GDX Audio and Video Door Entry

Standalone Reader Installation Guide

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Technical Support	pacgdxsupport@comelit-pac.co.uk **T: +44 (0)161 406 3400 — Option 2**
Customer Services	pacgdxcustomerservice@comelit-pac.co.uk **T: +44 (0)161 406 3400 — Option 1**
Training	pacgdxcustomerservice@comelit-pac.co.uk **T: +44 (0)161 406 3400 — Option 1**

Comelit-PAC Limited
Registered in England and Wales No. 04311885. VAT No. GB 795 645 27

UNITED KINGDOM: Unit 2B The Quad, Butterfield Business Park, Luton, Bedfordshire, LU2 8EF

ITALY: Comelit Group S.p.A., Via Don Arrigoni n° 5, 24020 - Rovetta S. Lorenzo - BG

WITH • YOU • ALWAYS

Health and Safety

Please read all these instructions and save them for later use.

The installation of this system must meet the requirements of the country of installation's National Wiring Regulations (BS7671, IET National Wiring Regulations in the UK) and EN60950-1. It must only be carried out by suitably competent, qualified and experienced personnel.

Injury or death by electric shock may result if ignored.

It must also comply with any local Fire, Health and Safety regulations. A secured door that may be part of an escape route must always be fitted with the following.

- A fail-safe lock so that the door will be released if the power fails. Ideally a magnetic lock should be used as these are less likely to jam or seize.
- A normally-closed break-glass or manual pull in the lock supply wiring so that in an emergency the fail-safe lock can be immediately powered off.

Risk of injury or death if ignored.

The controller must be earthed.

Isolate the controller power supply before working on the controller.

Failure to do so may damage the unit.

Cabling

The cabling used in the control systems, should be routed in a manner to avoid running alongside any heavy load switching signals either within equipment or wiring. Alternatively, you can use screened cable to reduce interference and/or cross the cable at right angles every 3.3–6.6ft / 1–2m to reduce the interference if possible.

Communications Cabling

Use CW1308 or a minimum of CAT5e U/UTP, multi-core, twisted pair with a bare/plain copper conductor.

Cabling for Lock Power

2-core 0.75mm standard flex

ESD Precautions

The product contains static-sensitive devices and earth grounding strap should be worn when handling the hardware.

RFID Devices

RFID technology is now widely used in a number of industries, it is possible that interaction between your credential and other devices in the vicinity may cause incorrect operation or recognition. Should you suspect that you have experienced such a problem, ensure the interfering device is out of range. **This only applies if any RFID devices have been fitted**

WEEE Directive and Product Disposal

At the end of its serviceable life this product should not be treated as household or general waste.

It should be handed over to the applicable collection point for the recycling of electrical and electronic equipment or returned to the supplier for disposal.

Lithium Batteries

Failure to read the following guidelines carefully may result in injury.

There is a danger of explosion if lithium batteries are incorrectly replaced or handled.

- Ensure that lithium batteries are never short circuited.
- Always store lithium batteries separately in non-conducting materials.
- Never replace a lithium battery with the incorrect type.
- Lithium batteries should be disposed of safely and legally according to your local area, state or country laws.

Equipment Electrical Rating

All electrical equipment should have electrical ratings clearly stated on an identification label and in any documentation provided. Any applicable fuse ratings will also be specified within the documentation.

Product Information

This section will list all relevant specifications and standards that apply to the GDX Audio Standalone reader.

Product Specifications

Temperature	-10 °C to +35 °C
Humidity	0% to 90% Relative Humidity
Input Voltage	12VDC
Power	0.35A

Approvals, Directives and Regulations

Hereby,Comelit-PAC Limited declares that the radio equipment type residential, commercial or light industry door entry product is in compliance with Directive 2014/53/EU.

The full text of the EU declaration of conformity is available at the following internet address:

https://pacgdx.com/compliance-declarations

RoHS	2011/65/EU
WEEE	2012/19/EU

1 Standalone Reader Mounting

1. Use the back plate (shown below) as a template:
2. Mark the holes for the back plate wall fixing screws (× three) (**D**) and the cable entry holes (**B**). (Mark one or two depending on the number of cables required.)
3. Mark the holes for the metal cover fixing screws (× four) (**A**).
4. Affix the plastic back plate to the wall with the three screws supplied. Use wall plugs if required.
5. Affix the plastic casing lid to the plastic back plate with the machine screws (× five) provided.
6. Affix the metal cover to the wall with the Monodrive 4 security screws (× four) provided with appropriate Monodrive 4 driver.
   Use wall plugs if required.

Mounting Information

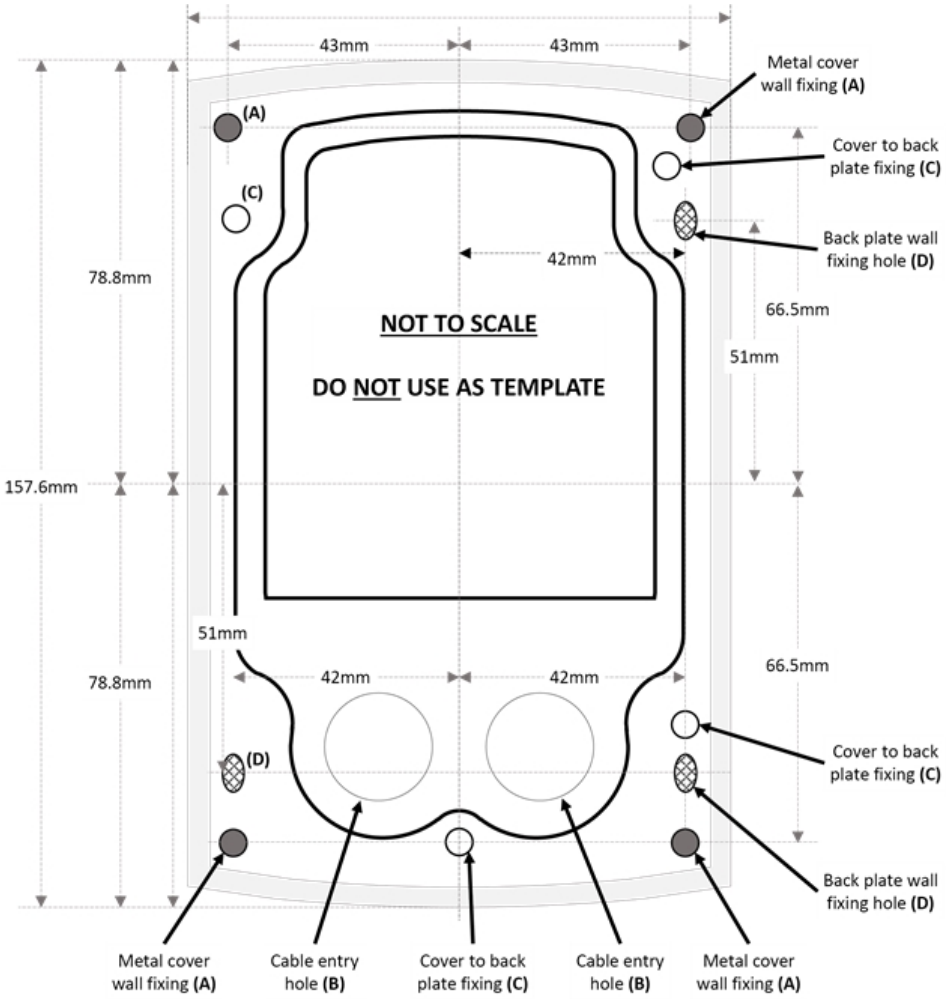
Wall type	Brick
Max weight	0.75 kg

Use appropriate fixings for the wall type

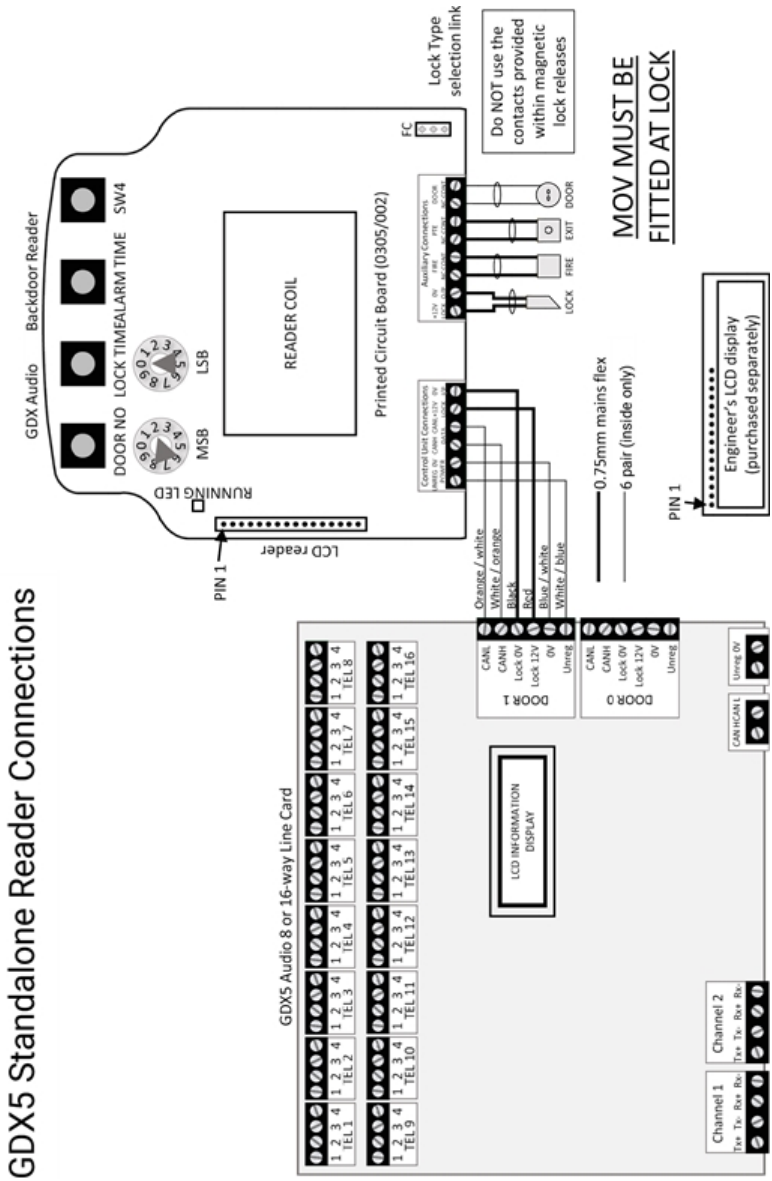
Standalone Reader Wiring

0.75mm min. flex	Max. length – 100m	Lock connections
3-pair CW1308 or Cat 5e/6 UTP min.	Max. length – 100m	Internal wiring

Reader Dimensions



Reader Connections



2 Power Supply Requirements

The reader requires a supply of 12VDC to 13.8VDC at 150mA maximum, excluding the door locks operated from the reader. The manufacturer's documentation for the door locks utilised will give the power consumption figure for the locks.

The Standalone Reader is rated to have a 1A max. load on the lock supply.

3 Engineer's LCD Display

An engineer's LCD display can be attached to the 16-way pin header, "PLG2" on the left hand edge of the reader control card, to show controller settings and operation statuses.

This LCD is not required or fitted in normal operation and is only useful as an engineering aid. The controller should not need a reset when an LCD is attached.

4 Door Numbers

All standalone readers are factory shipped with 'Door No.' set to 01. Every door or standalone reader on a system must be **uniquely addressed**.

There must be an entrance panel on the system addressed as Door 00.

As standalone readers are added to the system they must be allocated the next available Door No. on the system. E.g. Entry panels should be addressed as 00 and 01. The standalone reader addresses can be started at address 02.

Check Door No.

1. Press the "Door No" button.
2. Count the LED flashes between the two bleeps emitted by the sounder.
   An engineer's LCD can also be used to display the setting after the button press.

Change Door No.

Set the Door No. using the two rotary switches, labelled "MSB" and "LSB" on the PCB to the required setting—MSB is used for the 'tens' and LSB for the 'units'. E.g. Set Door no. to 12.

1. Adjust MSB to 1.
2. Adjust LSB to 2.
3. Press and hold down the "Door No" button until the reader emits a long 'bleep'.
4. Press it once again to check the new setting has been stored successfully.
5. Count the LED flashes between the two bleeps emitted by the sounder.
   A long bleep is emitted by the sounder indicating the setting has been changed.
   An engineer's LCD can also be used to display the setting after the button press.

5 Lock Release

Check Lock Release

1. Press the "Lock Time" button.
2. Count the LED flashes between the two bleeps emitted by the sounder.

An engineer's LCD can also be used to display the setting after the button press.

Change Lock Release

1. Adjust the two rotary switches at the top left of the controller PCB labelled "MSB" and "LSB" to the required setting—MSB is used for the 'tens' and LSB for the 'units'.
2. Press and hold down the "Lock Time" button.
   Current Lock Release Time will be displayed and a long bleep is emitted by the sounder indicating the setting has been changed.
3. Release the button and press it once again to check the new setting has been stored successfully.

6 Door Alarm

Check Alarm Time

1. Press the "Alarm Time" button.
2. Count the LED flashes between the two bleeps emitted by the sounder.

An engineer's LCD can also be used to display the setting after the button press.

Change Alarm Time

1. Adjust the two rotary switches at the top left of the controller PCB labelled "MSB" and "LSB" to the required setting—MSB is used for the 'tens' and LSB for the 'units'.
2. Press and hold down the "Alarm Time" button.
   Alarm Time will be displayed and a long bleep is emitted by the sounder indicating the setting has been changed.
3. Release the button and press it once again to check the new setting has been stored successfully.

7 Check / Change Lock Type

The lock type is selected using the jumper link PLG4, labelled "FO" and "FC". The position of this jumper link selects "Fail Open" or "Fail Closed" lock type operation. The red LED3 above the "Lock O/P" screw terminals indicates the presence or not of a lock output voltage at these screws.

8 Engineer Reset Codes

1. Adjust "MSB" and "LSB" to required code—MSB is used for the 'tens' and LSB for the 'units'.
2. Restart the reader and wait for the reset 'bleep' from the sounder. The red LED labelled "Running" will illuminate for four seconds. Only during this time can the engineer code be set. You can also recycle power at the mains if you have another team member to assist.
3. Press and hold down the "SW4" button (right-hand pushbutton) for up to 10 seconds.
4. Wait for a long bleep and then release the pushbutton.
5. Count the LED flashes between the two bleeps emitted by the sounder.

An engineer's LCD can also be used to display the setting after the button press.

A long bleep is emitted by the sounder indicating the setting has been changed.

6. Release the "Door No" button and press it once again to check the new setting has been stored successfully.

Code Action

Code	Description
55	Wipes token memory only and keeps all other settings.)
80	Toggle Global Fire On / Off
99	Returns unit to factory shipped defaults

9 Factory Default Settings

All units have the following factory default settings:

Setting	Setting Default	Setting Range
Door No. **Change as needed**	01	00–39
Lock Release Time	8 secs	01–99 secs
Door Alarm Time	5 mins	01–99 mins

10 Controller Mode Of Operation

Modes

A standalone reader can only have tokens administered from an entrance panel or a PC. It can only operate in "Common" or "Network" mode.

Default mode for standalone reader is "Common".

However, a door entrance panel can also operate in "Single" mode because tokens can be added or deleted directly into it, if restricted access through this door is required.

Common mode

When a standalone reader is in common mode, tokens can be added or deleted automatically from an entrance panel on the system. This will also update the stand alone reader automatically, as long as it is connected to the same system and powered up.

Network mode

The standalone reader controller is automatically switched into "Network" mode by the PC when the status of the reader is checked by the PC. It will remain in Network mode thereafter. The first time a reader is added to the system, this status check must be carried out from the PC to switch the unit into Network mode, before tokens can be added successfully to the unit from the PC.

Check mode

Count the sounder bleeps emitted after both the initial power up bleep and "Running" LED four second illumination or use the engineer's LCD display at power up.

- Two bleeps indicate "Common" mode.
- Three bleeps indicate "Network" mode.