DSX Access Systems, Inc. ®

Man Trap

Man Trap Application

DSX can accommodate a Man Trap application where one door has to close and lock before another can unlock. This application is based on the 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. The two doors used for a Man Trap application should reside on the same controller. The Door Position switches would be on input 7 and the Request to Exit devices would be on input 8.

Here are the general programming parameters. You will have to substitute the appropriate Device, Input and Output addresses. To begin with, you may want to use the names below at least in part to get through the programming.

1. **Location** - Select "Enable Linking Logic"

2. **Time Zone** - There will be a total of 7 Time Zones created. To begin with they will all be defined as Start 0 and Stop 2400 everyday including holidays. Program them all as "Time Zone is <u>OFF</u> when Linked to". Below is a list of the 7 time zones, their names, and assignments:
   a) Door A Rex Disable > Assigned to Open A Linking Group
   b) Door A Output Off   > Assigned to Device A Output 1 TZ
   c) Door A Reader Off   > Assigned to Device A Reader TZ
   d) Door B Rex Disable > Assigned to Open B Linking Group
   e) Door B Output Off   > Assigned to Device B Output 1 TZ
   f) Door B Reader Off   > Assigned to Device B Reader TZ
   g) Master 24 X 7   > Assigned to Input 7s and used in Linking Groups

3. **Device** - Add Two Devices. Door A and Door B. Select "Door Open Detect Relock", "Use Input 7 & 8", "Link Granted Events to Output 1", Unselect "Exit Request Unlocks Output 1". As indicated above assign time zone "Door A Reader Off " to Device A Reader TZ and time zone "Door B Reader Off" to Device B Reader TZ.

4. **Outputs** - Edit Door A Output 1 and assign it the "Door A Output Off" Time Zone and on the Options Tab set the "State When Linked To" to "Secure" and set the "Perform Link When" to "Open".

   Edit Door B Output 1 and assign it the "Door B Output Off" Time Zone and on the Options Tab set the "State When Linked To" to "Secure" and set the "Perform Link When" to "Open".

5. **Inputs** - Add input A8 and name it "Door A Rex" and assign it "No" time zone.

   Edit Door A Input 7 and assign it the "Master 24 x 7" time zone.

   Add input B8 and name it "Door B Rex" and assign it "No" time zone.

   Edit Door B Input 7 and assign it the "Master 24 x 7" time zone.

6. **Linking Groups** - There will be a total of 4 linking groups. Build them according to the information below.

a.) Add a New Linking Group and name it "Disable A". Under Outputs select "Output 1 for Door A" and assign it the "Master 24 x 7" Time Zone and a Response of Follow. In the same linking group under Time Zone select the "Door A Rex Disable" and assign it the "Master 24 x 7" Time Zone with a Response of Follow. Also in this linking group under Time Zone select the "Door A Reader Off" and assign it the "Master 24 x 7" Time Zone with a Response of Follow.

b.) Add a New Linking Group and name it "Disable B". Under Outputs select "Output 1 for Door B" and assign it the "Master 24 x 7" Time Zone and a Response of Follow. In the same linking group under Time Zone select the "Door B Rex Disable" and assign it the "Master 24 x 7" Time Zone with a Response of Follow. Also in this linking group under Time Zone select the "Door B Reader Off" and assign it the "Master 24 x 7" Time Zone with a Response of Follow.

c.) Add a New Linking Group and name it "Open A". Under Outputs select "Output 1 for Door B" and assign it the "Master 24 x 7" Time Zone and a Response of Follow. In the same linking group under Time Zone select the "Door A Output Off" and assign it the "Door A Rex Disable" Time Zone with a Response of 6 seconds.

d.) Add a New Linking Group and name it "Open B". Under Outputs select "Output 1 for Door A" and assign it the "Master 24 x 7" Time Zone and a Response of Follow. In the same linking group under Time Zone select the "Door B Output Off" and assign it the "Door B Rex Disable" Time Zone with a Response of 6 seconds.

7. **Linking Group Assignment** - Assign the above Linking Groups as follows:
Outputs
Output 1 Door A - Activates Linking Group "Disable B" and set the Perform Link When to "Open"
Output 1 Door B - Activates Linking Group "Disable A" and set the Perform Link When to "Open"

Inputs
Input 8 Door A Rex - Activates Linking Group "Open A" and Perform Link On "Status Change".
Input 7 Door A Status - Activates Linking Group "Disable B" and Perform Link On Status Change".

Input 8 Door B Rex - Activates Linking Group "Open B" and Perform Link On "Status Change".
Input 7 Door B Status - Activates Linking Group "Disable A" and Perform Link On Status Change".

Operation - Any time a Rex (input 8) is faulted the associated door is unlocked for 6 seconds and the other door is locked for the duration of the input 8 fault. Anytime an output 1 is open the other output 1 is secured for the duration, the other door's rex and reader are disabled for the duration. Anytime a Door Status switch (input 7) is faulted the other door's rex and reader are disabled and the other door output 1 is secured for the duration.