# GDX5 Lite Door Entry System

## SPECIFICATION

### GENERAL REQUIREMENTS

The installer shall include for the design, cost estimation, supply and commissioning of a complete integrated GDX5 door entry system, compliant with the technical and performance criteria set out in this document.

The GDX5 door entry system shall broadly comprise of the following:

- GDX5 System Control Unit
- GDX5 Compact and Flanged Entrance Panels
- GDX5 Telephones, hard of hearing couplers and beacons
- GDX5 Video Telephones, hard of hearing couplers and beacons
- Electric Lock Release:

The installer shall supply a complete and functionally working system including all control equipment, hardware and software, cabling and ancillary services. The installer is to make himself familiar with all matters related to the system, its requirements and installation.

The installer shall seek clarification of any relevant matters before returning the tender.

### GENERAL OPERATION OF GDX5 DOOR ENTRY SYSTEM

#### At the entrance to the Building

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 GDX5 Telephone. This tone shall sound for the duration programmed at the controller. On video systems 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.

Residents shall gain access to the property by presenting their electronic proximity key to an Indigo in-built reader housed in the GDX5 Entrance Panel, or by conventional key.

## At the Resident's Flat

Upon activation of a resident's GDX5 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. If the resident has a Video Telephone then the view from the camera at the entrance panel shall be displayed on the resident's Telephone's TFT / CRT 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 GDX5 Lite 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 GDX5 Telephones to indicate that the door has been left open. The red LED will remain illuminated until the door is closed. (This function requires door contacts to be fitted)

## Door Function

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 passersby entering the block once the valid visitor has entered.(Anti-Tailgaiting)

## GDX5 LITE SYSTEM SPECIFICATION

The GDX5 Lite door entry system shall be capable of supporting up to a maximum of 255 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 GDX5 Lite system shall have two simultaneous speech channels which provide full duplex speech from each entrance panel to the resident's 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 –

- Up to two programmable Service periods
- Sunday Service Period — on/off
- Door monitoring — 0 - 99 minutes
- Call answer duration — 1 - 99 seconds
- Call speech time duration — 1- 99 seconds
- Telephone timed privacy duration — 1 – 12 hours
- Lock release time duration — 1 - 20 seconds
- Lock release type — Fail locked – Fail open
- Telephone call tone duration — 1 – 20 seconds
- Door open alarm activation time — 1 – 99 minutes
- Coded access facility — on/off (Full Digital Panel required)
- Coded access code — 5 to 8 digits (Full Digital Panel required)
- Anti tailgaiting facility — on/off
- Global fire switch release — on/off

**Low Rise System (up to 32 way)**

The GDX5 Lite Control Unit with power supply, system electronics and telephone distribution shall be contained within a sheet steel enclosure. This Control Unit provides outputs for two Entrance Panels and supports up to 32 Telephones.

**High Rise System (up to 255 way)**

The GDX5 Lite Control Exchange Unit with power supply, system electronics and Landing Junction Box distribution shall be contained within a sheet steel enclosure. This Control Exchange Unit provides outputs for two Entrance Panels and up to 14 Landing Junction Boxes supporting up to a total of 255 Telephones

**GDX5 LITE CONTROL UNIT (UP TO 32 WAY)**

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. Additional telephone outputs are obtained by connecting one 8 way or 16 way Local Distribution Unit to the GDX5 Lite Control Unit providing outputs for a total of 32 Telephones.

The telephone outputs on each 8 or 16 way linecard in the control unit is 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.

On video systems individual outputs for the video signal to each telephone are provided for on the video distribution PCB

**For ease of installation and future maintenance all internal and external cables in the control unit are connected to the PCB control cards by plug in connectors.**

## GDX5 LITE EXCHANGE CONTROL UNIT (UP TO 255 WAY)

The exchange control unit comprises of a lockable sheet steel enclosure suitable for wall mounting. The exchange 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 exchange control unit provides outputs for two Entrance Panels each with a dedicated speech channel providing simultaneous speech between the entrance panel and up to 14 Local Distribution Units (LDU). Each LDU provides outputs up to 8, 16, 24 or 32 telephones. Lock outputs to entrance panels are 12 volt DC each protected by a 1 amp slow blow glass fuse.

The telephone outputs on each 8 or 16 way linecard in the LDU is 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..

On video systems individual outputs for the video signal to each telephone are provided for on the video distribution PCB

For ease of installation and future maintenance all internal and external cables in the LDU are connected to the PCB control cards by plug in connectors.

## GDX5 RESIDENTS UNIT

### GDX5 Telephone

The GDX5 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 GDX5 entrance panel.

When called, a distinctive electronic tone will sound from the GDX5 telephone and a green LED indicator shall illuminate to confirm a call has been made to the telephone. If the telephone is equipped with video then 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.

The timed privacy button on the GDX5 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.

If the telephone is equipped with video the resident shall then be capable of stepping through all the camera views in the system using the third button on the handset. This "camera scroll" facility can be enabled/ disabled within the control equipment.

On colour door entry video systems the GDX5 telephone shall have brightness and colour control. The TFT colour module specification is available on request.

On black and white door entry systems the GDX 5 telephone shall have brightness and contrast control. The CRT black and white module specification is available on request.

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 GDX5 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.

## GDX5 Hard of Hearing Units

Under certain circumstances, the resident's telephone shall have the following additional facilities:

## GDX5 Inductive Coupler

Shall be an inductive loop fitted to the loudspeaker in the ear piece of the residents telephone. The coupler shall enhance the quality of speech when the 'T' position is selected on a deaf aid.

## GDX5 LED Flashing Beacons

An optional extra that can be installed in the flat of a hard of hearing resident. The system can comprise of a maximum of 1 Master and 3 Slave Beacons per dwelling.

One master surface mounted ultra bright LED beacon and three Slave Beacons can be connected to the GDX5 Telephone. The GDX5 Slave Beacon shall have the same characteristics as the Master Beacon. As the Slave Beacon draws power from the Master Beacon no additional local power will be required.

The GDX5 slave units shall be linked to the master by three pair cabling.

## GDX5 Extension Sounders

Shall be installed as required, it shall be possible to install an Extension Sounder to the resident's GDX5 telephone to duplicate the call tone at a remote sounder. The call tone level is variable and can be easily adjusted by the end user with an external mounted potentiometer thumbwheel

The Extension Sounder will be available in two forms, as an extension sounder only or in combined unit within the housing of a Master Beacon.

## GDX5 COMPACT ENTRY 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.

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

- System Ready
- Phone In Privacy
- Phone Engaged
- Call Answered
- Call Completed
- Door Open
- Token Access
- Fire Access
- Service Access
- 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 20 residents' telephones. Digital entry panels will be used on larger systems.

**Proximity Reader Option**

A flush mount proximity panel reader shall be supplied as an integral part of the GDX5 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 shall be mounted to allow exit.

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

The integrated token access controller can be configured for direct administration from either the door entrance panel itself – or a standalone reader - or on a networked basis from a central PC. Various communication options between the central PC and the systems themselves are available - including ADSL, Fibre, GSM modem or Hard-Wiring which allow the administration PC to be located remotely if required.

With the direct onsite administration option, the administration of tokens is carried out from the door entrance panel itself by means of an Editor Token and an LCD display.

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

Various options are available to meet different system requirements with regards to the number of readers and the number of tokens required per system.

# Indigo Token Access Order Options

### Indigo Door & Reader Controllers

Should be used in situations where integrated token access is required in conjunction with audio communication to the dwellings within the building :-

### Indigo Door & Reader Controller

- A maximum of 2 combined door and reader and up to 38 standalone reader controllers can be used within any single door entry system.
- Door entry systems themselves can then be networked together to form larger schemes for administration from a central PC.
- Up to 1000 tokens per controller can be administered either via the door station reader utilising an editor token and the door station LCD or via the GDX5 Net PC based Commissionaire software package.
- Three editor tokens per controller can be stored.

### GDX Net (Remote Administration of Access Control)

The proximity token access control system that is an integral part of the system can, where required, be remotely connected to a “GDX Manager Admin PC”. This would be achieved either via a GSM Modem using a mobile telephone “SIM Card” link using the fax/data channel or a BT ADSL Internet connection. 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 “GDX Admin PC”.

The “GDX Admin PC” will have the “GDX Net” Window based software installed on a Microsoft Windows Platform. Together with token and system management, remote diagnostics of all GDX door entry hardware (telephones, low rise controllers, landing junction boxes, high rise exchanges and entrance panels) is undertaken via this system.

The proximity token access controller and GSM Modem or ADSL Internet facility is factory fitted and pre-built into the GDX equipment. The internal wiring of the GDX5 system is unaffected and remains as a standard installation.

The “SIM Card” to be supplied by several different Network providers. This leaves the choice of method of payment flexible.

## Video Option

On Video systems a high quality monochrome or colour camera shall be mounted behind vandal resistant material.

A full Camera Specifications is available on request.

**APPENDIX 1**

**Suppliers Contact Information**:


GDX
61-63 Back Sneddon Street
Paisley
PA3 2DD

Tel: 0141 889 8800
Fax: 0141 889 2838
Website : www.gdxtechnologies.com


**Sales Contacts** :


**Stuart Rennie**
Sales Manager
Scotland

Mobile 07980 851448
Fax 0141 889 2838
e-mail SRennie@stanleyworks.com

**Dave Anderson**
Sales Manager
Northern England

Mobile: 07968 862661
Fax: 01298 214255
e-mail DLAnderson@stanleyworks.com

**Robert Wilson**
National Sales Manager

Mobile : 07879 498304
Fax : 01763 268333
e-mail RWilson@stanleyworks.com

**Lloyd Palmer**
Sales Manager
Midlands

Mobile : 07979 245830
Fax : 0141 889 2838
e-mail LPalmer@stanleyworks.com


## Training

a) GDX provide in-house training on their various systems. This training is provided free of charge, subject to a small registration fee.

   Contact the Training administrator on 0141 889 8800 to check available dates and register for training.

b) Once a training course has been successfully completed, GDX then provides unlimited access to the Technical Support Department during normal working hours.