Security & Surveillance Solutions

CCTV ● emergency service vehicles ● command & control centres

Security & Surveillance

Professional Audio & Video Distribution & Switching Equipment

Smart-*e*

AV for Security

Who uses it?

Police Force

Emergency Services

Anti-terrorist

MOD

Bomb Squad

AV for security & monitoring

A modular matrix made up of scalable units in sizes of 8, 16, 36, 72 and 144 inputs and outputs units, which provide a cost-effective audio visual solution for security and surveillance. The matrix mixes central AV resources with remote sources, allowing the sharing of AV resources both building-wide and to remote field locations, such as emergency vehicles working at a temporary site. The solution gives control and monitoring for a wide range of applications where the transmission of AV signals across long distances is required. The system is also ideal for training environments, especially for the emergency and security services.

Where it's used?

Rapid Response Vehicles

Mobile Operation Centres

Incident Command Units

Command Centres

Command Rooms

AV security used for:

- Non-blocking matrix allows sharing of AV resources 'building-wide'
- All remote CCTV cameras can be used on any internal screen
- IP and web browser control
- Multi-user zoning & screen management
- Modular design allows for on-site upgrades
- Equipment designed for continuous working activity 24/7

Control & command

This family of large scalable AV solutions accommodates a variety of video formats, providing a single solution for mixing computer images, security cameras and TV. It allows security staff to view, direct from their PCs, simultaneous content such as files, emails, images, photos, together with live-feed from external CCTV cameras. bringing 'evidential' content to one central place.

Features such as scheduling, integral secure software control, a restriction on multi-users, and the ability to recall selected modes of operations such as macros and pre-sets, means this is the system of choice for many emergency and security surveillance operations.
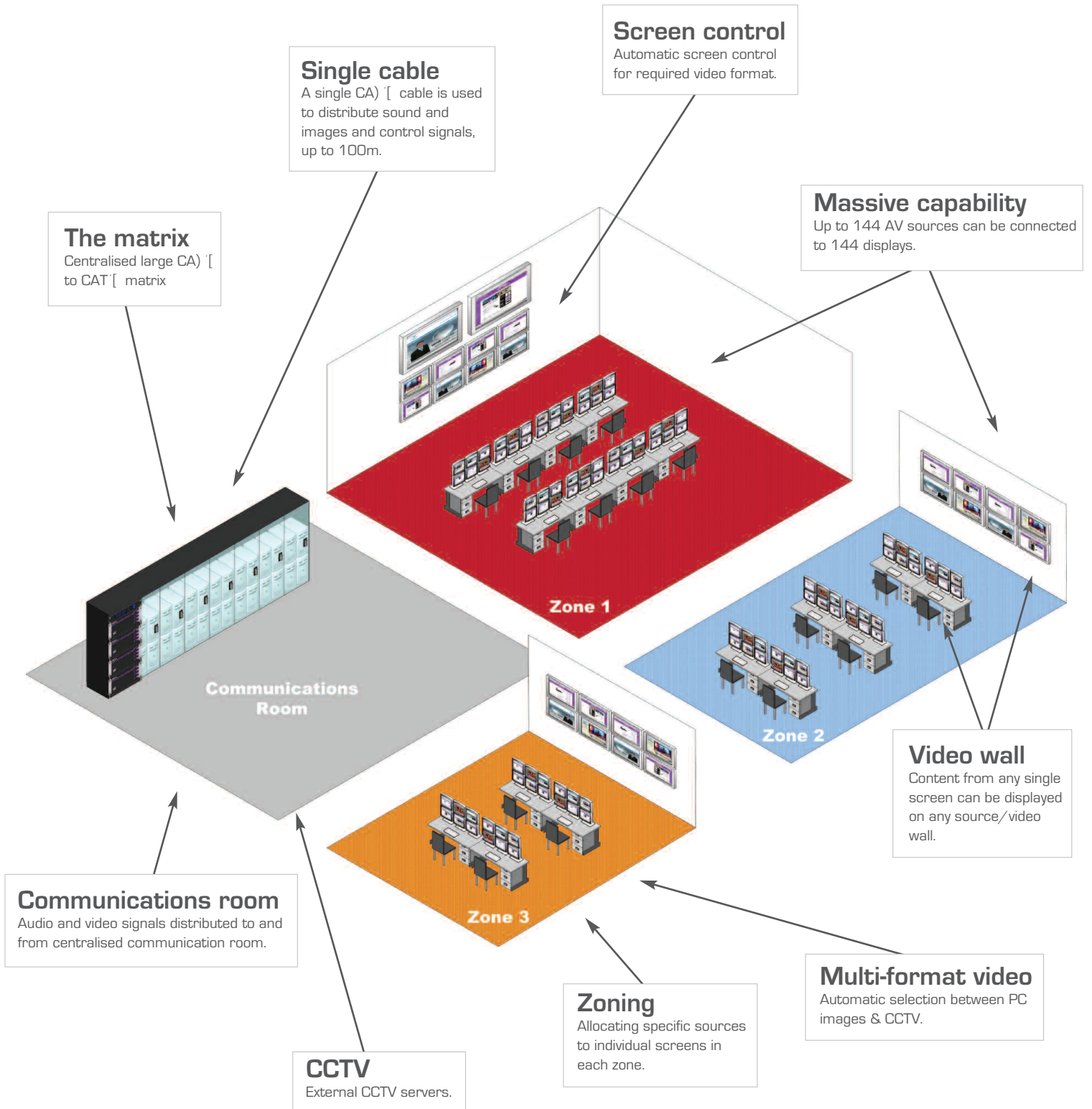
High Definition CCTV

How does it work?

All Smart-e solutions use CA) ̇[̇structured cabling to transmit signals, which is easy to install and much cheaper than other cabling systems. With Smart-e solutions you have the ability to mix signal formats between video content and live TV through one matrix. Users find Smart-e solutions extremely easy to use, whilst installation is made straight forward with a single CAT ̇[cable running to each device.
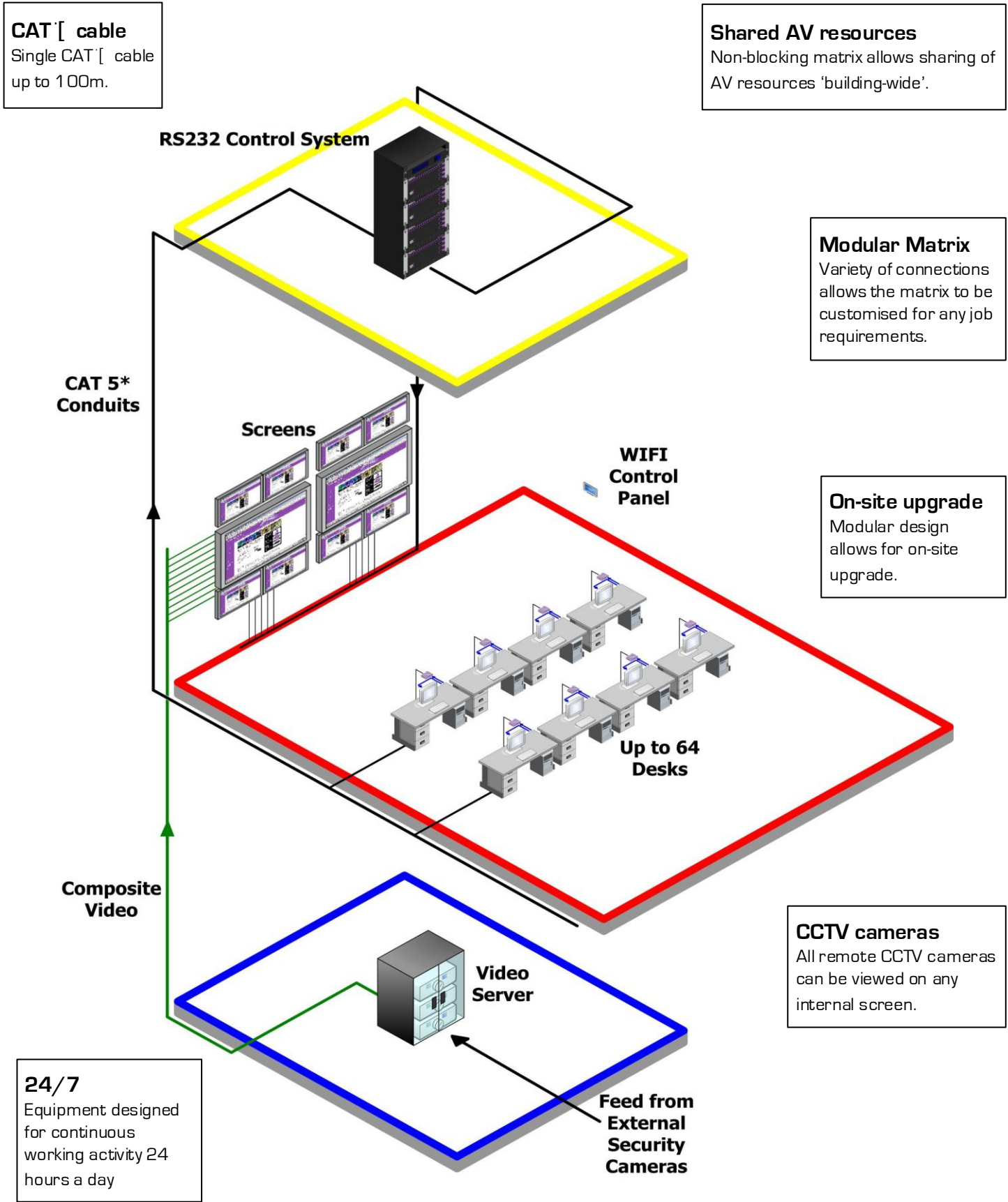
Ideal for control & command

Smart-e

AV solution for a control room

Large CAT 6 to CAT 6 matrix solutions
up to 144 inputs x 144 outputs

Single cable
A single CA) ˙[cable is used to distribute sound and images and control signals, up to 100m.

Screen control
Automatic screen control for required video format.

Massive capability
Up to 144 AV sources can be connected to 144 displays.

The matrix
Centralised large CA) ˙[to CAT ˙[matrix

Zone 1

Zone 2

Communications Room

Video wall
Content from any single screen can be displayed on any source / video wall.

Zone 3

Communications room
Audio and video signals distributed to and from centralised communication room.

Multi-format video
Automatic selection between PC images & CCTV.

Zoning
Allocating specific sources to individual screens in each zone.

CCTV
External CCTV servers.

Smart-e
Smart-e security & surveillance solution

Below is an example of Smart-e's security and surveillance solution using the MDX range of equipment. Products available are the MDX-8x8, MDX-16x16, MDX 36x36, MDX 72x72 and the MDX 144x144. These are large scalable modular matrices, designed with removable blades to give a range of options for input and output connections..

The connector types supported include: HDMI, DVI-D, HDBaseT, RGBHV, YPbPr, 3G-SDI and Fibre blade. More information on the MDX series can be found on the Smart-e website.

CAT ˙[cable
Single CAT ˙[cable up to 100m.

Shared AV resources
Non-blocking matrix allows sharing of AV resources 'building-wide'.

RS232 Control System

Modular Matrix
Variety of connections allows the matrix to be customised for any job requirements.

CAT 5* Conduits

Screens

WIFI Control Panel

On-site upgrade
Modular design allows for on-site upgrade.

Up to 64 Desks

Composite Video

CCTV cameras
All remote CCTV cameras can be viewed on any internal screen.

Video Server

24/7
Equipment designed for continuous working activity 24 hours a day

Feed from External Security Cameras

Smart-e

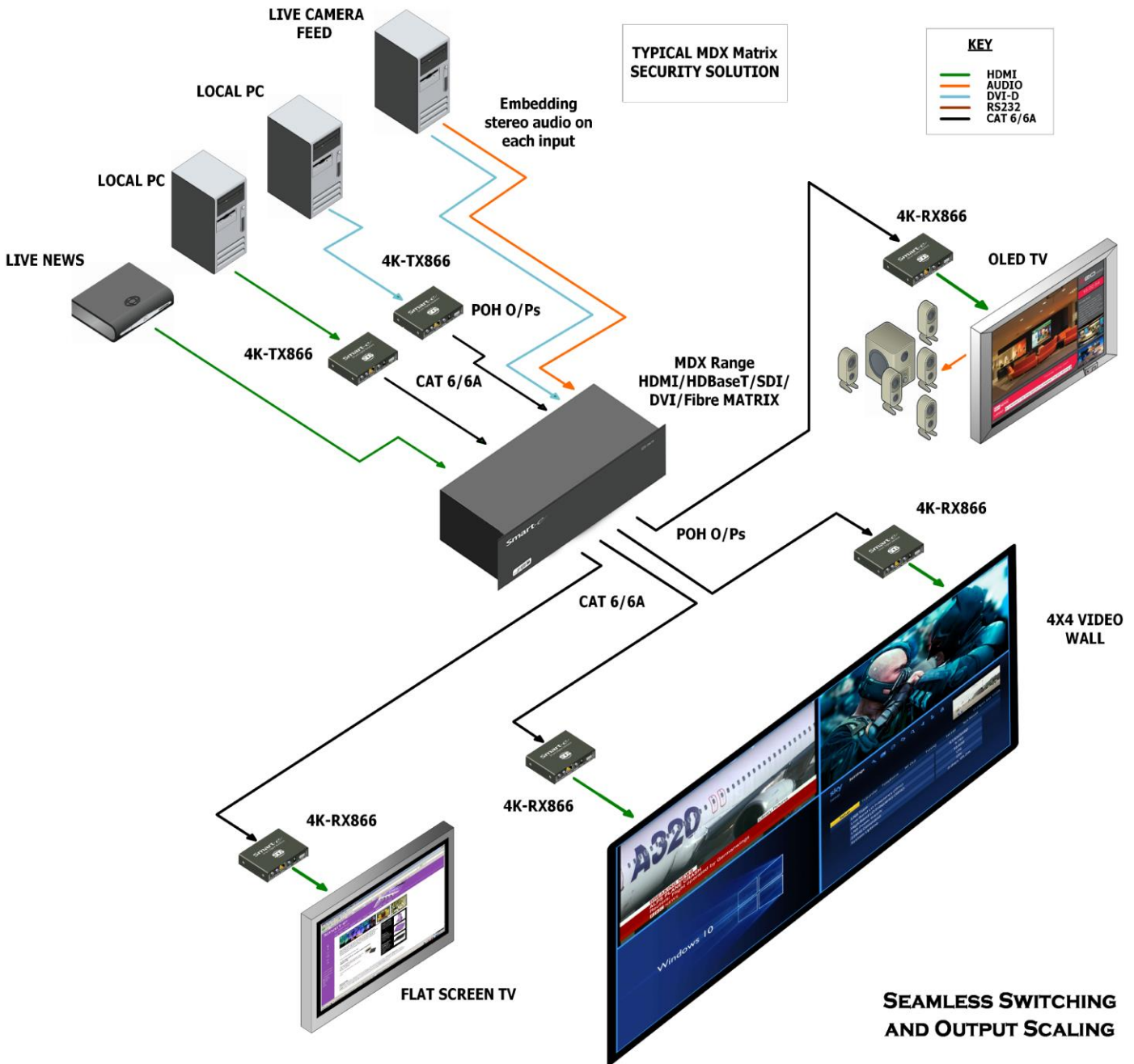## A typical Smart-e security solution

Central switch
A Smart-e matrix is at the core of its AV installation, reducing the complexity of the overall system

Single cable
Transmission up to 100m from source, via a single CAT˙[cable, saving on cable requirements.

Multiple input/outputs
Removable blades allow for a variety of input and output signal formats.

LIVE CAMERA FEED

LOCAL PC

LOCAL PC

LIVE NEWS

TYPICAL MDX Matrix SECURITY SOLUTION

KEY
- HDMI
- AUDIO
- DVI-D
- RS232
- CAT 6/6A

Embedding stereo audio on each input

4K-TX866

POH O/Ps

4K-TX866

CAT 6/6A

MDX Range
HDMI/HDBaseT/SDI/
DVI/Fibre MATRIX

4K-RX866

OLED TV

POH O/Ps

4K-RX866

CAT 6/6A

4X4 VIDEO WALL

4K-RX866

4K-RX866

A320 DD

Windows 10

FLAT SCREEN TV

SEAMLESS SWITCHING AND OUTPUT SCALING

In-line power
No need for bulky power supplies with in-line power which is reliable and space saving

Product list for above example

Product	Quantity	Description
MDX-36x36	1	Modular 8x8 Seamless Switching Matrix
4K-TX866	2	100m HDBaseT Transmitter
4K-RX866	4	100m HDBaseT Receiver

Display management
Allows direct communications to each display via RS232 from central control room.

Smart-e

A UK company with over 20 years experience in the Broadcast and AV industry, Smart-e is at the forefront of technology. As designers and manufacturers, with a dedicated research and development team, Smart-e covers AV solutions from start to finish. By focusing on customers' needs and adapting products to provide flexible, specialist applications, we have gained an outstanding reputation for cost-effective and reliable products.

Technically advanced UK design & manufacture

Our technical expertise and working partnership with several universities means we are able to design and develop the most comprehensive and innovative product range for AV switching and distribution solutions over CAT ̇[cable. Smart-e's focus has always been devoted to hardware, but with the constant changes in technology and the sudden need for IP control, we have worked quickly to design and develop software for IP to provide the whole solution and keep our leading edge.

Who uses Smart-e solutions?

Our extensive client portfolio ranges from smaller companies wanting a one-to-one presentation solution to blue chip clients and distributors world wide. Our adaptable products offer solutions to customer requirements from high-end residential, banks, educational environments and hotels to super yachts, multi-national corporations and more. We pride ourselves in being global pioneers in AV distribution.

Support & warranties direct from Smart-e

Smart-e offers excellent support, with regional offices and support engineers covering the whole of the UK. On-site help, as well as telephone support, ensures you receive a professional and efficient service throughout the project.

All our products are of the highest standard and include a 3 year return-to-base warranty, as well as an extended warranty option.

Why choose Smart-e solutions?

Compact unit offers extra space saving qualities

Single cable technology is more reliable, space saving and frees up cable for other services

High Video Quality is ideal for larger displays, providing more detail, and a clearer, sharper, more realistic picture

Display management allows direct communications to each display via RS232, from control room

In line power is highly reliable, space saving and kinder to the environment

Centralised AV resources means there is less clutter whilst providing a cost effective, 'greener', reliable system

Power saving scheduled screens on/off reduces power costs

Preventative maintenance automatically tracks status of equipment and alerts operator to low lamp life, loss of power etc., reducing downtime

Robust Smart-e equipment is built to last, and includes a 3 year warranty

Ease of maintenance means all components can be replaced and/or maintained quickly and easily

CAT 6 cable all Smart-e equipment is designed to work on CAT [w[̋ structured cabling

Scalable options range from 1 to an infinite number of screens

AV solutions from Smart-e

The 'green' credentials

Centralising power to the matrix results in power consumption savings

- Only one mains AC to DC conversion improves power efficiency

- Highly efficient low power DC-DC conversion provides effective power conversion from 24V to +/- 5V

- RS232 passthrough allows displays to be turned off when inactive

Presentations Systems

Corporate Comms.

Digital Signage

Entertainment Systems

Interactive & Remote Teaching

Security & Surveillance