# **Product Guide**







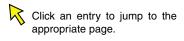




March 2003



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#### Acknowledgments

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The specification and price of all products and systems in this catalogue are subject to change without notice.



# Excellence in design, manufacturing and customer service

Baxall is the leading British manufacturer of high quality CCTV equipment and video network solutions. From cameras, switchers and receivers to the most complex systems dealing with thousands of cameras, Baxall offer the most innovative product range available. Committed to ensuring the highest standards are maintained from



the design and development team right through to our unrivalled after-sales service, the company has gained an enviable reputation within the security industry for reliability and value for money.

## Dedicated to innovation and total quality

The Baxall philosophy is simple: total quality in everything we do. That commitment demands an expert team working together to provide our customers with the products they want, when they want. It also requires substantial investment in the latest technology to ensure that in design and production, Baxall remains the pioneering force in the market.

#### **Products**

Providing CCTV equipment of the finest quality has been Baxall's strength for over 20 years. Our range of cameras, receivers, switchers, multiplexers and telemetry is unrivalled. The Baxall team of expert engineers ensure that our products are



continually evolving to take advantage of the latest developments in this high technology industry.

### **Systems**

Our customers are continually demanding more intricate solutions to the most complex security situations. Baxall systems are well established both in the UK and overseas, providing high quality surveillance in



town and city centres, retail centres, educational establishments, penal institutions and sports stadiums. Our flexibility in design and production makes Baxall the ideal partner for overcoming unique security challenges.

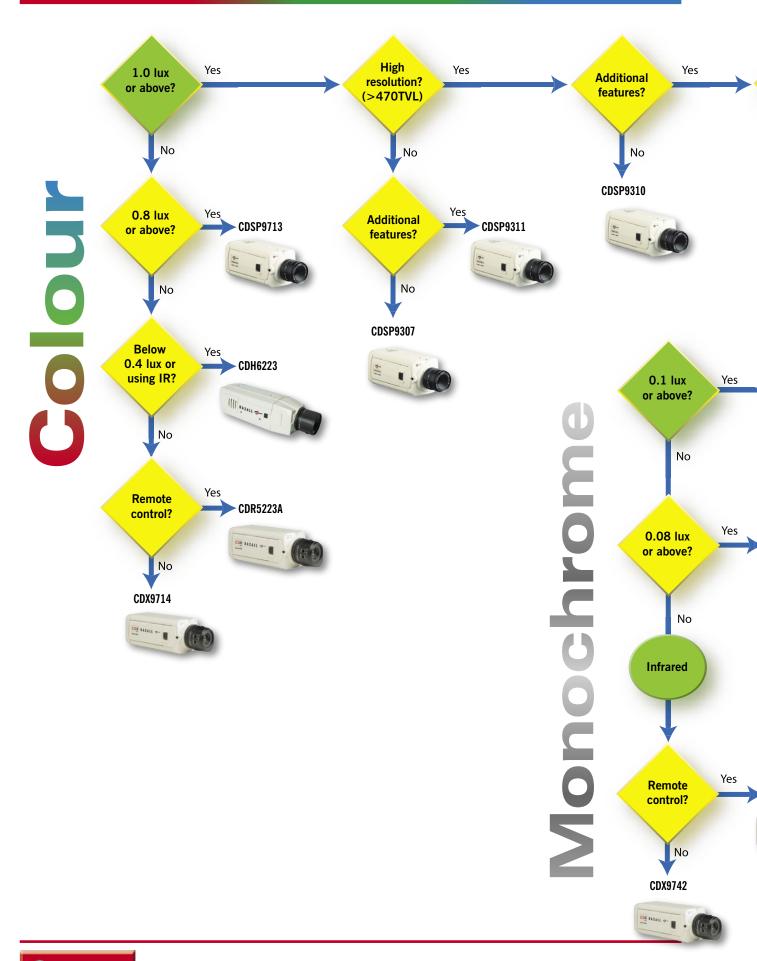
### **Networks**

Baxall is pioneering work on transmitting video and audio through existing networks. The result is our Destiny range of products that have gained several awards for innovation. Recognising the growth of IT



and communications marketplaces, Baxall will continue to remain at the forefront of development through the design of new video network products.

# Selecting the correct camera







Additional features include:

3 extra fixed white balance modes

8 discreet shutter speeds

Genlock

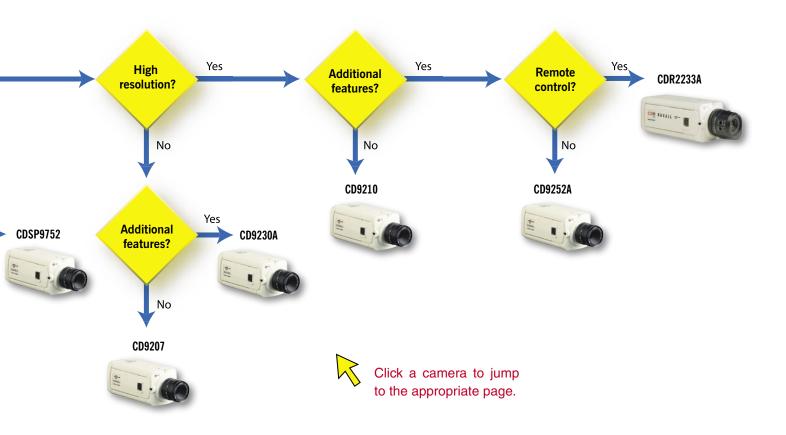
Flickerless

8 BLC window options\*

Peak white inversion\*

Y/C outputs\*

\* CDX and CDR models only







# CDH6223 - Day/Night Camera



- Remote set-up via RS485 or coax with OSD
- Filter switching for maximum day/night performance
- 1/2" EXviewHAD™ CCD
- On screen menus accessible at the camera or remotely
- 10 bit A/D for clearer images
- Peak white inversion
- Selectable auto black

#### **Camera Features**

Sensor 1/2" Sony EXviewHAD™ CCD

**Effective Pixels** 752 (H) x 582 (V)

Sensitivity 0.4 lux colour, 0.07 lux monochrome; for usable picture (40 IRE) with AGC

on; lens at F1.2, 80% scene reflectance

Resolution 480 TVL

**Video Output** 1V p-p composite video via  $75\Omega$  BNC connector on the rear of the camera;

PAL: 625 lines 50 fields per second 2:1 interlace;

S-Video output: Y/C signal - Y=0.7V p-p,  $75\Omega$  C=0.3V p-p,  $75\Omega$ 

Signal to Noise Ratio Better than 48dB

White Balance 3200K, 4200K, 6300K, USER (red and blue adjust) and HOLD PUSH

**AGC** Off, 8,16, 18, 20, 22, 24, 32dB

**Electronic Iris** 1/50s~1/100,000s menu selectable

Backlight Compensation 5 windows can be moved, resized and assigned weightings to allow

completely configurable BLC

Gamma Correction 5 levels

**Shutter Speeds** 1/50, 1/250, 1/500, 1/1000, 1/2000, 1/5000, 1/10,000, flickerless

Synchronisation System Full colour Genlock (H, V & SC adjustment), Internal or Line lock (360°

adjustment)

Auto Black Selectable with level adjust

Peak White Inversion With adjustable threshold

Camera Title 12 characters, alphanumeric

**Group Settings** Settings can be saved to 4 user groups

**Group Switching** By menu or remotely via 9-pin D type connector

**Remote Setup** Via coax (Baxall Telemetry) or RS485



#### **Lens Options**

Manual Any 'C' or 'CS' mount 1/2", 2/3" or 1" lens. NB lens is not supplied

Auto Iris (video drive) Via a 3 terminal, quick release connector at the rear of the camera

Direct Drive (DC iris) 4-pin square type socket on the side of the camera

#### **Power Supply**

**Low Voltage Only** 12~30V AC; 11~40V DC **Input Power Isolation** Fully isolated power supply

#### **Mechanical**

Lens Mount C/CS via racking back focus mechanism adjustment

Camera Mount 1/4-20 UNC or 1/4" BSW (top or bottom)

**Dimensions** 200 (L) x 65 (H) x 81 (W) mm

Weight 0.6kg

Material Die-cast zinc lens mount; extruded aluminium body; flame retardant ABS

plastic front trim, rear bezel and door

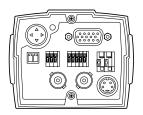
#### **Environmental**

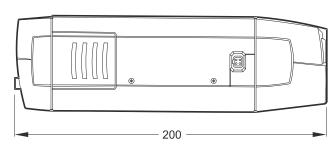
Operating Temperature -10°C to +50°C (14°F to 122°F)

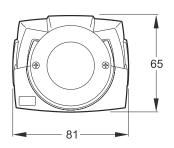
**Operating Humidity** 20% to 80% relative humidity, non condensing

Storage Temperature -10°C to +70°C (14°F to 158°F)

**Storage Humidity** 20% to 90% relative humidity, non condensing







# **CDR Range - Remote Control Cameras**



- Remote set-up via RS485 or coax with OSD
- 1/3" & 1/2" models
- Colour & mono
- High resolution
- Peak white inversion
- On screen menus accessible at the camera or remotely

#### **Camera Features**

**Video Output** 1V p-p composite video via  $75\Omega$  BNC connector on the rear of the camera;

PAL: 625 lines 50 fields per second 2:1 interlace; S-Video output (colour

models only) Y/C signal - Y=0.7V p-p,  $75\Omega$  C=0.3V p-p,  $75\Omega$ 

White Balance Colour models only: auto, indoor, outdoor, fluorescent, user (Red & Blue

adjust) & push

**AGC** Off, 8,16, 18, 20, 22, 24, 32dB

**Electronic Iris** 1/50s~1/100,000s

**Backlight Compensation** 5 windows can be moved, resized and assigned weightings to allow

completely configurable BLC

**Gamma Correction** 5 levels

**Shutter Speeds** 1/50, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/10,000 & flickerless

Synchronisation System Full colour Genlock (H, V & SC adjustment), Internal or Line lock (360°

adjustment)

Auto Black Selectable with level adjust

**Peak White Inversion** With adjustable threshold

#### **Model Variations**

Model	CDR2233A	CDR3223A	CDR4233A	CDR5223A
Camera Type	Mono	Mono(IR)	Colour	Colour
Resolution	580 TVL	580 TVL	480 TVL	480 TVL
CCD Sensor Size	1/3"	1/2"	1/3"	1/2"
0000	LI LIADIN	EV : LIABIN	LI LIADIN	EV : LIADIM
CCD Sensor Type	HyperHAD™	EXviewHAD™	HyperHAD™	EXviewHAD™
Sensitivity @ F1.2	0.1 lux	0.04 lux	1.0 lux	0.4 lux
Sensitivity @ F1.2	0.1 lux	0.04 lux	1.0 lux	0.4 lux



#### **Lens Options**

Manual Any 'C' or 'CS' mount 1/3" (CDR2233A and CDR4233A only), 1/2", 2/3" or 1"

lens. NB lens is not supplied

Auto Iris (video drive) Via a 3 terminal, quick release connector at the rear of the camera

**Direct Drive (DC iris)** 4-pin square type socket on the side of the camera

#### **Power Supply**

**Low Voltage Only** 12~30V AC; 11~40V DC **Input Power Isolation** Fully isolated power supply

**Power Consumption** Less than 5W

#### **Mechanical**

**Lens Mount** C/CS via racking back focus mechanism adjustment

**Camera Mount** 1/4-20 UNC or 1/4" BSW (top or bottom) **Dimensions** 137.5 (L) x 59.5 (H) x 65.5 (W) mm

> Weight 0.35kg

Material Die-cast zinc lens mount; extruded aluminium body; flame retardant ABS

plastic front trim, rear bezel and door

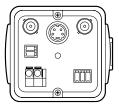
#### **Environmental**

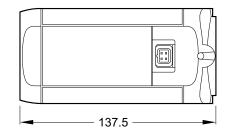
**Operating Temperature** -10°C to +50°C (14°F to 122°F)

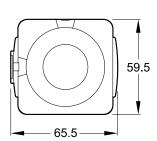
**Operating Humidity** 20% to 80% relative humidity, non condensing

 $-10^{\circ}$ C to  $+70^{\circ}$ C (14°F to 158°F) **Storage Temperature** 

**Storage Humidity** 20% to 90% relative humidity, non condensing







## **CDX9000 - EXview DSP Cameras**



- Digital signal processing
- Back focus mechanism
- 1/2" colour and mono (IR)
- Comprehensive feature set
- All lens options supported
- Configurable back light compensation
- Peak white inversion

#### **Generic Features**

Sensor 1/2" Sony EXviewHAD™ CCD

**Video Output** 1V p-p composite video via  $75\Omega$  BNC connector on the rear of the camera;

PAL: 625 lines 50 fields per second 2:1 interlace; S-Video output (colour

models only) Y/C signal - Y=0.7V p-p,  $75\Omega$  C=0.3V p-p,  $75\Omega$ 

AGC On/Off - selectable via DIP switch

**Electronic Iris** 1/50s~1/100,000s - selectable On/Off via a DIP switch

**Backlight Compensation** Selectable On/Off - 8 user selectable windows (3 DIP switches)

**Gamma Correction** DIP switch selectable: 0.45 or 1.0

**Shutter Speeds** 1/50, 1/100, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/10,000 & flickerless via

3 DIP switches

White Balance Modes Colour models only: auto, indoor, outdoor & fluorescent - selectable via 2

DIP switches

**Synchronisation System** Line lock - plus option to switch to internal synchronisation via DIP switch

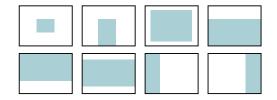
Genlock - BNC connector for externally generated synchronisation signal

**Adjustable V Phase** The line lock vertical phase may be adjusted by ±120°

Peak White Inversion Selectable On/Off (via DIP switch) with adjustable threshold

#### **Model Variations**

Model	CDX9742	CDX9714	CDX9772/WF
Туре	Mono (IR)	Colour	Colour/Mono
Resolution	580 TVL	480 TVL	480 TVL
Sensitivity @ F1.2	0.04 lux	0.4 lux	0.4 lux
Effective Pixels	752 x 582	752 x 582	752 x 582
S/N Ratio	>50dB	>48dB	>48dB



Advanced backlight compensation with positional windows



#### **Lens Options**

Manual Any 'C' or 'CS' mount 1/2", 2/3" or 1" lens. NB lens is not supplied

Auto Iris (video drive) Via a 3 terminal, quick release connector at the rear of the camera

Direct Drive (DC iris) 4-pin square type socket on the side of the camera; DC level is user

defined via a potentiometer located next to the socket

**Power Supply** 

Low Voltage Version 12~30V AC; 11~40V DC

Mains Version 98~260V AC, 50/60Hz

**Input Power Isolation** Fully isolated power supply

Power Consumption Less than 5W

Mechanical

**Lens Mount** C/CS via racking back focus mechanism with two adjustment points (top & side)

**Camera Mount** 1/4-20 UNC or 1/4" BSW (top or bottom) **Dimensions** 137.5 (L)  $\times$  59.5 (H)  $\times$  65.5 (W) mm

Weight Mains 0.6kg; low voltage 0.35kg

Material Die-cast zinc lens mount; extruded aluminium body; flame retardant ABS

plastic front trim, rear bezel and door

**Environmental** 

Operating Temperature -10°C to +50°C (14°F to 122°F)

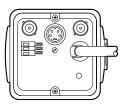
**Operating Humidity** 20% to 80% relative humidity, non condensing

Storage Temperature -10°C to +70°C (14°F to 158°F)

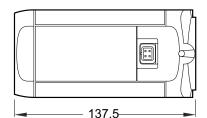
**Storage Humidity** 20% to 90% relative humidity, non condensing

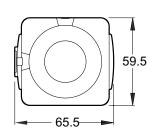


Low Voltage Models



Mains Voltage Models





## **CDSP9000 - Colour & Mono DSP Cameras**



- Digital signal processing
- 4 white balance modes
- Back focus mechanism
- 1/2" and 1/3" colour and mono
- Comprehensive feature set
- All lens options supported

#### **Generic Features**

Sensor Sony HyperHAD™ CCD

**Video Output** 1V p-p composite video via  $75\Omega$  BNC connector on the rear of the camera;

PAL: 625 lines 50 fields per second 2:1 interlace

AGC Selectable On/Off via DIP switch

**Electronic Iris** 1/50s~1/100,000s - selectable On/Off via a DIP switch

Backlight Compensation On/Off - selectable via a DIP switch, weighted to the centre third of scene

**Gamma Correction** DIP switch selectable: 0.45 or 1.0

**Shutter Speeds** 1/50, 1/125, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/10,000 & flickerless via 3 DIP

switches

White Balance Modes Colour models only: auto, indoor, outdoor & fluorescent - selectable via 2

DIP switches

**Synchronisation System** Line lock - plus option to switch to internal synchronisation via DIP switch

Genlock (mono only) - BNC connector for externally generated

synchronisation signal

**Adjustable V Phase** The line lock vertical phase may be adjusted by ±120°

#### **Model Variations**

Model	CDSP9713	CDSP9752	CDSP9313	CDSP9311	CDSP9772
Туре	Colour	Mono	Colour	Colour	Colour/Mono
Resolution	480 TVL	580 TVL	480 TVL	330 TVL	580 TVL
CCD Sensor Size	1/2"	1/2"	1/3"	1/3"	1/2"
Sensitivity @ F1.2	0.8 lux	0.08 lux	1.0 lux	0.9 lux	1.0/0.08 lux
Effective Pixels	752 x 582	752 x 582	752 x 582	500 x 582	752 x 582
S/N ratio	>48dB	>50dB	>48dB	>48dB	>48dB



#### **Lens Options**

Manual Any 'C' or 'CS' mount 1/3" (CDSP9313 &9311 only), 1/2", 2/3" or 1" lens.

NB lens is not supplied

Auto Iris (video drive) Via a 3 terminal, quick release connector at the rear of the camera

Direct Drive (DC iris) 4-pin square type socket on the side of the camera; DC level is user

defined via a potentiometer located next to the socket

#### **Power Supply**

Low Voltage Version 12~30V AC; 11~40V DC

Mains Version 230V AC +6%, -10% 50Hz Input Power Isolation Fully isolated power supply

Power Consumption Less than 4W

#### **Mechanical**

**Lens Mount** C/CS via racking back focus mechanism with two adjustment points (top & side)

Camera Mount 1/4-20 UNC or 1/4" BSW (top or bottom)

**Dimensions** 122.5 (L) x 59.5 (H) x 65.5 (W) mm

Weight Mains 0.6kg; low voltage 0.4kg

Material Die-cast zinc lens mount; extruded aluminium body; flame retardant ABS

plastic front trim, rear bezel and door

#### **Environmental**

Operating Temperature -10°C to +50°C (14°F to 122°F)

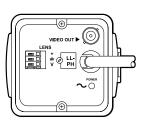
**Operating Humidity** 20% to 80% relative humidity, non condensing

Storage Temperature -10°C to +70°C (14°F to 158°F)

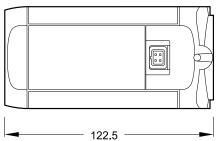
**Storage Humidity** 20% to 90% relative humidity, non condensing



Low Voltage Models



Mains Voltage Models





65.5

59.5

# CD9000A - Monochrome Camera Range



- Analogue monochrome camera
- CCIR (EIA available)
- 1/3" & 1/2" CCD
- High & medium resolution

#### **Generic Features**

Sensor Sony HyperHAD™ CCD

Video Output 1V p-p composite video via 75W BNC connector on the rear of the camera;

CCIR: 625 lines 50 fields per second 2:1 interlace

Signal to Noise Ratio Better than 50dB

**Sharpness** On/Off - selectable via a DIP switch

AGC Off/24dB/32dB - selectable via 2 DIP switches

**Electronic Iris** 1/50s~1/100,000s - selectable On/Off via a DIP switch

Backlight Compensation On/Off - selectable via a DIP switch, weighted to the centre third of scene

**Gamma Correction** DIP switch selectable: 0.45 or 0.8

**Shutter Speeds** 1/250, 1/500, 1/2000, 1/5000, 1/10,000, 1/100,000 and flickerless via 3 DIP switches

**Synchronisation System** Line lock - plus option to switch to internal synchronisation via DIP switch

Genlock - BNC connector for externally generated synchronisation signal

**Adjustable V Phase** The line lock vertical phase may be adjusted by ±120°

#### **Model Variations**

Model	CD9230A	CD9252A	CD9752A	
Туре	Mono	Mono	Mono	
CCD Type	1/3"	1/3"	1/2"	
Resolution	380 TVL	580 TVL	580 TVL	
Sensitivity @ F1.2	0.1 lux	0.1 lux	0.08 lux	
Effective Pixels (HxV)	500 x 582	752 x 582	752 x 582	



#### **Lens Options**

Manual Any 'C' or 'CS' mount 1/3" (not CD9752A), 1/2", 2/3" or 1" lens. NB lens is

not supplied

Auto Iris (video drive) Via a 3 terminal, quick release connector at the rear of the camera

Direct Drive (DC iris) 4-pin square type socket on the side of the camera; DC level is user

defined via a potentiometer located next to the socket

#### **Power Supply**

Low Voltage Version 12~30V AC; 11~40V DC

Mains Version 230V AC, +6% -10%, 50Hz Input Power Isolation Fully isolated power supply

**Power Consumption** Less than 5W

#### **Mechanical**

**Lens Mount** C/CS via racking back focus mechanism with two adjustment points (top & side)

Camera Mount 1/4-20 UNC or 1/4" BSW (top or bottom)

**Dimensions** 122.5 (L) x 59.5 (H) x 65.5 (W) mm **Weight** Mains 0.6kg; low voltage 0.35kg

Material Die-cast zinc lens mount; extruded aluminium body; flame retardant ABS

plastic front trim, rear bezel and door

#### **Environmental**

Operating Temperature -10°C to +50°C (14°F to 122°F)

Operating Humidity 20% to 80% relative humidity, non condensing

Storage Temperature -10°C to +70°C (14°F to 158°F)

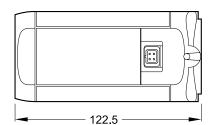
**Storage Humidity** 20% to 90% relative humidity, non condensing

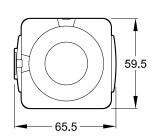


Low Voltage Models



Mains Voltage Models





# V Range - Colour & Monochrome Cameras



- Mid-range colour & mono cameras
- 1/3" CCD
- Medium & high resolution
- PAL/CCIR (NTSC/EIA available)

#### **Generic Features**

Sensor 1/3" Sony HyperHAD™ CCD

**Video Output** 1V p-p composite video via  $75\Omega$  BNC connector on the rear of the camera;

PAL: 625 lines 50 fields per second 2:1 interlace

AGC Built in 28dB

**Electronic Iris** 1/50s~1/100,000s - selectable On/Off via a DIP switch

**Backlight Compensation** On/Off - selectable via a DIP switch, weighted to the centre third of scene

**Gamma Correction** DIP switch selectable: 0.45 or 1.0

Synchronisation System Line lock - the option to switch to internal synchronisation is provided via a

DIP switch

**Adjustable V Phase** The line lock vertical phase may be adjusted by ±120°

#### **Model Variations**

Model	CD9207	CD9210	CDSP9307	CDSP9310
Туре	Mono	Mono	Colour	Colour
Resolution	380 TVL	580 TVL	330 TVL	480 TVL
Sensitivity @ F1.2	0.1 lux	0.1 lux	1.0 lux	1.0 lux
White Balance	N/A	N/A	Auto	Auto
Effective Pixels	500 x 582	752 x 582	500 x 582	752 x 582
S/N Ratio	>50dB	>50dB	>48dB	>48dB



#### **Lens Options**

Manual Any 'C' or 'CS' mount 1/3", 1/2", 2/3" or 1" lens. NB lens is not supplied

Auto Iris (video drive) Via 3 way, two part terminal block at the rear of the camera

**Direct Drive (DC iris)** 4-pin square type socket on the side of the camera; DC level is user

defined via a potentiometer located next to the socket

#### **Power Supply**

Low Voltage Version 12~30V AC; 11~40V DC

Mains Version 98~260V AC, 50/60Hz

**Input Power Isolation** Fully isolated power supply

Power Consumption Less than 4W

#### **Mechanical**

**Lens Mount** C/CS via racking back focus mechanism with two adjustment points (top & side)

Camera Mount 1/4-20 UNC or 1/4" BSW (top or bottom)

**Dimensions** 122.5 (L)  $\times$  59.5 (H)  $\times$  65.5 (W) mm

Weight Mains 0.6kg; low voltage 0.35kg

Material Die-cast zinc lens mount; extruded aluminium body; flame retardant ABS

plastic front trim, rear bezel and door

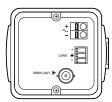
#### **Environmental**

Operating Temperature -10°C to +50°C (14°F to 122°F)

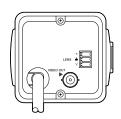
**Operating Humidity** 20% to 80% relative humidity, non condensing

Storage Temperature -10°C to +70°C (14°F to 158°F)

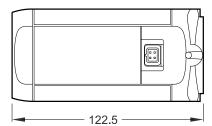
**Storage Humidity** 20% to 90% relative humidity, non condensing

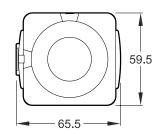


Low Voltage Models



Mains Voltage Models





## **Pro-Dome Series - Mini Domes**





- Proportional telemetry speed to zoom control
- Pendant, wall, direct or false ceiling mounting options
- Clear, smoked, gold or silver bubble options
- Language options
- Quick and easy release mechanism
- Multiple dynamic privacy zone options
- Tours

#### **Camera Features**

The Baxall Pro-Dome series provides a selection of interior or exterior domes based upon the choice of either monochrome, colour, or colour/monochrome camera modules. With easy installation, operation and maintenance you can choose between wall, ceiling, pendant or direct mounts. 360° pan and 90° tilt operation are provided with an auto-flip option ensuring that no blind area occurs during operation.

With a choice of maximum speeds on some models you can connect alarms to the dome that can either switch an alarm output or trigger the dome to preset positions.

The Pro-Dome series is compatible with a range of Baxall telemetry equipment ensuring its smooth integration into your system whatever your circumstances. It also complies with government legislation towards Dynamic Privacy Zones (DPZ) allowing public areas to be masked as required by law.

#### **Model variations** BPD1 BPD2 **Product Code** BPD0 Mono Colour Col/mono **Type Optical Zoom** 16x 22x 23x Memory Yes Yes Yes **Telemetry** Coax/RS485 Coax/RS485 Coax/RS485 **Network compatibility** Yes Yes Yes



**Outputs** 

Video 1V p-p composite video, PAL/CCIR: 625 lines, 50 fields per second, 2:1

interlace

Alarms 1 output

Inputs

**Telemetry** Twisted pair and coaxial control options

**Power supply** 24V AC, mains PSU (not included)

Alarms 1 input

**Dome features** 

Sensor 1/4" CCD

Resolution >470 TVL

Other Features Digital zoom: 7:1 mono unit, 11:1 colour and colour/mono units

96 presets
3 pattern tours

8 dynamic privacy zones

8 area titles

Proportional P/T to zoom

Preset titles Pull down menus

Controllers\*

**Transmitters** ZTX6

Keyboards ZKX2/K, ZKX2/J, ZKX3/J

**Multiplexers** All ZMX+ and ZMX+ matrix models (only supported with joystick keyboard)

**Networks** Pyramid System and Baxall IP

\*via interface models

Mechanical

**Dimensions** Internal dome: 205 x 120mm, external dome: 302 x 244mm

Weight Internal dome: 1.36kg, external dome 3.0kg

**Bubble Finishes** Internal: clear\*, smoked, gold or silver

External: clear\* or smoked

\*clear supplied, alternatives can be purchased separately

**Colour** Internal dome: black

Accessories: off white

**Environmental** 

Operating Temperature -10°C to +50°C (14°F to 122°F)

Operating Humidity 20% to 80% relative humidity, non condensing

Storage Temperature -10°C to +70°C (14°F to 158°F)

**Storage Humidity** 20% to 90% relative humidity, non condensing

# **DVS Range - Desk Video Switchers**



- Choice of 4 or 8 camera inputs
- Choice of 1 or 2 independent monitor outputs
- Alarms as standard on all DVS2 models
- VCR lock function\*
- User definable camera sequencing\*
- Programmable camera titling\*

- Camera title positioning options\*
- Variable dwell per camera\*
- Language options available\*
- Anti-tilt mechanism
- External BNC connections
- European & NTSC versions available

#### **Model Variations**

Product Code	DVS14L	DVS14	DVS18	DVS24A	DVS28A	
Camera Video Inputs	4	4	8	4	8	
Monitor Video Outputs	1	1	1	2	2	
Control Keys	5	5	9	6	10	
Sequencing - Main Monitor	**see below	Programi	mable individu	al dwell camera e	enable	
Sequencing - Spot Monitor	N/A	N/A	N/A	Sequences camera inputs in numerical order, skipping unused inputs		
Dwell Adjustment	Global, 3~45s	Per input, 1~60s		Main: per input 1~60s Spot: global 5~50s		
OSD Menu	no	yes	yes	yes	yes	
Built in Alarms	no	no	no	4 inputs, 1 output	8 inputs, 1 output	
Programmable Titles	no	yes	yes yes		yes	
VCR Lock	no	yes	yes	yes	yes	

<sup>\*</sup> Not model DVS14L

<sup>\*\*</sup>Sequences camera inputs in numerical order, skipping unused inputs



#### Input/Output

Video signals 1Vp-p composite video via coaxial cable with BNC connectors

Inputs AC coupled, maximum DC offset ± 2.7V

Power Supply

Power Supply Unit 230V AC ±10% input, max. 2.4VA; 12V DC (class 2) output

**Power Consumption** Maximum 200mA, 12V DC

**Mechanical** 

**Dimensions** 206 (L) x 50 (H) x 127 (W) mm

Weight 0.4kg max

Material ABS case to UL94, Steel Base

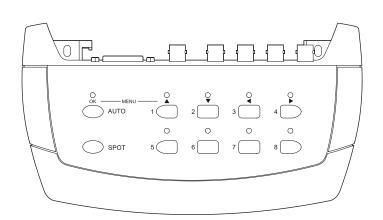
**Environmental** 

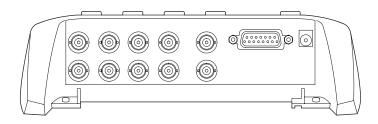
Operating Temperature -10°C to +50°C (14°F to 122°F)

**Operating Humidity** 20% to 80% relative humidity, non condensing

**Storage Temperature** -10°C to +70°C (14°F to 158°F)

**Storage Humidity** 20% to 90% relative humidity, non condensing





# **DVSR Range - Remote Switcher**



- Sequences up to 16 camera inputs, with auto skip facilities & adjustable dwell time
- Up to 6 monitor outlets, extendible, with completely independent viewing
- Utilises video cables for control signals, reducing installation costs
- Channel identification by numerical display on the picture
- Attractive compact metal cased controllers for desk usage

#### Overview

Having the capacity to accept up to 16 camera inputs and providing up to six monitor outlets as standard, with completely independent viewing, the DVSR Remote Switcher is a simple and economical way of installing an extendible multi channel facility. Utilising state of the art electronics, control signals are carried along the single video cables connecting the monitors to the Remote Unit, eliminating the need for any extra interconnecting wiring.

The Remote Unit can be mounted away from the user control area and includes all terminations, removing the requirement for plugs on the video cable. On screen camera numbering is provided, with auto sequencing and auto skip facilities for unused inputs and vertical interval switching techniques incorporated in the circuitry, ensure that picture bounce between compatible cameras is eliminated. Any camera can be omitted from any monitor at will.



Video

Inputs Up to 16 cameras with 1 Vp-p video output

Outputs Up to 4 independently controlled outlets in standard housing; additional

outlets as required to order. (Up to 6 maximum in one unit)

**Switching** Switching time less than 1.0 μs

Dwell time - adjustable, 5~50 seconds approximately

**Functions** 

**Desk Control box** Low movement tactile press buttons providing:

Manual selection; Auto Sequence; Stop

Interval switching adjustment through rear of controller

Auto sequencing & autoskip of unused inputs

**Remote Box** Houses motherboard and plug-in outlet cards

400m max distance between remote box and desk control box

**Power Supply** 

Input Voltage 240V AC ±10%, 50Hz standard

Other voltages on request

**Mechanical** 

**Dimensions (L x W x D)** Desk controller: 141 x 88 x 36.5 mm

Remote box: 225 x 215 x 75 mm

Weight Desk controller: 0.3kg

Remote box: 2.8kg

Material Desk controller: ABS endcaps with aluminium and mild steel shell

Remote box: steel casing

**Optional Alarm Card** 

Features 16 channel externally operated alarm facility combined with monitor outlet

card (daughterboard) providing 16 alarm inputs via terminal block connector Inputs N/O as standard (N/C on request) - one common pair of volts-free

contacts (250V AC, 5A rated)

Alarm timing out period adjustable between 5~50 seconds by potentiometer

mounted on outlet card

NOTE: since the alarm card is combined with the daughterboard the alarm option is not available on the single monitor switcher DVSR/1, which combines the first outlet (daughterboard) with the motherboard. A single outlet DVSR/1 with alarm option will therefore require the addition of a

daughterboard

Model Variations Model Description

DVSR/0 Extra monitor output

DVSR/1 16 camera inputs, 1 monitor output

DVSR/2 16 camera inputs, 2 monitor output

DVSR/3 16 camera inputs, 3 monitor output

DVSR/4 16 camera inputs, 4 monitor output

DVSR/5 16 camera inputs, 5 monitor output

DVSR/6 16 camera inputs, 6 monitor output

# **ZTX6 - Telemetry Transmitter**

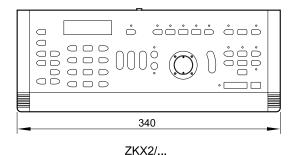


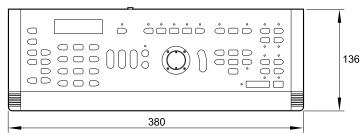
- Expandable matrix (8x2 modules) max 32x8
- Networkable with Baxnet compatible equipment (ZMX Multiplexers, ZKX2&3 keyboards, PC controlled software)
- Coaxial telemetry control for ZR receivers
- On-screen menus

- Control of most speed domes via Dax converters (contact Baxall for details)
- Flexible alarm handling
- Defined priority access for users
- 19" rack or wall mountable
- RS485 Baxnet data (maximum 32 nodes per Baxnet)

#### **Model Variations**

Model	ZTX6/8M2	ZTX6/16M4	ZTX6/24M6	ZTX6/32M8
Video inputs	8	16	24	32
Video outputs	2	4	6	8
Alarm inputs	8	16	24	32
Alarm outputs	2	2	2	2
Keyboard included	ZKX2/K	ZKX2/K	ZKX2/K	ZKX2/K
ZTX6 with joystick keyboard	ZTX6/8M2/J	ZTX6/16M4/J	ZTX/24M6/J	ZTX6/32M8/J





ZKX3/...



#### **Generic features**

**Video Format** PAL (CCIR) composite, 1V p-p,  $75\Omega$ . NTSC (EIA) also available

Video Bandwidth 20 MHz (50%)

**Differential Phase and Gain**  $< 5^{\circ}, < 3\%$ 

Signal to Noise Ratio -65 dB (unweighted)

Coax telemetry Baxall simplex telemetry

120mV 222-250 KHz FSK Vertical interval synchronised

**Keyboard control connection** RJ45 – Baxnet with termination and bias settings

RS485

Alarm inputs 8 inputs per module NO/NC option, via removable screw terminal blocks

Alarm outputs 2 relay outputs NO/NC option, via removable screw terminal blocks

**Alarm modes** Last – Displays only the last alarm input

Stack - Stacks alarms on to next available monitor

Seq - Rotate

Alarm acknowledgment modes Acknowledged – Requires keyboard acknowledge to clear alarm

Timed – clears alarm after a pre-determined time or by keyboard command Transparent (with minimum alarm time) – clears when alarm input clears.

#### **Power Supply**

Power supply 220V AC supplied via nominal 12V DC linear PSU

#### **Mechanical**

Max. Dimensions 215mm(L) x 132mm (W) x 50mm (H)

Weight ZTX6/8M2 - 0.9kg /16M4 - 1.4kg /24M6 - 1.9kg / 32M8 - 2.4kg

**Enclosure/colour** Slate grey with white text

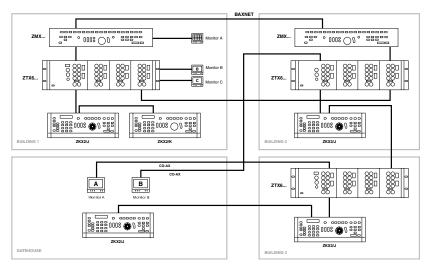
#### **Environmental**

Operating Temperature -10°C to +50°C

Operating Humidity 10% to 80% relative humidity, non condensing

Storage Temperature -20°C to +60°C

**Storage Humidity** 10% to 95% relative humidity, non condensing



ZTX6 Matrix Network Example

# **ZR Range - Coaxial Telemetry Receivers**



ZR-DC pictured

- Compatible with all pan & tilt heads
- Available as board (PCB) only or in weatherproof box (WBX)
- Range of AC voltage outputs plus 24V DC model
- Pan, tilt, zoom, focus and auxiliaries on all models
- Supports presets
- Twisted pair control input (20 mA current loop) for long distances
- Video gain and lift to compensate for long cable runs

#### **Model Variations**

Model	ZR3M	ZR4M	ZR-DC
Туре	AC	AC	DC (variable speed)
Presets	0	8	8
Auxiliaries	2	4	4
Iris control	no	yes	yes
PCB size	120 x 100 x 30mm	120 x 100 x 45mm	165 x 180 x 45mm



Video signal

**Video Input** Composite video, 1V p-p,  $75\Omega$  via BNC connector

**Video Output** Composite video 1v p-p  $75\Omega$  via BNC connector

Video Gain and Lift Max gain +6dB, max lift +12dB at 5Mhz

**Control telemetry** 

Via Video Coax Baxall telemetry
Via Twisted Pair 20mA current loop

**Outputs** 

Lens drive output 6V or 12V selectable @ 100mA / drive with 1 second slow start

Support for 3 or 4 wire

**Relays** 4 normally open relay outputs

Common supply rated at 240V @ 1A / output

**Alarms** 

Inputs 8 Normally open inputs or 4 Normally open and 4 normally closed

Outputs 1 Normally open alarm contact (1 second closure on each alarm)

**Power supply** 

**Input** 120~220v AC, 50/60Hz

Output 24V DC, 65W, 3A maximum

**Environmental** 

Operating Temperature -10°C to +50°C

**Operating Humidity** 10% to 80% relative humidity, non condensing

# **ZMX** Range - Multiplexers



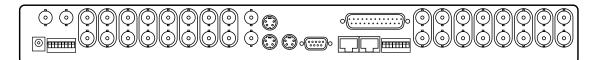
- Direct VCR control from multiplexer or keyboard via RS232
- Activity with intruder detection
- Covert camera setting prevents viewing by operators in live mode
- AutoList<sup>™</sup> enables automatic sequence list set up with variable dwell times for up to 2 monitors
- VEXT automatic VCR record speed synchronisation

- Bax-net compatible for systems integration to multiplexers, matrices and remote keyboards
- Decodes tapes from other major manufacturers (eg DM and Robot)
- Compatible with Baxall digital VCR
- On-screen menus with time and date
- S-VHS main and VCR connections provided

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Model	ZMXBD10	ZMXCD10	ZMXBD16	ZMXCD16
Туре	Mono duplex	Colour duplex	Mono duplex	Colour duplex
Video Inputs	10	10	16	16
Composite VCR S-VHS VCR	2 x BNC 2 x S-VHS			
Alarm Inputs	10	10	16	16
Composite Monitor S-VHS Monitor	2 x BNC 1 x S-VHS			
Recording Fields/sec	25	25	25	25





16 way unit shown





Video

**Video Format** PAL (CCIR), composite 1V p-p,  $75\Omega$  terminated

Video Inputs Dual loop through BNC's, termination via DIP switches. Auto & manual

signal type detection

Video Outputs BNC connectors, plus S-VHS connectors

Multi Screen Live Display Full, Quad, 7, 9, 10, 13, 16 way & Picture in Picture

 $\begin{array}{ll} \textbf{Display Resolution} & 720 \times 576 \\ \textbf{Recorded Resolution} & 720 \times 288 \\ \end{array}$ 

**Interface** 

**Sequence Modes** Full & multiscreen sequence option for Live and Playback displays

Default all cameras with menu adjustable dwell

AutoList feature: Allows customisation of a full screen sequence list & dwell time via camera keys for each monitor & display, allows up to 2

independent AutoList

**VCR Clock Pulse (VEXT)** TTL field sync pulse. Duration 2~5 ms,

High level +4.5V to +5.5V, Low level 0V

**Remote Control** Baxnet RS485: via 2 x RJ45 connectors

RS232: via 1 x 9 way D Type (Transmits up to 10 bytes on a RS232 string)

**Remote Keyboards** ZKB1, ZKX2/K, ZKX2/J, ZKX3/J

**Alarms** 

**Inputs and Outputs** 10 or 16 alarm inputs with audible buzzer & visible LED, programmable

Interface for N/O or N/C contacts. Video loss detection (VDL) with audible buzzer & visible LED. Linkable to 2 relay outputs. I external alarm clear 2 alarm output relays. 30V AC/DC & 500mA max. N/O or N/C programmable.

**Motion Detection** Activity: 16 x 16 definable mask grid. 10 levels of sensitivity

Definable record speed upgrade. Linkable to 2 relay outputs

Intrusion Detection Links motion detection to an alarm response allowing for camera full screen

or quad switching on detection

**Power Supply** 

Input voltage 12V DC via 2.1mm jack connector. 110/220 V AC input PSU supplied

**Power Consumption** 38W max

Mechanical

**Dimensions** 1 U high 19" rack mount. 445 x 45 x 360 (W x H x D mm)

Weight 6.5 kg (unit) 8 kg (shipping)

**Enclosure/colour** Rugged Metal Chassis in Slate Grey (rack ears supplied)

**Environmental** 

**Operating Temperature** 0°C to +40°C (32°F to 104°F)

**Max.Operating Humidity** 90% relative humidity, non condensing

# **ZMX Plus - Multiplexers with Telemetry**



- Built-in coaxial telemetry
- Parallel Video Processing (PVP) for 50 frames/second
- Range includes built-in matrix models providing 1 main and 4 spots
- Direct VCR control from multiplexer or keyboard via RS232
- Activity with intruder detection
- Covert camera setting to prevent operators viewing the images in live mode
- VEXT automatic VCR record speed synchronisation

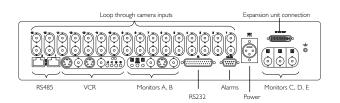
- AutoList<sup>™</sup> enables automatic sequence list set up with variable dwell times for up to 2 monitors
- Bax-net compatible for systems integration to multiplexers, matrices and remote keyboards
- Decodes tapes from other major manufacturers (eg DM and Robot)
- Compatible with Baxall digital VCR
- On-screen menus with time and date
- S-VHS main monitor and VCR connections provided

#### **Model Variations**

Model	ZMX+BD16	ZMX+CT10	ZMX+CD16	ZMX+BT16M4	ZMX+CT16M4
Туре	Mono Duplex	Colour Triplex	Colour Duplex	Mono Triplex	Colour Triplex
Video Inputs	16	10	16	16	16
Composite VCR S-VHS VCR	2 x BNC 2 x S-VHS	2 x BNC 2 x S-VHS			
Expandable to 32 Inputs	No	No	No	Yes (ZMX+BT32M4)	Yes (ZMX+CT32M4)
Alarm Inputs	16	10	16	16(32)	16(32)
Composite Monitor S-VHS Monitor	2 x BNC 1 x S-VHS	2 x BNC 1 x S-VHS	2 x BNC 1 x S-VHS	2(5) x BNC 1 x S-VHS	2(5) x BNC 1 x S-VHS
Recording Fields/sec	50	50	50	50	50

#### 16 channel unit pictured







Video

**Video Format** PAL (CCIR), composite 1V p-p,  $75\Omega$  terminated

Video Inputs Loop through BNC's auto terminating, auto & manual signal type detection

**Video Outputs** BNC connectors, plus S-VHS connectors

Multi Screen Live Display Full, Quad, 7, 9, 10, 13 and 16 way and Picture in Picture. Plus 25 way on 32

input models

**Resolution** Display: 720 x 576, Recorded: 720 x 288

Interface

Sequence Modes Full & multiscreen sequence option for Live and Playback displays

Default all cameras with menu adjustable dwell

AutoList feature: Allows customisation of a full screen sequence list & dwell time via camera keys for each monitor & display, allows up to 2

independent AutoList

**VCR Clock Pulse (VEXT)** TTL field sync pulse. Duration 2~5 ms,

High level +4.5V to +5.5V, Low level 0V  $\,$ 

**Remote Control** Baxnet RS485: via 2 x RJ45 connectors

RS232: via 1 x 9 way D Type (Transmits up to 10 bytes on a RS232 string)

Remote Keyboards ZKB1, ZKX2/K, ZKX2/J, ZKX3/J

Alarms

**Inputs and Outputs** 10, 16 or 32 alarm inputs with audible buzzer & visible LED, programmable

Interface for N/O or N/C contacts. Video loss detection(VDL) with audible buzzer & visible LED. Linkable to 2 relay outputs. I external alarm clear 2 alarm output relays. 30V AC/DC & 500mA max. N/O or N/C programmable.

**Motion Detection** Activity: 16 x 16 definable mask grid. 10 levels of sensitivity

Definable record speed upgrade. Linkable to 2 relay outputs

Intrusion detection Links motion detection to an alarm response allowing for camera full screen

or quad switching on detection

**Telemetry control** 

Baxall Coax telemetry on all monitors and first 16 channels for:

ZR3M, ZR4M, ZR-DC, DAX (Dome converters)

Built-in Preset Park (TL1) & Random Preset Patrol (TL2) Tour facility

Pseudo variable speed using front panel controls Twisted pair converter also available ZT-TP1

(Note: Full variable speed telemetry only available with ZKX2/J and ZKX3/J

keyboards and on the first 16 channels of a 32 way unit)

**Power Supply** 

Input voltage 12V DC via 2.1mm XLR connector. 110/220 V AC input PSU supplied

**Power Consumption** 38W max

Mechanical

Dimensions 1 U high 19" rack mount. 445 x 90 x 360mm (W x H x D), expander main unit

Weight 6.5 kg

**Enclosure/colour** Rugged Metal Chassis in Slate Grey (rack ears supplied)

**Environmental** 

Operating Temperature 0°C to +40°C

**Max.Operating Humidity** 90% relative humidity, non condensing

# **DTL Series - Digital Video Recorders**



- VCR functionality with instant video retrieval
- VCR style control panel
- No tapes to manage or tape heads to clean or replace
- On-screen menus for image search
- Records and plays multiplexed video
- Alarm-activated recording

- Programmed with common timelapse speeds
- 10/100 BaseT Ethernet via RJ45
- RS-232 remote control and upload
- Audio
- Event timers
- Built in CD-Writer or removable hard disk drive

#### **Overview**

Baxall's DTL series of single channel digital video recorders, operate in a similar way to the traditional VCR. The familiar buttons on the control panel make it simple in operation and extremely user friendly. The DTL series delivers crisp images, whether in play, reverse, fast forward, fast reverse or pause mode where sharp and stable images can also be viewed frame by frame. Through a simple on-screen search menu, precise access to recorded events eliminates time spent rewinding and fast forwarding. The "e" in the product name denotes that the unit can be assigned its own IP address and by using the supplied WaveReader Software, live or recorded images can be viewed on a LAN or WAN.

The DTL96Ce, offers the highest specification available within the series. Boasting features such as ethernet, audio and built in CD-Writer, the DTL96Ce can record and play back video in the same way as a time lapse VCR and can record at speeds of up to 50 pictures per second (PPS), or as low as 0.1PPS. This makes it ideal for event recording,

or time-lapse photography.



Using the built in CD-Writer, video clips of at least 20 minutes can be copied from the hard drive and opened again at a later date on a PC running WaveReader software. The images can then be printed, enhanced or forwarded onto other recipients. Recordings can be archived automatically for any number of days, weeks or even longer, with an optional MDAe (Multi-Disk Array) available separately from Baxall, or a DAT or AIT storage system.

Other features include unlimited video viewing without image degradation, data transfer and standard VCR I/O facilities such as event timers, alarm recording, audio and S-VHS input and output. To assist in compliance with the CCTV Code of Practice within the Data Protection Act 1998, the unit boasts an Auto Delete Mode that can be turned on from 1 day to 99 days.



#### **Models**

DTL-96Ce-80, DTL-96Ce-160, DTL96Ce-320 DTL-900-40, DTL900-120, DTL900-240 DTL-90R, DTL-96Re (80GB HDD as standard)

REM-HDD80 spare caddy with 80GB HDD for use with DTL-90R and DTL-96Re

DTL-96Ne\*, DTL90N\*.

#### Video

Video Colours YUV 4:2:2, 16.8 million colours

**Greyscale** 256 levels **Horizontal Resolution** 720 pixels

**Vertical Resolution** 576 lines PAL/CCIR

Signal Format PAL/CCIR

#### **Storage**

Hard Drive Capacity HDD size up to 320GB available

**Recording Speeds** 50, 25, 17, 10, 5, 3, 2, 1, 0.5, 0.2, 0.1 pictures per second, and event

External Archive DAT or AIT or CD-Recorder

One SCSI, DB 50-S-SCSI (reversed)
Contact Baxall for recommended models

External HDD Removable HDD 80Gb or 160Gb

#### **Connections**

I/O Port 10 way screw terminal connector: Alarm input and output, Record Start in,

Alarm Record reset, VEXT Pulse out, Error out, Ground, Video Loss out,

Disk End (5 minutes) out

RS-232 9 way D type, male, 3-wire, N-8-1, baud rate selectable in menus

**Composite Video** BNC connectors, one each input and output

**S-VHS** DIN connectors one each input and output

Audio Phono connector (signal type - line)

Network RJ45 connector for 10/100 BaseT Ethernet

#### Remote Control

Via RS-232 Allows control from PC or multiplexer, software upgrades & remote control

of front panel buttons

#### **Power Supply**

Input Voltage 110~230V AC

Power <50W nominal (Maximum with dual hard drives and internal CD-Writer)

#### Mechanical

**Dimensions** 438 x 385 x 88 mm, (17.3 x 15.2 x 3.5 in). 2U rack height

Weight 7.5kg (16.53 lbs) Maximum weight with dual hard drives and internal CD-Writer

#### **Environmental**

Operating Temperature 0 to 40° C

**Relative Humidity** 90% max. relative humidity, non-condensing

<sup>\*</sup> Reserved products not for general use. Contact Baxall Export Sales for more details

# **MDAe - Hard Drive Storage/Archive**



- Holds up to 8 internal disk drives
- 960GB of storage
- Background archiving
- Selective archiving
- "Continuous" or "Disk full". No overwrites modes
- SCSI 2 interface cable supplied

- Compatible with DTL900 and DTL96Ce series
- 3 Months storage in equivalent 24Hr mode, Medium Video Quality
- Purchase unit with or without hard drives installed
- WaveReader software
- 10/100 BaseT Ethernet via RJ45

#### **Overview**

An addition to Baxall's hard disk recording products is the Multi Disk Array (MDAe), a digital video storage system. Designed with the CCTV security industry in mind, with the ability to support up to 8 hard drives (storage capacity of 960GB), the MDAe is truly the most effective and efficient method of maintaining hard drive recordings when used in conjunction with the DTL96Ce hard disk recorder.

LCD and LED indicator lights show how many hard drives are installed and operating, and the total disk storage capacity. Rack-mount handles are provided with the unit for simple installation.

Compatible with WaveReader software (version 2.7), retrieval and viewing of video is simple for users. WaveReader software enables the user to search and view the archived images directly from the MDAe. Images can also be captured, printed and exported as a file using Wavestudio software.

960GB capacity										
Pictures per second		50	25	17	10	5	3	2	ı	0.5
Equivalent tape capacity		3hr	6hr	9hr	l2hr	24hr	48hr	72hr	120hr	240hr
Video quality (Recording time in hrs)	High	6.7	14	19.8	33.7	67.3	112	168	337	673
	Medium	9.3	19	27.2	46.3	93	154	231	463	926
	Standard	14.8	30	43.6	74.1	148	247	370	741	1481



**Electrical** 

**Input voltage** 110 – 120 VAC (60 Hz) / 200 – 240 VAC (50 Hz)

Power 60Hz at 110 VAC, 50Hz at 220 VAC

**Network** 

One RJ45 connection 10/ 100 Mbit Ethernet

**Mechanical** 

Weight 28 lb (Caution: weight may vary depending on number of hard drives

installed)

**Construction** Steel, rack-mountable, 3U

Finish Dark grey

**Storage** 

Hard drive(s) Up to 8 x Maxtor IDE HDD, sizes up to 160GB/ drive

**Connections** 

SCSI Ports 1 and 2: 50-pin, high-density, SCSI 2

RS232 port: DB-9 connector, male, null modem cable required

Relay connection

Front Panel Indicators

Hard Drive Status Light On: Drive present and operating

Light Flashing: Drive present, error detected Light Off: No drive present, or drive damaged

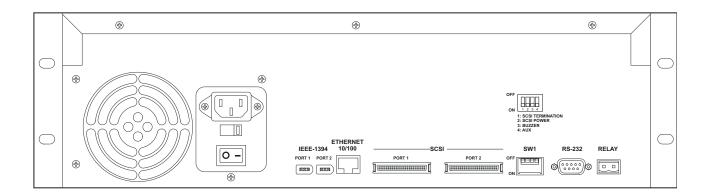
Hard Drive Activity Light on when the drive is being accessed (read or written to)

**LCD** When power up is complete, the LCD displays the total disk storage

capacity of the unit.

# **Dimensions**

483 x 130.81 x 350.52mm (L x W x H)



# **DAX - Dome Interfaces**



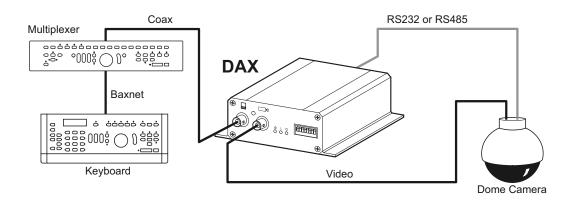
- Easy to install
- Auto tuning
- Compatible with leading dome brands
- Access to 16 presets supported depending on dome
- Patrol function available, DAX driven

- Pan flip (Auto flip) function supported on some domes
- Supports proportional variable speed
- One transmitter controls AC or DC receivers and Dax converters
- Compatible with Baxall coaxial ZTX6 and ZMX Plus telemetry transmitters

# **Overview**

The DAX range of dome converters is designed to control leading brands of variable speed domes via ZTX6 and ZMX Plus coaxial telemetry transmitters. Control is enabled by converting Baxall co-axial telemetry signalling into twisted pair protocols for selected proprietary domes.

Installation of the domes is made simple as all signals are transmitted along the coaxial cable to the DAX. Control can be maintained at distances up to 500 metres using correctly specified coax cable. Compatible with ZTX6 and ZMX Plus using joystick keyboard ZKX2/J or ZKX3/J for proportional variable speed.





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Input Composite video 1V p-p 75 ohm terminated, BNC connector Output Composite video 1V p-p 75 ohm terminated, BNC connector

# Interface

**Data Comms** RS485, RS232

# **Power Supply**

**Input Voltage** 12V DC (240V AC adapter supplied) or 24V AC.

<50mA **Power Consumption** 

# **Physical**

**Dimensions (WxHxD)** 115 x 37 x 107mm

> Weight 242g

**Enclosure / Colour** Anodise black aluminium

# **Environmental**

**Operating Temperature** 0~40°C operating (-20°~80°C storage)

20% to 80% relative humidity max, non condensing **Operating Humidity** 

### **Supported Domes** Baxall Code Models

JVC TK-C675BE, TK-C675E DAX/JVC

Star MD-100, MD800, MD-1200S, MD1200H, MD-2000 DAX/DMA VCC-9200P Sanyo DAX/DMA

DAX/DMA Computar SMD08P, SMD-0811, SMD-12, SMD-1211, SMD-20 **Mark Mercer** D250 mpT, D400 mpT, D500mpT DAX/MM

**Dennard** Type 2050 DAX/DEN

Vicon V7UVS-CC, V7UVS-MC, V15UVS, Surveyor 99, Surveyor 2000 DAX/VIC

Phillips/Burle TC750-4-2, TC750-6-2, TC750-9-2, TC750X-2-2, TC750X-6-2, (RS232 I/F only) TC750X-9-2, TC770-4-2, TC770-6-2, TC770-9-2, TC770X-4-2,

TC770X-6-2, TC770X-9-2

DAX/PHIL

**Panasonic** WV-CSR300, WV-CSR400, WV-CSR600, W-CSR850 DAX/PAN Pelco Will control any Pelco dome running Pelco "D" protocol DAX/PEL

DAP16-H3 Kenko DAX/KEN

**Ultrak** Will control all KD6 domes. KDZ domes controlled after initial

programming via JPD keyboard DAX/UL

Sensormatic Optima, Ultra 3, 4 and 6 DAX/SEN

> **VCL** Orbiter lite, Orbiter and Jupiter DAX/VCL

# **Pyramid - Echelon Based Matrix System**



- Simple twisted pair data network cabling
- Flexible topology
- Multi level security
- Programmable via on-screen menus
- Interfaces to other system networks
- Extensive camera control features
- Easily expanded through modular design
- Smart-card protected keyboard

# Overview

The Pyramid System is a highly flexible video management system. It simplifies installation, maintenance and expansion of CCTV networks and offers exceptional functionality for systems with up to 144 cameras and up to 32 monitors. Multiplexers, VCRs and matrices can all be controlled from one keyboard, or a number of distributed keyboards.

Pyramid is suitable for large systems such as town centres, football grounds, sports stadiums, carparks etc.

Multiple points of control can be distributed around a Pyramid system. These can be keyboards or PC-based interfaces. Each user on the system can be allocated a priority level, enabling effective system management when more than one user wishes to control a vital resource. Control authority limitations can also be defined.



# **System features**

Single twisted pair data network - simplifies cabling and keeps costs down

Flexible topology - either daisy chain, star or a mixture of both

Smart card, user priority, resource allocation and access level protection

Programmable via user friendly on-screen menu

Multi network media options can be installed with any combination of RS485, RS422, FTT10 or direct fibre

Unique flexible network expansion system using Star drivers and network expanders

Interfaces to a wide range of other system networks

Camera control features eg variable speed control, random and patrol tours, privacy zones, up to 128 camera presets per receiver

Easily expanded through modular design

Lap top installation tool enables simple system configuration

Network connection by twisted pair FTT10, RS485, fibre optics or microwave

IP connectivity - universal and flexible support for wide range of dome products

# **Matrix features**

48 camera inputs, 16 monitor outputs as standard, with full cross-point switching

Echelon based technology, provides easy interfacing to other industrial equipment

On-screen text on all monitors as standard

8 x RS232 ports as standard for control of VCRs and multiplexers

Printer logging port for alarms and user access

Expandable to 144 inputs and 32 outputs using slave matrices

Multiple matrix capability for larger systems

# **Installation tool**

System is programmable from a laptop or PC and enables remote camera addressing, camera titling and configuration of systems facilities, including alarms

# Alarm handling

Up to 1024 networked alarm inputs may be individually switched

Preset positions and views on alarm

On-screen messages may be generated

Transmit audio signal to operator on alarm

Active Alarm List on separate monitor

# **Keyboard functions**

Camera and monitor selection

Control of fixed and variable speed PTZ cameras

Twist joystick for rapid, precision zoom control

Camera focus/iris, wash-wipe/lighting controls

System configuration and addressing

VCR and multiplexer control

Backlit LCD display for operator information

# **Compatibility**

7000 systems using PY-7000

Baxall ZR mini receivers using PY-COX coaxial telemetry converter

Most market leading VCRs and multiplexers including Baxall ZMX, ZMX+, DTL and Vista Columbus Universal dome interface compatible with Ultrak, Vicon, VCL, Panasonic, JVC, Pelco, Dennard and Mark Mercer domes - other domes will be added



# Destiny IP - Digital Network Video



- Constant quality video that remains fit for purpose
- Highly flexible and scaleable
- Low bandwidth digital CCTV over any existing or new Ethernet network
- Can integrate legacy analogue solutions
- Low cost implementation and maintenance through single convergent network

- Possible to route video over any private or public network
- Bi-directional audio for point-to-point connections
- Alarms inputs and device switching outputs
- Serial data communication for other third party applications
- Various software options from simple web-servers to comprehensive multiuser controllers

# **Overview**

The Destiny-IP video solution enables video images to be transmitted and viewed over networks. It consists of several network compatible devices that address, transmit and control real-time video, data and audio streams over IP networks.

Providing a simple to assemble but sophisticated CCTV solution, Destiny-IP can operate in a standalone capacity or as an extension to an existing analogue system. Remote monitoring can be cost effectively implemented via the network and the scope of the traditional CCTV network can be extended due to its ability to share the viewing and control of images from different points on the network.

The Destiny range of products has been designed to support both TCP/IP (Transmission Control Protocol) and UDP/IP (User Datagram Protocol). The products can be directly connected to an Ethernet network which can be incorporated into a dedicated network or as part of a LAN, MAN or WAN configuration.



CCTV over Ethernet and internet networks opens up a realm of possibilities for security installers and end users. The installer can branch out into new areas combining security with a number of different functions namely access control, information technology or finance applications. This makes it an excellent sales tool as the cost of the system can be spread between clients' departments.

Also for the end user real cost savings can be made as existing networks can be used for the application. Additionally the Destiny IP equipment can be applied for non-security applications such as access control, information technology or market research purposes to learn about consumer behaviour for instance.

# **Destiny IP - the possibilities are endless**

### Caltrans

Baxall recently supplied Caltrans with the Destiny IP range of software products for use on the 15,000 mile California State Highway System.

Baxall provided 430 CCTV cameras and a number of IP Codecs for the project. The IP Codecs convert camera signals into compressed data, allowing full-motion, real-time, digital quality video, together with audio and data, to be transmitted across an IP network. The Destiny IP Codec solution was used due to its flexibility as it enables multiple Caltrans' operators to view the same image simultaneously from numerous locations. Currently, the CCTV images are restricted to Caltrans employees, but with the introduction of the new Baxall software, plans are already afoot to make some CCTV images available for view on the internet, allowing the public to check the highways for traffic themselves.





### Vatican

At 44 square kilometres in size, Vatican City is the world's smallest independent state, with a tiny population that magnifies during the working week. To meet the demanding security needs of the Vatican City, Baxall designed and installed a Destiny IP solution featuring encoders and decoders. It has provided a highly flexible solution, enabling local and remote monitoring simultaneously via the City's existing network.

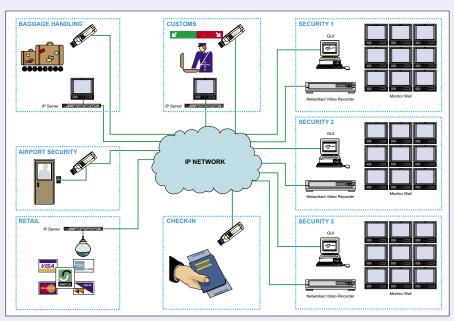
Each Destiny IP encoder is linked to a multiplexer so that any camera on the system can be viewed and controlled, either as a single, full screen or as a quad display. Control is via a simple GUI that allows for pan, tilt and zoom functions to be controlled and camera-to-monitor switching.

# **Brussels Airport**

Baxall worked in conjunction with ENI of Belgium to produce a CCTV system for Brussels airport. The CCTV system was originally installed to cover the airport solely, however as further growth is intended, it is engineered to adapt and support any changes as the airport develops.

The Destiny IP network video range was based around IP, sending CCTV images across an Ethernet network that can be configured as a LAN, MAN or WAN. The advantage of using the Destiny IP system in an airport environment is its scope and flexibility; it can be used by the police, fire services, baggage handling and customs and excise for a variety of different purposes, at different places and all at the same time.

When completed, Brussels airport will have a state of the art CCTV system that offers 25 images per second streaming video from 700 cameras, whilst retaining existing cameras with the use of IP encoders. There will be three control rooms with the familiar analogue video walls and the new Graphical User Interfaces.



Typical example of an airport video network configuration

# Destiny - The possibilities are endless

# IP Camera • A single IP camera accommodating IIII BAXALL &up to 4 analogue video signals · Transmits and receives video, IIII BAXALL &audio, serial and alarm signals over 10/100 Base T Ethernet networks white video images on PC's and Analogue traditional analogue monitors High quality CIF resolution images camera at 25 frames per second IP camera • Low network bandwidth utilization • Supports RS232/422/485 serial data for PTZ and other local devices IP encoder **IP** Receiver · Provides full pan, tilt, zoom and lens functionality Transmits transparent data via Analogue Contains four relay outputs as standard for wash, wipe, lamps and camera plus PTZ • Supports up to 128 presets with various options for patrol or auto-IP pan modes No additional interface for Ethernet network required RS422 serial data connection Network Video Recorder · Centralised recording tool for a IP encoder customized solution • Available as 16/32/100 stream IP receiver device enabling the same number of streams to be recorded at any · Quick and easy development tool it is a cost effective alternative to high cost DVR technology • Compatible with the whole Destiny IP range ensuring comprehensive • Enables configuration of continuous recordings or alarm event recording

Network Video Recorder

PC cont.





# IP Webserver

- Enables distributed viewing of images on any PC
- Provides serial data for PTZ domes and other serial devices
- Low cost option by viewing small groups of cameras at 4-5 frames per second
- Images displayed in a choice of resolution for non-critical or extremely sensitive circumstances

# IP Codec

- Can be configured as an encoder or decoder
- Supports viewing of images on PC's and traditional analogue CCTV monitors
- Provides high quality CIF resolution images at 25 frames per second
- Low network bandwidth utilization
- Control new or legacy domes and PTZ devices over any sized network
- Supports telephony quality audio for help points of door access applications
- Enables up to six binary inputs and outputs for alarm trigger and device switching

# IP Keyboard

- Similar functions to a CCTV keyboard
- No additional interface to Ethernet network
- Durable, high quality three-axis joystick
- Large back lit LCD display for clear messaging
- Shortcut keys to all functions
- Multi-level protection for unauthorized access
- Popular for operation at remote sites

## PC controller

- Provides scalable configuration, viewing and event management
- Operate on any Windows 98, 2000, M.E and NT platform.
- Extensive list of drivers for PTZ, Domes and other third party devices
- Enables configuration of all devices, users, systems and alarms operating an easy to use graphical interface.

# Your local Baxall agent is:















