**VIDEO DOOR ENTRY SYSTEM FOR 3 STOREY BLOCKS OF FLATS**

**1. Details**

The contractor is to provide and install a fully functional audio and visual link access control system for the front entrance doors and fob access to the new rear entrance door as described in the attached schedules.

All equipment is to be supplied in a new and unused condition, be fully CE tested and approved and as described in the equipment schedules. A written guarantee is required from the manufacturer that they will supply spare parts for the system supplied for a minimum of 10 years from installation.

On completion the contractor shall provide training on operation, in depth service, maintenance and repair training to our in-house electrical team.

**2. Installation Details**

The door entry system and installation will meet the requirements of BS EN 50133-1:1997, BS EN 50133-2-1:2000, BS EN 50133-7:1997, BS 7273-4:2007 and is to be carried out in multi-core flexible cables of LSOH type construction, installed in surface mounted compartmented galvanised metal trunking.

The containment will be co-ordinated with the existing services such that the new installation is as unobtrusive as possible.

The trunking, fixings and lid fastenings shall be of a metallic construction such that the containment system and associated wiring remains supported in the event of a fire.

The system supply is to be taken from the fused connection unit situated in the landlord controlled area on the ground floor of each block. Final connection of the system is to be via a fused connection unit with flex outlet and fused at 3 amps, installed by others. The connection unit is to be clearly labelled **DOOR ENTRY SYSTEM DO NOT SWITCH OFF.**

**3. System Requirements**

A visitor wishing to gain access to the property shall press the appropriate button on Entrance Panel. The electronic tone shall sound in the resident’s Telephone. This tone shall sound for the duration programmed at the controller. The image from the camera at the door will be displayed on the resident’s Video Telephone. When the resident releases the Lock a tone shall sound at the Entrance Panel and the Liquid Crystal Display will inform the visitor “DOOR OPEN”.

The Entrance Panel Liquid Crystal Display will keep visitors informed of call progress

A service button on the Entrance Panel shall allow access to the property for delivery of mail, papers, etc., at pre-determined times, controlled by the system time clock. The button will be engraved ‘Trade’

Residents shall gain access to the property by presenting their electronic proximity key to an in-built reader housed in the Entrance Panel.

Upon activation of a resident’s Telephone, the call tone will sound and the green LED (light emitting diode) will illuminate, it shall remain lit for the duration of the call. The view from the camera at the entrance panel shall be displayed on the resident’s Telephone’s TFT Monitor; the display shall remain active for the duration of the call. The resident shall have 30 seconds to accept the call (adjustable between 1-99 seconds), when answered the resident shall have 40 seconds to talk to the caller (adjustable between 1-99 seconds). The resident shall admit the caller by pressing the Enter button on the Telephone, a tone shall sound at the entrance panel and the LCD display will inform the visitor “DOOR OPEN”

Should the resident choose not to be disturbed, a privacy switch on the Telephone disconnects the call tone from the system for approx 6 hours (adjustable between 1-12 hours). A Red LED indicates to the resident that the telephone is in privacy mode.

All telephones on the System shall have complete privacy of conversation, no other resident may pick up their telephone and overhear a conversation.

Should the door remain open over the pre-set time period, (adjustable between 1-99 minutes) the red LED shall illuminate on all Telephones to indicate that the door has been left open. The red LED will remain illuminated until the door is closed. To enable this facility a door contact will be required and connected into the entrance panel.

Lock release times shall be set at 8 seconds (adjustable between 1-99 seconds) once the door closes behind a person entering the block, the lock shall automatically close if door contacts are fitted. This shall prevent passers by entering the block once the valid visitor has entered. (Anti-Tailgating)

The Video door entry system shall be capable of supporting up to a maximum of 32 Telephones and two Entrance Panels. Each individual telephone output shall be protected by an electronic fuse. Should a fault develop in the telephone cabling the electronic fuse shall disconnect the telephone from the system. All other telephones connected to the system shall continue to operate in the normal manner. When the fault is cleared from the system the fuse will automatically reset. The individual telephone outputs will ensure complete secrecy of speech it shall not be possible for any other telephone on the system to overhear a conversation between the entrance panel and any other telephone.

The system shall have two simultaneous speech channels which provide full duplex speech from each entrance panel to the residents telephone. The only time the system will be busy is if a resident is talking to a visitor at one Entrance Panel and another visitor is attempting to call the same resident from the other entrance panel. In this instance the visitor will be informed by the entrance panel display “PHONE ENGAGED”

The system shall maintain the correct time and date, with automatic adjustment for British Summer Time (BST) and Greenwich Mean Time (GMT).

The following site programmable options shall be available –

ƒ Up to two programmable Service periods

ƒ Sunday Service Period on/off

ƒ Door monitoring 0 - 99 minutes

ƒ Call answer duration 1 - 99 seconds

ƒ Call speech time duration 1- 99 seconds

ƒ Telephone timed privacy duration 1 – 12 hours

ƒ Lock release time duration 1 - 20 seconds

ƒ Lock release type Fail locked – Fail open

ƒ Telephone call tone duration 1 – 20 seconds

ƒ Door open alarm activation time 1 – 99 minutes

ƒ Coded access facility on/off (Digital Panel Only)

ƒ Coded access code 5 to 8 digits (Digital Panel Only)

ƒ Anti tailgaiting facility on/off

ƒ Global fire switch release on/off

The control unit comprises of a lockable sheet steel enclosure suitable for wall mounting. The control unit contains the PSU and all necessary electronics and distribution for the operation of the system. Standby batteries can be accommodated for by fitting the battery charging module.

The Control Unit is available in 8 way, 16 way, 24 way and 32 way as standard. It provides outputs for two Entrance Panels each with a dedicated speech channel providing simultaneous speech between the entrance panel and telephone. Lock outputs to entrances panel are 12 volt DC each protected by a 1 amp slow blow glass fuse. Telephone outputs are fully isolated ensuring complete privacy of speech.

The telephone outputs on each 8 or 16 way linecard in the control unit are protected by a self-resetting electronic fuse. Telephones connected to the linecard are continuously monitored and each line card has a LCD information display confirming the status of the telephone. An additional video distribution PCB for each individual video handset shall be provided as part of the control unit.

**4. Video Handsets**

The telephone shall be a two-button telephone manufactured from high quality white ABS plastic. This telephone will be suitable for wall mounting. A high-quality condenser microphone and matched speaker will provide clear duplex speech from the entrance panel. A 4-inch diagonal TFT Video Screen will provide a high-quality image of visitors activating the entrance panel.

When called, a distinctive electronic tone will sound from the telephone and a green LED indicator shall illuminate to confirm a call has been made to the telephone. The view from the camera at the entrance panel shall be displayed on the resident’s unit; the display shall remain active for the duration of the call. On lifting the handset, the resident can converse with the caller and admit them by pressing the lock release button. The green indicator shall remain illuminated for the duration of the call.

Should the entrance door remain open for a period in excess of the door open alarm time, the red LED door open indicator shall be illuminated on the telephone until the door has been closed. To enable this facility a door contact will be required and connected into the entrance panel.

The timed privacy button on the telephone shall be used to disconnect the electronic call tone should the resident not wish to be disturbed, for a period of six hours. When this mode of operation (privacy) is selected, a red indicator shall illuminate on the resident telephone ensuring the resident is aware of the mode selected.

Operating instructions shall be provided on the telephone. The printed circuit board within the telephone base shall have silk screen printed wiring connections corresponding to the outputs in the control unit.

The wiring to the resident’s telephone should be fully protected by electronic circuitry in the control unit, in the event of a short circuit, only the unit connected to the faulty cable shall be affected. Once the fault is rectified, the electronic fuse shall reset, and reconnect the telephone to the system.

There shall be full secrecy of speech, preventing other users overhearing the call on any other telephone connected to the system.

Each resident’s telephone shall be supplied with ‘door release’ and ‘privacy’ buttons, with descriptions of each button printed on the telephone.

**5. Entrance Panels**

The flush mounted functional entry panels shall be manufactured from 12 SWG stainless steel and shall conform to British Standard BS1449, Type 316. The faceplate will be fitted to the flush mounting galvanised backbox with tamper proof stainless steel mono drive five fixing screws.

The push button shall be manufactured from stainless steel and be rated to IP66 to prevent the ingress of moisture. Each push button will be secured to the entry panel via a starlock washer from the rear.

The unit will contain a 16-character back lit liquid crystal display (LCD) for user status information. The complete entrance panel will be rated to IP66 from the front of the panel. All components within the entrance panel, with the exception of the push buttons, will be mounted on a plastic hinged chassis within the entrance panel that can be easily accessed for wiring once the steel faceplate is removed. Speech levels between the entry panel and the resident units may be adjusted at the entry panel. A reassurance tone will sound at the entry panel each time a push button is pressed and when the door lock is released. The level of the tone may be adjusted to suit the environment.

A high-quality colour camera shall be installed within the entrance panel located behind the vandal resistant viewing section.

The entrance panel liquid crystal display will provide the visitor with the following information;

ƒ System Ready

ƒ Phone In Privacy

ƒ Phone Engaged

ƒ Call Answered

ƒ Call Completed

ƒ Door Open

ƒ Token Access

ƒ Fire Access

ƒ Service Access

ƒ Service Denied

Engraved operating instructions and resident address numbers will be provided as standard.

Functional entry panels may be used on systems with up to 12 residents’ telephones. Digital entry panels will be used on larger systems.

A flush mount proximity panel reader shall be supplied as an integral part of the door entry panel. The reader shall be identified by a key logo mounted behind a transparent vandal resistant material with a DDA compliant raised key symbol on the front

On the secure side of the entrance door a vandal resistant push button with yellow Bezel shall be mounted to allow exit.

The token controller is fully integrated within the door entrance panel and no additional controller should be required within the central control rack itself.

The reader itself will be factory shipped with all of the required connections already made directly into the entrance panel. No further additional cabling shall be required between an integrated door/reader controller and the control rack.

Remote Administration

The proximity token access control system that is an integral part of the system shall be remotely connected to the existing GDX Net PC software. This will be achieved via a GSM Modem/block interface using a mobile telephone “SIM Card” link using the asynchronous data channel. The administration of tenant’s proximity fobs (i.e. adding and deleting of fob tokens) and also reporting and monitoring of fob usage is then undertaken remotely from the Admin PC. Together with token and system management, remote diagnostics of all door entry hardware (telephones, low rise controllers, landing junction boxes, high rise exchanges and entrance panels) shall be possible Via the Software.

The system should have the facility to be able to connect the GSM modem to any part of the system Data bus to aid in the location of the modem in poor signal areas

**6. Maintenance**

The contractor upon completion of each system is to fully commission the system ready for hand over, and is to provide a relevant NICEIC test certificate not later than five working days after the system has been commissioned.

The contractor is to provide a full on-site maintenance service for a period of six months after completion of each system. This is to include for routine system failures and general breakdowns. The contractor is to attend to any breakdowns during normal working hours and within 24 hours upon receipt of a telephone/fax request from the contractor administrator.

**7. Keys and Fobs**

The contractor is to provide a set of 3 key fobs to each resident for which must be able to open main and rear door entrances relevant to their block, and 3 sets of fob keys for the main access and rear door of each block to the contract administrator upon the successful completion and testing of each block. The proximity key fobs should hold a lifetime guarantee.

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| Qty | Description |
| 1 | 7 button flush mount compact stainless-steel audio-visual entrance panel with integrated proximity reader |
| 1 | Yellow Bezels for entrance Panel |
| 1 | Braille Engraving for entrance panel |
| 2 | Stainless Steel request t exit buttons with yellow Bezel |
| 1 | Stainless steel drop key fireman’s override switch |
| 1 | 8 way video rack with battery back up |
| 6 | Colour Video handsets with 4 inch TFT screen and timed privacy |
| 1 | GSM Modem |
| 1 | External high gain aerial and adaptor |
| 1 | Vandal resistant Proximity reader |
| 6 | Red Key fobs |
| 6 | Yellow Key fobs |
| 6 | Blue Key fobs |
| 5 | Spare key fobs black |

**8. Schedule of Equipment./ Specification**

Typical 6 Way system

Typical 9 Way system

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| Qty | Description |
| 1 | 10 button flush mount compact stainless-steel audio visual entrance panel with integrated proximity reader |
| 1 | Yellow Bezels for entrance Panel |
| 1 | Braille Engraving for entrance panel |
| 1 | Stainless steel drop key fireman’s override switch |
| 2 | Stainless steel request to exit buttons with yellow Bezel |
| 1 | 16 way video rack with battery back up |
| 9 | Colour Video handsets with 4 inch TFT screen and timed privacy |
| 1 | GSM Modem |
| 1 | External high gain aerial and adaptor |
| 1 | Vandal resistant Proximity reader |
| 9 | Red Key fobs |
| 9 | Yellow Key fobs |
| 9 | Blue Key fobs |
| 5 | Spare key fobs Black |

Typical 12-way system

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| Qty | Description |
| 1 | 13 button flush mount compact stainless-steel audio visual entrance panel with integrated proximity reader |
| 1 | Yellow Bezels for entrance Panel |
| 1 | Braille Engraving for entrance panel |
| 2 | Stainless Steel Request to exit buttons with yellow bezel |
| 1 | Stainless steel drop key fireman’s override switch |
| 1 | 16 way video rack with battery back up |
| 12 | Colour Video handsets with 4 inch TFT screen and timed privacy |
| 1 | GSM Modem |
| 1 | External high gain aerial and adaptor |
| 1 | Vandal resistant Proximity reader |
| 12 | Red Key fobs |
| 12 | Yellow Key fobs |
| 12 | Blue Key fobs |
| 12 | Spare key fobs Black |