

**DSX Access Systems, Inc.**

## **Two Man Rule**

### **Two Man Rule Application**

DSX can accommodate a Two Man Rule using just one reader port and one relay output. The Two Man Rule requires that two Card Holders must be granted access at a door for either to gain entry. 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.

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 “Enable Code to Linking Logic”

Device – Select “Device Used for Code to Linking Logic” De-Select “Link Granted events to Output 1”. Set the “Timed Anti-passback Delay” to 15 seconds.

Output – Edit output 1 that controls the lock and make sure it has a time zone to lock the door and set the “State When Linked to” to be “Open”.

Output – Create a new Virtual Output 3. Assign no Time Zone and set the “State When Linked to” to be “Secure” and the “Perform Link When” to “Secure”.

Time Zone – Create a 0-0 Time Zone and Select “Time Zone is ON when linked to”.

Linking Group – Create two new Linking Groups A and B.

A. Under Outputs select the Output 1 to be controlled, on the right select the new 0-0 Time Zone, and select a Response Type of "Pulse – 5 seconds".

In the same Linking Group under Outputs select the new Virtual Output #3, on the right select a 24 hr Time Zone, and select a Response Type of "Pulse – 5 seconds".

B. Create another new Linking Group B and under Time Zone select the new 0-0 Time Zone, on the right assign a 24 hr Time Zone and a Response Type of "Pulse – 5 seconds". Assign this Linking Group to the Virtual Output 3.

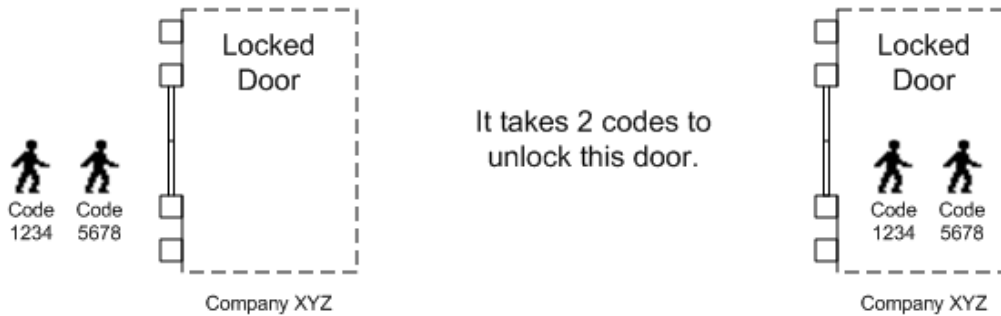
Note/// The pulse time can always be adjusted for optimum performance. Be sure that the Timed Anti-passback is greater than both pulse times added together.

Linking Levels – Create a Linking Level that associates the Device (reader) in question to the Linking Group A that contains the two Outputs.

Implementation/Operation – For any two Card Holders to operate the Two Man Rule assign the Linking Level to all card holders. Two Card Holders will have to be granted access at the door for either to gain entry. It does not matter who presents their card first.

For a “1 person from group A and 1 from group B” implementation (manager/subordinate) you would separate the two components of the Linking Group A (the Output 1 and the Virtual Output) into two separate Linking Groups with two separate Linking Levels. Assign the Linking Level that activates the Virtual Output to one group of Card Holders and that group would always have to present their card first. Assign the Linking Level that activates the Output 1 to the other group of Card Holders that would always present their card second.

Note/// Timed Anti-passback is not required when configured for manager/subordinate implementation.



**Standard Egress (Exit Without Two Man Rule)**

For a normal type of egress to leave the two man area, program a linking group consisting of output 1 with a 24 hr time zone and a response of pulse 5 seconds. Assign this linking group to input 8 and set input 8 to link on a status change. Input 8 does not require a time zone.

**Variation 1 (Two Man Rule Entry and Exit)**

For a Door requiring the Two Man Rule on both sides for in and out traffic, duplicate the above settings making all unique time zones and linking groups but combining the reader and linking groups into the Linking Level that was built for the first door. In this extended application the In and Out readers of the same door should be connected to the side A and B of the same controller. The relay output 1 of Side B should be connected to the Request to Exit input 8 of side A. Input 7 and 8 of Side B should be strapped out with the 1K resistor. The Side B unlock time is set to 1 second. This is building on the Standard Egress option above.

**Variation 2 (Single Man or Two Man by Time Schedule)**

With a simple change the door can be set to operate as a single man door during one part of the day and as a two man door the other. To do this, change the 0 - 0 time zone(s) so that the Start Time is the beginning of the Single Man operation and the Stop Time is the beginning of the Two Man Rule. This only applies to the "Any Two Card Holders" implementation of the Two Man Rule. It will not work with the Manager/Subordinate implementation.

**LED Control**

Using a 1042 Controller move the LED control Line from the Reader Port to Output 2. Output would have no Time Zone and would be programmed to Link Secure. Create a Linking Group consisting of Output 2 with a 24 hour Time Zone and set to Follow. Assign the Linking Group to Output 1 and set it to Link on Open.