

**DSX Access Systems, Inc.** 

## **Building Automation and Controls**

## **Building Automation and Controls**

The WinDSX Software is capable of controlling a number of Building functions. Equipped with time, date, day of week, user, and event driven relay outputs the system can virtually control anything that is electrical in nature or can be controlled with a switch or timer. Most buildings have a vast electrical system that supports lights, signs, fountains, HVAC, Elevators and more. All of these can be controlled by DSX.

Lighting in the Building can be zoned out and controlled by the DSX system. This would allow lights in tenant spaces and even in hallways and common areas to be shut off at a certain time every day. After hours an authorized user would present their card at a particular reader and it could turn the lights on or enable the lights to be turned on in a specific area. This allows lights to be shut off each day and only turned on in the specific areas needed by an authorized card holder. Lights can be scheduled by time, day, and date and controlled from the computer or from a card or keypad.

There are many ways to configure the Lighting Control and it can be custom fit to the building and customer's needs. It provides a means to turn lights off and on by schedule and command in an effort to save electricity and make the building more energy efficient. It also gives the customer a way to control it all from their desk and to change the schedule without standing on a ladder in an electrical room or having to schedule a service call to do it.

Electrical devices such as Outside and Parking Lights, Signs, and even Fountains are typically controlled by a timer mounted in a closet or electrical control room. These devices can be connected to relays controlled by the DSX system. This allows the user to manually control them as well as schedule when they will turn on and off without hiring an electrician to come change the antiquated timer they are connected to now.

HVAC - After Hours Zone Control can be used in multi-tenant buildings to control and monitor the after hours use of heating and cooling systems in each tenant space.

This control gives the Administrator the ability to define the amount of extra consumption that each tenant is responsible for. This information can be used to bill the tenants for the correct amount of usage.

For example, a tenant has heating and cooling from 7:00 AM to 6:00 PM as condition of the lease, but any other usage can be billed as an extra charge. At the specified time every day, the HVAC would automatically shut down and only be turned back on by the tenant using their access code or card at a designated keypad or reader. Once enabled, the tenant's HVAC zone would then be under thermostat control for a preset amount of time. At the end of that time period, the HVAC would shut down until the tenant uses their code or card again, or until the unit automatically returns to thermostat control according to its schedule. The tenant can enable the HVAC from one second to over nine hours (546 min.). The HVAC zone control relay can always be overridden from the PC.

WinDSX fully supports Floor Select Elevator Control and is capable of providing full elevator security. There are two ways the WinDSX System can secure the Elevator.

The simplest method is to disable the Car-Call Buttons on the common level or ground floor so that the Elevator cannot be accessed until a valid card is used that enables the car-call button. The upper or secured

floors have free access to the elevators. This requires just one reader and one relay output for each car-call button on the floors that need to be individually secured.

The next method is to disable all or particular Floor Select Buttons in each Cab. A reader is placed in those cabs and presenting a valid card enables the Floor Select Buttons the user is authorized for. This restricts all passengers to the floors that their access code allows.

The typical system utilizes a card reader in each elevator cab. The DSX System can be configured and programmed to automatically secure and un-secure any or all Floor Select Buttons in a cab individually, by time and day. Once a Floor Select Button is secure, it requires the passenger to use their access code or card at the reader in the cab before the select button will operate and light when pressed.

The passenger's access code determines which Floor Select Buttons are to be enabled for them to press. This restricts the passenger from selecting buttons that correspond to floors they are not authorized for.

DSX-Soft IO used with WinDSX provides a high level interface to Kone or Otis Elevators using data exchanges instead of relays to control cabs and access to floors.

Other System Monitoring can be performed with the use of the DSX-Soft IO program. It allows other systems to send data via ascii text messages to the WinDSX system and have the WinDSX system report, react to and record those events.

Door and Point Monitoring is a basic function of the system. DSX will monitor the open and closed state of all doors in the building. Public and employee entrances along with stairwell and emergency exit doors can all be monitored by the system for authorized and unauthorized access.

With the Use of WinDSX and its Alarm Email Notification feature Alarms from other systems as well as the access control system can be sent to the customer via Emails or Text Messages. This allows for specific and immediate response to building events and occurrences.

WinDSX can help you control, monitor, and report your building's functions and systems!