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PC4820 Troubleshooting Guide

Trouble	Troubleshooting	Related Programming/Additional Notes
'Door does not unlock when a card is presented'	▪ Ensure lock device is functioning (See Note#1) ▪ Ensure that the cards and readers compatible with each other ▪ Ensure that the correct reader type is selected ▪ Ensure that the correct card number programmed for the user ▪ Ensure that a valid card is presented during the active schedule for the user's access level	**Programming:** ▪ Card number (User Code Programming) ▪ Access level programming (User Code Programming) ▪ Access level (PC4820 Programming)
'Lock device does not activate when the REX is violated'	▪ Ensure lock device is functioning (See Note#1) Ensure that the 'Unlock On REX' toggle option is enabled ▪ Ensure that the REX device is wired between the 'REX' and 'COM terminals, and is wired according to the control panel's zone supervision programmed ▪ Ensure that the REX is violated while the 'REX Schedule' is active	**Programming:** ▪ Unlock on REX **Ref#[0011XX01YY00]** ▪ REX Schedule **Ref#[0011XX01YY07]** **Notes:** ▪ REX device will activate the lock output for duration of the 'Door Unlock Time' ▪ Once the REX is violated, a second REX activation will not occur unless the REX contact is restored and the door has relocked
'When an access card is presented, the card information does not log to the control panel event buffer'	▪ Ensure that the PC4820 is enrolled ▪ Ensure that the correct reader type is selected according to the reader/card technology ▪ Confirm that the cards/reader(s) are compatible with each other	**Programming:** ▪ Reader Type **Ref#[0011XX00]**

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Trouble	Troubleshooting	Related Programming/Additional Notes
'Arming with a card not functioning'	- Ensure that the user has privileges to arm the partition (s) - Ensure that the partition(s) to be armed are enabled in the PC4820 'Arm/Disarm Mask' - Ensure that the arming is being performed while the schedule assigned to the 'Arm Request Schedule' is active - Ensure that an arming button is wired between the 'ARM' and 'COM terminals on the PC4820, and is wired according to the control panel's zone supervision - Ensure the zone assigned to the door is assigned to the partition which is to be armed - Ensure that when arming using the PC4820, a valid card first be presented, followed by a violation of the 'ARM' contact	**Programming:** ▪ Arm/Disarm Mask **Ref#[0011XX01YY01]** ▪ Arm Request Schedule **Ref#[0011XX01YY05]** **Operation:** When the user presents their card the PC4820 will identify the user, verify they have access and if so, will unlock the door. The user then pushes a button wired to the 'ARM' and 'COM' terminals on the PC4820. The PC4820 will check the Arm Request schedule for each partition assigned to the reader and if active, the panel will arm the partition or partitions assigned to the reader, assigned to the user and ready to be armed (all zones secure).
'Disarming with a card not functioning'	- Ensure that the user has privileges to disarm the partition (s) - Ensure that the partition(s) to be disarmed are enabled in the PC4820 'Arm/Disarm Mask' - Ensure that the disarming is being performed while the schedule assigned to the 'Disarm Request Schedule' is active - Ensure the zone assigned to the door is assigned to the partition which is to be disarmed - Ensure that the contact on the door is wired to the 'DOOR' and 'COM' on the PC4820, and is wired according to the control panel's zone supervision	**Programming:** ▪ Zone Assignment **Ref#[0011XX01YY03]** ▪ Arm/Disarm Mask **Ref#[0011XX01YY01]** ▪ Arm Request Schedule **Ref#[0011XX01YY05]** **Operation:** When the user presents their card the PC4820 will identify the user, verify they have access and if so, will unlock the door. When the door is opened, the panel will check the Disarm Schedule for each partition assigned to the reader and, if active, the panel will disarm every partition that is assigned to the reader, assigned to the user and to which the zone is assigned.

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Trouble	Troubleshooting	Related Programming/Additional Notes
'There is a PC4820 lock trouble'	▪ Ensure that a lock device is wired to the PC4820 lock terminals ▪ If no lock device is used, place a 1k ohm resistor between the unused lock terminals	
'Door not following door unlock schedule'	▪ Ensure lock device is functioning (See Note#1) ▪ Ensure that the date schedule programmed for the 'Door Unlock Schedule' contains the desired time period of when the door is to be unlocked automatically	**Programming:** ▪ Door Unlock Schedule **Ref#[0011XX01YY06]** **Notes:** ▪ If the 'Unlock Safety' toggle option is enabled, after a valid card is presented, the door must be opened before the lock will follow the unlock schedule
'Door does not lock when the partition(s) is armed'	▪ Ensure that the door is assigned to a zone ▪ Ensure the zone assigned to the door is assigned to the partition which is being armed	**Programming:** ▪ Zone Assignment **Ref#[0011XX01YY03]** ▪ Arm/Disarm Mask **Ref#[0011XX01YY01]**

Note#1:

If the lock device does not function, this may either due to programming or due to a physical problem with the lock device or its wiring.

Perform the following to test the functionality of the lock device:

1) **Determining if the lock device does not activate due to programming**

   a. *Does the door unlock for other any other operations (i.e. REX, card presentation, door unlock schedule etc.)?*

   b. *Does the door unlock when the programming of the 'Lock Reversed' toggle option is inverted?*

   If the door unlocks when either a. or b. are performed, this indicates that there is a programming issue related to the operation being tested. Go to the next step of troubleshooting in the chart.

   If the door does not unlock, go to the next bullet.

2) **Determine if there is a physical problem with the lock device**

   Test the operation of the lock output

   1. Remove lock device
   2. Place a 1K ohm resistor across the 'Lock +/-' terminals
   3. Set the PC4820 toggle option 'Lock Reversed' to 'N'
   4. Place the voltage meter across the resistor
   5. The reading should be 1.2Vdc – 1.5 Vdc
   6. Set the PC4820 toggle option 'Lock Reversed' to 'Y'

   The voltage across the resistor should now read 13.8Vdc, indicating that the lock output on the PC4820 is operating normally. If this occurs:

   - Test the wiring to the lock
   - Ensure that the lock device does not draw more than 250mA
   - Replace the lock device

Note#2

Required Programming
The following locations contain the minimum programming required to ensure proper operation of the PC4820:

- Reader Type   – **Ref# [0011XX00]**
- Zone Assignment   – **Ref# [0011XX01YY03]**
- Arm/Disarm Mask   – **Ref# [0011XX01YY05]**

   XX – PC4820 Number
   YY – Door Number