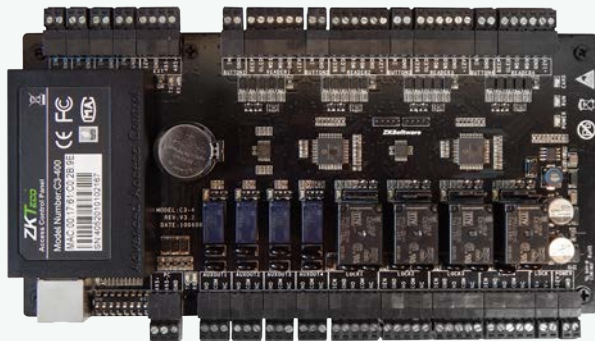


Installation Manual

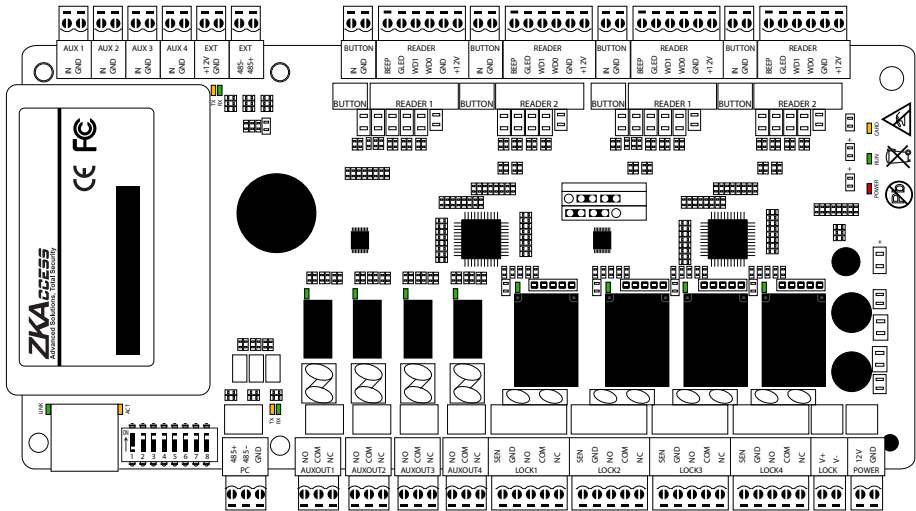


C3-Series Access Control Panels

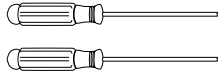
&

ZKACCESS®

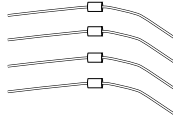
ZKAccess.com



2 Screws & Anchors



2 Screwdriver



4 Diode

| | |
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Wiegand Card Reader



Prox Card



RS485 Convertor



K1-1 Exit Button



Door Sensor



Card Enroller



Alarm



C3 Cabinet

The following precautions are to keep user's safe and prevent any damage.
Please read carefully before installation



Do not install the device in a place subject to direct sun light, humidity, dust or soot



Do not place a magnet near the product. Magnetic objects such as magnet, CRT, TV, monitor or speaker may damage the device.



Do not place the device next to heating equipment



Be careful not to let liquid like water, drinks or chemicals leak inside the device.



Do not let children touch the device without supervision



Do not drop or damage the device



Do not disassemble, repair or alter the device.



Do not use the device for any other purpose than specified.



Clean the device often to remove dust on it. In cleaning, do not splash water on the device but wipe it out with smooth cloth or towel.

Contact your supplier in case of a problem.

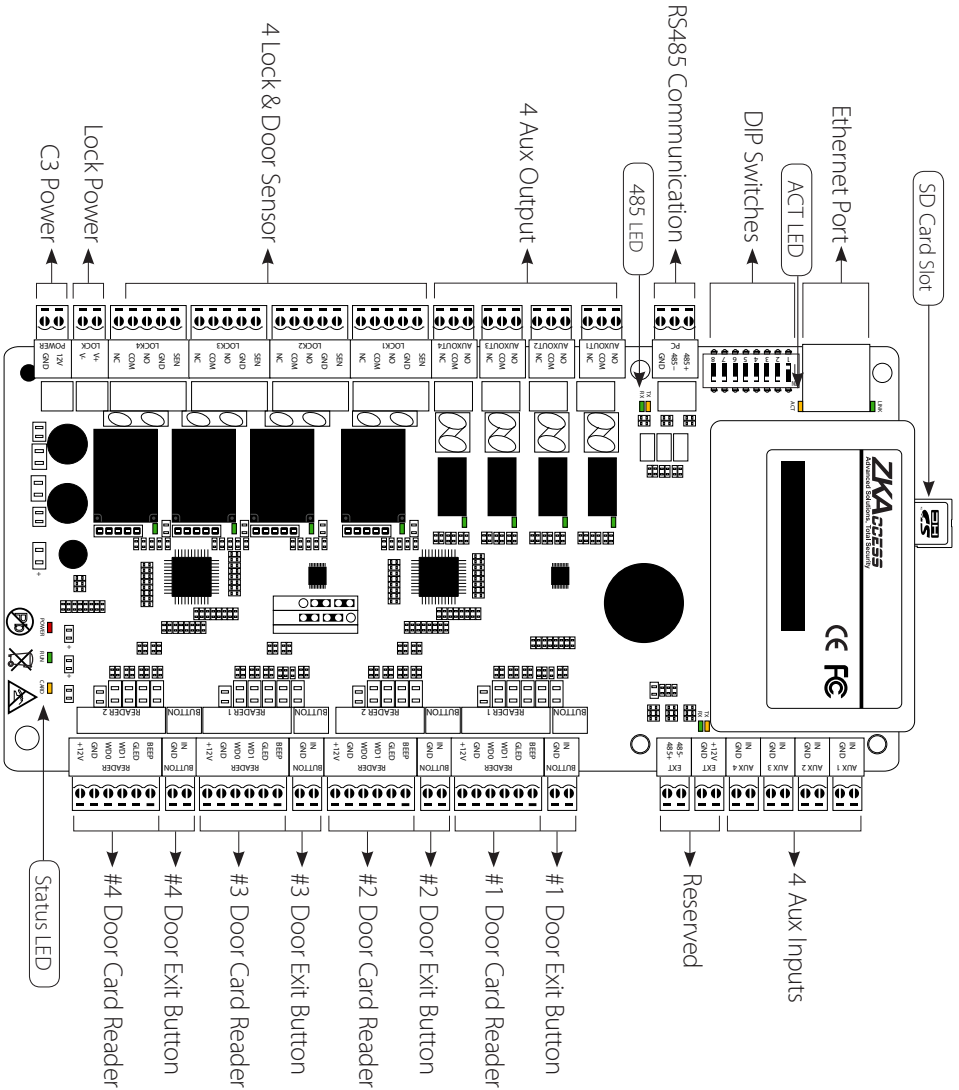


Figure 1

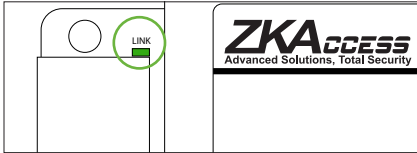


Figure 2

LINK Solid Green LED indicates TCP/IP communication is normal



Figure 3

Flashing (ACT) Yellow LED indicates data communication is in progress

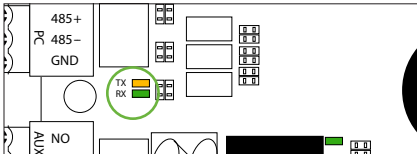


Figure 4

PC RS485 (TX/RX) Flashing Yellow & Green LED indicates communication is in progress

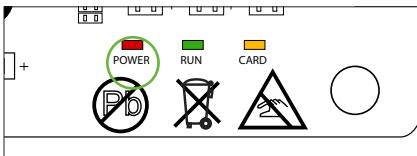


Figure 5

Flashing (POWER) Red LED indicates the panel is powered on

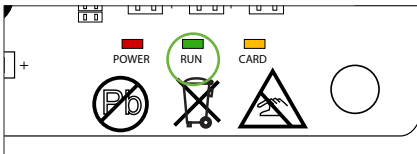


Figure 6

Flashing (RUN) Green LED indicated that panel is in normal working state

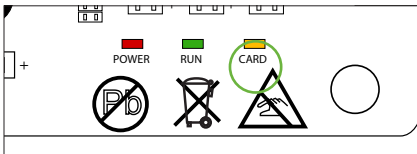


Figure 7

Flashing (CARD) Yellow LED indicates that the card is read by the panel

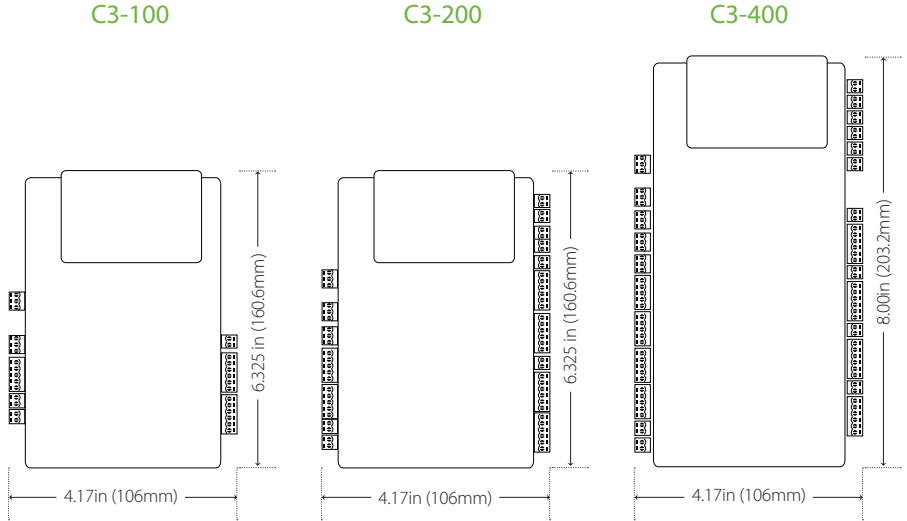


Figure 8

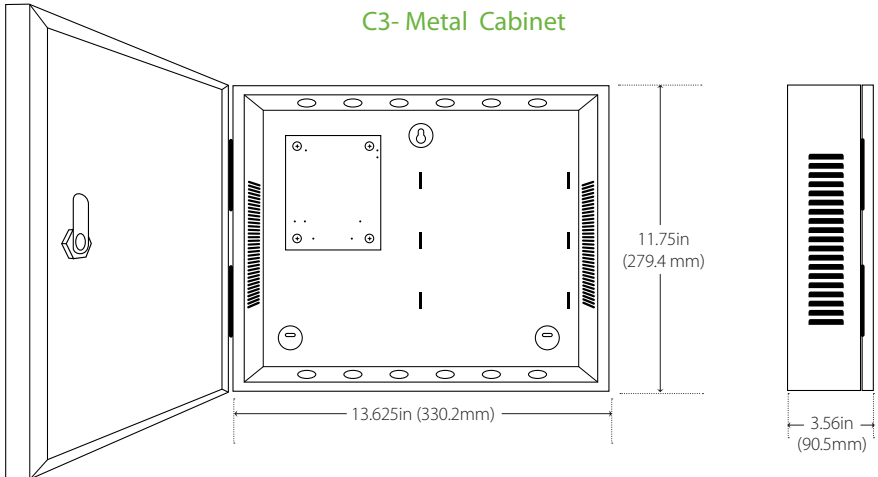


Figure 9

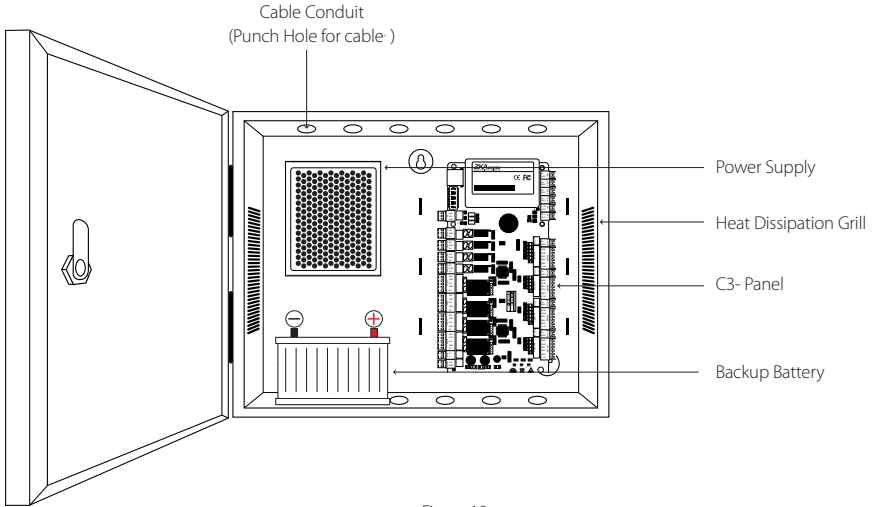


Figure 10

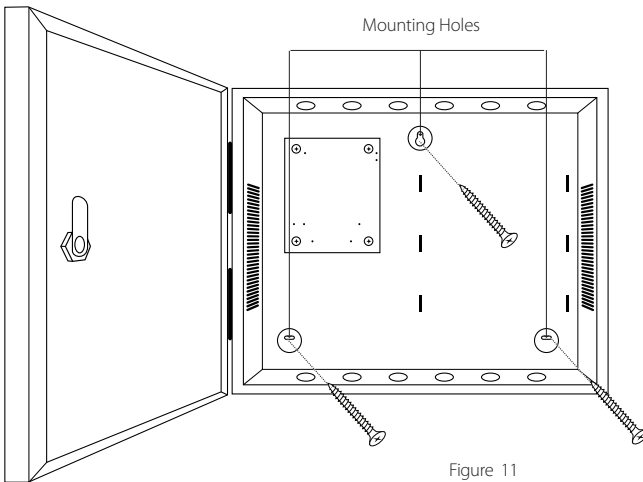


Figure 11

We recommend drilling the mounting plate screws into solid wood (i.e. stud/beam). If a stud/beam cannot be found, then use the supplied drywall plastic mollies (anchors).

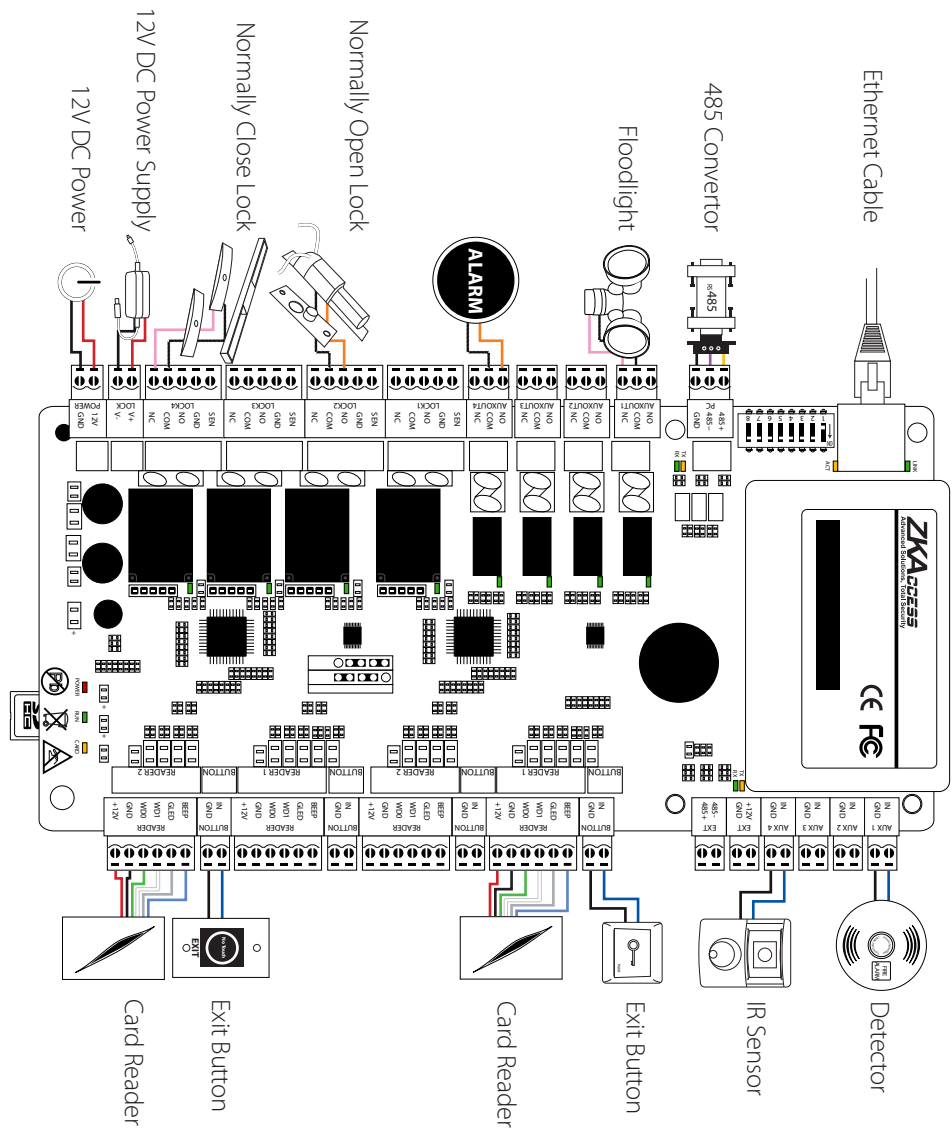


Figure 12

Without Backup Battery

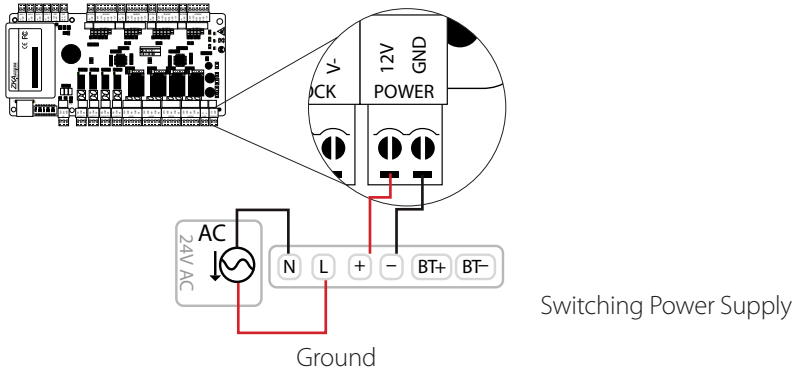


Figure 13

With Backup Battery

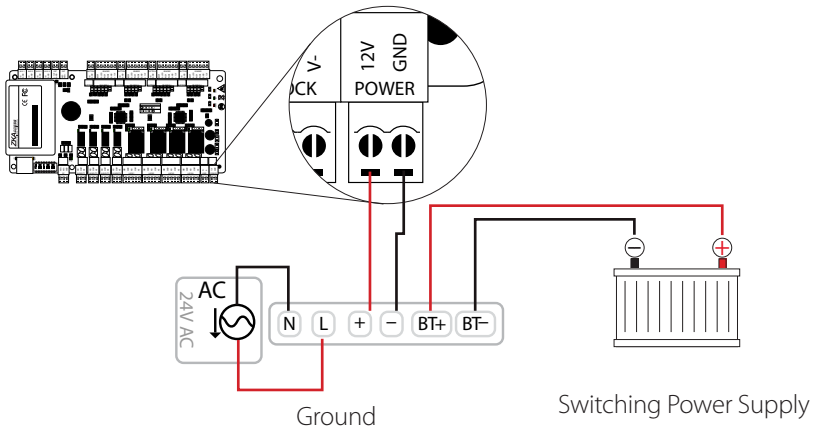
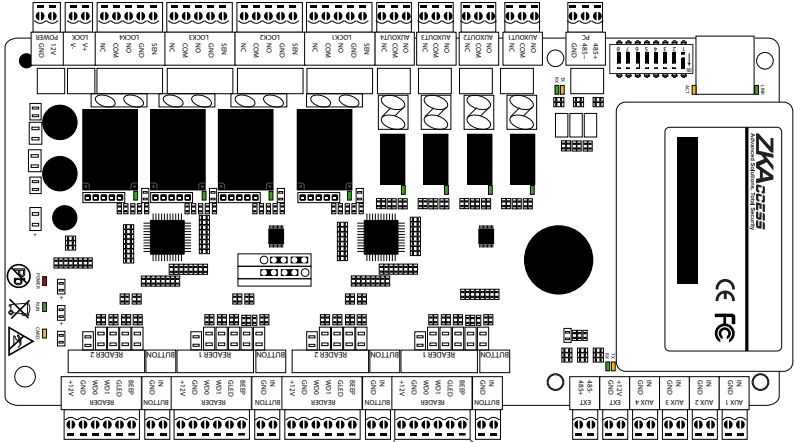
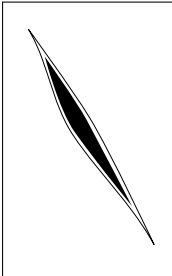
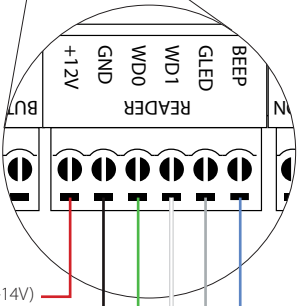


Figure 14



16 or 18 AWG shielded cable recommended



- DC+(6-14V)
- GND
- Wiegand D0
- Wiegand D1
- Green LED
- Beeper

Wiegand Card Reader

Figure 15

Connecting a Lock with External Power Supply (Dry Contact)

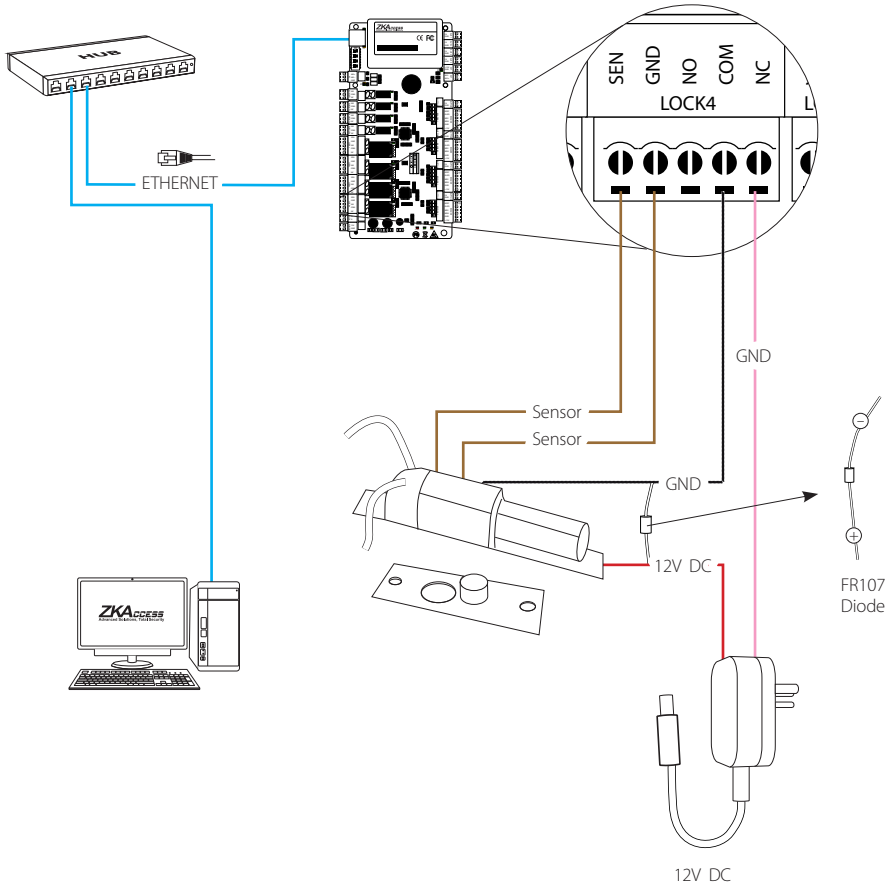




Figure 17

Switching Dry Contact to Wet Contact

Important Notes:

The factory default jumper setting is set as dry mode. If you want to power the lock from the panel, you must take the following steps

Select the appropriate lock relay and find its jumpers

1. Take off the jumpers and change  to 
2. Connect the lock as shown in the diagram, (see figure 20 and 21)

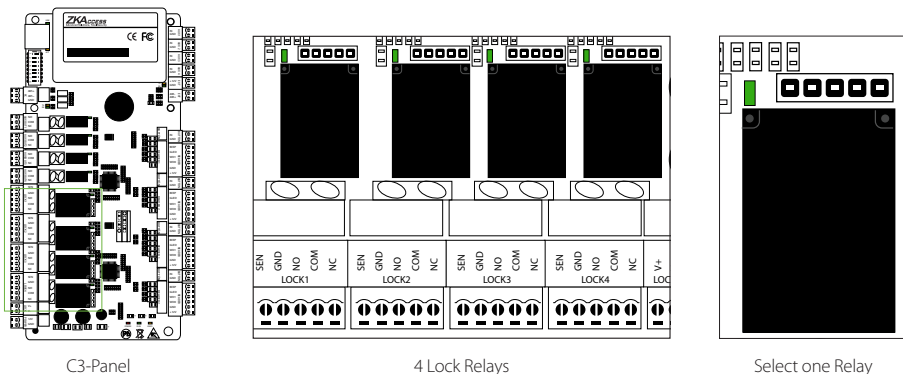


Figure 18

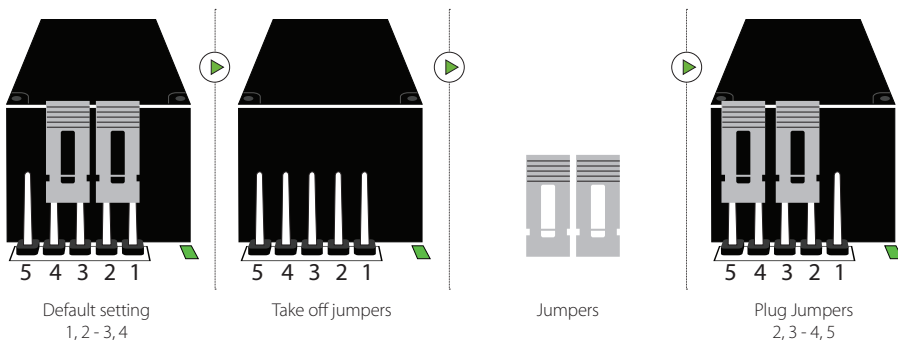


Figure 19

Normally Open Lock Powered From Lock Terminal (Wet Contact)

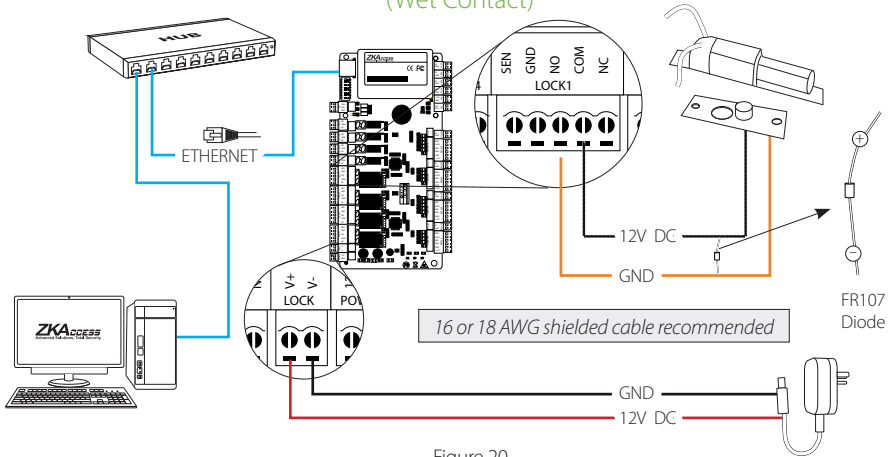


Figure 20

Normally Closed Lock Powered From Lock Terminal (Wet Contact)

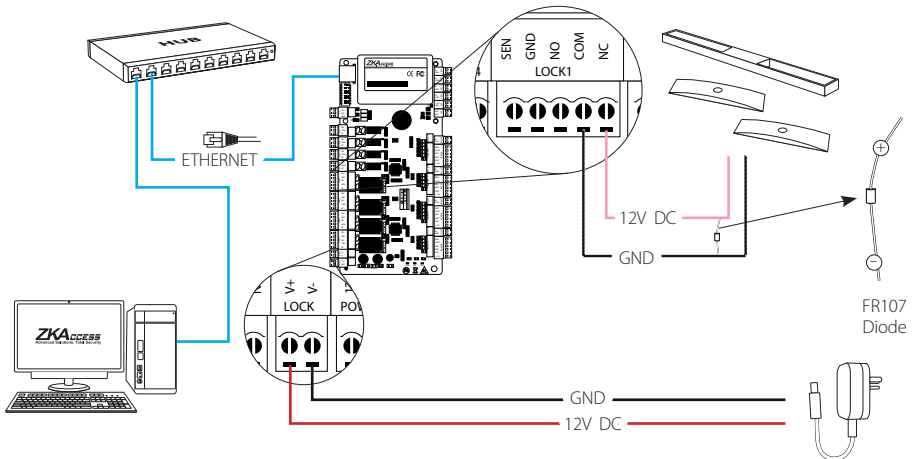


Figure 21

Aux. Input Connection

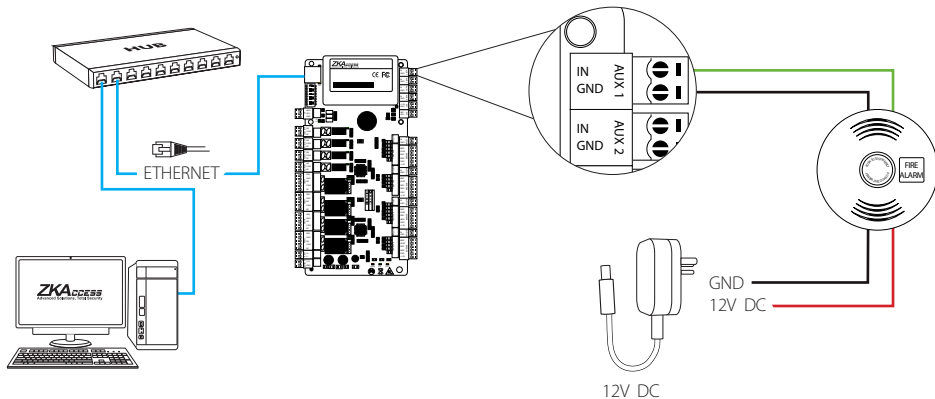


Figure 22

Aux. Output Connection

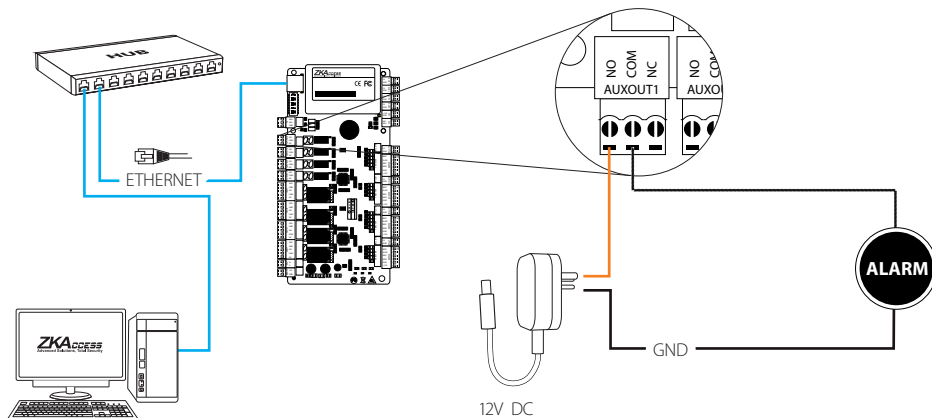


Figure 23

LAN Connection

Important Notes:

1. Both 10Base-T and 100Base-T are supported.
2. This cable distance must be less than 330 ft. (100m).
3. For cable length of more than 330 ft. (100m), use HUB to amplify the signal.

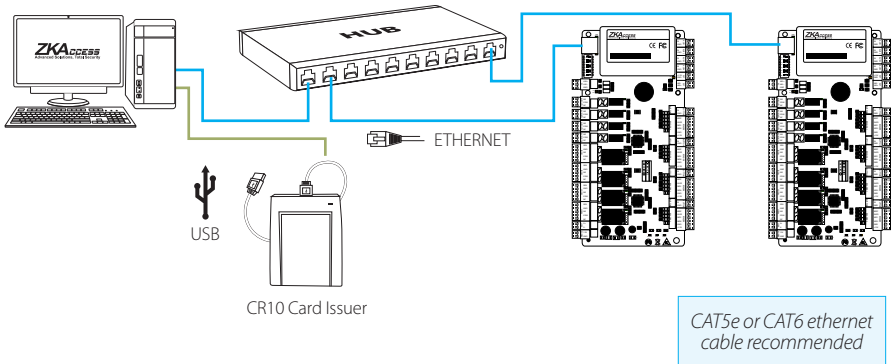


Figure 24

Direct connection

To connect C3-Panel with a PC directly, connect both devices with a straight network cable. As the C3-Panel supports auto MDI/MDIX, it is not necessary to use a crossover type cable.

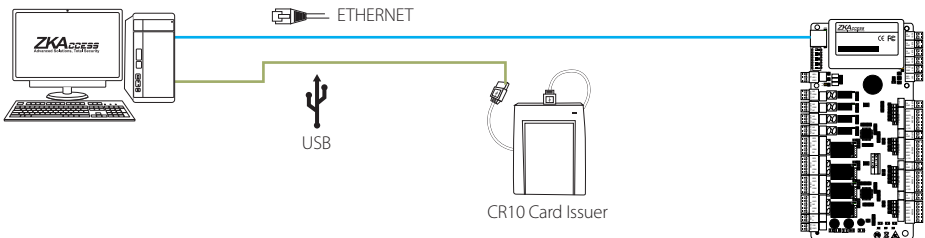


Figure 25

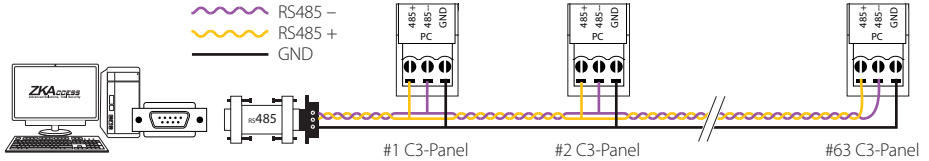


Figure 26

Important Notes:

1. RS485 communication wires should be a shielded twisted pair cable. RS485 communication wires should be connected in a bus cascade topology instead of a star topology, to achieve a better shielding effect by reducing signal reflection during communications.
2. A single RS485 bus can connect up to 63 access control panels, but preferably 32 is recommended maximum.
3. To eliminate signal attenuation in communication cables and suppress interference, if the bus is longer than 200 meters, set the number 8 DIP switch to the ON position. This is equivalent to a parallel connection of one 120ohm resistance between the 485+ and 485- lines.

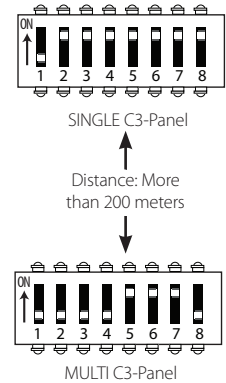


Figure 27

Incorrect RS 485 connections

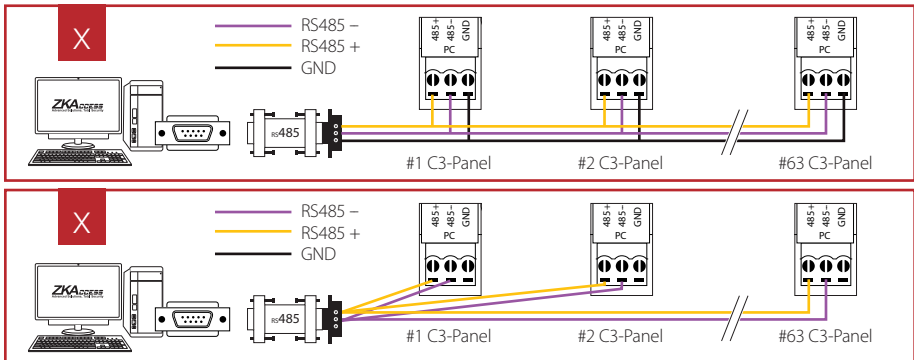


Figure 28

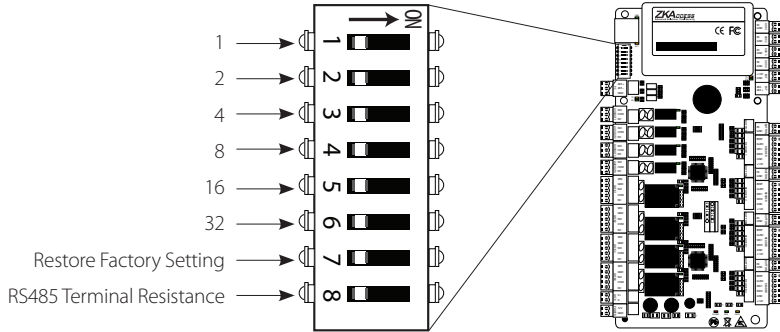
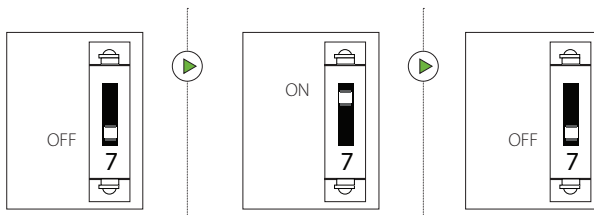


Figure 29

Restore factory setting

1. If you forget the IP address of the C3 panel or the device does not work normally, you can use the number 7 DIP switch to restore C3-Panel to factory default settings. The parameters which gets reset are device IP address, communication password, gateway, and subnet mask.
2. The switch is OFF by default. When it is moved up and down for three times within 10 seconds and finally returned to OFF position, the factory settings will be restored after the access control panel is restarted.



To reset factory settings
Turn #7 switch ON and OFF

Repeat process 3 times

Figure 30

RS485 Address

1. Number 1-6 are reserved to set the device number for RS485 communication. The code is binary, and the numbering starts from left to right. When the switch is set to ON position, it indicates 1 (on); when the switch is set downwards, it indicates 0 (off). For example, to set a device number $39=1+2+4+32$, which corresponds to the binary code 111001, put number 1, 2, 3, and 6 to ON position, as illustrated below.

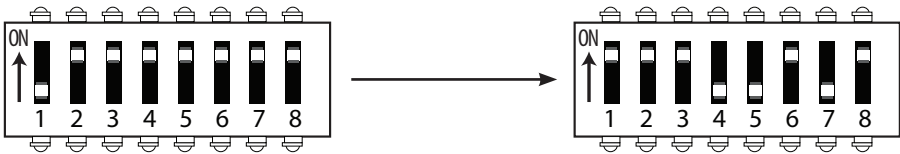


Figure 31

For more details, please check the table at the end of this document.

Terminal Resistance

1. Number 8 is for setting the RS485 termination resistance. Putting the switch to ON position is equivalent to parallel connection of a 120 ohm termination resistance between 485+ and 485- lines.

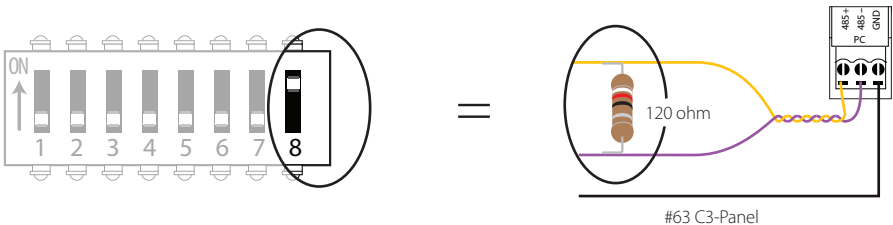


Figure 32

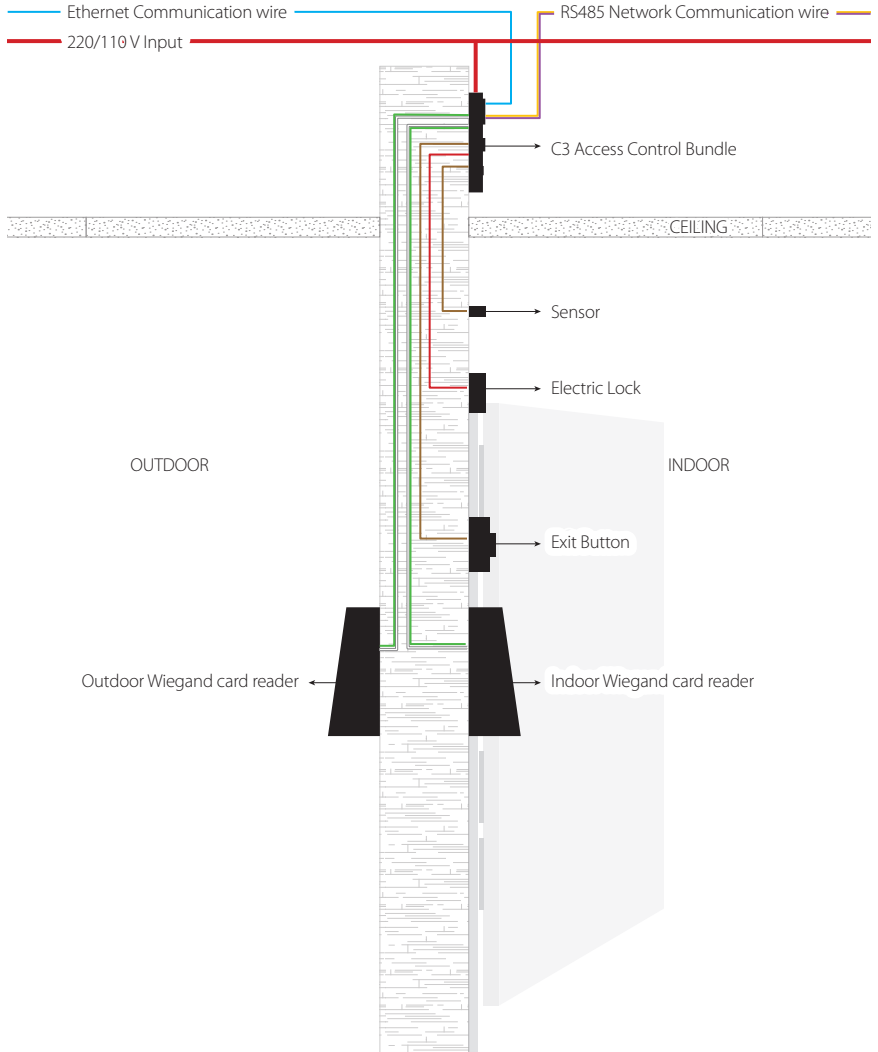


Figure 33

1. How to switch four door one way to two door two way?

- › Connect four readers from reader 1 to reader 4.
- › Connect two door locks, one connected to LOCK1, another connected to LOCK3.
- › In the software configure reader 1-Indoor, and reader 2-Outdoor.

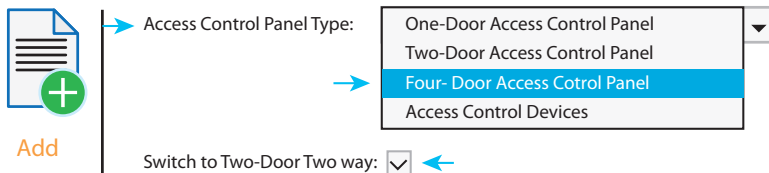


Figure 34

2. Can we integrate IP Camera and NVR?

- › Currently ZKACCESS software supports ZKAccess' IP Cameras and NVR
- › You can associate a camera to the door and setup a linkage for the same.

3. What does it mean when I get a "Wiegand Format Error"?

- › Your WD0 and WD1 wiring is reversed.

4. How do I connect a third party reader or a stand-alone reader to a C3 panel?

- › Connect the wiegand output to the WD0 and WD1 of the stand-alone readers on the panel's reader port.

Note: The board can only supply 12VDC, 300mA power so an external power supply may be required.

5. What is the SD card slot used for?

- › SD card, stores transactions from the panel and creates a back up in additional to internal memory.

6. What kind of wire is recommended for the panel?

- › 16 or 18 AWG twisted shielded wire is recommended.

7. What is the default IP of the panel?

- › 192.168.1.201

8. How long is the device under warranty?

- › 1 Year from original purchase date, replacement/repair of hardware under ZK standard warranty requires an evaluation of the failed system by a ZK Technical Support specialist, and the issuance of a Technical Support RMA number.

PC 485 Setting Table

| Address No. | Switch Setting | | | | | |
|-------------|----------------|-----|-----|-----|-----|-----|
| | 1 | 2 | 3 | 4 | 5 | 6 |
| | 1 | 2 | 4 | 8 | 16 | 32 |
| 01 | ON | OFF | OFF | OFF | OFF | OFF |
| 02 | OFF | ON | OFF | OFF | OFF | OFF |
| 03 | ON | ON | OFF | OFF | OFF | OFF |
| 04 | OFF | OFF | ON | OFF | OFF | OFF |
| 05 | ON | OFF | ON | OFF | OFF | OFF |
| 06 | OFF | ON | ON | OFF | OFF | OFF |
| 07 | ON | ON | ON | OFF | OFF | OFF |
| 08 | OFF | OFF | OFF | ON | OFF | OFF |
| 09 | ON | OFF | OFF | ON | OFF | OFF |
| 10 | OFF | ON | OFF | ON | OFF | OFF |
| 11 | ON | ON | OFF | ON | OFF | OFF |
| 12 | OFF | OFF | ON | ON | OFF | OFF |
| 13 | ON | OFF | ON | ON | OFF | OFF |
| 14 | OFF | ON | ON | ON | OFF | OFF |
| 15 | ON | ON | ON | ON | OFF | OFF |
| 16 | OFF | OFF | OFF | OFF | ON | OFF |
| 17 | ON | OFF | OFF | OFF | ON | OFF |
| 18 | OFF | ON | OFF | OFF | ON | OFF |
| 19 | ON | ON | OFF | OFF | ON | OFF |
| 20 | OFF | OFF | ON | OFF | ON | OFF |
| 21 | ON | OFF | ON | OFF | ON | OFF |
| 22 | OFF | ON | ON | OFF | ON | OFF |
| 23 | ON | ON | ON | OFF | ON | OFF |
| 24 | OFF | OFF | OFF | ON | ON | OFF |
| 25 | ON | OFF | OFF | ON | ON | OFF |
| 26 | OFF | ON | OFF | ON | ON | OFF |
| 27 | ON | ON | OFF | ON | ON | OFF |
| 28 | OFF | OFF | ON | ON | ON | OFF |
| 29 | ON | OFF | ON | ON | ON | OFF |
| 30 | OFF | ON | ON | ON | ON | OFF |
| 31 | ON | ON | ON | ON | ON | OFF |
| 32 | OFF | OFF | OFF | OFF | OFF | ON |

Switch Setting

| Address No. | Switch Setting | | | | | |
|-------------|----------------|-----|-----|-----|-----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 |
| | 1 | 2 | 4 | 8 | 16 | 32 |
| 33 | ON | OFF | OFF | OFF | OFF | ON |
| 34 | OFF | ON | OFF | OFF | OFF | ON |
| 35 | ON | ON | OFF | OFF | OFF | ON |
| 36 | OFF | OFF | ON | OFF | OFF | ON |
| 37 | ON | OFF | ON | OFF | OFF | ON |
| 38 | OFF | ON | ON | OFF | OFF | ON |
| 39 | ON | ON | ON | OFF | OFF | ON |
| 40 | OFF | OFF | OFF | ON | OFF | ON |
| 41 | ON | OFF | OFF | ON | OFF | ON |
| 42 | OFF | ON | OFF | ON | OFF | ON |
| 43 | ON | ON | OFF | ON | OFF | ON |
| 44 | OFF | OFF | ON | ON | OFF | ON |
| 45 | ON | OFF | ON | ON | OFF | ON |
| 46 | OFF | ON | ON | ON | OFF | ON |
| 47 | ON | ON | ON | ON | OFF | ON |
| 48 | OFF | OFF | OFF | OFF | ON | ON |
| 49 | ON | OFF | OFF | OFF | ON | ON |
| 50 | OFF | ON | OFF | OFF | ON | ON |
| 51 | ON | ON | OFF | OFF | ON | ON |
| 52 | OFF | OFF | ON | OFF | ON | ON |
| 53 | ON | OFF | ON | OFF | ON | ON |
| 54 | OFF | ON | ON | OFF | ON | ON |
| 55 | ON | ON | ON | OFF | ON | ON |
| 56 | OFF | OFF | OFF | ON | ON | ON |
| 57 | ON | OFF | OFF | ON | ON | ON |
| 58 | OFF | ON | OFF | ON | ON | ON |
| 59 | ON | ON | OFF | ON | ON | ON |
| 60 | OFF | OFF | ON | ON | ON | ON |
| 61 | ON | OFF | ON | ON | ON | ON |
| 62 | OFF | ON | ON | ON | ON | ON |
| 63 | ON | ON | ON | ON | ON | ON |

| | Minimum | Typical | Maximum | Notes |
|-------------------------------------|---------|---------|---------|---|
| WORKING POWER SUPPLY | | | | |
| Voltage (V) | 9.6 | 12 | 14.4 | Use regulated DC power adaptor only |
| Current (A) | | | 2 | |
| ELECTRONIC LOCK RELAY OUTPUT | | | | |
| Switching voltage (V) | | | 12V | Use regulated DC power adaptor only |
| Switching Current (A) | | | 2 | |
| Auxiliary relay output | | | | |
| SWITCH AUX. INPUT | | | | |
| VIH (V) | | TBD | | |
| VIL (V) | | TBD | | |
| Pull-up resistance (Ω) | | 4.7k | | The input ports are pulled up with 4.7k resistors |
| WIEGAND INPUT | | | | |
| Voltage (V) | 10.8 | 12 | 13.5 | |
| Current (mA) | | | 500 | |
| ZK ELECTRONIC LOCK | | | | |
| Voltage (V) | 10.8 | 12 | 13.2 | |
| Current (mA) | | | 500 | |

| | |
|-----------------------------|---|
| Communication | RS485, TCP/IP |
| Baud Rate for RS485 | 9600-15200 |
| Power Supply | 12V DC, 2A |
| Card Holders Capacity | 30,000 |
| Log Events Capacity | 100,000 |
| LED Indicator | Indicator for communication, power, status and prox card |
| Environment | 32-113 °F (0-45°C) |
| Operating Humidity | 20% to 80% |
| Number of doors controlled | Four Door (four door one way and two door two way) |
| Number of readers supported | 4 |
| Types of readers supported | 26-bits WIEGAND, others upon request |
| Number of Inputs | 12 (4 Exit Device, 4 Door Status, 4 AUX) |
| Number of Outputs | 8 (4- Form C relay for lock and 4- Form C relay for Aux output) |
| Weight | 7.8lbs (3.55kg) |
| Enclosure | Stainless Steel |
| Mounting | Wall Mount |
| Dimensions (Bundle Only) | 15.7in. x 3.56in. x 13.0in 400mm(L) x 90.5mm(W) x 330mm(H) |
| Dimensions (Board Only) | 8.0in. x 4.17in. 203.2mm(L) x 106mm(W) |
| CPU | 32 bit 400MHz |
| RAM | 32MB |
| Flash | 128MB |

Certified



