (separate item)
- SLAVE 17
  17" mono monitor for use as slave or spot monitor with ESP Witness DMQ
- HOUS2
  External use camera housing c/w bracket. Heated version available (see page 10)
ESP Witness Q2K

Mono Quad Observation System

FEATURES & FUNCTIONS
- 12" mono monitor
- Suitable for up to four cameras
- Single camera or quad display
- Integral "real-time" quad processor
- On screen set up facility
- Full alarm function
- 6 character ID generator
- Two way sound
- Monitor stand-by facility
- Slave monitor output
- Bi-directional VCR connections

SYSTEM COMPRISES
ESP Witness mono Quad monitor with integral quad switcher, single mono CAM4 2K c/w electronic iris, 4mm lens, bracket and 20m cable

OPTIONAL ACCESSORIES
CAM4 2K
Additional Mono Camera c/w 4mm lens, bracket & 20m Cable

24/960 HR3
Time Lapse VCR (see page 11)

EXT1
1m cable c/w din connectors

EXT4
4m cable c/w din connectors

EXT10
10m cable c/w din connectors

EXT20
20m cable c/w din connectors

EXT40
40m cable c/w din connectors

EXT80
80m cable c/w din connectors

COUP2
Cable coupler (separate item) Suitable for all ESP Witness systems

HOUS2
External use camera housing c/w bracket. Heated version available (see page 10)

SLAVE 2
Connects to master monitor via 2 phono to 2 phono lead, max 2 per master

MONITOR

Picture: 12" BW CRT
System: EIA or CCIR
Resolution: Over 800 TV lines
Frequency: Horizontal: 15.625/17.75 Khz
Vertical: 50/60Hz
Video input: 1.0V p-p 75Ω
Video output: 1.0V p-p 75Ω
Scanning time: 30 Frames/second
Automatic synchronisation: Quad mode only or with 4 cameras
Built-in microphone: Electric
On screen display (OSD): Time and Date
System connection:
- In/out system: 6 Pin Mini DIN jack
- VCR out: RCA connector
- VCR in: RCA connector
- Audio out: RCA connector
- Output slave AV: RCA connector
- Wired remote: 8 Pin modular jack
Power consumption: 40W
Power requirement: AC 90 ~ 250V, 50/60 Hz
Assurance temperature: -10°C~+50°C (14°F~122°F)
Cabinet: Plastic case
Weight: 7.05Kg

CAM42K

Image sensor: 1/3" CCD BW
System: EIA or CCIR
Camera power input: DC 12V (from monitor)
Video output: 1.0V p-p 75Ω
Alarm output: 12v dc
Alarm input: n/o 2 pin
Rafem microphone: Electric
Speaker: 0.3W
Resolution: More than 380 lines
Effective picture elements:
- Pixels (EIA): (V) 492 x (H) 512 = 251,000
- Pixels (CCIR): (V) 582 x (H) 512 = 297,000
Lens mount: C/CS mount
IRIS control: 1.60~1/100,000 seconds (auto)
S/N ratio: More than 45dB
Min. lighting illumination: 0.1Lux/1Lux (WF:1.6 Lens)
Assurance temperature: -10°C~+50°C (14°F~122°F)
Power consumption: 2.4W
Weight: 140g
## ESP Witness 2K

### FEATURES & FUNCTIONS
- 12" mono monitor
- Suitable for up to four cameras
- On screen set up facility
- Full alarm function
- 6 character ID generator
- Two way sound
- Monitor stand-by facility
- Slave monitor output
- Bi-directional VCR connections

### SYSTEM COMPRISES
ESP Witness mono monitor, single mono CAM4 2K c/w electronic iris, 4mm lens, bracket and 20m cable

### OPTIONAL ACCESSORIES

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<th>Description</th>
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<tr>
<td></td>
<td>SLAVE 2</td>
<td>Connects to master monitor via 2 phono to 2 phono lead, max 2 per master</td>
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<tr>
<td></td>
<td>HOUS2</td>
<td>External use camera housing c/w bracket, heated version available (see page 10)</td>
</tr>
</tbody>
</table>

### Monitor

- **Picture tube**: 12" B/W CRT
- **System**: EIA or CCIR
- **Resolution**: Over 800 TV lines at centre
- **Frequency**:
  - Horizontal: 15.625 Khz/17.75 Khz
  - Vertical: 50/60Hz
- **Video input**: 1.0V p-p 75Ω
- **Video output**: 1.0V p-p 75Ω
- **Built-in microphone**: Electric
- **System connection**:
  - Input system: 6 pin Mini DIN jack
  - VCR out: RCA connector
  - VCR in: RCA connector
  - Audio out: RCA connector
  - Output slave A/V: RCA connector
  - Wired remote: 8 pin modular jack
- **Power consumption**: 50W
- **Power requirement**: AC 90 - 250V, 50/60 Hz (free voltage)
- **Assurance temperature**: -10°C to +50°C (14°F to 122°F)
- **Cabinet**: Plastic
- **Weight**: 7.05Kg

### CAM 2K

- **Image sensor**: 1/3" CCD B/W
- **System**: EIA or CCIR
- **Camera power input**: DC 12V (from monitor)
- **Video output**: 1.0V p-p 75Ω
- **Alarm output**: 12v dc
- **Alarm input**: n/o 2 pin
- **Built-in microphone**: Electric
- **Speaker**: 0.3W
- **System connection**:
  - Input system: 6 pin Mini DIN jack
  - VCR out: RCA connector
  - VCR in: RCA connector
  - Audio out: RCA connector
  - Output slave A/V: RCA connector
- **Power consumption**: 2.4W
- **Weight**: 140g
- **Resolution**: More than 380 lines
- **Effective picture elements**:
  - Pixels (EIA): (V) 492 x (H) 512 = 251,000
  - Pixels (CCIR): (V) 582 x (H) 512 = 297,000
- **Lens mount**: 4mm, C mount
- **IRIS control**: 1.60~1/100,000 seconds (auto)
- **S/N ratio**: More than 45dB
- **Min. lighting illumination**: 0.1Lux/1Lux (W/F:1.6 Lens)
- **Assurance temperature**: -10°C to +50°C (14°F to 122°F)
- **Power consumption**: 2.4W
- **Weight**: 140g

### Features & Functions
- 12" mono monitor
- Suitable for up to four cameras
- On screen set up facility
- Full alarm function
- 6 character ID generator
- Two way sound
- Monitor stand-by facility
- Slave monitor output
- Bi-directional VCR connections
Additional mono camera for ESP Witness systems c/w 4mm lens, 20m cable and bracket

Additional colour camera for ESP Witness systems c/w 4mm lens, 20m cable and bracket

Additional colour camera for ESP Witness systems c/w 4mm lens, 20m cable and bracket

C-mount lens for use with CAM42K, CAMCOL2 & CAM6. Available in 4mm, 6mm, 8mm, 12mm and 16mm formats

External use “Bullet Camera” for use with ESP Witness systems. Complete with bracket.
MagnumBW - Mono version
MagnumCOL - Colour version
NB Requires appropriate length EXT cable

Mono pinhole board camera, c/w ESP Witness connector.
NB Requires appropriate length of EXT cable

Mono covert camera in clock, c/w ESP Witness connector.
NB Requires appropriate length of EXT cable

Covert camera in working PIR, c/w ESP Witness connector.
Unit has one way audio.
COVPIR - Mono version
COVPIRCOL - Colour version
NB Requires appropriate length of EXT cable

Covert camera in dummy smoke detector, c/w ESP Witness connector.
Unit has one way audio.
COVSMOKECOL - Colour version
NB Requires appropriate length of EXT cable

Covert camera in dummy smoke, c/w ESP Witness connector.
Unit has one way audio.
NB Requires appropriate length of EXT cable

Dummy version of CAM42K
C/w real lens and short dummy cable

Dummy version of CAMCOL2
C/w real lens and short dummy cable

Large external dummy camera
with optional red LED, battery housed in camera

Medium external dummy camera
with optional red LED, housed in junction box
**Motorised Pan & Tilt Dome Cameras**

**FEATURES & FUNCTIONS**
- Motorised pan and tilt camera in mini 4.5" dome
- Requires DOMEPTCTRL except when connecting to ESP Witness DCQ, DC and DMQ
- High speed low noise motor
- Electronic iris and 4mm lens
- Attractive semi covert solution
- Available in mono or colour

**DOMEPTBW**
- Image sensor: 1/3" CCD B/W
- Effective picture element: 512x492 (EIA) or 512x582 (PAL)
- Resolution: more than 380 TV lines
- Built-in microphone: Electric
- Video output: 1.0V p-p, 75Ω
- System connection: 6 Pin Mini DIN jack
- Lens: 3.6mm
- Synchronisation: External
- IRIS control: 1/100,000 sec. (auto)
- Shutter speed: 1/60~1/100,000
- Minimum illumination: 0.1Lux
- Camera power input: DC 12V (from monitor)
- Weight: 1Kg

**DOMEPTCOLHR**
- Image sensor: 1/3" CCD Colour or 1/4" CCD
- Effective picture element: 512x492 (NTSC) or 512x582 (PAL)
- Resolution: more than 330 TV lines
- Built-in microphone: Electric
- Video output: 1.0V p-p, 75Ω
- System connection: 6 Pin Mini DIN jack
- Lens: 3.6mm
- Synchronisation: External
- IRIS control: 1/100,000 sec. (auto)
- Shutter speed: 1/50~1/100,000
- Minimum illumination: 2.0Lux
- Camera power input: DC 12V (from monitor)
- Weight: 1Kg

**Fixed Dome Cameras**

**FEATURES & FUNCTIONS**
- Fixed camera in mini 4.5" Domes
- Electronic iris with 3.8mm lens
- Attractive semi covert solution
- Available in mono or colour

**DOMEPTCTRL**
- Internal use mounting bracket for DomePT
- DomePTBRAWA (wall)
- DomePTBRACE (ceiling)

**DOMEPTBW**
- Image device: 1/3" CCD B/W
- Horizontal resolution: 330 TV lines
- Built-in lens: Standard f:1.6, 3.8mm
- Built-in microphone: Standard composite signal, 75Ω
- Minimum illumination: 0.1Lux
- Shutter control: Auto, 1/60~1/100,000
- Power requirement: 12V = 1V DC, 300mA
- Weight: 210g

**DOMEPTCOLHR**
- Image device: 1/3" CCD Colour or 1/4" CCD
- Horizontal resolution: 380 TV lines
- Built-in lens: Standard f:1.6, 4mm
- Built-in microphone: Standard composite signal, 75Ω
- Minimum illumination: 0.2Lux (EIA)
- IRIS control: Auto, 1/60~1/100,000
- Power requirement: 12V = 1V DC, 300mA
- Weight: 210g

**DOMEPTCTRL**
- Controls pan and tilt of up to four PT domes
- 1-4 camera selection
- Includes additional IR remote control
- Not required when connecting pan & tilt dome cameras to WITDC/WITDCQ/WITDMQ
- Suitable for both mono and colour PT domes
- Displays up to four pictures on single ESP Witness system channel

**DOME PT BRA**
- Fixed Dome Cameras

**DOME BW**
- Image device: 1/3" CCD Colour
- Horizontal resolution: 380 TV lines (H/V)
- Built-in lens: Standard f:1.6, 3.8mm
- Built-in microphone: Standard composite signal, 75Ω
- Minimum illumination: 0.2Lux (CCIR)
- IRIS control: Auto, 1/60~1/100,000
- Power requirement: 12V = 1V DC, 300mA
- Weight: 210g

**DOME PT BRA**
- Internal use mounting bracket for DomePT
- DomePTBRAWA (wall)
- DomePTBRACE (ceiling)
Ext Cables

EXT Cables

EXT1 1m cable c/w din connectors
EXT4 4m cable c/w din connectors
EXT10 10m cable c/w din connectors
EXT20 20m cable c/w din connectors
EXT40 40m cable c/w din connectors
EXT80 80m cable c/w din connectors
COUP2 Cable coupler (separate item)

Suitable for all ESP Witness systems

Housings

HOUS2 Weather proof external housings for use with ESP Witness kit cameras. Complete with adjustable high strength bracket.
HOUS2 Standard version
HOUS2H - 240v Heated version

Weather proof external housings for use with ESP Witness kit cameras. Complete with adjustable high strength bracket.

High security cabinet for VCR. Made from 16swg Sheet Steel with duo high security locks.

510W x 470D x 150H

VCR CAB

CAGE 1 Anti vandal galvanised steel cage for external housed camera protection. 335W x 410D x 335H.

Anti vandal galvanised steel cage for external housed camera protection. 335W x 410D x 335H.

Lockable tape storage unit for 31 tapes

Ext Cables Housings

Alarm Trigger PIR’s

IN1 Internal trigger PIR for ESP Witness alarm function, connects directly to rear of camera. Normally open contacts.

OUT 2 External trigger PIR for ESP Witness alarm function, connects directly to rear of camera. Normally open contacts.

Modules

AMP-1 Amplifier to increase distance between camera and monitor up to 300m. Only required with cable runs over 100m

BNC-1 Converts BNC cameras for use with ESP Witness systems

Converts BNC cameras for use with ESP Witness systems

Alarm Trigger PIR’s

Signs

WARN 1 External use durable CCTV warning sign (420mm x 300mm). Space available to add scheme ownership details

External use durable CCTV warning sign (420mm x 300mm). Space available to add scheme ownership details

Monitor Brackets

BRA350 Mounting brackets for ESP Witness monitors.

BRAVCR Addition to BRA350 to allow mounting of VCR below monitor

Slave Monitors

SLAVE COL Connects to master colour monitor, max 2 per master and should not exceed 20m distance. Can receive signals from two masters.

SLAVE 2 Connects to master colour monitor, max 2 per master and should not exceed 20m distance.

SLAVE 17 17” mono monitor for use as slave or spot monitor with ESP Witness DMQ

Alarm Trigger PIR’s

Slave Monitors

BRA350 Mounting brackets for ESP Witness monitors.

BRAVCR Addition to BRA350 to allow mounting of VCR below monitor

SLAVE COL Connects to master colour monitor, max 2 per master and should not exceed 20m distance. Can receive signals from two masters.

SLAVE 2 Connects to master colour monitor, max 2 per master and should not exceed 20m distance.

SLAVE 17 17” mono monitor for use as slave or spot monitor with ESP Witness DMQ

Alarm Trigger PIR’s

Internal trigger PIR for ESP Witness alarm function, connects directly to rear of camera. Normally open contacts.

External trigger PIR for ESP Witness alarm function, connects directly to rear of camera. Normally open contacts.

Amplifier to increase distance between camera and monitor up to 300m. Only required with cable runs over 100m

Converts BNC cameras for use with ESP Witness systems

Slave Monitors

Connects to master colour monitor, max 2 per master and should not exceed 20m distance.

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17” mono monitor for use as slave or spot monitor with ESP Witness DMQ

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17” mono monitor for use as slave or spot monitor with ESP Witness DMQ
**Time Lapse Video Recorders**

**FEATURES & FUNCTIONS**

- Multiple record time settings
  - 24HR3: 3-12-18-24-36 (E-180 tape)
- 10,000 hour head warranty
- Super Resolutions - 350 lines (B/W), 300 lines (Colour)
- Audio Recording: 3H, 12H, 18H, 24H
- Diamond-like Carbon Coated Head Drum
- 30 Days Battery Back-up Time
- Universal Free Voltage (AC 85V - 265V)
- Flexible Timer REC (Daily or Weekly)
- Multiple OSD Languages - English/French/Spanish
- Alarm Recording
- Panic Recording
  - When there is a panic input at the PANIC IN terminal, the panic recording starts and continues to the end of the tape in 3 hour recording mode
- Series Recording
- Using 2 VCR’s or more, the series recording function lets you switch recording from one unit to the next
- Auto Power ON, Auto Head cleaning
- Wireless Remote Controller (RC-20)
- Suitable for connection to all ESP Witness systems

ESP can supply VCR tape storage equipment, please call with your requirements

**OPTIONAL ACCESSORIES**

- VCR 2: VCR connection cable. For use with time lapse VCR
- VCR CAB: High security cabinet for VCR. Made from 16swg Sheet Steel with dual high security locks. 510W x 470D x 150H
- HSK1: Replacement desk assembly
- TSU1: Lockable tape storage unit for 31 tapes

**24HR3 - 24 hour & 960HR3 - 960 hour Video Recorders**

<table>
<thead>
<tr>
<th></th>
<th>24HR3 - 24 hour</th>
<th>960HR3 - 960 hour</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Recording system</strong></td>
<td>Double azimuth 4 head helical scanning</td>
<td></td>
</tr>
<tr>
<td><strong>Tape cassette</strong></td>
<td>VHS 1/2&quot; video cassette tape</td>
<td></td>
</tr>
<tr>
<td><strong>Head cleaning</strong></td>
<td>Auto</td>
<td></td>
</tr>
<tr>
<td><strong>Tape speed</strong></td>
<td>23.39m/sec (3 hour mode)</td>
<td></td>
</tr>
<tr>
<td><strong>FF/Rew time</strong></td>
<td>3min under (when using T-120 tape)</td>
<td></td>
</tr>
<tr>
<td><strong>Loading type</strong></td>
<td>Full-Loading</td>
<td></td>
</tr>
<tr>
<td><strong>REC/PB mode (Hr)</strong></td>
<td>L3, L12, L18, L24, 36</td>
<td></td>
</tr>
<tr>
<td><strong>960HR3</strong></td>
<td>48, 72, 96, 120, 168, 240, 480, 720, 960H (when using E-180 tape)</td>
<td></td>
</tr>
<tr>
<td><strong>Series record</strong></td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td><strong>Repeat record</strong></td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td><strong>Alarm record</strong></td>
<td>3H, 12H, 18H, 24H (when using E-180 tape)</td>
<td></td>
</tr>
<tr>
<td><strong>Audio record</strong></td>
<td>In 3H, 12H, 18H and 24 hour modes</td>
<td></td>
</tr>
<tr>
<td><strong>Resolution</strong></td>
<td>350 lines B/W, 300 lines Colour</td>
<td></td>
</tr>
<tr>
<td><strong>Recording method</strong></td>
<td>Luminance signal: FM recording~0.8V Down-converted subcarrier phase shift system</td>
<td></td>
</tr>
<tr>
<td><strong>Video input/output</strong></td>
<td>1.0Vp-p, 75Ω, unbalanced</td>
<td></td>
</tr>
<tr>
<td><strong>Audio input</strong></td>
<td>RCA pin jack more than 47kΩ-8.8dBm, unbalanced</td>
<td></td>
</tr>
<tr>
<td><strong>Audio output</strong></td>
<td>RCA pin jack more than 1.5kΩ-8.8dBm, unbalanced</td>
<td></td>
</tr>
<tr>
<td><strong>Microphone input</strong></td>
<td>-60dB, 3.5mm Mini jack, 10kΩ unbalanced</td>
<td></td>
</tr>
<tr>
<td><strong>Alarm input</strong></td>
<td>DC-4.5V (Open), DC-0.8 (Closed) / 5.7kΩ</td>
<td></td>
</tr>
<tr>
<td><strong>Alarm output</strong></td>
<td>DC-4.5V (H), DC-0.8 (L) / 5.7kΩ</td>
<td></td>
</tr>
<tr>
<td><strong>Panic input</strong></td>
<td>DC-4.5V (Open), DC-0.8 (Closed) / 5.7kΩ</td>
<td></td>
</tr>
<tr>
<td><strong>End output</strong></td>
<td>DC-4.5V (H), DC-0.8 (L) / 5.7kΩ</td>
<td></td>
</tr>
<tr>
<td><strong>Warning output</strong></td>
<td>DC-4.5V (H), DC-0.8 (L) / 5.7kΩ</td>
<td></td>
</tr>
<tr>
<td><strong>Series input</strong></td>
<td>DC-4.5V (H), DC-0.8 (L) / 5.7kΩ</td>
<td></td>
</tr>
<tr>
<td><strong>Switch output</strong></td>
<td>DC-4.5V (H), DC-0.8 (L) / 5.7kΩ</td>
<td></td>
</tr>
<tr>
<td><strong>Common</strong></td>
<td>DC-4.5V (H), DC-0.8 (L) / 5.7kΩ</td>
<td></td>
</tr>
<tr>
<td><strong>Head drum</strong></td>
<td>DLC (Diamond Like Carbon) coated Head Drum</td>
<td></td>
</tr>
<tr>
<td><strong>Dimensions</strong></td>
<td>360 (W)X90 (H)X315 (D) mm</td>
<td></td>
</tr>
<tr>
<td><strong>Weight</strong></td>
<td>Approx, 4Kgs (9 lbs)</td>
<td></td>
</tr>
<tr>
<td><strong>Power requirement</strong></td>
<td>AC 85V-265V (free voltage), 50/60Hz</td>
<td></td>
</tr>
<tr>
<td><strong>Power consumption</strong></td>
<td>Approx, 17W</td>
<td></td>
</tr>
</tbody>
</table>
**Domestic Systems**

Expandable modular direct to TV observation system

The Obs Sys is a full feature modular CCTV system, available in either colour or mono, designed specifically for use in the home alongside virtually any modern TV and VCR set up. A full Obs Sys package can detect an intruder, alert the user by sounding a warning bleep, switch the TV to the CCTV viewing channel and even automatically start a time and dated VCR recording. All parts are available separately allowing the system to be expanded as necessary however a full Obs Sys package including all items required for a fully automated 4 camera system is featured on the inside back page of this catalogue.

**OBSYS**
- Colour system connects to TV via scart or RF c/w one Obs Sys camera and 20m cable

**OBSYSBW**
- Mono system connects to TV via scart or RF c/w one Obs Sys camera and 20m cable

**OBSYSCAM**
- Additional colour camera for Obs Sys c/w 20m cable. Requires Obs Sys 4

**OBSYSCAMBW**
- Additional mono camera for Obs Sys c/w 20m cable. Requires Obs Sys 4

**OBSYSCAM4**
- Four way camera switcher for Obs Sys (suitable for colour or mono)

**OBCAM**
- 20m camera extension for camera

**OBTW5**
- 50m camera extension for camera

**OBCOUP**
- Cable coupler for Obs Sys Cab

**TG-1**
- Time and date generator for Obs Sys (suitable for colour or mono) Requires VCRIR

**OBSYSVCRIR**
- Infra-red auto record stop/start module for Obs Sys. The VCRIR learns the infra-red signal coding of the users VCR remote then mimics it when triggered by the Obs Sys. The infra-red signal is provided by a discrete flying lead placed in front of the VCR. (suitable for colour or mono)

**FEATURES & FUNCTIONS**
- 5” mono monitor
- Suitable for up to four cameras
- One way sound
- Cameras feature infra-red illumination
- Auto sequencing
- Bi-directional VCR connections
- Ultra compact design

**SYSTEM COMPRISES**
Scout Mini Observation System

OBSYS - Scout monitor, single mono Cam5 c/w electronic iris and infra-red illuminators, 4mm lens, bracket and 20m cable

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**OPTIONAL ACCESSORIES**

**CAM5**
- Additional Mono Camera c/w 4mm lens Bracket & 20m Cable

**HOUS2**
- External use camera housing c/w bracket. Heated version available see page 10

**EXT20-80S**
- Additional camera cable available in lengths of:
  - EXT20S - 20m, EXT40S - 40m, EXT80S - 80m

**COUP2S**
- Coupler for extension cables

**SPY2S**
- Mono covert board camera for Scout

**AVAILABLE IN COLOUR OR MONOCROME**

**Monitor**

- Power source: AC adaptor (DC 17V 1A)
- Power consumption: Less than 20W
- Picture: 5” B/W CRT
- Video input: VS 1.0V p-p
- Video input impedance: 75 Ω
- Resolution: More than 700 TV lines at centre
- Frequency: Horizontal: 15.625 Khz/15.75 Khz
  - Vertical: 50/60Hz
- System wiring: 4 Pin Mini DIN jack
- Assurance Temperature: -10°C~+50°C (14°F~122°F)
- Weight: 1.9Kg

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  - Vertical: 50/60Hz
- System wiring: 4 Pin Mini DIN jack
- Assurance Temperature: -10°C~+50°C (14°F~122°F)
- Weight: 1.9Kg
**Interview 2/2V**

Video Door Entry Systems

**FEATURES & FUNCTIONS**
- Clear high resolution picture
- Integral power for lock release
- Up to 3 slave handsets
- 4 core cable to camera plus 2 core for lock release. Should not exceed 50m
- Weather resistant camera
- Optional 12VDC door release available

**OPTIONAL ACCESSORIES**

**ENTERH2**
- Additional slave handset monitor for Interview 2/2V
- Up to 3 per system
- Connects via 4 core cable

**ENTERM2**
- Records visitors in your absence
- Manual record facility
- 32 frame recording capability
- Simple plug-in connection

**SURF 1**
- Optional surface mounting kit for Interview 2V camera

**SURF 1A**
- 20° angled version of SURF1

**Monitor**
- Power source: AC 90V~250V
- Picture: Flat CRT - 4" B/W
- TV system: B/W Optional EIA or CCIR
- Resolution: More than 200 lines
- Call signal sound: Electronic Chime bell
- Wiring: 2 Wire in polarity
- Max wiring distance: 0.55 wire 50m
- Voice transmission: Hands set transmission
- Assurance temp.: -10°C~+50°C (14°F~122°F)
- Cabinet colour: White
- Weight: 2.10Kg

**Camera**
- Image sensor: 1/3" B/W CCD
- Min illumination: 0.1 Lux (0.5 lux Vandal)
- Illumination: Infrared LED
- Lens: Fixed (Pin hole lens Vandal)
- Iris system: Electronic automatic
- Viewing angle: Horizontal 74° Vertical 55°
- Voice transmission: Simultaneous conversion via speaker
- Power source: DC 12V (+ 1V) from Monitor
- Assurance temp.: -10°C~+50°C (14°F~122°F)
- Cabinet: Interview 2 Plastic
- Weight: 455g
**QUATWDCQ**

Digital Colour Quad System Package

System package comprising of:
- 1 x 14” Digital Colour Quad monitor (see page 2)
- 4 x CAMCOL2 (see page 2)
- 24HR3 (see page 11)
- 1 x VCR2 (see page 11)

**QUATWDMQ**

Digital Mono Quad System Package

System package comprising of:
- 1 x 17” Digital Mono Quad Monitor (see page 5)
- 4 x CAM42K (see page 5)
- 1 x 24HR3 (see page 11)
- 1 x VCR2 (see page 11)

**QUATWQ2K**

Mono Quad System Package

System package comprising of:
- 1 x 12” Mono Quad monitor (see page 6)
- 4 x CAM42K (see page 6)
- 1 x 24HR3 (see page 11)
- 1 x VCR2 (see page 11)

**QUATOBSCOL**

Colour Direct to TV System Package

**QUATOBSBW**

Mono Direct to TV System Package

System package comprising of:
- 1 x OBSSYS (colour or mono)
- 1 x OBSYS4
- 3 x OBSYSCAM (colour or mono)
- 1 x OBSYSVCRIR
- 1 x TG1
- 1 x SCART
- 1 x PHONO