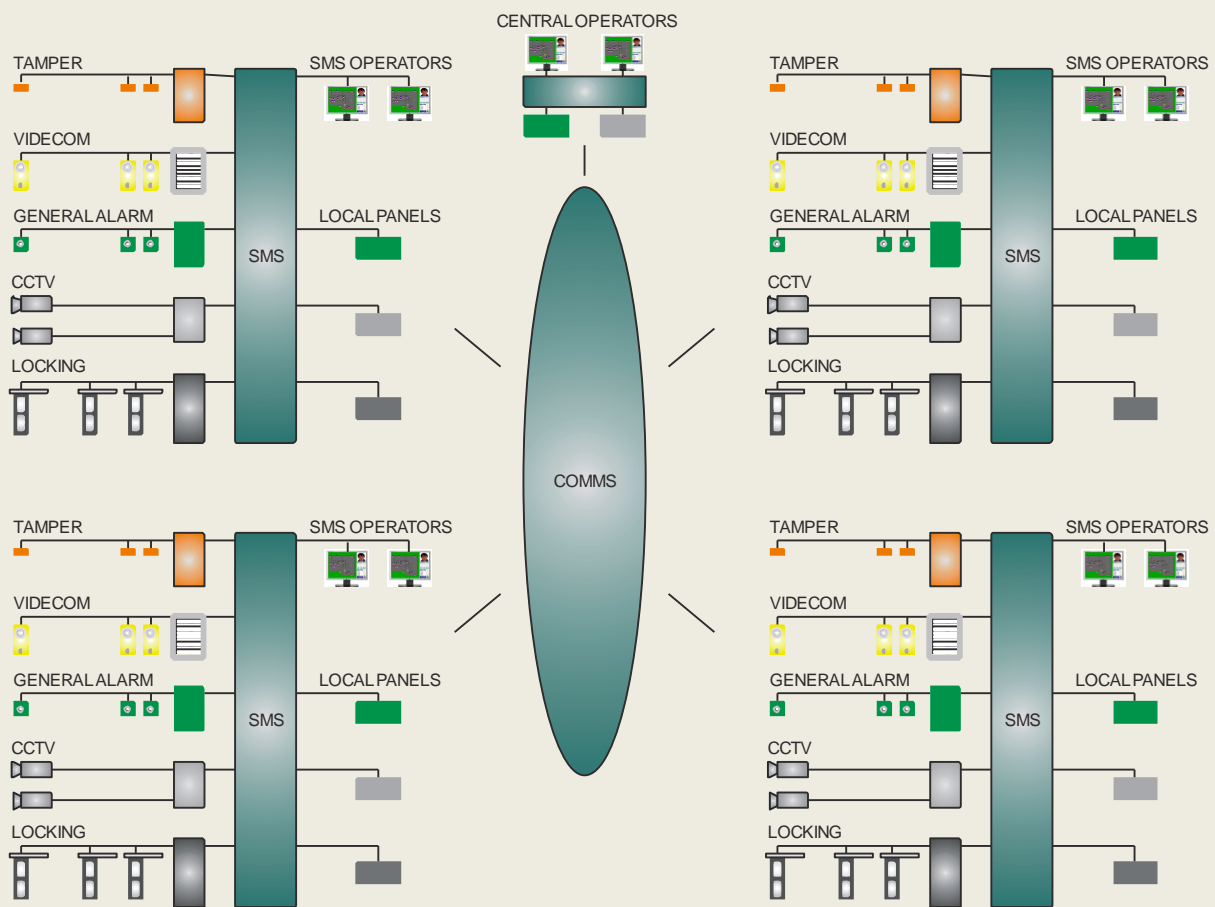# Custodial Systems

Product Range

FOLKNOLL GROUP LTD

For more than 30 years we have been leading suppliers of audio visual communications equipment and security locking systems. We supply a large range of standard and specialist products for the high security, communications and care industries. All of our products are design by experienced engineers for easy installation, simple configuration, straightforward
operation, excellent testing facilities, low maintenance, high reliability making our products better for you and your clients.

Customer Base

We have a large customer base across all of our market sectors and are approved suppliers of Electric Locking Control, Video Intercoms and General Alarm Systems for the Prison Service. Our custodial systems are currently installed and in use in HMPs prisons and young offender's institutions site though out England.

Our High Security Product Range

- Security Management Systems
- Gates and Perimeter Locking
- Electronic Sliding Door Drives
- Audio/Visual Intercoms
- Voice Transfer
- General Alarm
- Public Address
- Cell Call
- Safer Cell Samaritan Call
- Night Sanitation
- Support Services

Specialist Systems

The Folknoll group offers full a design service to modify our existing products or developing completely new products to enable us to provide the right product for you and your clients.

Quality

Folknoll pride ourselves on the quality of materials and workmanship used for all our standard and specialist products. At the heart of every Folknoll Group product or project are a team of highly skilled dedicated engineers with relevant industry experience ensuring every Folknoll product is the right product for you. Our commitment to quality is reflected in the proportion of repeat business from clients across all our market sectors.

Support

Folknoll group products are fully supported with on-site commissioning, on-site and remote technical support.

Further Information

Please contact us on **01763 234567** send us an email **sales@follnoll.co.uk** or visit our website **www.folknoll.co.uk** for further information on any of our product ranges.

FOLKNOLL SMS THE SECURITY MANAGEMENT SYSTEM

- Home Office Approved
- Established HMPs user base
- Site wide networked integrated security management system
- Operator friendly plan based graphical user interface
- Integrated voice audio and camera video
- Multiple control centres
- Configurable locking and interlocking strategies
- Configurable alarm strategies
- Easy to operate graphical user interface

System Integration

Our fully integrated Security Management System combines the control and monitoring of multiple security systems into a coherent unified management system controlled and monitored from a single PC compatible workstation. Speeding throughput and reducing desk space requirements. The current version integrates:-

- Custodial Locking Systems
- Vehicle and Pedestrian sliding doors
- Controlled and Monitored Doors
- Tamper alarms
- Audio and Video Intercom Control
- General Alarm
- PID's
- CCTV Control
- Fire Release
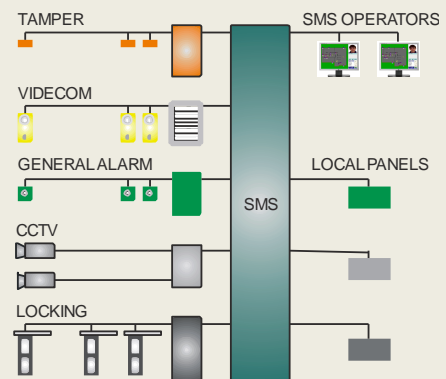
Industry Standard

All our systems are based on standard PC equipment and industry standard Siemens PLC equipment. As a Siemens Business Partner Folknoll are able to call upon their corporate support if required.

System Software

With over 35 years experience dating back to the earliest PLC based system installed in the Prison Service, our software is specified, written, tested and installed by our own engineers. We are in regular contact with HMPS to ensure that our systems fully comply with current specifications, and usually exceed these requirements. As authors of our own software, however, we are able to adapt the software to any requirement.

Operational Benefits

Utilising Folknoll's integrated control solutions have been proved to offer:-

- Improved Safety and Security
- Improved staff and visitor throughput
- Simple and effective control routines, minimising training requirements
- Reduced space requirements in control areas
- Clear alarm indications for speedy management decisions
- Significantly increased reliability

CELL CALL SYSTEMS

- NOMS STD/E/SPEC/013 Compliant
- Established HMPS user base
- Vandal resistant
- Full range of standard vandal resistant BESA panels
- Customised panels for existing or specialist systems available on request.
- All cell call units fitted with tamper alarms
- Up to 4080 cells and 128 wing display units over 16 wings.
- Options for power outlets, TV/Radio distribution
- Additional call buttons and personal wireless call buttons for disabled cells
- Private Samaritan/other call unit for 'Safer Cells'
- Range of landing indicator units
- UPS with 24 hour battery operation
- Customisable file server for data logging and configuration
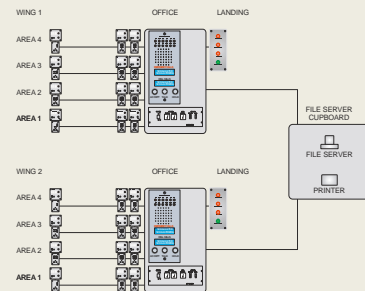
NOMS Compliant

The Folknoll Cell Call range offers a fully STD/E/SPEC/013 compliant cell call system for use in HMPS, Police Service and similar establishments. The range comprises a comprehensive collection of units defined by the NOMS specification including Cell Call Units, Corridor Reset Units, Landing Indicator Units, Wing Office Display Units, PSUs and file servers.

Safer Cell / Samaritan Call

The range also includes safer cell units will allow direct private calls to Samaritans or other organisations.

Vandal Resistant Design

All panels are constructed from stainless steel, and fitted with vandal resistant switches, displays, speaker grills etc. All cell call units are fitted with tamper alarms for additional security.

Standard Cells (CCU)

Cell call units comprise a call button, microphone and speaker used alert the wing display unit the operators and intercom communication with the wing display operators. A range of cell call unit panels are available for power outlets and TV/radio distribution.

Disabled Cells

For disabled cells the range includes optional wired call points and personal wireless call buttons.

Safer Cells

For safer cells the range offers direct private calls to the Samaritans or other organisations.

Corridor Reset Units (CRC)

All corridor reset units are fitted with a light switch, a bright RED alarm indicator LED, and FOB reset switch implementing the specifications requirements for visit and emergency attendance.
Cell calls can only be reset using the corridor reset unit, requiring the wing display unit operator to visit the CRU.

A range of options are available providing cell power and lighting controls depending on site requirements.
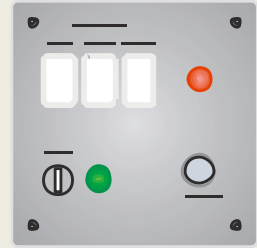
Landing Indicator Units (LIU)

Folknoll offer a full range of BESA panel vandal resistant landing indicator units comprising 2, 4, 6 or 8, bright alarms LEDs and adjustable audio alarms.

Wing Display Units (WDU)

Each wing may have up to 8-off wing display units. Wing display units are used to accept calls from cell call units and intercom communication with the cell call unit user. Each wing display unit two alphanumeric displays, fault LEDs, control buttons, speaker and microphone. One display shows system wide emergency calls, and the other display shows local wing cell calls. The unit has an integral solid state event log. Events are recorded locally and sent to the file server to provide an audit trail. In the event of a communications failure the event log is buffered in the WDU until communications are restored.
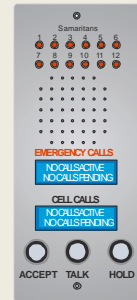
Wing Power Supply Unit (PSU)

The Folknoll wing power supply unit provides power and charges the standby batteries and fitted with the required indicators. The unit is also monitored by the WDU. Mains status , detected PSU faults will be displayed to the operators.
In the event of a mains failure there will be a smooth transition to battery operation. Each system is supplied with sufficient battery capacity to provide standby power for a minimum of 5-off 5 minute calls per hour for 24 hours.

Typical Wing
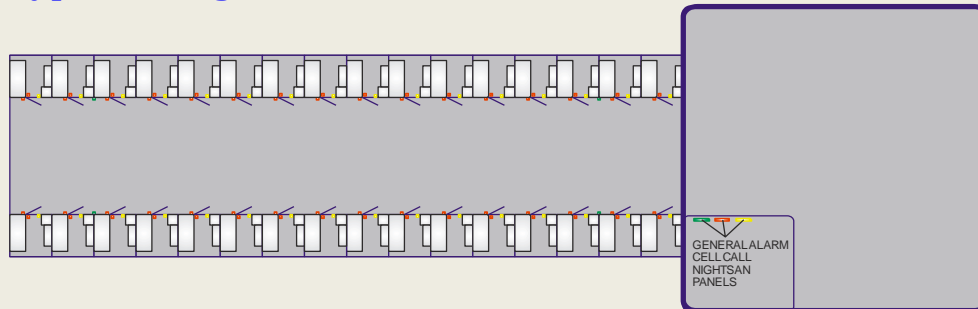
GENERAL ALARM SYSTEMS

- Home Office Specification Compliant
- Established HMPS user base
- Vandal resistant
- Compatible with HMP approved security management systems
- Hierarchical 'hardwired' reliable site-wide
- Fault Monitoring
- Battery backed operation
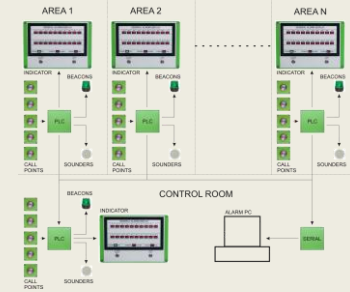
NOMS Compliant

The Folknoll GA range offers a fully compliant general alarm system for use in HMPS, Police Service and similar establishments. The range comprises a comprehensive collection of call points, indicator panels, sounders, beacons, controllers and logging PC.

Hierarchical Design

Local alarms systems can be integrated into a site-wide system using a simple reliable hierarchical 'hardwired' philosophy. Site-wide systems can be extended over fibre and other media to suite site conditions.

Industry Standard Reliability

Control of the Folknoll General Alarm is based on robust industry standard PLCs, PC equipment, and network devices, providing a reliable tested platform, and a ready supply of parts for system expansion or repair.

Vandal Resistant Design

All fascias are fitted with vandal resistant switches and secured by anti-tamper screws. Call points are fitted with tamper detect switches to alert operators when enclosed are opened. Indicator panels LEDs are fitted behind vandal resistant windows. PLCs are housed in lockable enclosures.

Call Points

All Folknoll call points are vandal resistant. The units are fitted with vandal resistant call buttons and have integral tamper detect switches.

Surface Mount Call Points

- IP 65 die-cast aluminium surface mount enclosure
- Suitable for internal or external use
- Finished in BS 4800 green
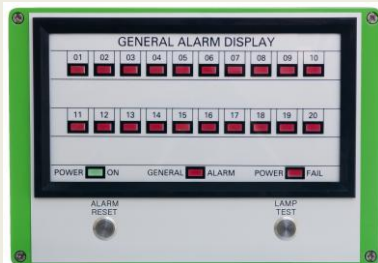- Anti-tamper screws

Flush Mount Call Points

- Steel fascia panel
- Suitable for mounting on standard back boxes.
- Finished in BS 4800 green

Other call point options are available on request.

Alarm Indicator Panels

Indicator panels are located in local offices and central control rooms to identify activated alarm zones, typically 20-off zones per indicator panel

- Large red LEDs indicators for each zone,
- Supplied annotated for zones 01-20 or 21-40 etc.
- Integral sounder
- Power on, general alarm and power fail LED indicators
- Vandal resistant 'ALARM RESET' and 'LAMP TEST' buttons
- Finished in BS4800 green
- Anti-tamper screws

Beacons And Sounders

Folknoll offer a full range of indicators, beacons and sounders to suite site conditions. They can be mounted in offices, control rooms, corridors or other suitable locations and be associated with single or multiple alarm zones.

Control Panels PLCs And PSUs

Folknoll General Alarm Systems are controlled by industry standard PLCs. These can be linked together to form robust reliable hierarchical site-wide alarm systems.

System PSUs are battery backed to provide continuous operation in the event of a mains supply failure, and monitored so that main supply fail and other faults are reported by the indicator panels.

The PLCs and system PSUs are usually supplied ready assembled in lockable BS4800 green enclosures ready for wall mounting.
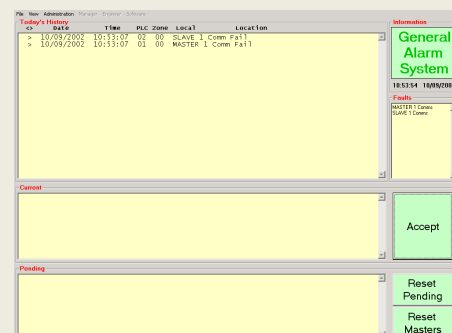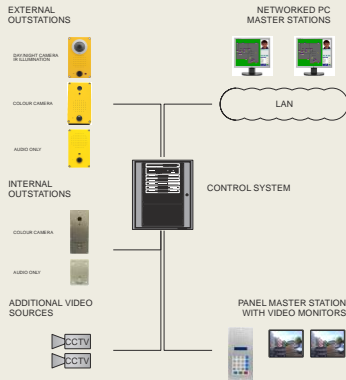

General Alarm PCs

General Alarm PCs provide alarm source reporting, event logs and audit trail information. A printer is supplied to make hard copies of event logs. All General Alarm PCs are based on standard PC equipment for long term support. Time and date may be derived from off-air rugby clocks, GPS or other time sources depending on site requirements. All General Alarm PC equipment is powered from UPSs to provide continued operation in the event of a mains supply failure.

Alarm Source

Indicator panels indicate activated alarm zones. Site-wide systems tend to group alarm zones into larger area alarm zones for display on the central indicator panel(s). In site-wide systems central operators will know only that an alarm has been activated in a particular group or area. A General Alarm PC detects reports and logs individual zone activations. Using a General Alarm PC enabling central operators to direct resources to the exact source of an alarm.

INTERCOM AND VIDECOM SYSTEMS

EXTERNAL OUTSTATIONS

DAY/NIGHT CAMERA IR ILLUMINATION

COLOUR CAMERA

AUDIO ONLY

INTERNAL OUTSTATIONS

COLOUR CAMERA

AUDIO ONLY

ADDITIONAL VIDEO SOURCES

CCTV
CCTV

NETWORKED PC MASTER STATIONS

LAN

CONTROL SYSTEM

PANEL MASTER STATION WITH VIDEO MONITORS

- Home Office approved
- Established HMPS user base
- Compatible with HMP approved security management systems
- Vandal Resistant
- Range of indoor/outdoor outstations
- Range of video cameras and illuminators for low light, and wide range environments
- Adjustable audio output up to 80dB for noisy environments
- 24V operation

NOMS Compliant

The Folknoll Videcom range offers a fully approved audio video intercom system for use in HMPS, Police Service and similar establishments.

Vandal Resistant Design

All panels are designed to be vandal resistant and fitted with vandal resistant switches, displays, speaker grills etc.

User Recognition And Image Quality

Folknoll recognise the need to accurate user identification. Video rendering quality will vary greatly depending on light conditions, and lighting conditions will vary from location to location.

Standard Dynamic Range Image Sensors

Standard cameras can over expose highlights, under expose low lights or both depending on the aiming point. Over exposure can cause secondary effect such as whiteouts. Under exposure can cause granulation and patterning.

Folknoll Wide Dynamic Range Image Sensors

For locations with high background light levels Folknoll offer wide dynamic range image sensors. Wide dynamic range sensors capture images adjust the image to match light are dark areas of the scene. Bright areas are darkened, dark areas are brightened, vertical smear and pixel blooming are reduced resulting in more accurate colour rendering under difficult lighting conditions, such as backlighting, glare and other high contract scenes.

Standard IR Illuminated Image Sensors

Intercom users tend to be within an arm's length of the outstation. Standard IR cameras used at this range tend to suffer from bright highlights/glare/refection making user recognition difficult.

Folknoll Diffused IR Illuminated Image Sensors

For locations with low light levels Folknoll offer diffuse IR illumination. The diffused IR Videcom outstation is fitted with a high resolution high sensitivity wide dynamic range camera and diffused IR light, which combine to reduce close up highlighting, glare and reflections.

Outstations

Folknoll offer a wide range of audio and audio video outstations to suite site requirements. The range includes wall and flush mount internal and external designs, optional buttons and annotation and a variety of video image sensors with high resolution, high dynamic range, and illuminated options. All outstations are vandal resistant by design.

Traditional Master Stations

The Videcom range included surface and flush mount traditional vandal resistant panel master stations. A range of video is available to display live video from the calling station or CCTV cameras to enable visual identification of callers.

PC Master Station

Master stations can also built into PCs, with live video streams on the pc monitor and audio presentation using pc speakers and microphones or headsets. PC master stations can be networked to the videcom over dedicated or existing network infrastructure enabling the implementation of remote and emergency operator station.

Control Equipment

Videcom control equipment is designed around our robust well proven 24v audio exchange and video matrix equipment. We have a full range of modules enabling us to provide the solution you need. Folknoll control equipment is supplied mounted in racks complete with pre-wired termination rails etc.

Site-Wide Systems
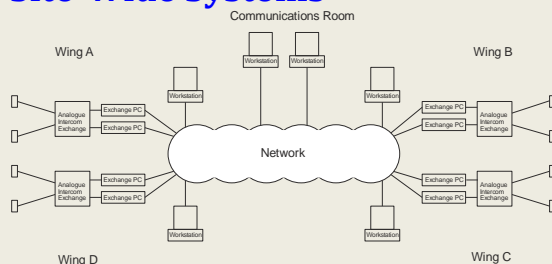
Local Videcom Systems can be networked over IP to form site-wide intercom systems. Video and audio can be streamed across the network allowing authorised operators to handle calls from intercom users from across the site.

System Integration

Videcom systems can be seamlessly integrated into Folknoll SMS security management systems. Calls can be accepted and cancelled from the SMS operator station. Outstation image sensor and CCTV video streams are incorporated into the SMS GUI. Caller and operator audio are processed by the SMS workstation and can be presented and accepted on PC speakers, headsets and microphones. Additional interfaces are available for integration with third party equipment.

PCs And Networking Equipment

All PCs and networking equipment are based on industry standard equipment for long term support. System time may be derived from an off-air rugby clock or GPS depending on site conditions. UPSs are offered if required

ELECTRIC PEDESTRIAN SLIDING DOOR DRIVES

- Home Office approved
- Established HMPS user base
- Compatible with HMP approved security management systems
- Max door weight 250Kg
- Reliable drive mechanism
- Electric motor with adjustable torque limiter
- Inverter speed control
- Test box displaying door sensor and relay status
- Engineer's test terminal available for local control (addresses commissioning, testing and maintenance health and safety issues).
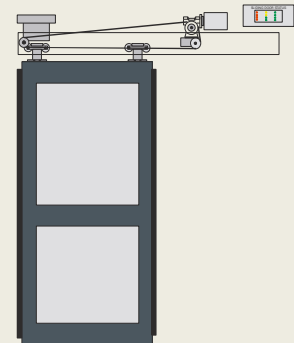
NOMS Compliant

The Folknoll electric pedestrian sliding door drive is fully NOMS compliant and is suitable for use on HMPS, Police Service sites and similar high security establishments.

Reliability

The Folknoll electric pedestrian sliding door drive is a simple reliable design.

System Integration

The drive mechanism is fully compatible with Locking and Security Management Systems.

Safety

The electric sliding door is supplied with a test box usually mounted in the pelmet. The Test Box displays the status of the drives relays and sensors, and allows the connection of an Engineer's Test Terminal for local testing during commissioning and maintenance.

Description

The Folknoll Electric Pedestrian Sliding Door Drive has been designed for use in H.M. Prison Service and similar institutions and is fully compatible with Home Office specifications. The drive has been design a safer alternative for the traditional hydraulic powered doors and can be used to replace hydraulic mechanisms in existing doors or can be used in new installations. The sliding door drive has been design to accommodate heavy duty High Security glazed doors of up to 250Kg with ease. The rugged yet simple design enables ease of routine maintenance and component replacement.

Test Box

Each sliding door drive is connected to the control system through a Test Box normally mounted within the pelmet. The Test Box acts as a cable termination box joining the system cabling to the door electronics. The Test Box provides a door status display and allows connection of an Engineer's Test Terminal.
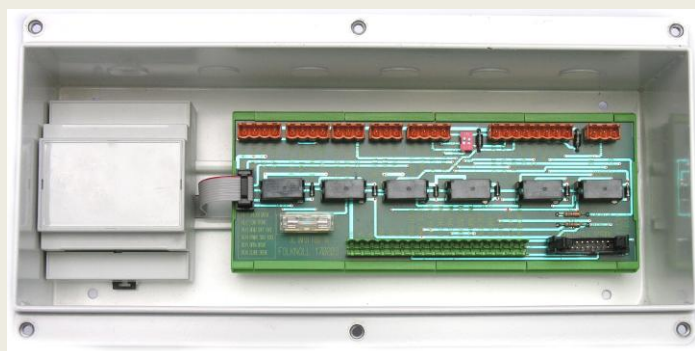
Status Display

The Test Box status display shows the current status of the sliding door drive relays and sensors to aid system diagnostics.

Door Status Indicators

🔴 Close Drive	🟡 Front Safe	🟢 Lock Open
🔴 Open Drive	🟡 Rear Safe	🟢 Lock Shut
🔴 Lock Drive	🟢 Door Open	🟢 Emerg. Stop
🔴 Unlock Drive	🟢 Door Closed	🟢 Tamper

Engineer's Test Terminal

Folknoll offer an optional Engineers Test Terminal which connects into the Custodial Systems test box. The door is isolated from the main control system preventing inadvertent operation of the door when an engineer is working with the pelmet. **A significant and Health and Safety benefit.** The Engineers test terminal allows local operation of the door and mimics the LEDS on the test box to aid maintenance.

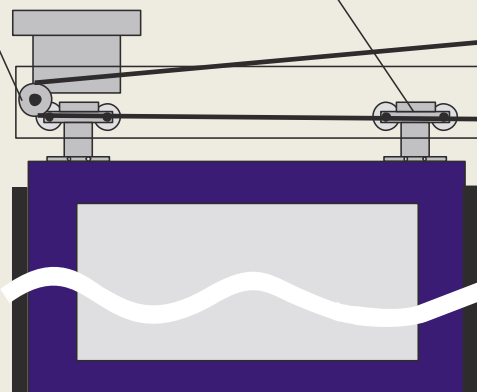## Drive Mechanism

Single heavy duty 20mm wide drive belt.

All metal suspension system. Trolleys run on case hardened bearings.

0.2 Kw Electric Motor and Gearbox with adjustable torque limiter.

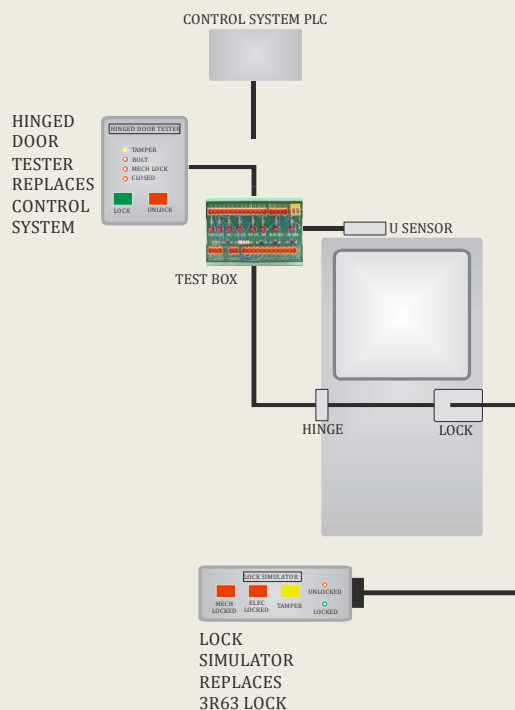Intelligent Test Box. Full LED indication of door status.

Aluminium extruded track allows trolleys to be removed from either end.

Engineers Test Terminal. Enables local operation for routine maintenance.

HINGED DOOR TEST EQUIPMENT

CONTROL SYSTEM PLC

HINGED DOOR TESTER REPLACES CONTROL SYSTEM

HINGED DOOR TESTER
TAMPER
BOLT
MECH LOCK
CLOSED
LOCK   UNLOCK

TEST BOX

U SENSOR

HINGE   LOCK

LOCK SIMULATOR
MECH LOCKED   ELEC LOCKED   TAMPER   UNLOCKED   LOCKED
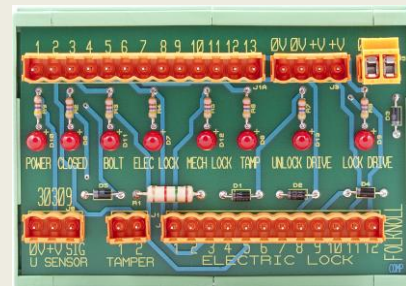
LOCK SIMULATOR REPLACES 3R63 LOCK

- Compatible with approved Security Management Systems and locking control systems
- Local door control without affecting normal system operation
- Easy accurate fault diagnosis
- Enables engineers to determine type and source of fault
- Reduces repair time
- Reduces maintenance down time

Use of Folknoll test equipment enables engineers to quickly and accurately diagnose faults reducing down time and identifying the appropriate correct actions resulting in COST SAVINGS.

Hinged Door Test Box

- Fitted between Control systems and hinged door
- Real time indication of control signal and door sensor status
- Enables easy connection of Hinged Door Tester and Lock Simulator
- Din rail mounted

Hinged Door Tester

HINGED DOOR TESTER
TAMPER
BOLT
MECH LOCK
CLOSED
LOCK   UNLOCK
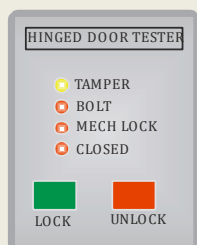
- Allows local control of door
- Does not affect control system operation
- Displays lock sensor status

Lock Simulator

- Display control system drive signals
- Simulates 3R63 lock
- Can be plugged into Hinged Door Test Box
- Can be plugged into 3R63 lock connector

LOCK SIMULATOR
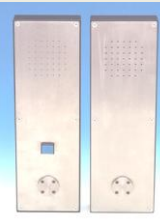MECH LOCKED   ELEC LOCKED   TAMPER   UNLOCKED   LOCKED
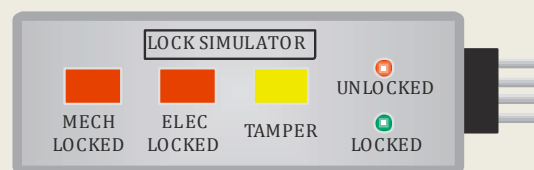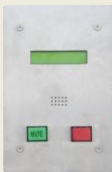
NIGHT SANITATION SYSTEMS

- Home Office approved
- Established HMPS user base
- Vandal resistant
- Compatible with HMP approved security management systems

VOICE TRANSFER SYSTEMS

- Home Office approved
- Established HMPS user base
- Vandal resistant
- Optional recording
- Applications include Gate Office, key issue, closed visits
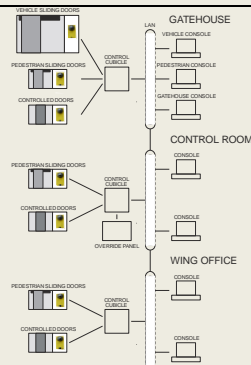
TAMPER ALARM SYSTEMS

- Home Office approved
- Established HMPS user base
- Vandal resistant
- Compatible with HMP approved security management systems
- Applications include door monitoring, secure cupboards, restricted access areas

PUBLIC ADDRESS SYSTEMS
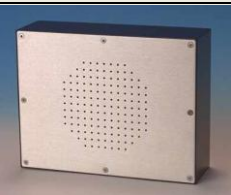
- Established HMPS user base
- Vandal resistant speakers
- Zoned
- UPS backed

GATES AND PERIMETER LOCKING SYSTEMS

- HMPS approved
- Established HMPS user base
- Compatible with HMP approved security management systems
- Based on industry standard PLCs
- Interlocks and other locking strategies
- Lock downs
- Tamper alarms
- UPS backed

NEW SAFER CELL SAMARITAN CALL SYSTEMS
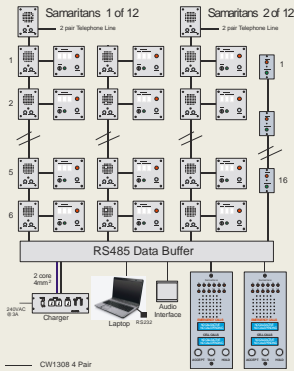
- Direct private call to Samaritans or other service
- Line in-use indication
- Integration with Folknoll Cell Call System
- Additional options for disabled cell options
- UPS backed with 24 hour standby operation
- Ideal for at risk and safer cells

THE FUTURE

Folknoll staff are proud of their reputation as innovative specialist to the custodial market, regularly offering new products and systems to keep pace with the continually evolving electronics industry.

"We are committed to a rolling plan of system review and upgrade, to ensure that our systems continually represent the most up to date and cost effective solution to custodial system requirements."

B Perryman
(Managing Director)

SUPPORT SERVICES

At Folknoll, we know that the supply and implementation of our Security and Alarm systems is only part of the solution. These systems also need routine maintenance and emergency support throughout their life cycle.

For over 20 years Folknoll have been offering quality contract and ad hoc support to the Custodial market, covering systems supplied by ourselves and third parties including.

- Electronic locking systems
- Intercom and Videcom systems
- General alarm
- Cell call
- CCTV
- Tamper alarm

All of our support conforms to HMPS standard specifications.

We are currently privileged to support electrical and mechanical aspects of systems including High Security Estate in several regions.

Our technical staff are all security cleared to Enhanced CRO and CTC level, and have extensive experience in custodial security systems. Our NQA ISO 9001 accreditation ensures the quality required to deliver these critical services. We are also CHAS approved; guaranteeing all works will be implemented safely in line with your requirements.

So whether you require a support contract, help with a specific issue, or just a second opinion we would be pleased to assist. Call Brian or Derek on **01763 234567** and to arrange the best and most cost effective support available.

Standard Product Engineering
Folknoll know that sometimes you need a special feature to comply with clients requirements or to stand out in the crowd. That is why we offer a Standard Project Engineering service to adapt an existing product to match your needs.

Design Service
If your requirements cannot be met by modifying existing equipment Folknoll offer a full bespoke design service.

Commissioning Termination, Testing, Training
To help you get the job done fast Folknoll offer on-site remote commissioning, configuration and training services.

Technical Support
Folknoll have a team of experienced engineers offering a full on-site or remote technical support service.
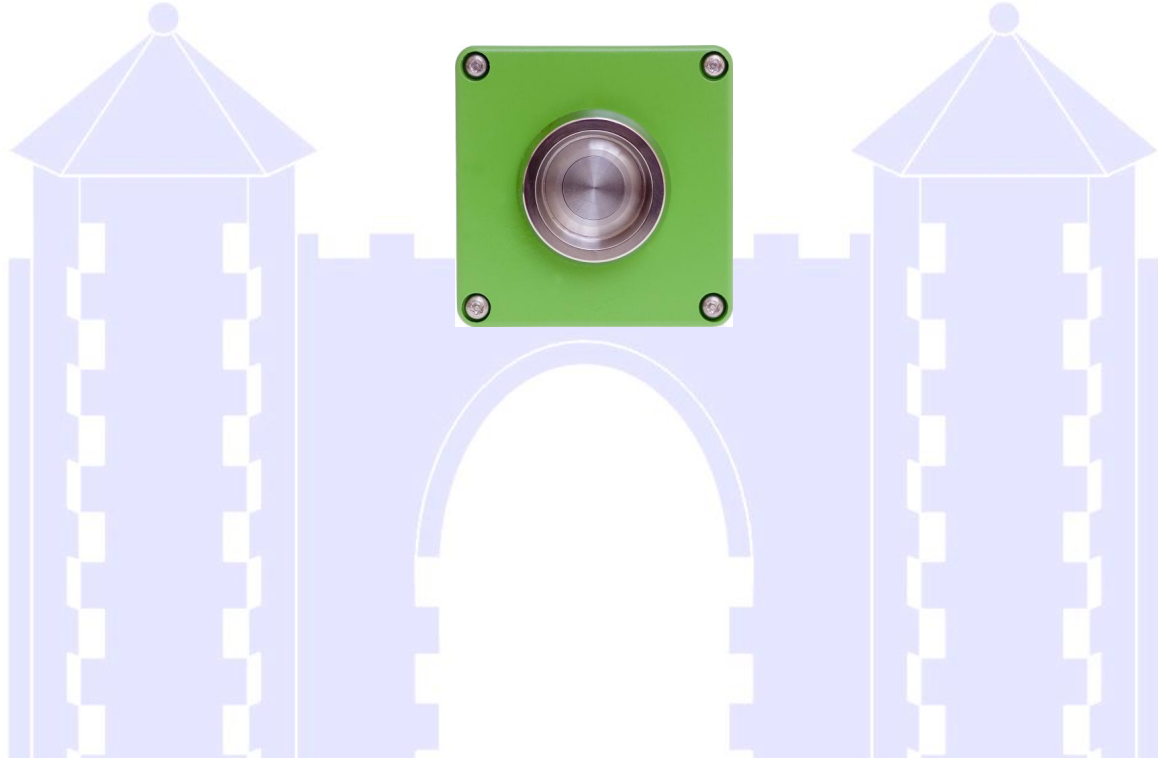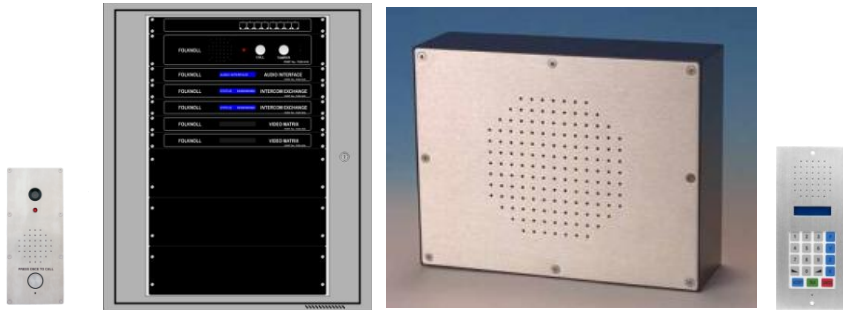
Folknoll

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