

## SAFETY

Only use your DAX/SEN in a clean, dry, dust-free environment unless it is protected by an appropriate protective housing.

### ⚠ WARNING

Your DAX/SEN is not designed for use in intrinsically safe environments. Installation is only to be carried out by competent, qualified and experienced personnel. Wire in accordance with your national wiring regulations. Failure to do so can result in injury or death by electric shock. Use a class 2 isolated power supply for the +12V DC

## ELECTROMAGNETIC COMPATIBILITY (EMC)

### ⚠ CAUTION

This is a Class A product. In a domestic environment this product may cause radio interference. The user may be required to take adequate measures.

This product is intended for use in general purpose CCTV applications in a residential, commercial or light industrial EMC environment. This product must not be used in an area where an explosive hazard exists i.e. an intrinsically safe application, or a medical application or an industrial EMC environment.

The product must be installed in accordance with good EMC-installation practice to enable the product to function as intended and to prevent EMC problems.

## MANUFACTURER'S DECLARATION OF CONFORMANCE

The manufacturer declares that the product supplied with this document is compliant with the essential protection requirements of the EMC directive 89/336 and the Low Voltage Directive LVD 73/23 EEC. Conforming to the requirements of standards EN 55022 for emissions, IEC801 parts 2, 3 and 4 for immunity and BS415 superseded by EN60950 for Electrical Equipment safety.

## UNPACKING

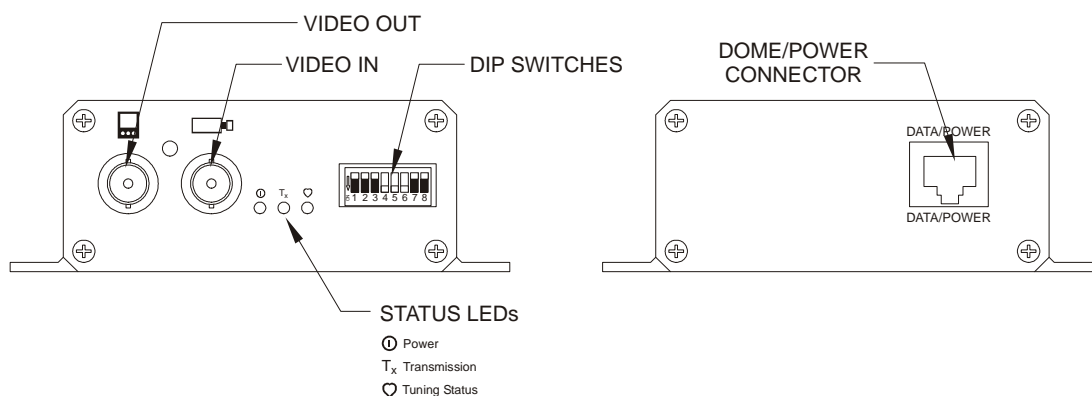
Keep your packaging. The packaging should contain:

- A Sensormatic Dome Telemetry to Baxall co-axial telemetry Interface Module
- 1 metre lead (RJ45 to stripped ends)
- These Instructions

Check the product code on the serial number label. If you have an incorrect item or it is damaged then inform the suppliers and carriers immediately. If this is the case then do not attempt to use your unit.

## DESCRIPTION

The Sensormatic Dome Interface converts Baxall coaxial telemetry into Sensormatic (SensorNet) telemetry. It connects between the transmitter and dome camera in the coaxial line. The DAX/SEN is powered from the Dome via the RJ45 connection. The DAX/SEN will operate with Optima, Ultra 3, Ultra 4 and Ultra 6 dome cameras.



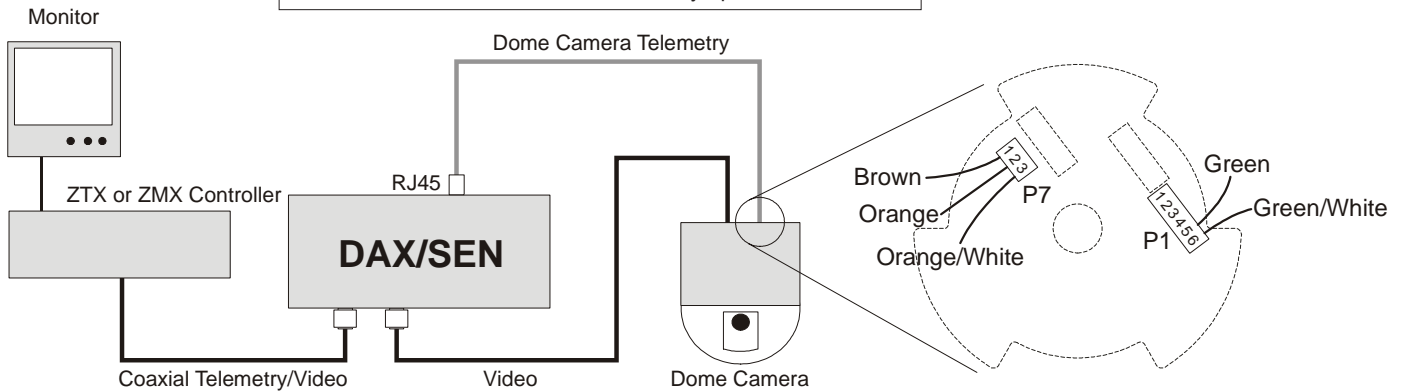
**Sensormatic Dome Interface Front and Rear Panels**

**CONNECTIONS**

All video is 1V pk-pk composite via 75 ohm video coaxial cable and BNC connectors. The connections to the DAX/SEN are shown in the schematic below. The camera ID number should be set to one (001). For best results from the auto-tune feature ensure that a telemetry signal is being sent by the transmitter immediately after the DAX/SEN is powered up. The colours shown in the schematic refer to the stripped ends of the supplied 1 metre RJ45 connector.

- Connect the Sensormatic Dome Interface to the Dome Camera as shown in the schematic.
- Since the DAX/SEN has internal termination, ensure that the dome camera is terminated in accordance with the manufacturer's instructions.

**Note:** Baxall Limited have tested and validated correct operation with cable lengths between the DAX unit and dome of 10 metres. For distances greater than 10 metres, the installer is advised to undertake a site trial to ensure satisfactory operation.



Note: After initially connecting the power, the DAX/SEN will automatically tune to the telemetry signal being sent. This can take up to 30 seconds. During this time, telemetry control of the dome will not be possible.

**PRESETS**

**STORING PRESETS**

Dome presets are stored in the following manner:

**ZMX Plus**

If storing presets 1 to 8 ensure that the Wipe key LED is OFF  
 If storing presets 9 to 16 ensure that the Wipe key LED is ON

1. Set the Telemetry key to ON.
2. Position the camera.
3. Press the Function key.
4. Press the Preset key.
5. Press a number key between 1 and 8.

**ZTX6**

If storing presets 1 to 8 ensure that the Wipe key LED is OFF  
 If storing presets 9 to 16 ensure that the Wipe key LED is ON

1. Position the camera.
2. Press the Function key.
3. Press a number key between 1 and 8.
4. Press the Preset key.

**RECALLING PRESETS**

Dome presets are recalled as follows:

**ZMX Plus and ZTX6 using ZKX2/J and ZKX2/K keyboards**

1. Enter the number for the preset to be recalled.
2. Press the preset key.

**Using the ZMX Plus front panel**

1. Press the preset key.
2. Enter the number for the preset to be recalled.

**Extended Presets**

The WIPE key (Aux 6) may be used to access presets 9 to 16. If the WIPE key is off, presets 1 to 8 are accessible. If the WIPE key is on, presets 1 to 8 become presets 9 to 16.

**PATROL FUNCTION (TOUR OF PRESETS)**

The Patrol Function is selected using DIP switch 8. The Patrol function will patrol through all 16 presets (if the presets have been programmed). Where a preset has not been programmed, the dome will remain at the last preset reached until the next programmed preset is reached. A fixed dwell time of 5 seconds between presets is the default setting, however this can be changed to 10 seconds using DIP switch 7.

**AUTO FOCUS AND AUTO IRIS**

DIP switch 1 will enable/disable the Auto Focus feature. When the Auto Focus feature is on, the manual focus controls may still be used to override Auto Focus, but will time out after 20 seconds returning to Auto Focus mode.

DIP switch 2 will enable/disable the Auto Iris feature. When the Auto Iris feature is on, the manual iris controls may still be used to override Auto Iris, but will time out after 20 seconds returning to Auto Iris mode.

**PATTERNS**

The SensorNet protocol supports three patterns. Patterns are programmed by putting the dome camera into learn mode. It will then record all pan, tilt and zoom commands until the pattern is either full or cancelled by the user.

**Storing a Pattern**

1. Set the Telemetry key to ON.
2. Set the Camera Power Key to ON.
3. Press the Function Key, then a number for the pattern (1 to 3).
4. Press the Preset Key.

Switching the Camera Power Key OFF will end and SAVE the pattern at any time during the pattern program sequence.

**Recalling a Pattern**

1. Set the Telemetry key to ON.
2. Set the Camera Power Key to ON.
3. Enter the number for the pattern to be recalled (1 to 3).
4. Press the Preset Key.

**AUTO PAN MODE**

The Auto Pan feature is selected using DIP switch 8. In the Auto Pan mode, the dome camera will pan left for 20 seconds, then right for 20 seconds, then left for 20 seconds etc.

Auto Pan is initiated using the Auto Pan key on the keyboard. Auto Pan will continue until either the Auto Pan key is again selected, or the keyboard's joystick is moved.

**AUTO FLIP**

The Auto Flip feature rotates the camera through 180° from its current position. It is initiated manually by pressing the Wash key (AUX2).

**ACCESSING THE DOME CAMERA MENU SYSTEM**

Access to the dome camera's menu settings can be achieved using the following key presses:

1. Set the Telemetry key to ON.
2. Set the Camera Power key to ON.
3. Enter 8 using the numeric keys (note that the menu system will only activate using number 8).
4. Press the Preset key.

**Navigating the Menu**

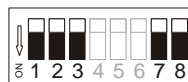
The Focus key (Focus near or Focus far) will act as the Enter key.

The Zoom In key acts as the value increment key and the Zoom Out key acts as the value decrement key. This will allow a menu item variable to be altered.

The joystick is used to navigate up and down the menu structure.

**SWITCHES**

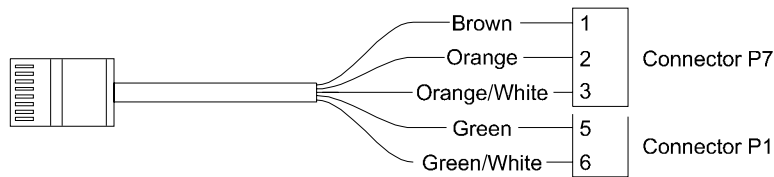
The DIP switches located on the front of the DAX/SEN perform the following functions:



Switch	OFF (Default)	ON
1	Auto Focus enabled (default)	Auto Focus disabled
2	Auto Iris enabled (default)	Auto Iris disabled
3	SensorNet Protocol	Vista Sprint dome protocol
4	<i>reserved</i>	<i>reserved</i>
5	<i>reserved</i>	<i>reserved</i>
6	<i>reserved</i>	<i>reserved</i>
7	5 second dwell	10 second dwell
8	Auto Pan key press = Preset Tour	Auto Pan key press = Auto Pan mode

RJ45 CONNECTOR

The supplied 1 metre lead (RJ45 to stripped ends) is used to connect the DAX/SEN to the Dome Camera in accordance with the Dome Camera's installation instructions and the schematic below.



CABLE DISTANCES

Type	Name	Maximum Distance (m)	Medium
Coaxial	RG59/URM70	250	Video
Coaxial	RG11.CT125	500	Video
Twisted-pair	Belden 8723	1000	RS485

SPECIFICATIONS

**Inputs:** Baxall-coaxial telemetry as defined by the Baxall coaxial telemetry specification, 24V AC

**Output:** Sensormatic (SensorNet) dome camera telemetry RS485

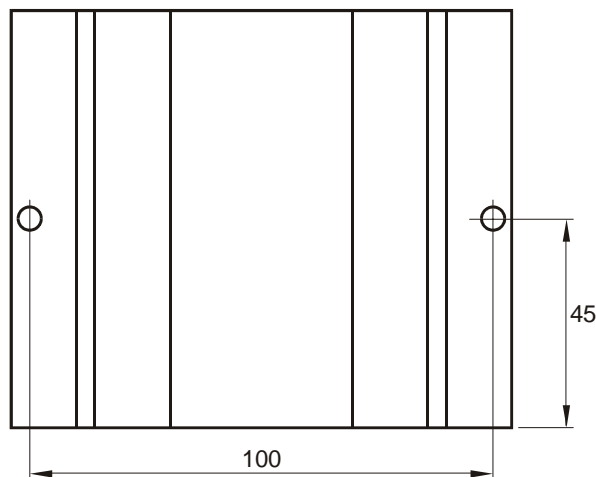
**Power:** nom. 24V AC class 2 isolated, 150mA max.

**Dimensions:** 108 x 90 x 35 mm.

**Temperature limits:** Only use this product between the temperatures of -20° and +40° C.

MOUNTING

The DAX/SEN may be mounted using the ØM5 holes located on either side of the housing.



**Baxall Limited**, Stockport, England. Visit our Web site: <http://www.baxall.com>

Baxall Limited reserve the right to make changes to the product and specification of the product without prior notice to the customer.