EP.L3800 WIRING GUIDE

Version: 1.05

Last Updated: 08-01-2019

Notes:

L3800 is the serial enabled lift controller.

L3800 will ship with a HIO board in a package which can cater up to 8 floors.
It can connect up to 8 HIO boards with expansion board which can cater maximum 128 floors
So, totally L3800 can cater 136 floors.

L3800 can connect up to 4 readers (Reader Type: HID Integrated Keypad, Rosslare Integrated Keypad, Standard Wiegand, Suprema Biometric devices).

It also support multi bit custom Wiegand format (Wiegand Group) for each reader.
1 Key Switch can be connected to L3800.

See http://www.entrypass.net/ for updates, revisions, and download the latest installation manual

Platform1 version 3 support 6 and 10 digits format.
For existing site, P1 will detect its card database to determine 6 or 10 digits; For new site, user can change the digits as long as the card database is empty.

Please refer to separate EntryPass Platform1 User Manual for detail operation help. The Official EntryPass Platform1 User Manual can be downloaded from our website under “Download” section.

BEFORE YOU BEGIN

Technical Support

If you cannot find the answer to your question in this manual or in the Help files, we recommend you contact your system installer. Your installer is familiar with your system configuration and should be able to answer any of your questions.

Should you need additional information, please call our Technical Support Help desk, Monday to Friday 9:00 AM to 6:00 PM (GMT +8:00)

Method Details
Phone + 60 (3) - 8068 1929
Fax + 60 (3) - 8068 1922
Internet www.entrypass.net
Email support@entrypass.net

Considerations Prior to Installation

Preparing Your EntryPass Controllers

EntryPass controller contains numerous delicate electronic circuits and components which can become damaged as a result of electrostatic discharge (ESD). Thus, prior to installation, please follow the instruction below:

- Observe precautions while handling the circuit board assembly by using proper grounding straps and handling precautions at all
- Visually ensure no onboard parts is broken, damage or contains burn mark
- Do not turn on the power supply until you completed all wiring and external add on devices installations

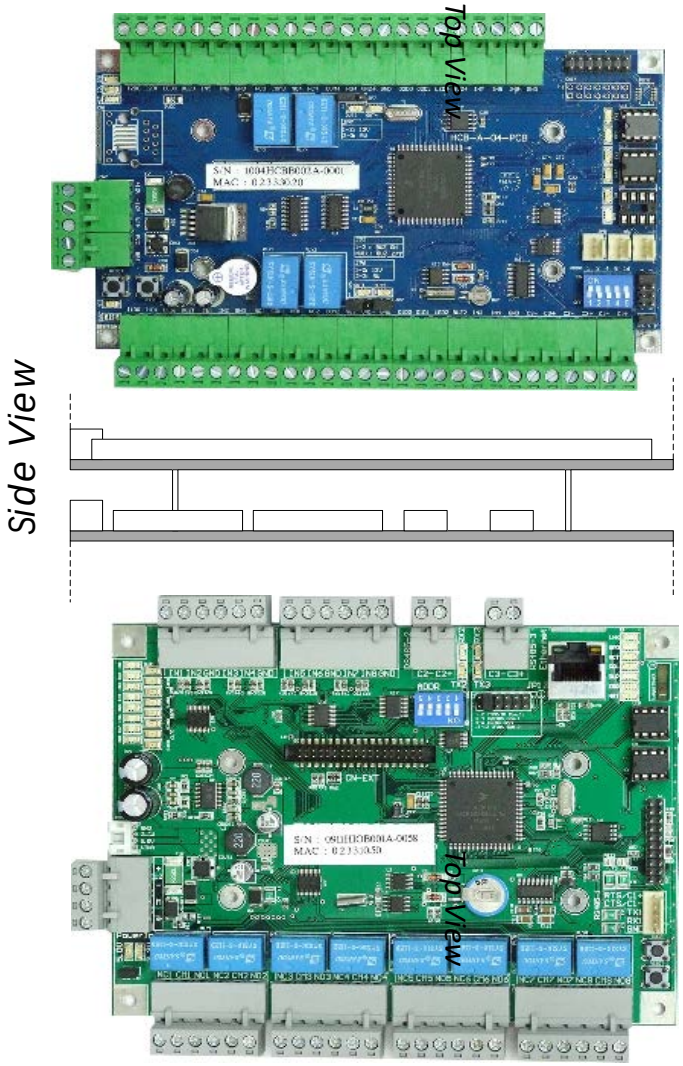
CAUTION
Battery may explode if mistreated. Do not recharge, disassemble or dispose of in fire. To prevent a risk of explosion do not pry the battery out with a metal or conductive tool.

Instances of Non-Warranty

- Damage due to natural disaster, accident or human cause.
- Damage as a result of violating the conditions recommended in the user manual
- Damage due to improper installation
- Damage due to use of uncertified components
- Damage due to use exceeding the permitted parameters

L3800 Description

L3800 is a combination of a HCB controller and HIO controller
HCB controller will automatically poll the on-board HIO controller after factory default

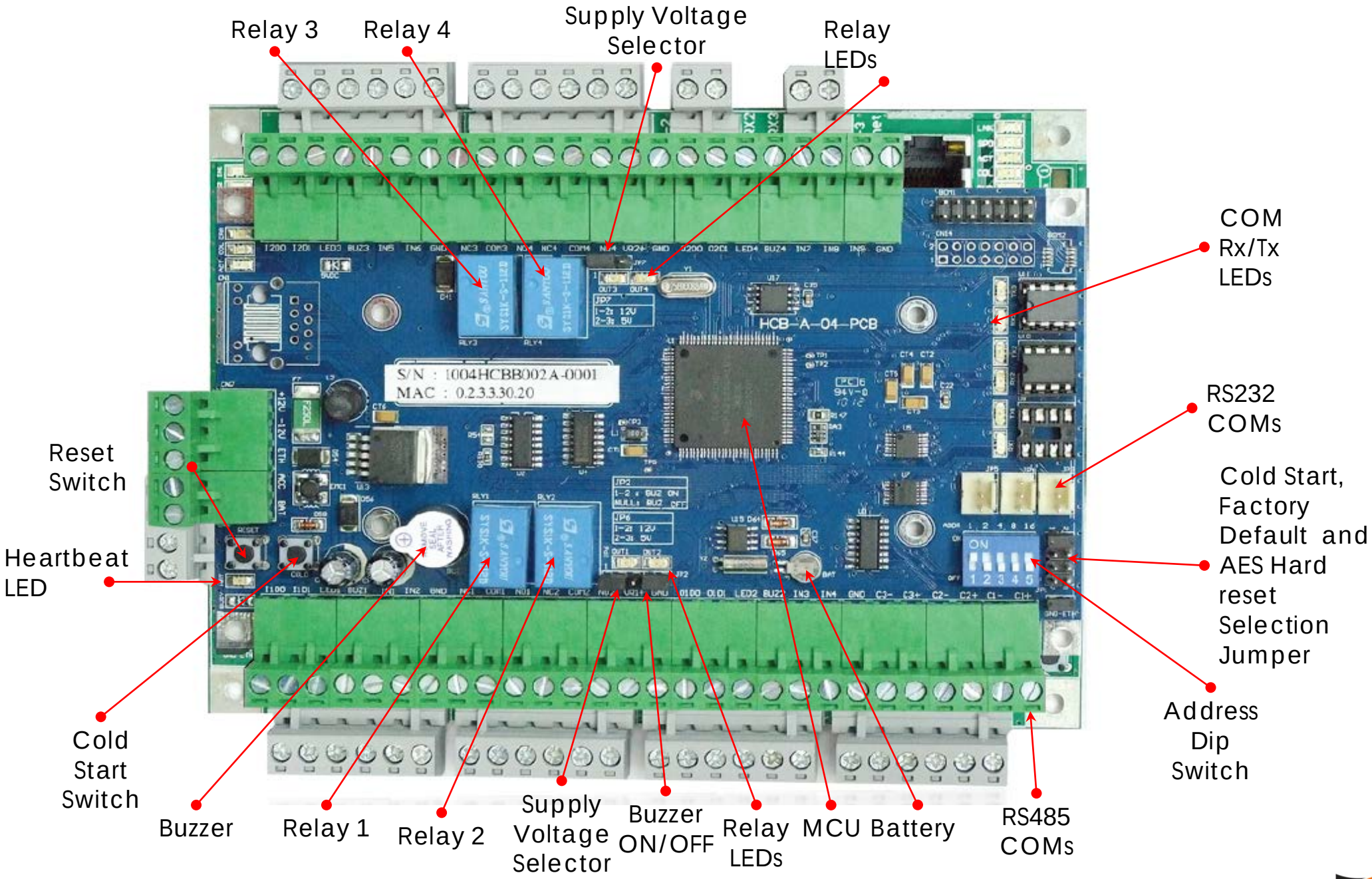


HCB Controller
(On Top)

HIO Controller
Unit Address: 01
(On Bottom)

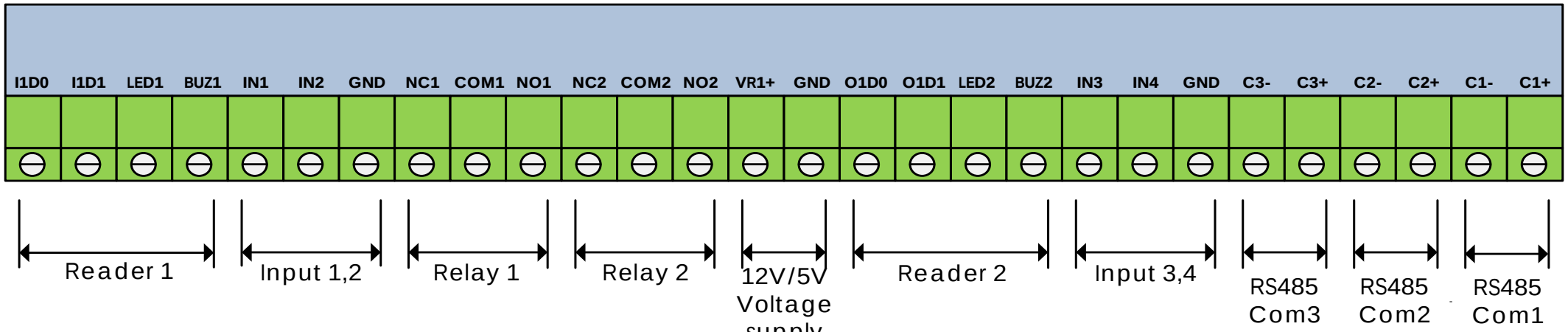
Make Sure the Jumper Cap is placed on JP1 (1-2) after factory default
If Jumper Cap is placed on JP1 (5-6), HCB controller will stop polling HIO controller

Components Description



Legend Description

Lower Connector

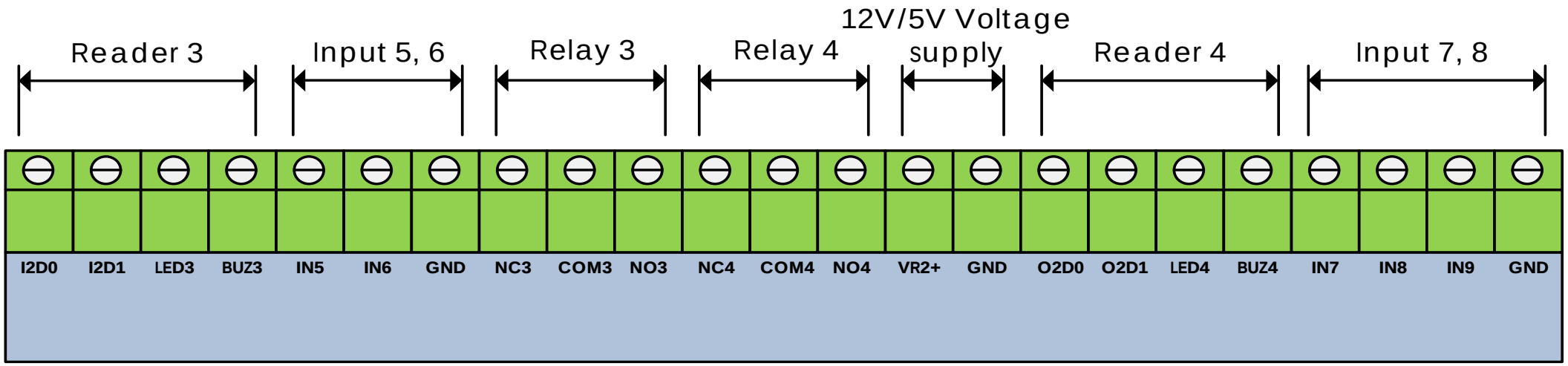


I1D0	- Reader 1 Data 0 Input
I1D1	- Reader 1 Data 1 Input
LED1	- Reader 1 LED
BUZ1	- Reader 1 Buzzer
IN1	- Input 1 (Default: Door Sensor)
IN2	- Input 2 (Default: Exit Push Button)
GND	- Inputs Ground
NC1	- Relay 1 Normally Close Connection
COM1	- Relay 1 Common Input
NO1	- Relay 1 Normally On Connection
NC2	- Relay 2 Normally Close Connection
COM2	- Relay 2 Common Input
NO2	- Relay 2 Normally ON Connection
VR1+ (12V/5V)	- Supply Voltage Positive Connection
GND	- Supply Voltage Ground Connection

O1D0	- Reader 2 Data 0 Input
O1D1	- Reader 2 Data 1 Input
LED2	- Reader 2 LED
BUZ2	- Reader 2 Buzzer
IN3	- Input 3
IN4	- Input 4
GND	- Inputs Ground
C3-	- RS485 COM3 (-) Connection
C3+	- RS485 COM3 (+) Connection
C2-	- RS485 COM2 (-) Connection
C2+	- RS485 COM2 (+) Connection
C1-	- RS485 COM1 (-) Connection
C1+	- RS485 COM1 (+) Connection

For VR1+ to supply 12V, please make sure JP6 is at 1-2 pins
For VR1+ to supply 5V, please make sure JP6 is at 2-3 pins

Legend Description



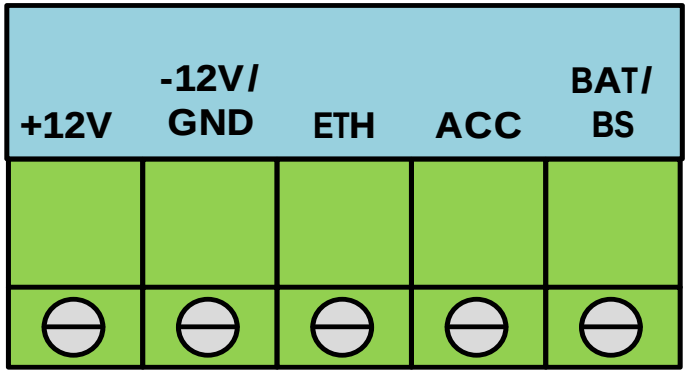
Upper Connector

I2D0	-	Reader 3 Data 0 Input
I2D1	-	Reader 3 Data 1 Input
LED3	-	Reader 3 LED
BUZ3	-	Reader 3 Buzzer
IN5	-	Input 5
IN6	-	Input 6
NC3	-	Relay 3 Normally Close Connection
COM3	-	Relay 3 Common Input
NO3	-	Relay 3 Normally ON Connection
NC4	-	Relay 4 Normally Close Connection
COM4	-	Relay 4 Common Input
NO4	-	Relay 4 Normally ON Connection

VR2+ (12V/5V)	-	Supply Voltage Positive Connection
GND	-	Supply Voltage Negative/Ground Connection
O2D0	-	Reader 4 Data 0 Input
O2D1	-	Reader 4 Data 1 Input
LED4	-	Reader 4 LED
BUZ4	-	Reader 4 Buzzer
IN7	-	Input 7
IN8	-	Input 8
IN9	-	Reserved
GND	-	Inputs Ground

For VR2+ to supply 12V, please make sure JP6 is at 1-2 pins
For VR2+ to supply 5V, please make sure JP6 is at 2-3 pins

Legend Description

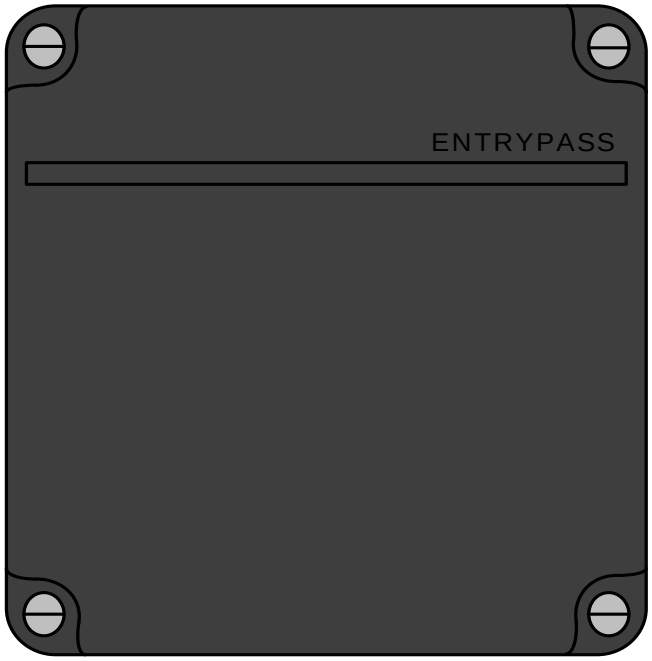


Power Supply Connector

+12V	-	Power Supply Positive 12V DC
-12V/GND	-	Power Supply Ground
ETH	-	Power Supply Earthing
ACC	-	AC Fail Monitoring
BAT/BS	-	Backup Battery Monitoring

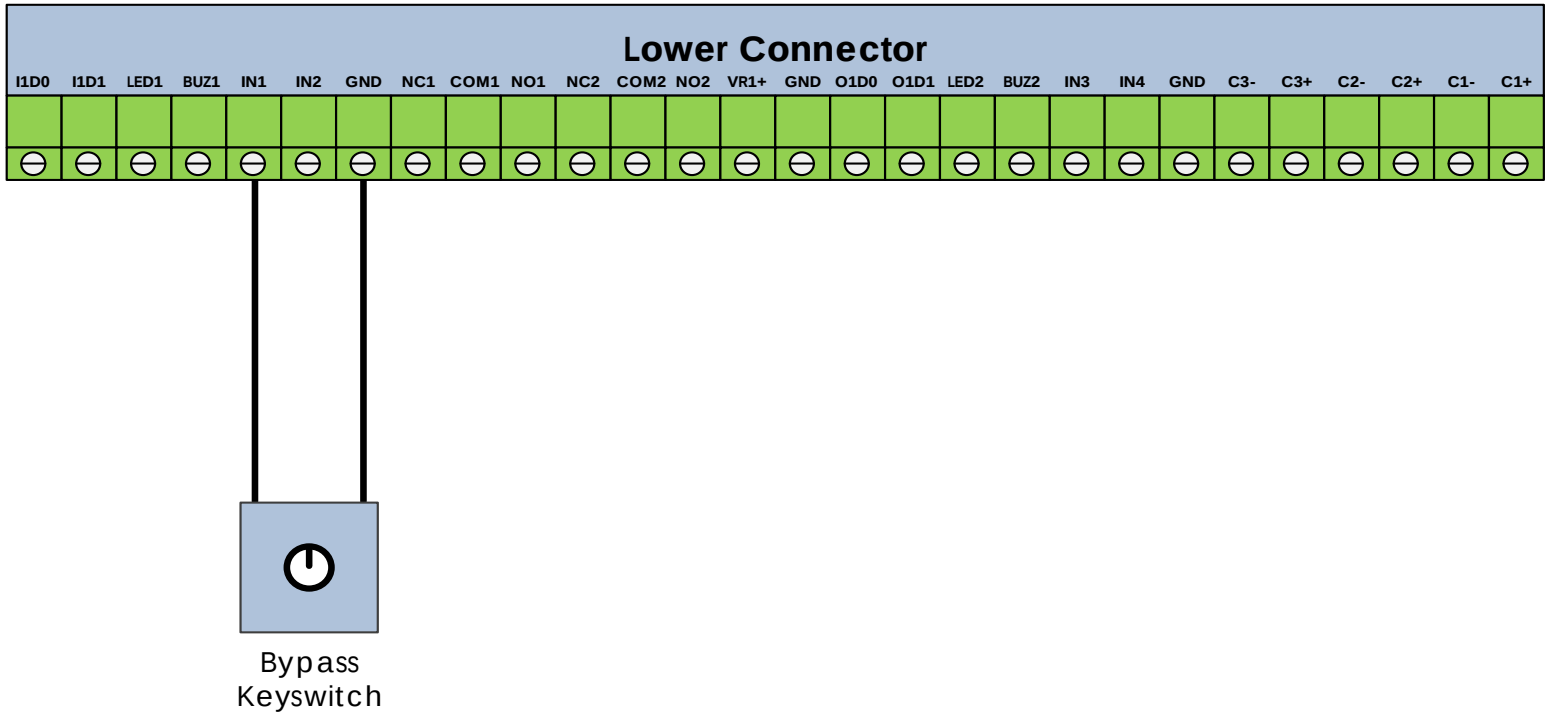
BAT/BS (Backup Battery Monitoring) point will monitor the backup battery voltage which will supply power to the board when AC power is cut off
The minimum voltage for cutoff while using backup battery is 10V

Power Supply Unit Specification



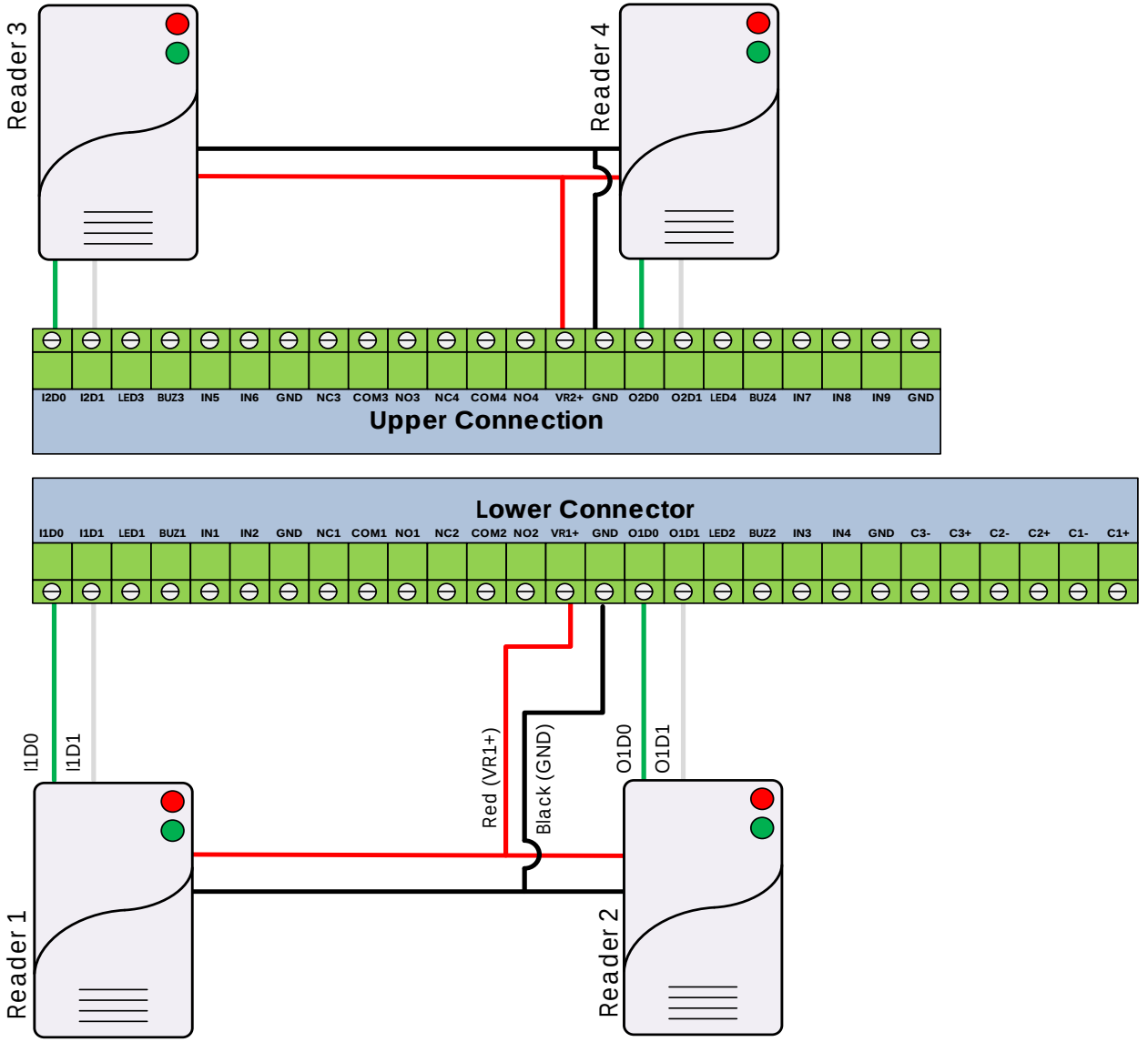
Power Supply Unit Specification:
- Switching Power Supply
- 12V DC
- 3 Amp (Minimum)

Connecting the Keyswitch

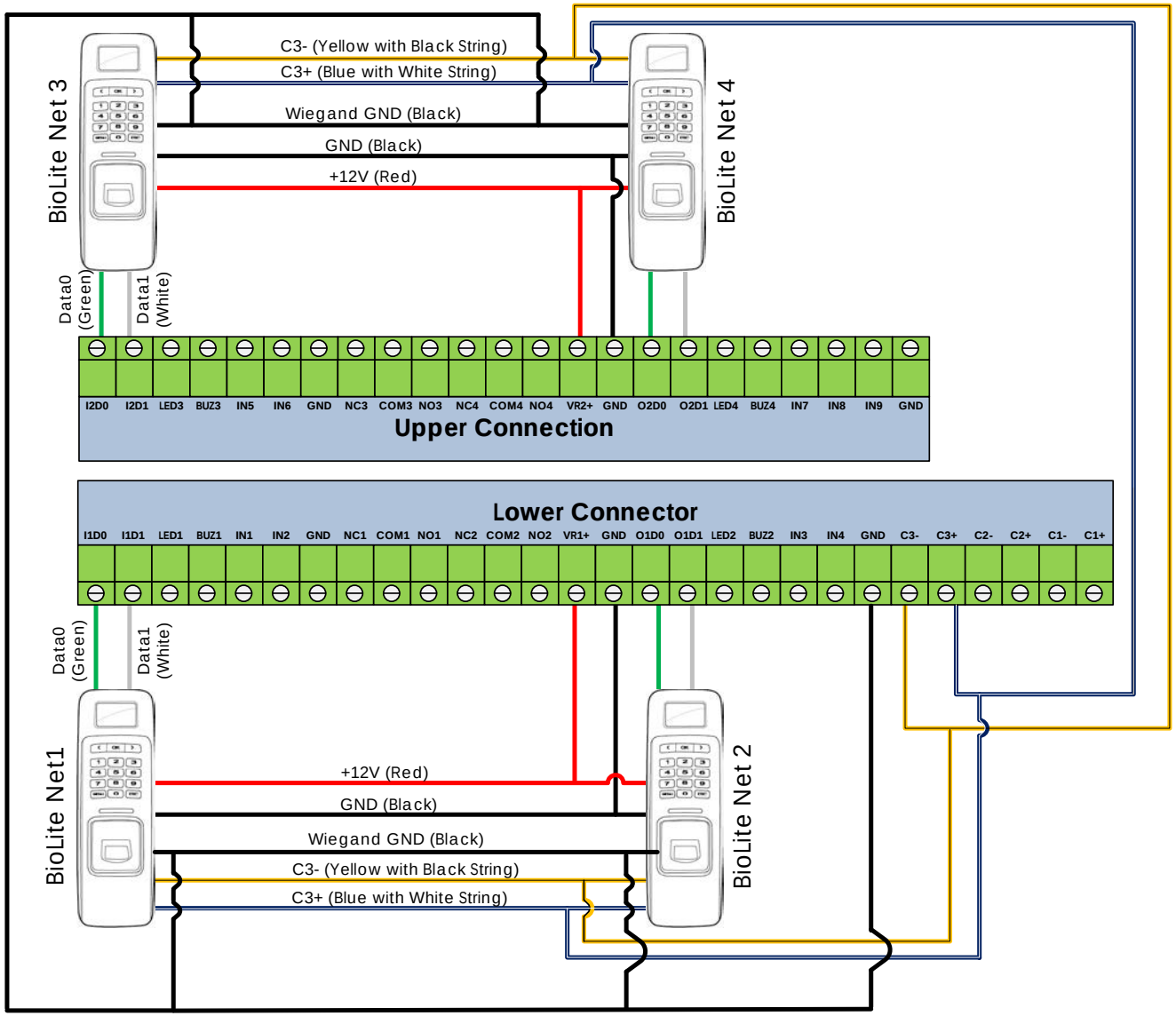


Keyswitch can only be connected to IN1 and GND

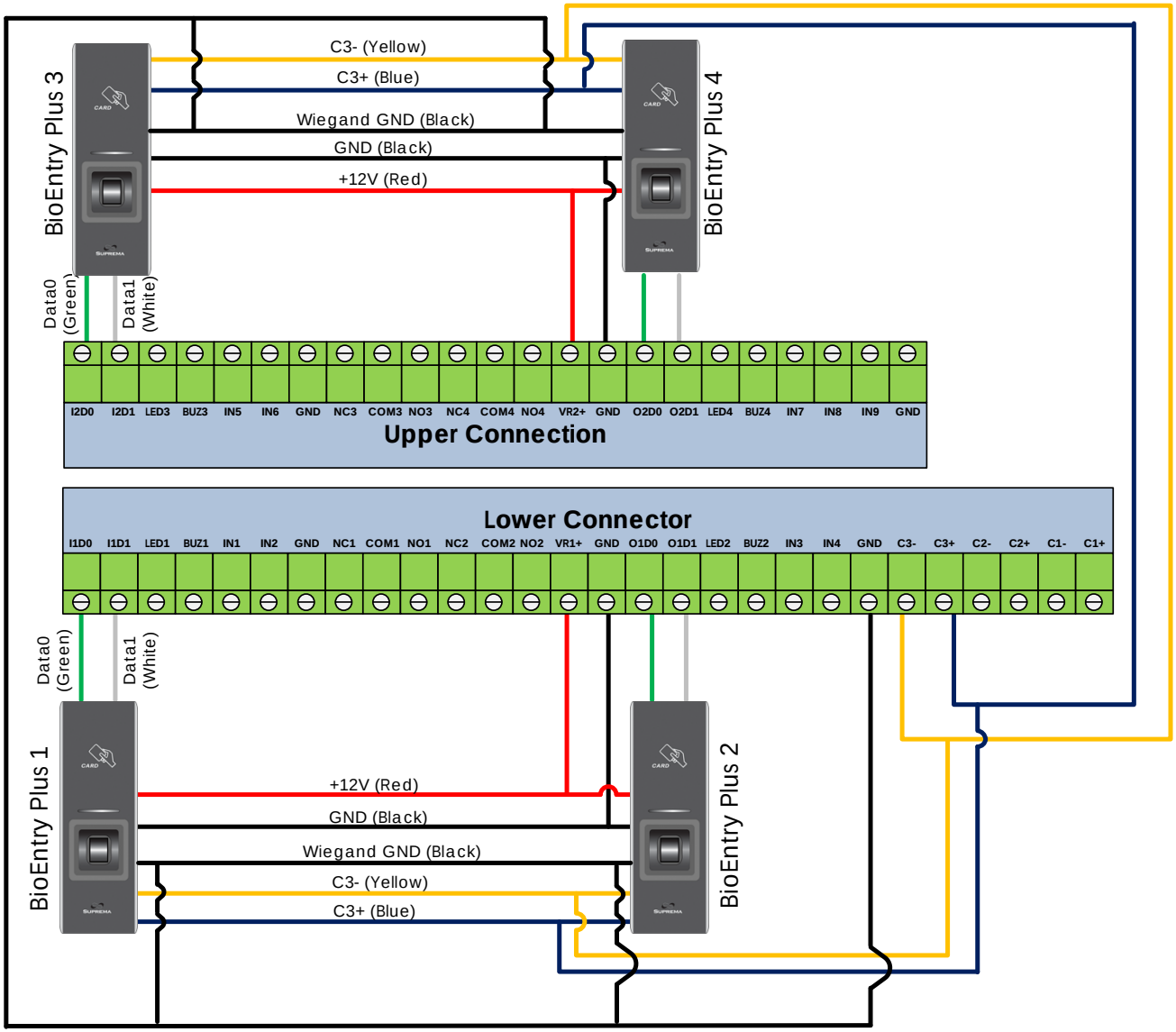
Connecting the Reader – 3rd Party Reader



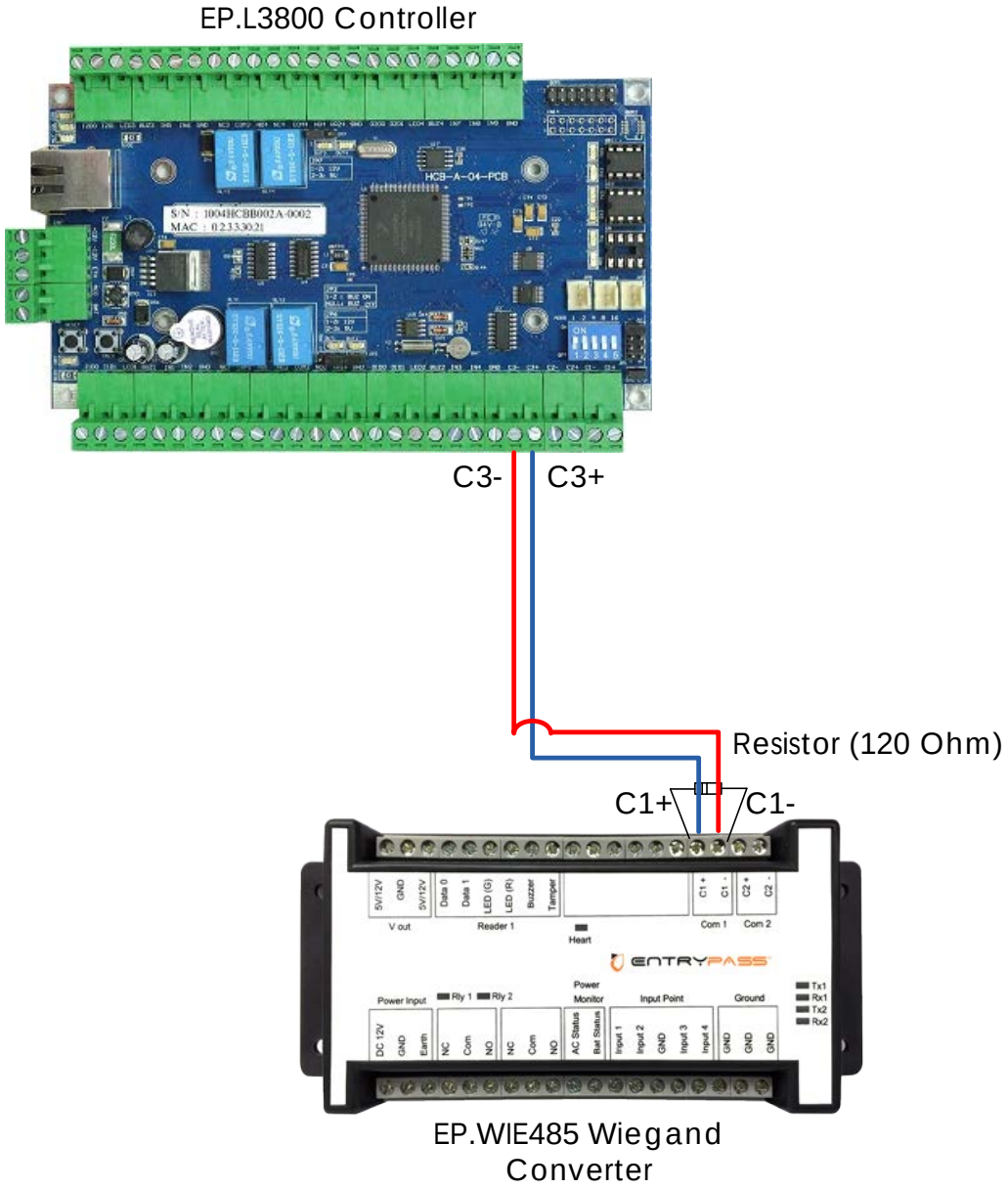
Connecting the Reader – Suprema Biometric Devices (BioLite Net)



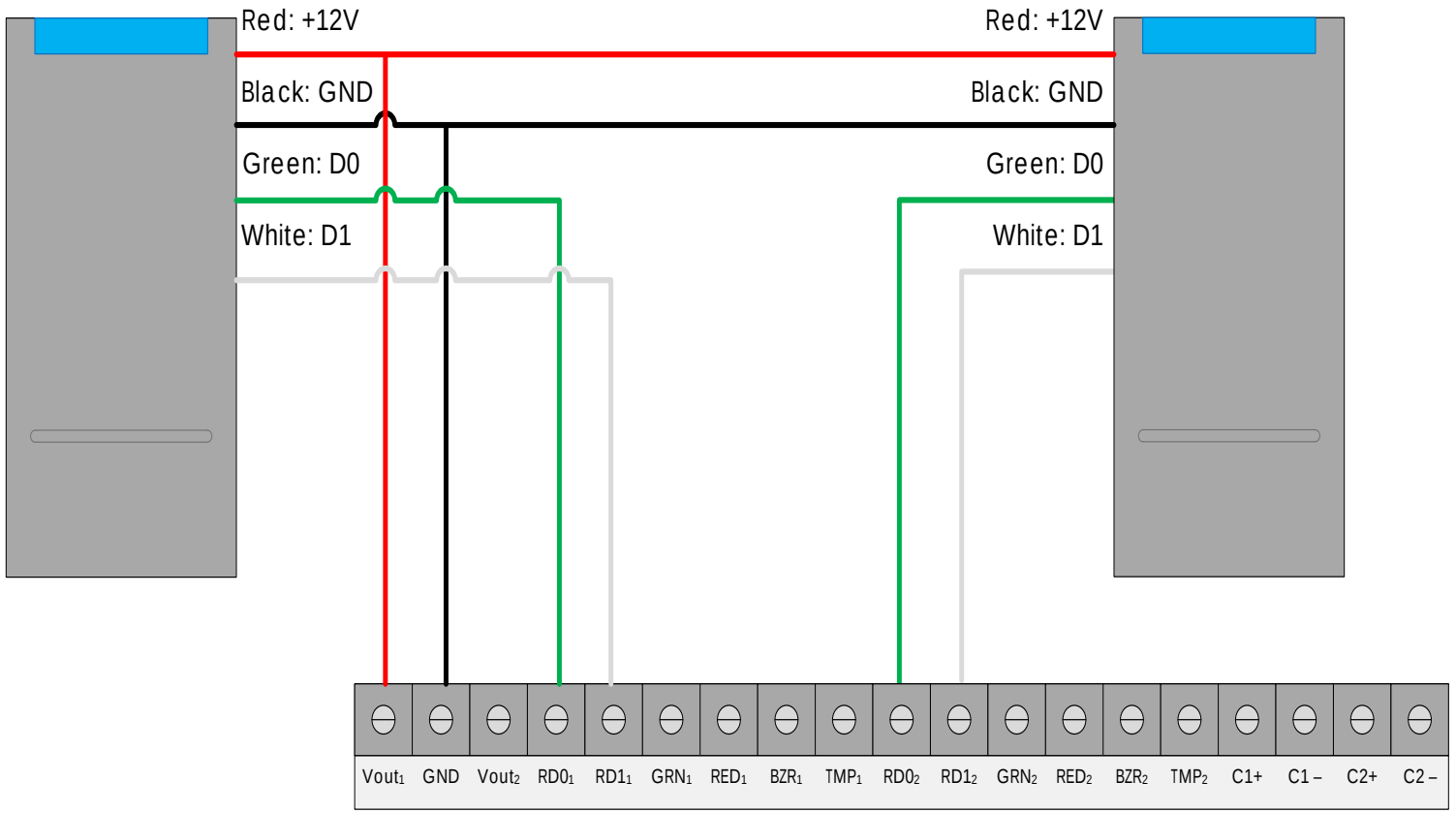
Connecting the Reader – Suprema Biometric Devices (BioEntry Plus)



Connecting the EP.WIE485

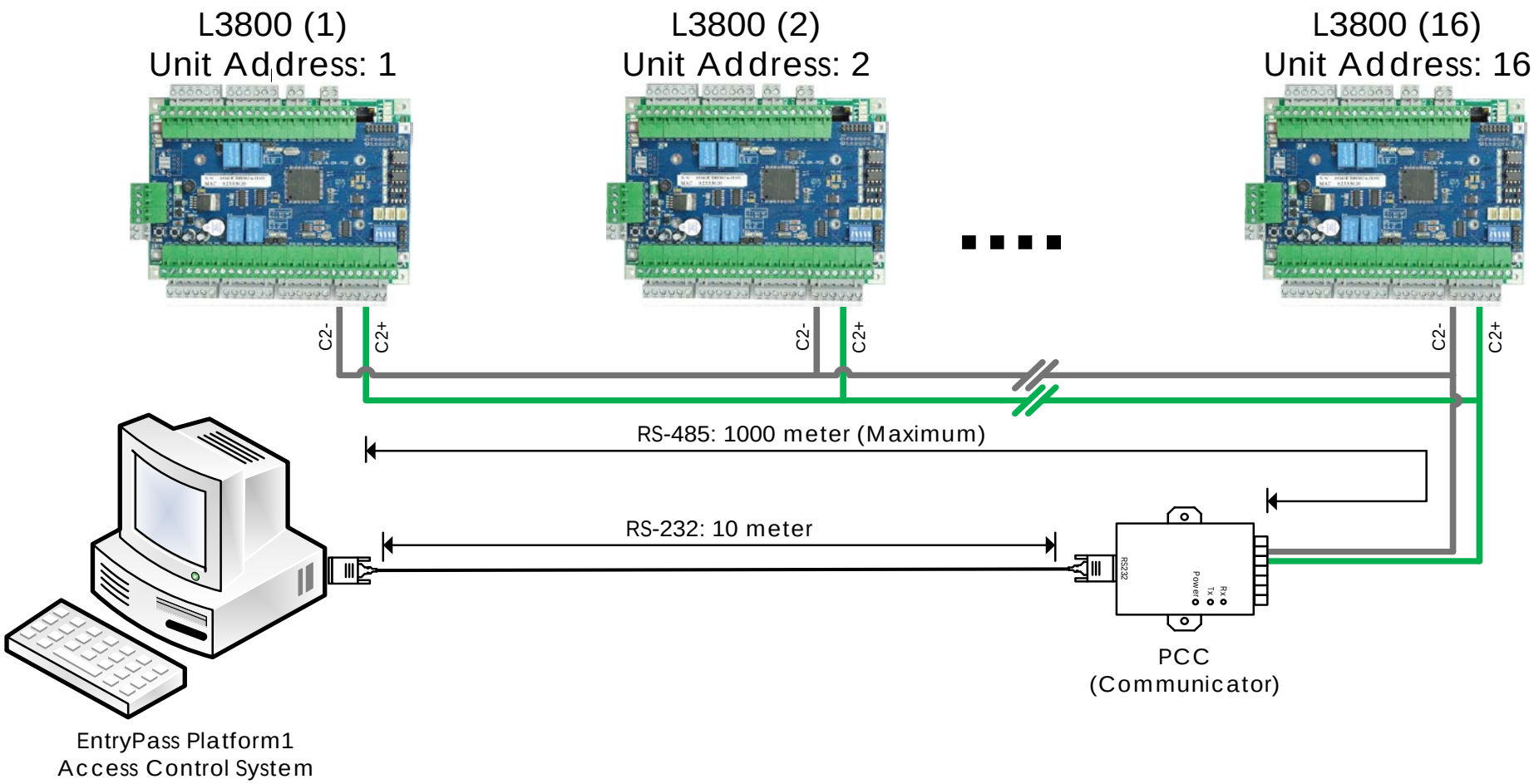


Connecting the Reader to EP.WIE.485



EP.WIE.485

Connecting to the PC via RS485 Mode



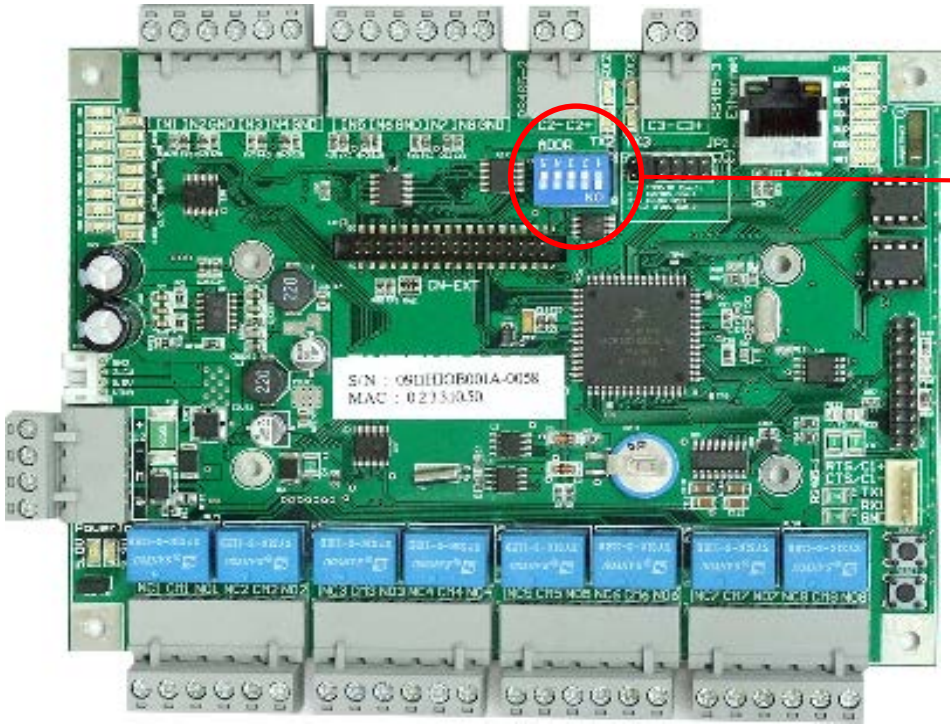
Serial connection (RS485) only applicable for maximum 16 sets L3800
The serial address format in Platform1 is 255.255.255.X where X is unit address

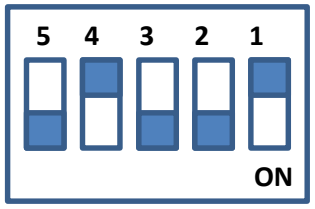
Connecting to the PC via Serial: Dip Switch Addressing Table

	Switch 1 (1)	Switch 2 (2)	Switch 3 (4)	Switch 4 (8)	Switch 5 (16)
Address 01	**ON**	OFF	OFF	OFF	OFF
Address 02	OFF	**ON**	OFF	OFF	OFF
Address 03	**ON**	**ON**	OFF	OFF	OFF
Address 04	OFF	OFF	**ON**	OFF	OFF
Address 05	**ON**	OFF	**ON**	OFF	OFF
Address 06	OFF	**ON**	**ON**	OFF	OFF
Address 07	**ON**	**ON**	**ON**	OFF	OFF
Address 08	OFF	OFF	OFF	**ON**	OFF
Address 09	**ON**	OFF	OFF	**ON**	OFF
Address 10	OFF	**ON**	OFF	**ON**	OFF
Address 11	**ON**	**ON**	OFF	**ON**	OFF
Address 12	OFF	OFF	**ON**	**ON**	OFF
Address 13	**ON**	OFF	**ON**	**ON**	OFF
Address 14	OFF	**ON**	**ON**	**ON**	OFF
Address 15	**ON**	**ON**	**ON**	**ON**	OFF
Address 16	OFF	OFF	OFF	OFF	**ON**

Each switch is represent by an address, the sum of the switch address will be the controller address
The number in ( ) is the address of each individual switch of the dip switch
Example: To obtain Address 11, 1 + 2 + 8 = 11, So just switch on switch 1, 2, 4

HIO Board Unit Address Dip Switch





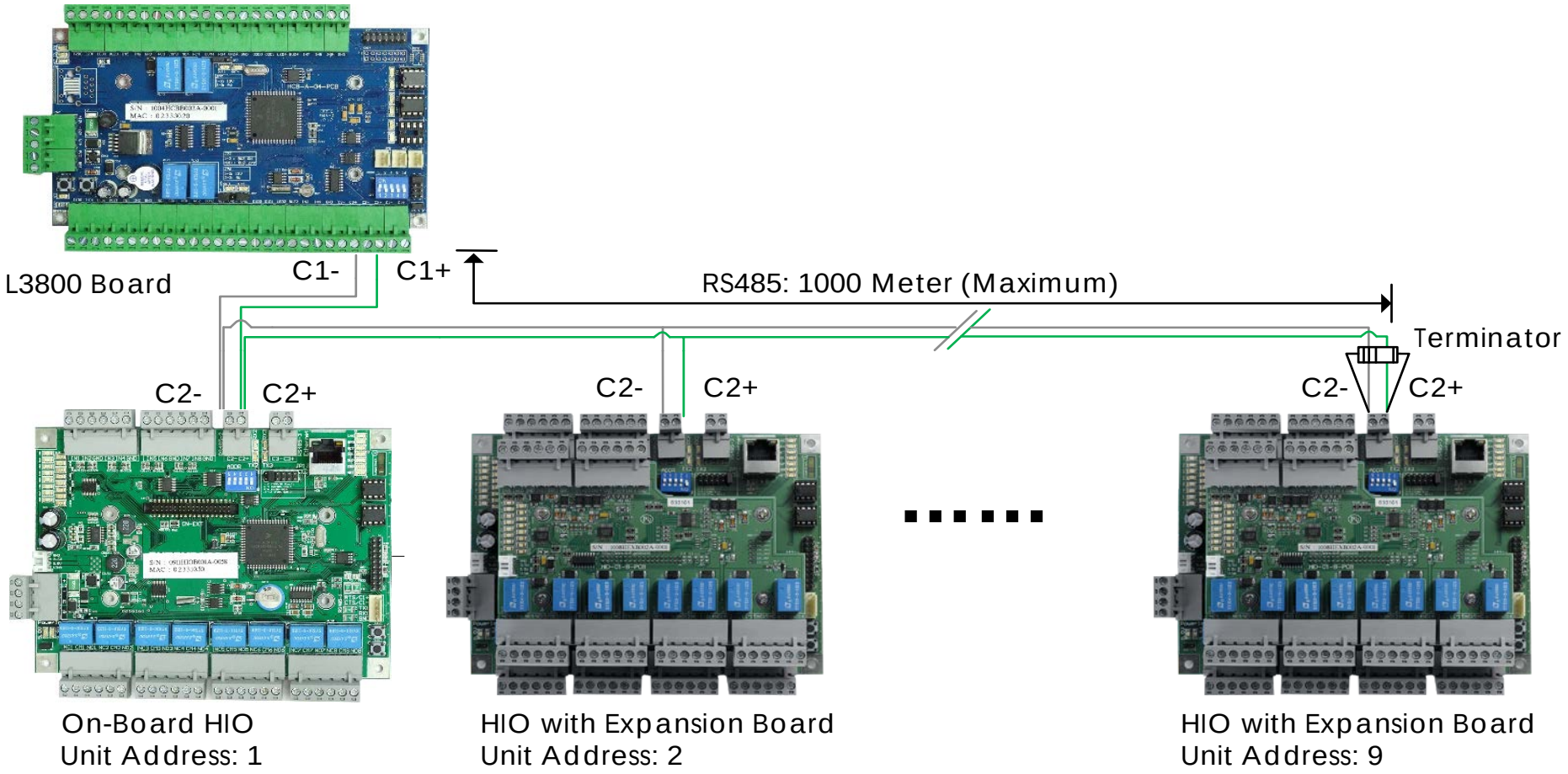
Unit Address Dip Switch

The unit address for On-board HIO is 1
Another 8 HIO Boards with expansion can be connected to L3800 and each HIO board unit address must be unique

HIO Board: Dip Switch Addressing Table

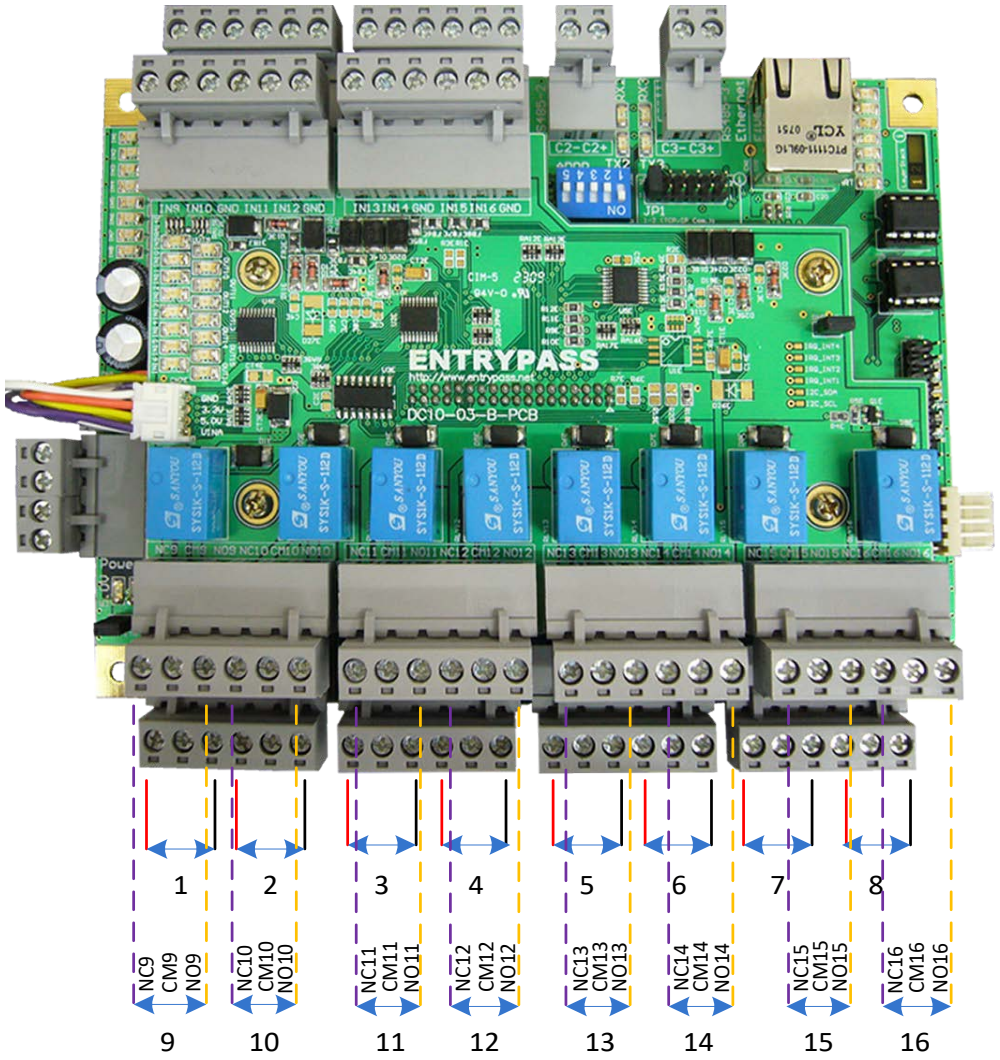
	Platform1 Label	Unit Address	Dip Switch				
			SW1	SW2	SW3	SW4	SW5
On-Board	On-Board	**1**	**ON**	OFF	OFF	OFF	OFF
HIO 1	Sub Lift 1	**2**	OFF	**ON**	OFF	OFF	OFF
HIO 2	Sub Lift 2	**3**	**ON**	**ON**	OFF	OFF	OFF
HIO 3	Sub Lift 3	**4**	OFF	OFF	**ON**	OFF	OFF
HIO 4	Sub Lift 4	**5**	**ON**	OFF	**ON**	OFF	OFF
HIO 5	Sub Lift 5	**6**	OFF	**ON**	**ON**	OFF	OFF
HIO 6	Sub Lift 6	**7**	**ON**	**ON**	**ON**	OFF	OFF
HIO 7	Sub Lift 7	**8**	OFF	OFF	OFF	**ON**	OFF
HIO 8	Sub Lift 8	**9**	**ON**	OFF	OFF	**ON**	OFF

Connecting L3800 Board with HIO Board via RS485



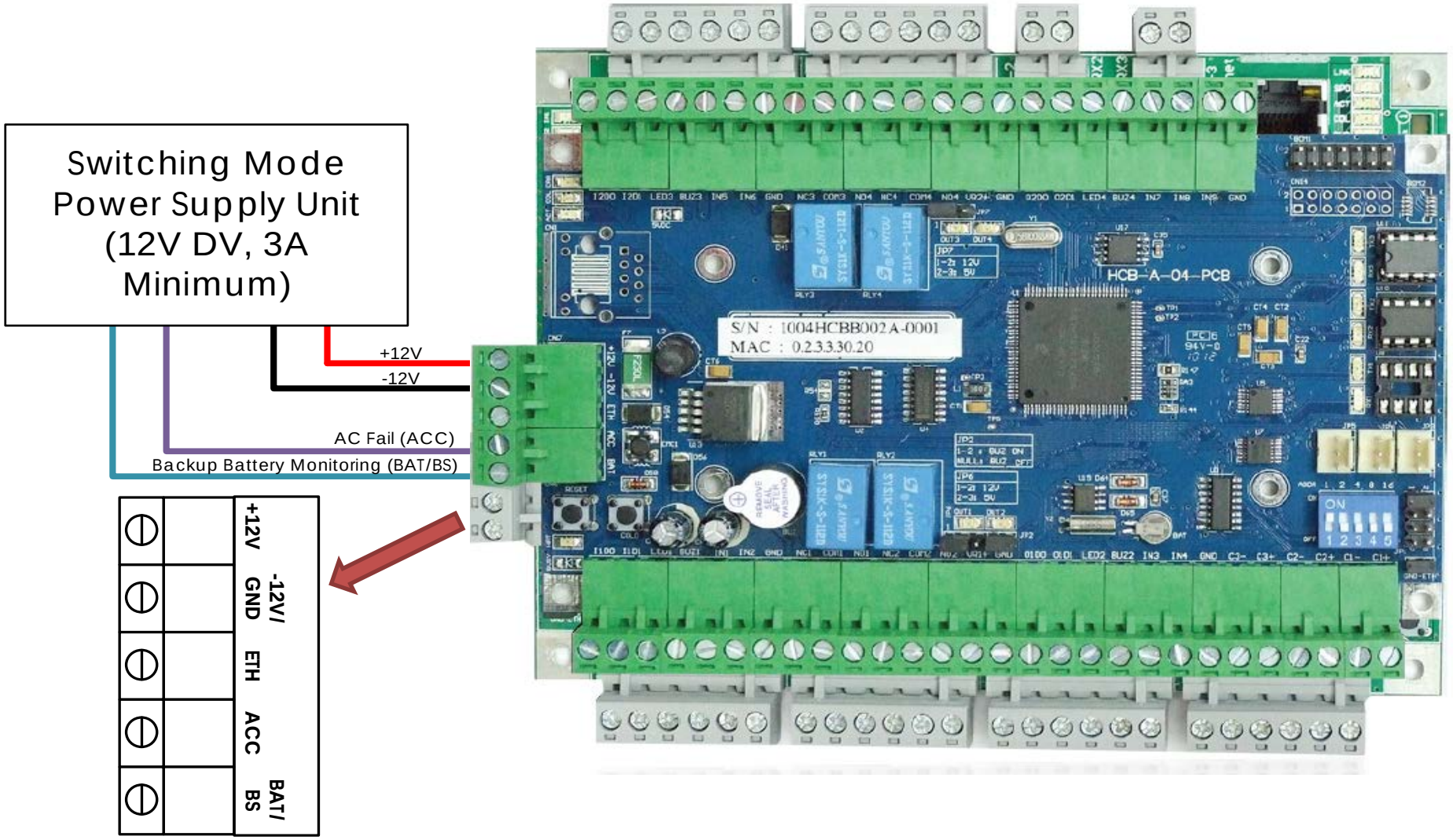
The On-Board HIO is shipped in package with L3800
Is advisable to connect a resistor (100 Ohm) as terminator on last HIO
Other HIO boards must loop from ON-board HIO C2+/C2-

HIO Board Output Connector

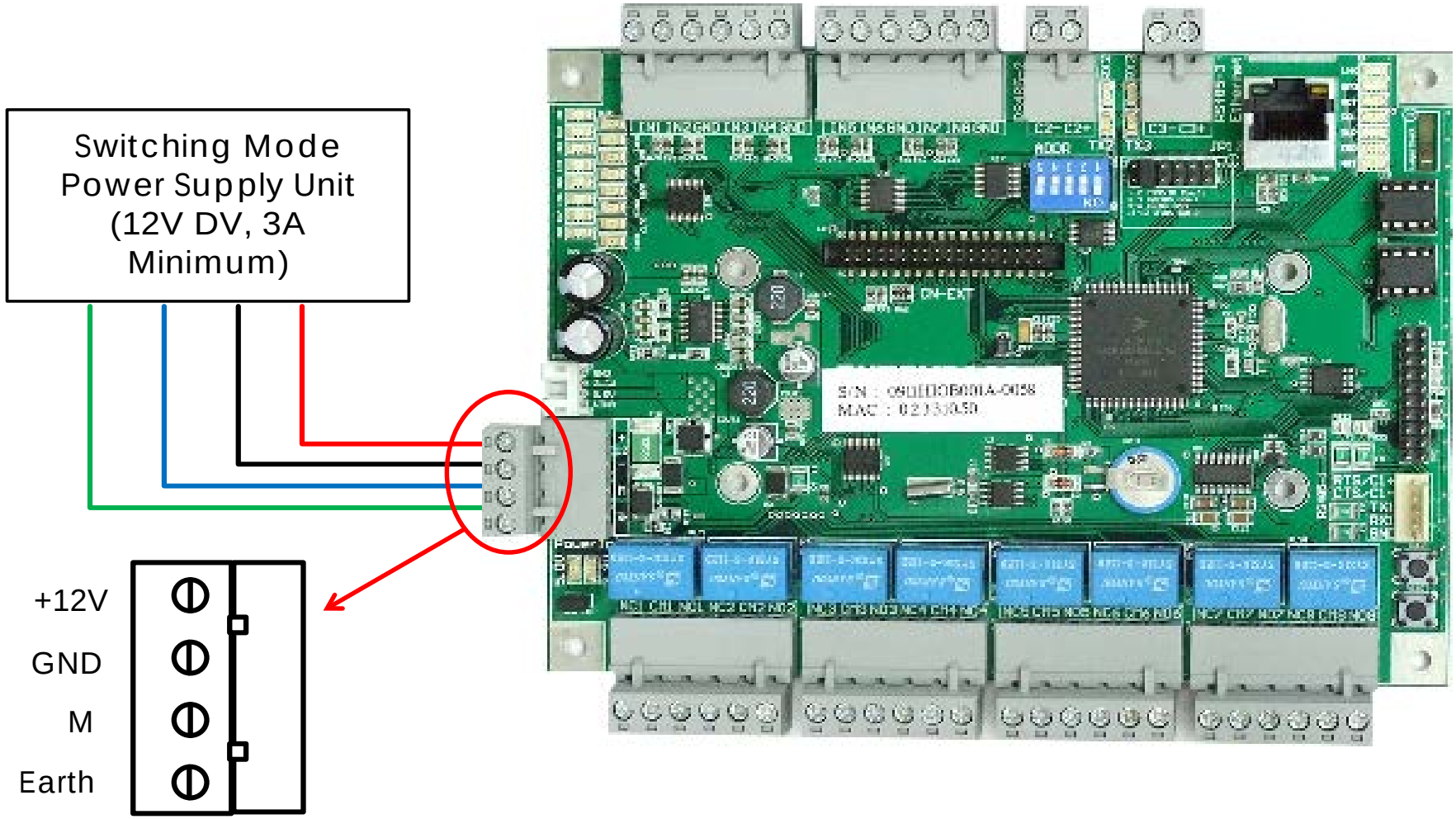


The HIO Output connection is connected to the lift controller (Button Location)
Thus, 1 HIO with Expansion Board can control up to 16 floors' buttons

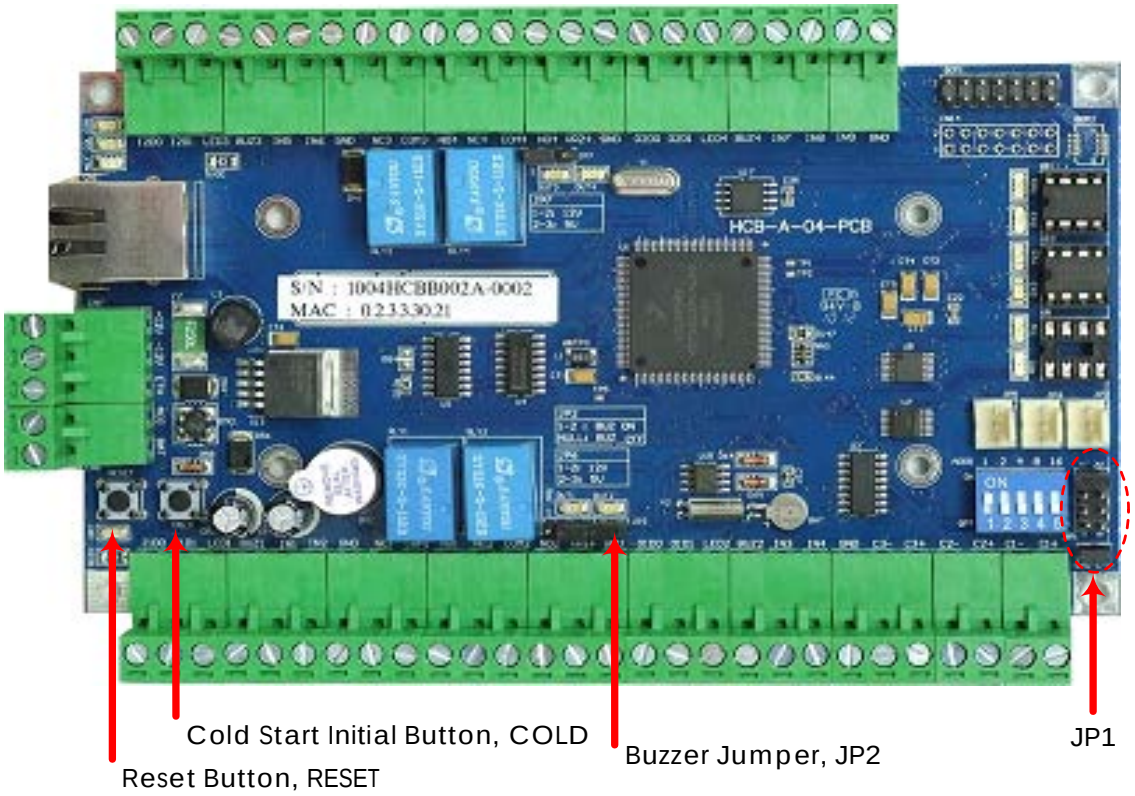
Connecting the L3800 to Power Supply Unit



Connecting the HIO to Power Supply Unit



Performing Cold Start

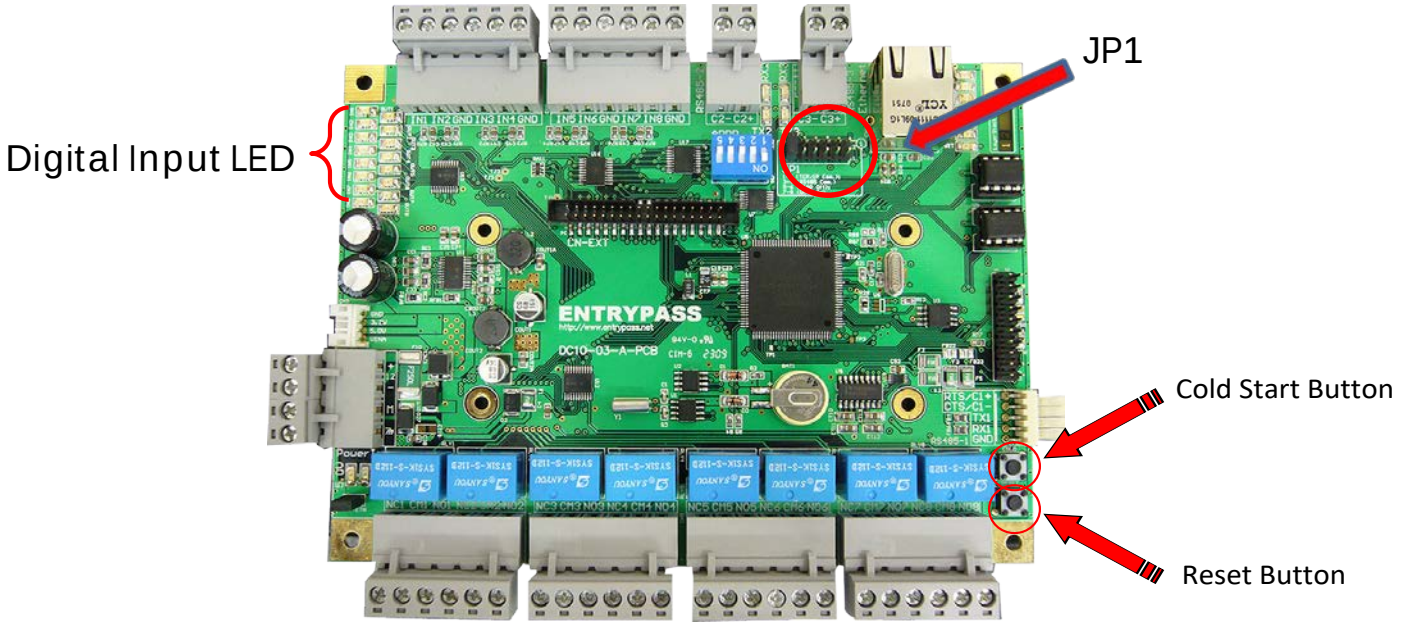


Steps of performing cold start:

1. Please ensure that the jumper is inserted on JP1 1-2
2. Press and Hold COLD switch
3. Press RESET Switch and Release RESET switch
4. Release COLD switches when a long beeping sound heard

Advisable to perform cold start for the first time you turn on the power
The buzzer will only beep if jumper is placed on (JP2) 1-2

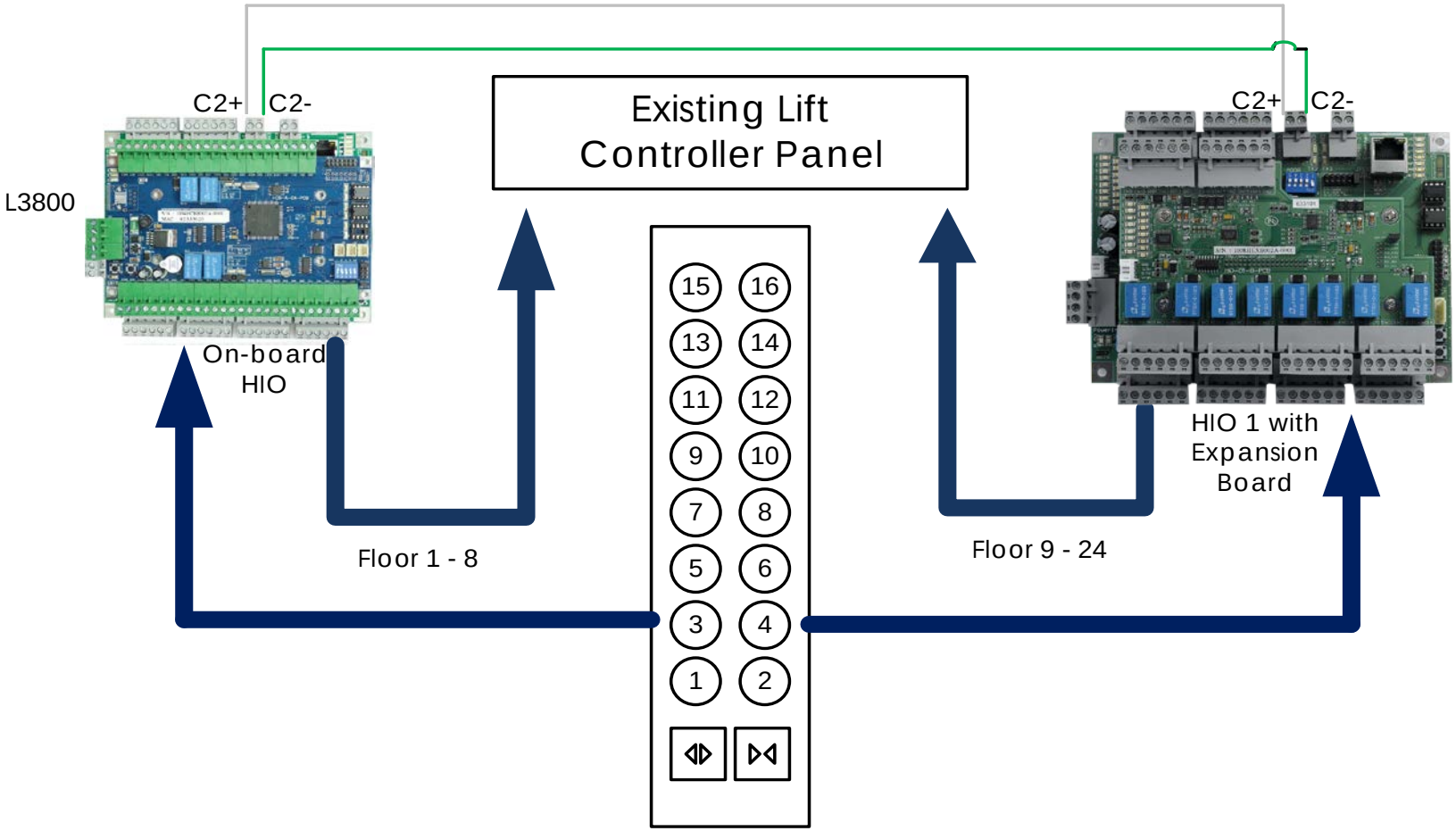
Performing Cold Start



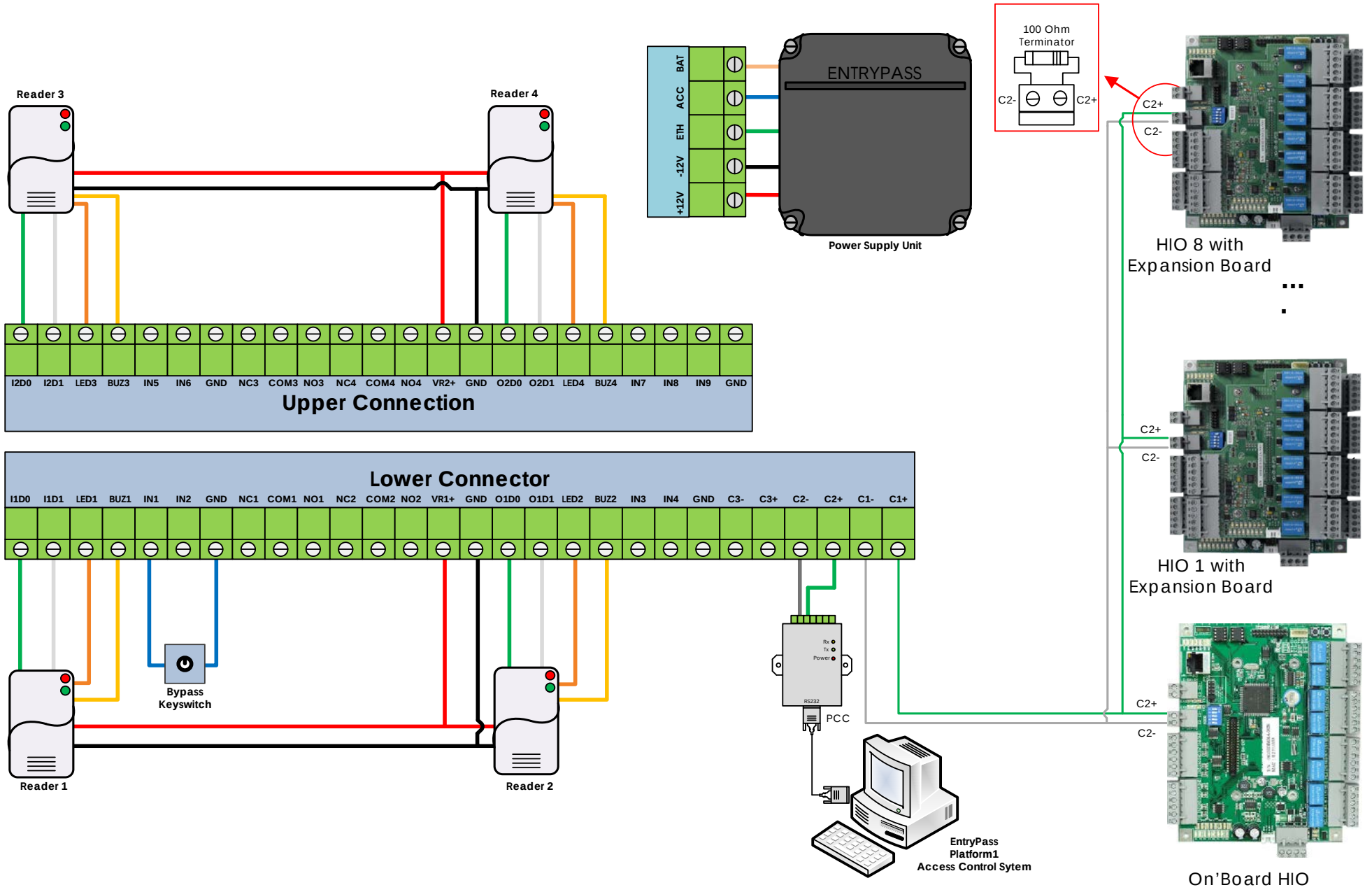
Steps of performing cold start:

1. Please ensure that the jumper is inserted on JP1 1-2
2. Press and Hold COLD switch
3. Press RESET Switch and Release RESET switch
4. Release COLD switches when all the inputs LED will turn to 'Yellow'
5. When the process is complete, all the inputs LED will turn OFF

Lift Application System Overview



Complete Overview



Cabling Information

Communication	Data Signal	Max Distance	Description
PC to PCC	RS232	10m (30 ft)	22 AWG, 2 Pairs, Shielded
PCC to L3800	RS485	1000m (3000 ft)	22 AWG, 2 Pairs, Shielded & Twisted Pair
L3800 to HIO	RS485	1000m (3000 ft)	22 AWG, 2 Pairs, Shielded & Twisted Pair
L3800 to Reader	Wiegand	10m (30ft)	22 AWG, 2 Pairs, Shielded & Twisted Pair
L3800 to Keyswitch	Contact	30m (100 ft)	22 AWG, 1 Pair
L3800 to WIE.485	RS485	1000m (3000 ft)	22 AWG, 2 Pairs, Shielded & Twisted Pair
WIE.485 to Reader	Wiegand	30m (100 ft)	22 AWG, 2 Pairs, Shielded & Twisted Pair