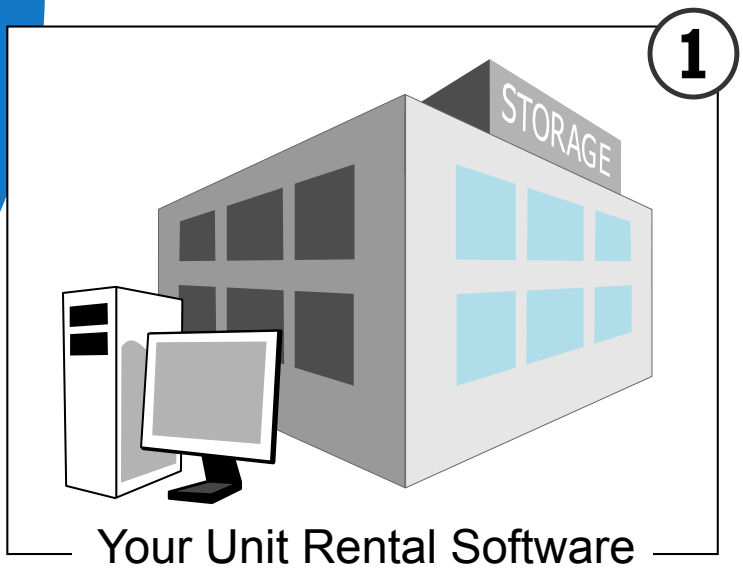
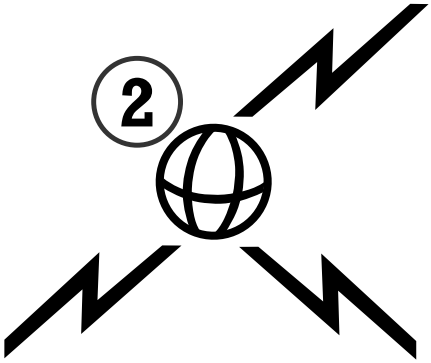
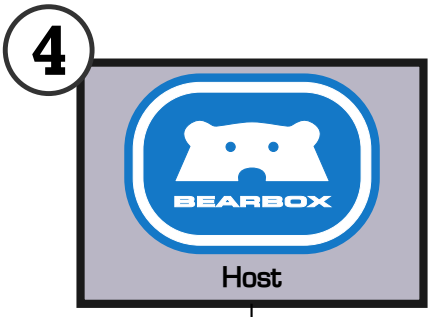
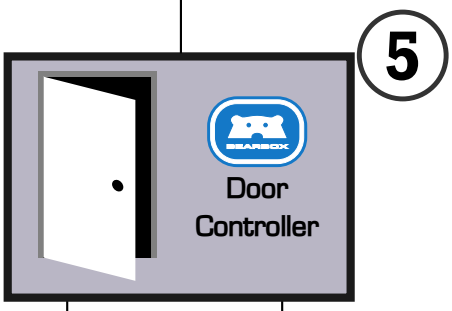
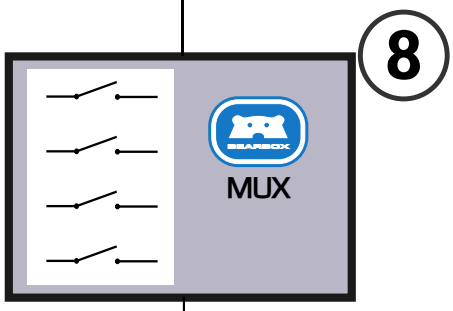
How BearBox Works on Your Site

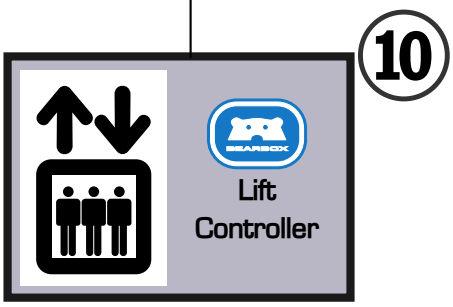


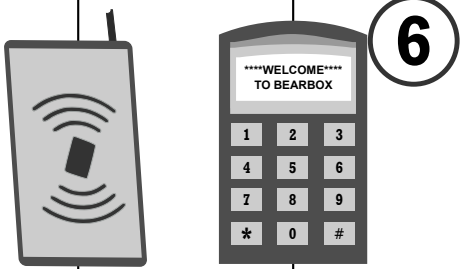


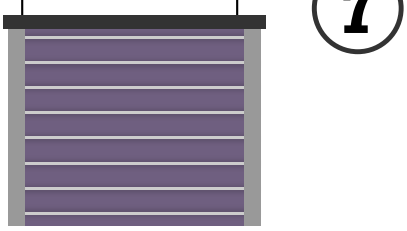


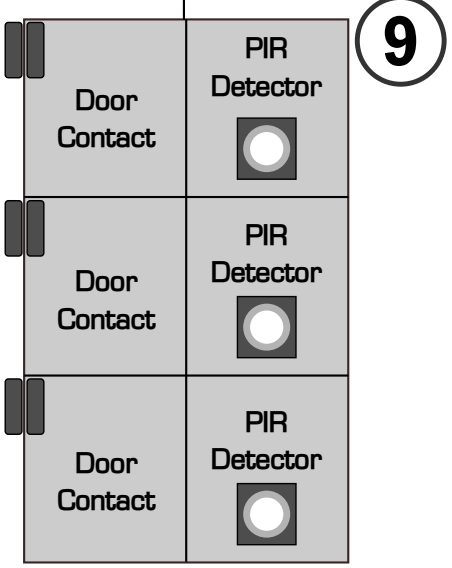


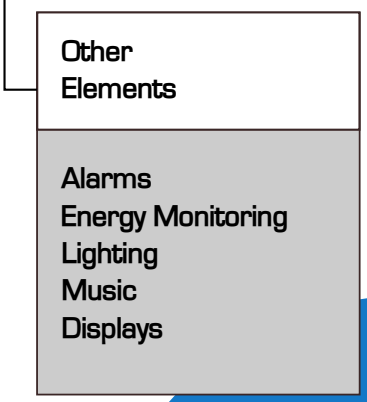












The BearBox System: How It Works

Basic System Outline

(1) BearBox interfaces directly with your unit rental software via the internet.

(2) Customer data and unit rental information is sent to the BearBox server.

(3) The BearBox Website is used to set up the customers' allowed zones and access levels. This is also where you can see access logs.

(4) The Host holds the database of users, PINs and rented units for the site. It makes all decisions on the site - whether to give access to a user and whether a unit has been opened legally (or forced).
The Host carries out all communications with the BearBox server via the internet. It also has inputs and outputs for interfacing with other systems on site – commonly an intruder alarm system. The interface is typically used to disarm parts of the building intruder alarm while a user or staff is on site.

(5) The main component that interfaces with users is the *Door Controller*.

(6) By means of a PIN *Keypad*, Proximity Reader or Biometric ID device, every user requests access from the Door Controller.

(7) This then signals the door or gate to open, subject to verification from the Host. The Door Controller also monitors the access door and provides a signal to the Host if the door has been held open for too long.

(8) The Multiplexer Unit (*Mux*) provides continuous monitoring of any storage units that are fitted with:

(9) *Door Contacts* or *PIR Sensors*. The Mux signals to the Host every time a unit door is opened or closed. The Host then checks whether it is a valid opening (i.e. the user is currently logged on site).

(10) A variant of the Door Controller is the *Lift Controller*. This allows one keypad or reader to give access to a number of floors from within an elevator car, according to a user's access rights.

Setting Up & Customising The BearBox System

The BearBox system controls all the physical aspects of a self storage access control system - it accepts access tokens such as PINs or Fobs and it monitors unit doors. It controls who can enter, when and where they can go, and disarms their units while they are on site. It also logs all events and sends messages out when an incident occurs.

The BearBox system is set up in a combination of two ways:

1) Site Parameters

The initial layout of the site is set up via the BearBox website. This includes:

- access point locations
- customer access times & areas
- alarm timers
- time periods allowed on site
- welcome messages at the keypads
- CCTV display layout

2) Dynamic Information from Your Unit Rental Software

Customer-related information is obtained automatically from your unit rental software package (e.g. Space Manager, or BearBox's own Rental Tools Software). Once a customer has an active contract on this software, the relevant data – name, contract dates, unit number and access zone – are imported into BearBox and, within minutes, the customer has access to the site.

Site Manager and staff rarely need to access BearBox; all day-to-day administration takes place on the rental software.

Alarm Interfaces

The BearBox system can also be linked in to commercial fire and intruder alarm systems in several different ways. Some typical scenarios are described below:

"External Alarm" Monitoring

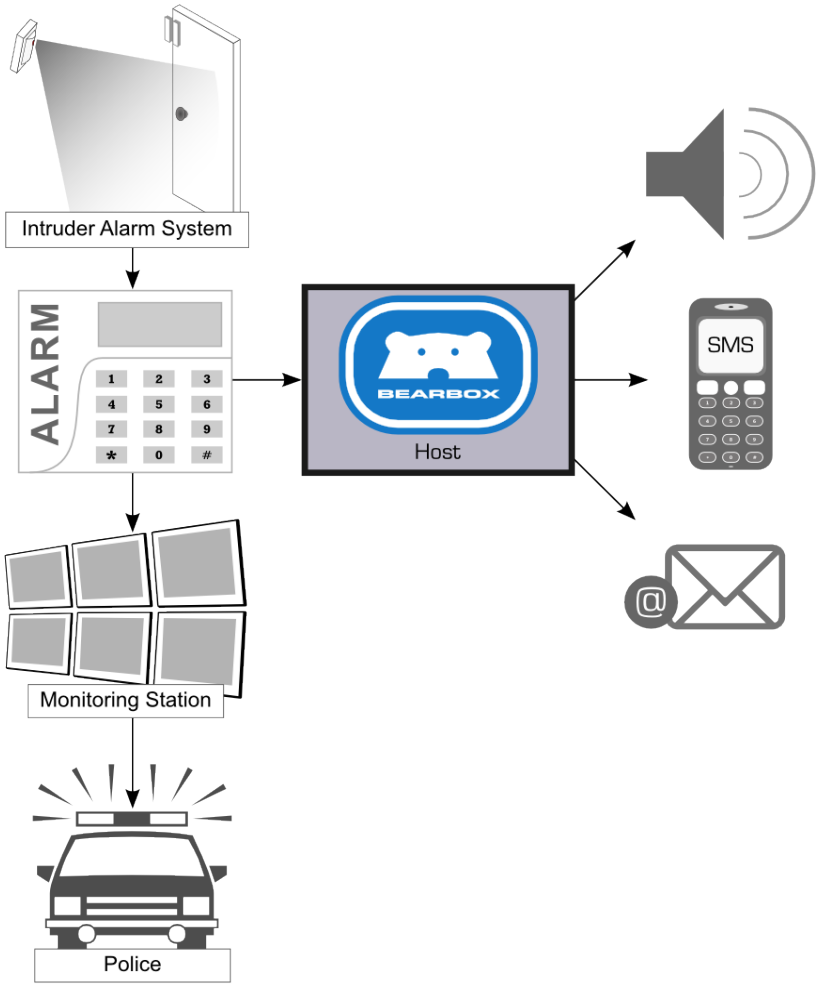
BearBox provides additional signalling of alarm events from an installed intruder alarm system

An intruder alarm system is installed in areas that are not accessible to customers, such as the office. It may also cover external Fire Exits.

If an alarm is triggered on the intruder system, BearBox can be alerted and take one of the following actions:

- Switch a local relay, allowing you, for example, to turn on an alarm sounder.
- Send an SMS text to a designated mobile phone number to alert them that there has been an incident on site.
- Send an email message to a designated address to alert them of the incident.

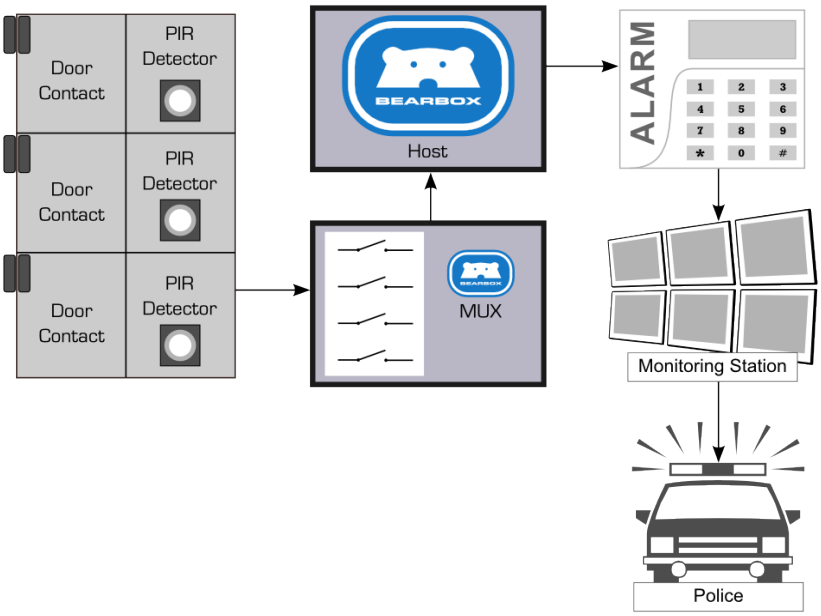
The event will also be present in the logs on the BearBox website.



“Door Forced” Alarm

BearBox alerts the installed intruder alarm system if the unit monitoring alarms are triggered

The BearBox Host and Mux boards can be connected as a zone on the intruder alarm system, which enables BearBox to notify the intruder alarm system in the event that a unit door is forced.



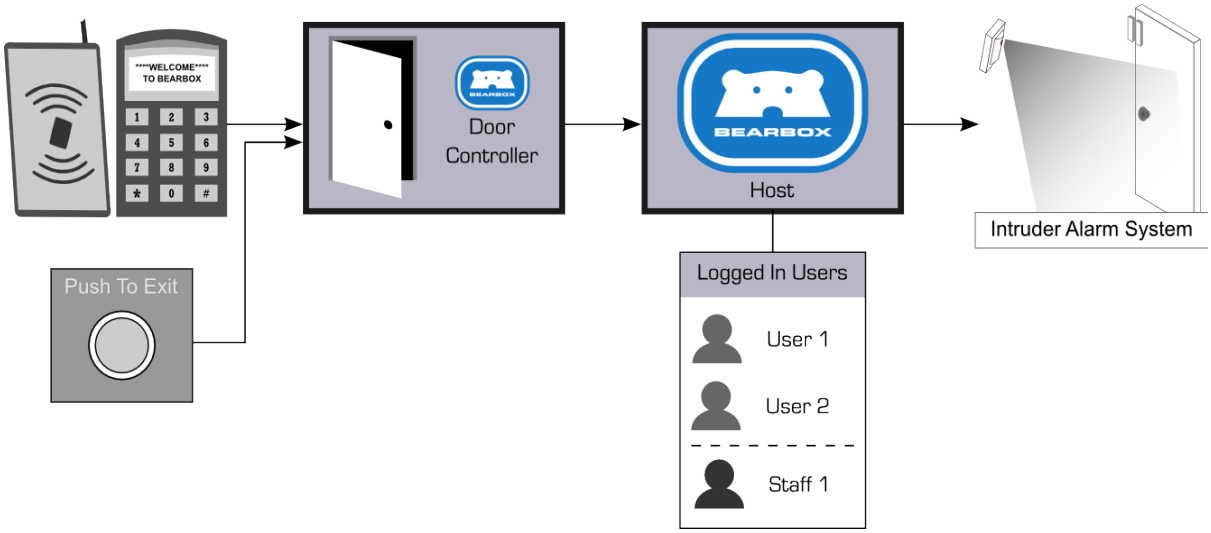
Intruder Alarm Disarmed - for 24 hour Customers

BearBox interfaces with an installed intruder alarm system, disarming the alarm for users who are validly on site

The BearBox Host keeps a log of the staff and users logged on to a site at any time. It can be used to signal an intruder alarm via switched relay outputs for "Customer on Site" and "Staff on Site". The intruder alarm can then be programmed to disarm areas of the site that you want to remain accessible to those logged in.

Note:

- This function requires the site to log all users both ON and OFF site – it cannot be used in the case of entry-only systems.
- All users – both staff and customers – may have a specific time period for being on site. If this is exceeded, BearBox will read the user as off-site and the intruder alarm may be re-activated.



Door Alarm Shunt

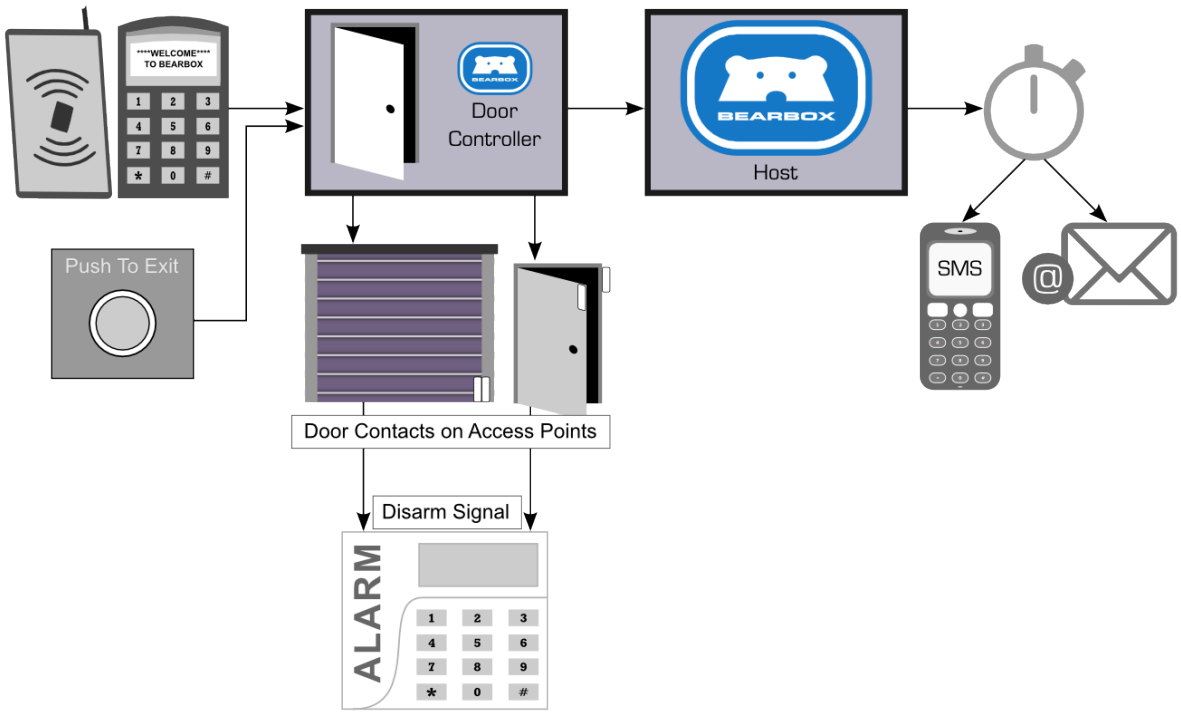
BearBox momentarily disarms the alarm on an access door that is part of an installed intruder alarm system

The access door is unlocked by an electrical signal from the BearBox Door Controller, initiated by either a valid PIN or pressing an Exit button. This signal also provides a signal to disarm the monitoring contact on the door. This allows the user to open the door without triggering an alarm.

The door alarm is disarmed until the door is closed. An "Access Door Left Open" alarm is generated if the door is not closed within a pre-set time. This alarm can trigger an SMS text to a designated mobile phone number or send an email message to a designated address.

Note:

- This function is suitable for use where exit does not require PIN use, but it does rely on use of an Exit button – use of an exit handle will not activate the signal to disarm the alarm.
- This function is not suitable for use where there is internal space monitoring, use of PIR detectors etc., as entry through the door will not disarm these.



BearBox includes building doors (Fire Exits etc.) in the unit monitoring system without using a separate intruder alarm

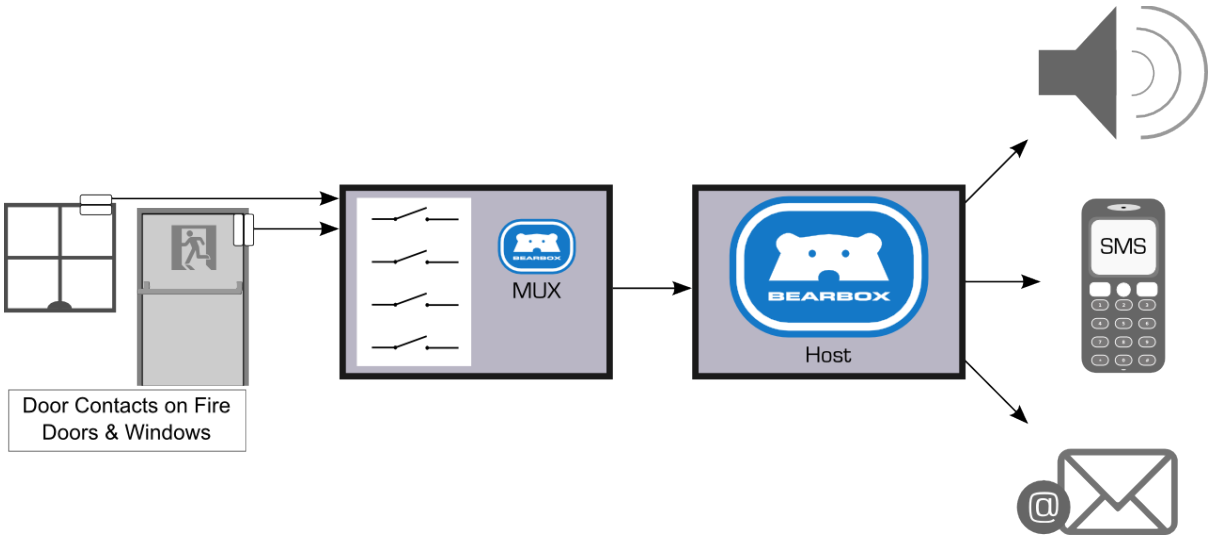
All doors, windows, roof hatches etc. can be monitored by the BearBox Multiplexer (Mux) system. "Door Forced" alarms are generated in the same way as for unrented units, with alarm options:

- Switch a local relay, allowing you, for example, to turn on an alarm sounder.
- Send an SMS text to a designated mobile phone number to alert them that there has been an incident on site.
- Send an email message to a designated address to alert them of the incident.

The event will also be present in the logs on the BearBox website.

Note:

- This function does not provide digital signalling to a monitoring station, but can be used with a speech dialler for this purpose.



Other Uses For Staff/User Presence Monitoring

For any site you may designate up to four different areas – usually buildings. The BearBox Host keeps track of the number of people logged in to each of these buildings at any time, with separate counts held for staff and customers.

Using these counts, the BearBox Host can control external systems according to whether or not any building is occupied.

Examples of applications include:

- Disarming particular intruder alarm zones when the building is occupied;
- Disarming the office alarm when staff are logged in;
- Holding the gate or roller doors open while staff are on site;
- Giving "down" commands to manual roller shutters left open after the last customer has left site
- Turning off Loading Bay lights when all customers have left;
- Turning on corridor lights specific to each customer's route to their unit.