

Copyright

# Basic InterLock Logic Operation

Isotec Security

Note, on the following slides the following applies:

- Lock and Unlock refer to applying power to the lock in the PLC logic, which means the PLC is trying to power the lock. It may or may not actually power the lock if a wire is broken or the lock is defective
- DPS, Occy, and Bond refer to the signals applied to the PLC. If there are broken or shorted wires or defective devices, these signals might not reflect the actual state of the device.
- Items above the dotted line on the following sheets are the more likely to occur; check those before the ones below the line.

# A Door Lock Logic, simplified

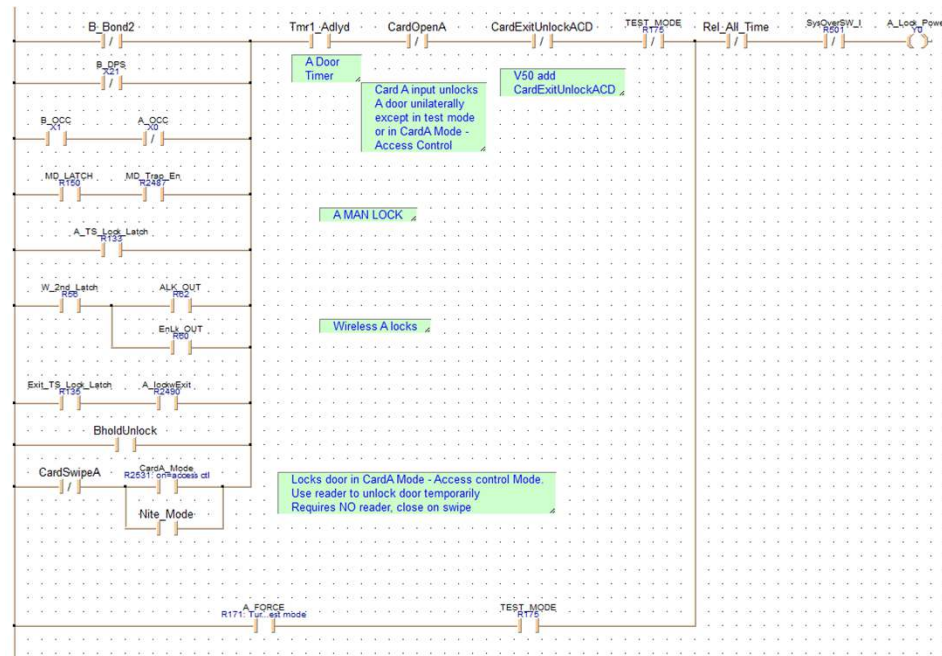
## Things that can LOCK the A Door:

- B door not bonded
- B door not closed (DPS)
- B occupied and A not occupied
- A touchscreen Lock Button
- Pressing 2<sup>nd</sup> Remote button (toggles) if either
  - Entry or A Door is selected

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- Releasing B door by 2 sec press on screen,
    - or by 6 second hold on remote, if enabled
  - Turning on Nite Mode, or if Card A Mode = Unlock
  - Exit Lane screen lock button(toggles) , if '& A' is on
  - Metal Alarm, only if MD Trap is on

## Things that can UNLOCK the A Door:

- A door not closed
  - Being in in System Override
- 
- Turning on Test Mode (and not manually locking A door)
  - Pressing the 2<sup>nd</sup> button on Remote if 'Release All' is on (momentary)
  - Card A input if Card A Mode = Reader



## B Door Lock Logic, simplified

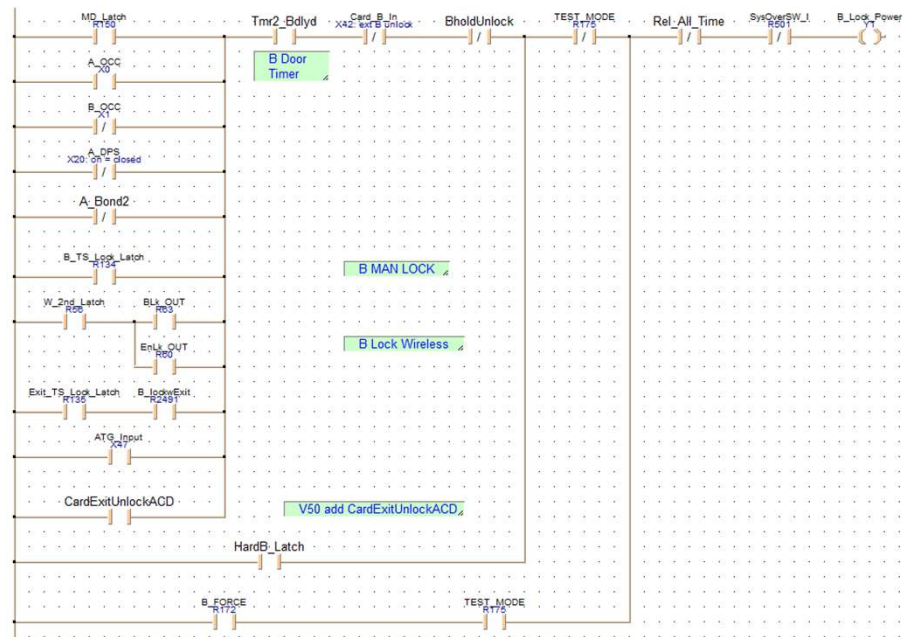
### Things that can LOCK the B Door:

- A door not bonded
- A door not closed (DPS)
- B zone not occupied
- A zone occupied
- B touchscreen Lock Button
- Pressing 2<sup>nd</sup> Remote button (toggles) if button mode is either B door or Entry
- Pressing 3<sup>rd</sup> Remote button (toggles)

- 
- Exit Lane screen Lock button, if '& B' is on
  - Tailgating Input is on

### Things that can UNLOCK the B Door:

- Being in in System Override
- 
- Turning on Test Mode (and not manually locking B door)
  - Pressing the 2<sup>nd</sup> button on Remote if 'Release All' is on
  - Releasing B door with 2 sec press on screen B lock button
  - Card B input
  - Holding 2<sup>nd</sup> remote button if set for Exit



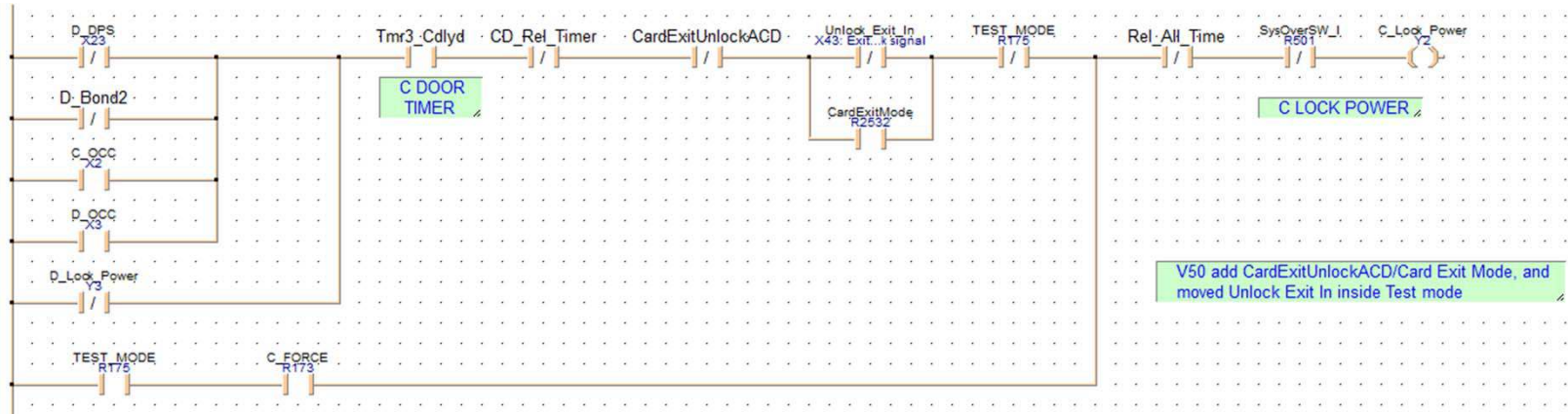
## C Door Lock Logic, simplified

### Things that can LOCK the C Door:

- D door not bonded
- D door not closed (DPS)
- D zone occupied
- C zone occupied
- 
- D door lock not powered

### Things that can UNLOCK the C Door:

- Being in in System Override
- 
- Turning on Test Mode (and not manually locking B door)
- Pressing the 2<sup>nd</sup> button on Remote if 'Release All' is on
- C or D door held open, if CD Door Hold feature is on
- Exit Unlock input on and not in Unlock ACD mode
- Exit Unlock input on and in Unlock ACD mode



## D Door Lock Logic, simplified

### Things that can LOCK the D Door:

- C door not bonded\*
- C door not closed (DPS)\*
- D zone not occupied
- Screen Exit Lock Button

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 Pressing 2<sup>nd</sup> Remote button (toggles) if mode is 'Exit'

\* If Exit Bypass is on, C DPS and C Bond do not lock the D door (exit lane is not secure)

### Things that can UNLOCK the D Door:

- Being in in System Override
- 
- Turning on Test Mode (and not manually locking B door)
- Pressing the 2<sup>nd</sup> button on Remote if 'Release All' is on
- C or D door held open, if CD Door Hold feature is on
- Exit lane occupied too long and Occy Timeout Release is on
- Exit Unlock input on and not in Unlock ACD mode
- Exit Unlock input on and in Unlock ACD mode

