



DSX Access Systems, Inc.

Emergency Lockdown

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DSX can accommodate the quick lockdown of a system required for Emergency or Hazmat alerts. The Lockdowns occur without the need of programming or lengthy downloads. Hazmat Lockdowns will typically secure all the doors in an area or the entire facility not allowing anyone or just particular personnel, access in or out.

This application is based on the new Time Zone Linking features of the WinDSX 3.7 and higher software. It requires that all controllers in the location have a 1040 processor and firmware version 3129 or higher.

Below we will discuss what the Triggers are for Lockdown (links) and what the different components are that we will be linking to and how they will respond.

Triggers – The activation of Hazmat Lockdowns can be from several sources. Virtual Outputs can be defined and assigned Linking Groups so that their manipulation in the Workstation program activates the Linking Group. This allows the control to be from Output or Override Group Icons in Workstation. An Operator would click on the appropriate Icon and set it secure for example to lock all doors. Using the same Icon, the system can be put back to its normal operation. In this configuration the Comm Server PC must be online for Hazmat Lockdown control.

A different Trigger could be a card read at a particular reader. This could be a normal card used at a particular reader or it could be a particular card used at any reader. This type of Trigger would work without the Comm Server PC online.

A push button (latching switch) can be connected to an Input allowing the Trigger to be ready and active even when the Comm Server PC is offline, or the software is not running. Placing the switch in one position initiates or triggers the Lockdown and setting the switch back to normal resets the doors to their programmed state (Time Zone). If a momentary switch were used, it would require that there be one to initiate the Lockdown and a different one to put everything back to normal.

Components to Control - Access Levels, Devices (readers/keypads), and Outputs can be assigned and controlled by Time Zones. This allows Time Zone Linking to also control these components.

By linking to a Time Zone that is part of an Access Level we can force the level to allow or deny access immediately. By linking the Time Zone OFF, the cards stop working and by linking it ON we can force the cards to work regardless of the Time Zone schedule definition.

By linking to a Time Zone that is assigned to a Device we can force that reader/keypad to work or stop working altogether. If we link the Time Zone ON, the Device will read and process cards. If we link the Time Zone OFF the Device will become inactive and not read any cards regardless of their Access Level.

By Linking to a Time Zone that is assigned to an Output we can affect the On/Off status of that point. If the Time Zone is set to Link ON, the Output it is assigned to will go Secure. If the Time Zone is set to Link OFF, the Output it is assigned to will go Open.

Programming – Here are the general programming parameters. You will have to substitute the appropriate Device, Input and Output addresses.

Location – Select “Enable Linking Logic” and select “Code to Linking Logic” if you will trigger any links with a card read.

Device – Select “Device Used for Code to Linking Logic”. This could be any or all Devices where a card would be used to trigger the Hazmat Lockdown Linking Groups.

Output – Create Virtual Outputs if you want to use Icons in Workstation for the Trigger. This is an Output that does not physically exist but operates as if it did. This could be Output numbers 3-8 on any 1042 Device. This application will require one Virtual Output for each different group of actions you wanted to control. Do not assign a Time Zone to these Virtual Outputs and configure them for “Perform Link on Secure”.

Inputs – Define the Trigger Inputs. These would be Inputs that the Trigger switches are connected to. To have an alarm generated when the switch is activated assign the Input a 24hr Time Zone.

Time Zone – Create Separate Time Zone(s) “A, B, C...” for each group of Card Holders to be controlled independently, and for each component that you want to control separately. The Time Zone schedule is defined as to when it should work as normal. Some of these Time Zones may have the same definition but need to be controlled separately so they are named separately. Select “Time Zone is OFF when Linked to” for those that you want to shut down or select “Time Zone is ON when Linked to” for those that you want to force on. Remember when you link to a Time Zone you will affect all things that Time Zone is assigned to. Keep these Time Zones and Access Levels exclusive to what it is you want to control and do not use them for anything else.

Access Levels – Create Separate Access Levels for each group of Card Holders whose access needs to be controlled independently. Assign the Time Zones “A, B, C...” to each Device in the Access Level the Card Holders should have access to.

Linking Group – Create a new Linking Groups “1, 2, 3...” for each Time Zone “A, B, C...” to be controlled separately. Of the Components to link to under Time Zone, select the new Time Zone “A, B, C...”, on the right assign a 24-hour Time Zone (unless you are wanting to control when the link occurs) and a Response Type of “Follow”. Assign these Linking Groups to the Virtual Outputs and select “Perform Link On – Secure” and/or assign them to the Inputs where the Trigger switches will be connected.

Linking Levels – Create a Linking Level that associates the Device (readers to be used to trigger the links) to the above created Linking Groups.

Operation – When the Virtual Outputs are “Secured” by manual command from the Operator they activate a Linking Group that links the associated Time Zone – On or Off. Tripping an Input into alarm can also trigger the Linking Groups. When the Linking Groups are triggered, their associated Time Zones will be forced on or off thereby affecting anything the Time Zones are assigned to.

The doors that are required to lock down would be assigned Time Zones that are configured for “Time Zone is ON when Linked to”. These Time Zones would be defined in a Linking Group and set to “Follow” and the Linking Group would be assigned to an Input or Virtual Output. Triggering the Linking Group would force the Time Zones to be ON which would immediately secure the Outputs they are assigned to. Devices (card readers) could be shut off where necessary by the Time Zones that are assigned to them, and Access Levels could be restricted only allowing certain people access at certain doors. It would be important to place all of the outputs we are wanting to lock down in the same linking group we are linking to the Time Zones in and set all of those outputs back to Time Zone.

Egress devices that unlock a door directly would have to be contended with by possibly activating a relay that physically shunts the contacts in the device. Egress devices that signal the controller to unlock the door can be configured so that the input 8 does not unlock the door but rather links to the door Output. This link could then be controlled through the Time Zone assigned in the Linking Group.