

## **AUTODIALLERS IN LIFTS**

### **IN LAMENS TERMS, WHAT ARE THEY AND WHY DO YOU NEED THEM?**

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#### What is an Autodialler?

An Autodialler Unit is a 2-way communication system which connects passengers, in a Lift car, to emergency help in the event of someone getting trapped inside. An Autodialler allows anyone who is trapped in a lift to automatically call for help. By pressing and holding the alarm button inside the lift, it will allow the trapped passenger(s) to communicate with emergency help who will immediately send out a competent person and release any trapped passengers safely. Normally the Autodialler unit will be connected to the Lift company but can be connected to ANY Emergency services first depending on requirements of clients or Geographical locations.

#### Different types of Autodiallers

There are two main types of Autodiallers in the lift industry. These are **Phone line** and **GSM** (Global Service Mobile)

Autodiallers connected via a **phone line** are installed and are linked to your copper phone line that is installed at the property, normally by BT. Autodiallers powered by phone lines are good and reliable products for as long as they last but with BT currently in the process of removing all copper phone lines in the UK and replacing them with fibre cables, the phone line Autodiallers will become obsolete.

Autodiallers powered by **GSM** units use a SIM, (Subscriber Identity Module) card that are compatible with most network providers such as O2 and EE for example. GSM Autodiallers do not require a copper phone line to work, they are equipped with a 3G or 4G connection which enables the unit to make outbound calls in the event of a passenger trap in. Having a GSM fitted will be beneficial for you in the future because of the switch from copper phone lines to fibre cables.

## Where are Autodiallers Fitted and where are they located in a Lift

An Autodialler unit is normally fitted on top of the lift car and connected to the lift Car Operating Panel (COP) via a microphone. The microphone enables the trapped passenger(s) to communicate with the operator on the other side of the line, and vice versa.



The arrow is pointing to the yellow button on the COP which is the Alarm Sounder. If the Alarm Sounder is pressed/held it will enable the passenger(s) trapped inside the lift to call for emergency help.

## An Example of Different manufacturers of Autodiallers

There are a several manufacturers of Autodialler units within the lift industry. The UK Lift Industry mainly has the following and these include:-

- Memcom
- Windcrest
- Safeline
- Avire

All the above Autodialler manufacturers are compatible with copper phone lines or GSM so they can all be fitted to most lifts. We have to remember this is based on whether there is a good signal in the building/Lift in the first place.

## THE JARGON - Is it a legal requirement to connect telephone lines to a lift?

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There has been a requirement to fit alarm devices to lifts since 1 July 1999 under the Lifts Regulations to allow trapped passengers to call for help. Similar alarm devices have also been fitted to many new enclosed lifting platforms and many older lifts as an important improvement for the safety of passengers.

To meet this requirement, many lift companies supply an Autodialler to BS EN 81-28 (the standard for new alarm systems) designed to work on a "plain old telephone system" line to meet this requirement. Some alarm devices might use the line voltage to power them so avoiding the use of a power supply and backup supply. Some alarm devices might need a dedicated line to allow identification of the lift with the alarm.

However, there is no requirement to connect alarm equipment only to a hardwired telephone line connected to the public switched telephone network. Provided that the alarm communication and management requirements are met then communication means can be, for example: radio, digital phone network, optical, hard wired within a building or site to a permanently manned rescue service.

So, although there is no legislation which says that a telephone line must be used, there is legislation which effectively requires that the level of safety of a lift must not be reduced. So, where an alarm device has been provided, the lift owner must ensure the connection is maintained or, if replaced, is compatible with the alarm device used.

Some types of installed alarm devices might not be compatible with digital lines or voice over internet protocol (VoIP) or might need some adjustment to allow them to work. If looking to change the type of connection to the lift alarm device, owners are advised to seek the assistance of their lift maintenance company who would check with the original alarm device provider that their device will work with the type of line proposed and will continue to be compliant with the standard to which it was installed e.g. BS EN 81-28.

If the alarm device is changed, perhaps to be compatible with a new line, care should be taken to ensure the new system is at least to an equivalent level of safety. Since alarm systems might also have been installed for the top of car and the pit, these should be retained unless shown through risk assessment that there is no risk of a person being trapped in these areas.

BS EN 81-28, the standard for new alarm systems, is being revised and will include a feature to alert in the car if the communications link has been lost. It is the owner's decision on the action to be taken in case 2-way communication is out of order, e.g. remove the lift from service or provide some other alarm service as a temporary measure. Similarly, owners of lifts without alarm devices would be well advised to consider carefully how trapped passengers could call for help and potential liabilities for them as owners in the event of a prolonged entrapment.

The above article is written by LIEA (Lift and Escalator Industry Association) who are the trade association and advisory body to the lift and escalator industry in the UK.

## Why you need an Autodialler, what happens when you don't have an Autodialler installed?

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GES Ltd will always recommend fitting an Autodialler on a lift. It is a vital part of ensuring passenger safety. If an Autodialler isn't installed it can cause many problems for the users of your lift, both short and long term. In an event of a passenger trap-in; if an Autodialler isn't installed, there may be no way to tell if anyone is trapped inside. The passenger(s) may not be able to call for help using their mobile phones because there might be no phone signal inside the lift. However if the trapped passenger does have phone signal inside the lift, they may call the emergency services for help instead of the lift provider. If this does happen the fire brigade will attend and do whatever is necessary to release the trapped passenger(s) especially if "life is in danger". This can result, in certain conditions with damage to the lift doors and lift equipment in order to gain access inside the lift. If the lift doors are ripped off, they will of course need replacing and this can be an expensive procedure and also time consuming. The manufacture of lift doors can be 10 weeks lead time. The photograph below shows exactly what can happen when the fire brigade attend a trap in (it's not pretty). Nationally, firefighters rescued trapped passengers from lifts 11,253 times in in 2017/18. This resulted in thousands of people being fined for calling out the fire brigade.



Picture taken in Cardiff, 2023.

### How much does an Autodialler cost, how long do they take to fit?

To supply and fit a GSM Autodialler system, cost is anywhere between £1,400.00 - £2,100,00 plus VAT. A GSM Autodialler system normally takes around 5 hours to fit, reprogramme and test. This can vary from site to site depending on geographical location and building signal. On some lifts there may be a consideration for an extended antenna to boost the signal.

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