-General Wiring Info-
· Relay position refers to strike wiring location.
· Reader position refers to keypad wiring location.
· Input position refers to door sensor, also called **DPS**, wiring location.

-On 1502-
· **Reader1**, **Relay1**, and **input1** will be associated to **Door 1**.
· **Reader2**, **Relay2**, and **input2** will be associated to **Door 2**.

-On MR52-
· **Reader1**, **Relay1**, and **Input1** will be associated to **odd numbered doors** past 1 (E.g. 3, 5, 7).
· **Reader2**, **Relay2**, and **Input2** will be associated to **even numbered doors** past 2 (E.g. 4, 6, 8).

-General Recommendations-

- Use 22/6 shielded cable for keypad/readers within 250 ft. Use 18 for readers within 500ft.

- Use 18/4 stranded for Fail-Secure locks and 18/6 for Fail-Safe locks within 100 feet. Check strike manual for max gauge and wire-run length.

- Power supply jumper is pre-set to 12VDC. Power down before changing, if needed.

- If powering with 24V, will need to change power jumper from PT to 12V, on each panel.

- Keypads must be installed no higher than 54 inches (to the top row of keys) above the floor if side reach is available. Otherwise, 48 inches is required.

- Contact sensors are to be installed 6-8 inches from the hinges on the top of the door/header.

- Multiple batteries can be used in series for longer backup durations.

- Strikes should be set to 12v input only, unless supplied by seperate power source.

- **First Input** is for a door sensor.

- **Next Input** is for a Request to Exit (REX) device. And so on.

- **Both these Inputs need to be defined online, in prospective door's settings.**

-DIP Switch Settings for MR52-
(this should already be done)

· The 1502 will always have an address assignment of "0".

· MR52 address assignment starts at "1".

· The 1502 does not need to be assigned an address by DIP switches: they should all be OFF.

· Baud rate of 9600 is set by DIP switch S6. All MR52s should have S6 switched to ON.

· If a switch is not mentioned, the switch is set to OFF.

- **Address 1: S1, S6**
- **Address 2: S2, S6**
- **Address 3: S1, S2, S6**
- **Address 4: S3, S6**
- **Address 5: S1, S3, S6**
- **Address 6: S2, S3, S6**
- **Address 7: S1, S2, S3, S6**
- **Address 8: S4, S6**
- **Address 9: S1, S4, S6**
- **Address 10: S2, S4, S6**

D8

B1 FlexIO FlexIO B1
B2 B2
JP1 JP2 JP3 JP4 JP5 JP6 JP7 JP8 (2 1)
BR BR
OUT1 OUT2 OUT3 OUT4 OUT5 OUT6 OUT7 OUT8 (+ −)

Strike1 Strike2 Strike3 Strike4 Strike5 Strike6

MR52 (top)

TB1 — A B 1 2 3 4 5 6 7 8 TMP PFL R1 R2

IN1, IN2, IN3, IN4, IN5, IN6, IN7, IN8 — Inputs 1 - 8
TMP, TMP GND, AC FLT, AC GND — Tamper/Fault
TB5

MR52
- Address: 2
- Doors: 5,6
- DIPs Set To On: S2,S6

TB8 — Reader 1 / Reader 2
VO, LED, BZR, D1/CLK, D0/DAT, GND
Keypad 5, Keypad 6, white

DIP Switches — S1 — 8 7 6 5 4 3 2 1

TB10 — RLY 1–6
NC1 COM1 NO1 NC2 COM2 NO2 NC3 COM3 NO3 NC4 COM4 NO4 NC5 COM5 NO5 NC6 COM6 NO6

12V PT J2 — K1 K2 K3 K4 K5 K6

TB6 — TR+ TR- R+ R- GND
VIN (+12v) GND — Power
RS-485

1502

3V BR/CR2330, RESET S2, BT1

Power
VIN 12V, GND, TMP, TMP GND, AC FLT, AC FLT GND — TB1

1502
DIP Switches 1 2 3 4 — S1

TB8
Reader 1: GND, DAT/D0, CLK/D1, BZR, LED, VO — Keypad 1, white
Reader 2: GND, DAT/D0, CLK/D1, BZR, LED, VO — Keypad 2, white

- Address: 0
- Doors: 1,2
- DIPs Set To On: none

Relays 1-4
NO1 COM1 NC1 NO2 COM2 NC2 NO3 COM3 NC3 NO4 COM4 NC4
TB11

TB2
TXD, RXD, RTS, CTS, GND, TR+, TR-, GND
IN 1, IN 2, IN 3, IN 4, IN 5, IN 6, IN 7, IN 8 — Inputs
TB7

MR52 (bottom)

TB1 — A B 1 2 3 4 5 6 7 8 TMP PFL R1 R2

IN1, IN2, IN3, IN4, IN5, IN6, IN7, IN8 — Inputs 1 - 8
TMP, TMP GND, AC FLT, AC GND — Tamper/Fault
TB5

MR52
- Address: 1
- Doors: 3,4
- DIPs Set To On: S1,S6

TB8 — Reader 1 / Reader 2
VO, LED, BZR, D1/CLK, D0/DAT, GND
Keypad 3, Keypad 4, white

DIP Switches — S1 — 8 7 6 5 4 3 2 1

TB10 — RLY 1–6
NC1 COM1 NO1 NC2 COM2 NO2 NC3 COM3 NO3 NC4 COM4 NO4 NC5 COM5 NO5 NC6 COM6 NO6

12V PT J2 — K1 K2 K3 K4 K5 K6

TB6 — TR+ TR- R+ R- GND
VIN (+12v) GND — Power
RS-485