MAP1 Controller

INSTALLATION MANUAL

April 2020

FC CE
ICES-003

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Introduction

Cansec Systems' MAP1 (Modular Access Panel) incorporates a mini-computer called the Panel Logic Module (PLM) utilizing Ethernet connectivity and an Input Output Module (IOM) which incorporates a 32-bit processor in this new architecture. This allows for a fast, high capacity access control system with a lower cost per reader/door system implementation. The MAP1 architecture has the ability to flash applications and firmware updates into the control panel using the Ethernet connection.

The standard MAP1 is factory provisioned for two doors in **First Access** mode. Door provisioning and mode (**First Access** – *application based* or **Webster** – *web based or* **Cloud Lock** – *cloud based*) can be changed with a provisioning file provided by Cansec upon purchase. Only one mode can be run at a time and data cannot be shared between modes. Input and Output points are available when not used on a provisioned door. ***Note***: *I/O points may be available in future release of Webster and Cloud Lock.*

The MAP1 allows for 100,000 individual cardholders, using raw Wiegand data up to 64 bits per card ID. This allows the use of many proprietary Wiegand cards without the need for data conversion. The readers can be Cansec's CanProx One Proximity Readers (AWID or HID card technology) or one of many other popular Wiegand readers.

Key Features

- 255 Access Schedules
- On board Triggers independent of host connection
- Supports 100,000 individual user card IDs
- Supports any Wiegand card (64 bit max.)
- Supports up to 4 readers/door combinations
- Supports Door Contact and RTE connection per reader/door
- Supports Input points (with or without supervision) and Output points
- Ease of future software/firmware upgrades
- First Access mode or Webster mode or Cloud Lock mode

Note: Must have l*atest approved PLM and IOM firmware version for compatibility to this document.*

Specifications

See power supply notes in Appendix section for more information.

Controller Power Requirement

Maximum Current (including 4 proximity readers with 100 mA each) 1A

Temperature Range

Operating..... 0˚C to 60˚C

Relative Humidity

Operating ..... 20% to 80%

Auto Resettable Fuses

MAP1 Main 12V DC.....1 A
Each Reader Pair .....1 A

Output Relays

All Relays (8 per panel) Form 'C' .....SPDT 6 A @ 30 VDC

Inputs per Provisioned Doors (Supervised or Non-Supervised)

Door Contact (2 per MAP1) .....Requires normally closed contact
(On/Off door switch)
Exit Button (2 per MAP1) .....Requires normally open contact
(Momentary push button switch)

Reader Cable

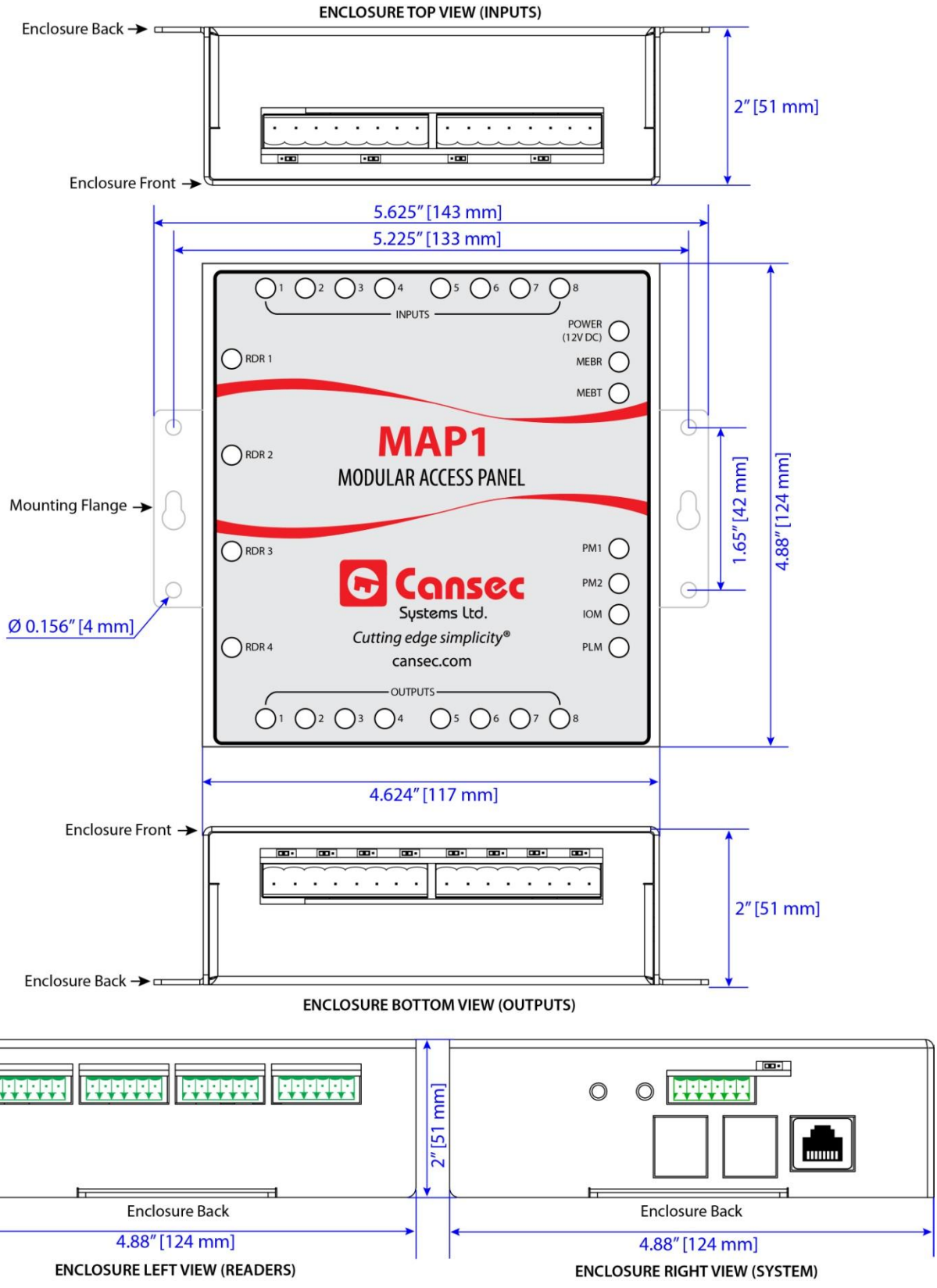
Wiegand Readers..... 6 conductor (twisted pair not required)
22 AWG, overall shield
152 m [500 ft] max. Length

NOTE: *Consult reader specifications as 18-gauge wire may be required for power*

Dimensions & Weight

MAP1 Enclosure .....4.6" (W) x 4.9" (H) x 2.0" (D)
[11.7 cm (W) x 12.4 cm (H) x 5.1 cm D)]

Enclosure plus Controller Weight..... 500 g [17.6 oz]



Note: Specifications subject to change without notice.

NOTE: Tech Support will only be provided where product installation guidelines have been followed.

Specification Notes

CAUTION: EMERGENCY LOCKDOWN

Emergency lockdown functions must operate totally independent of the access control system and must **not** rely on operation of card readers, access control panels, communications networks, communications devices or host software. Cansec accepts no responsibility for direct or consequential damages resulting from the failure of emergency lockdown functions which are dependant in any way on the operation of card readers, access control panels, communications networks, communications devices or host software.

Wiring Note:

Improper Wiegand cable (new or originally installed cable or missing **required** shield connections) may result in high frequency noise on the data lines creating misreads. This Wiegand misread issue is more evident on longer Wiegand reader cables. The reader cable may have to be replaced with the correct type of Wiegand reader cable to improve system reliability.

MAP1 and H1000 Connector Compatibility:

H1000 connectors can be used on the MAP1 controller. The wiring will have to be adjusted to accommodate for the reversed connector insertion.

MAP1 Controller Layout

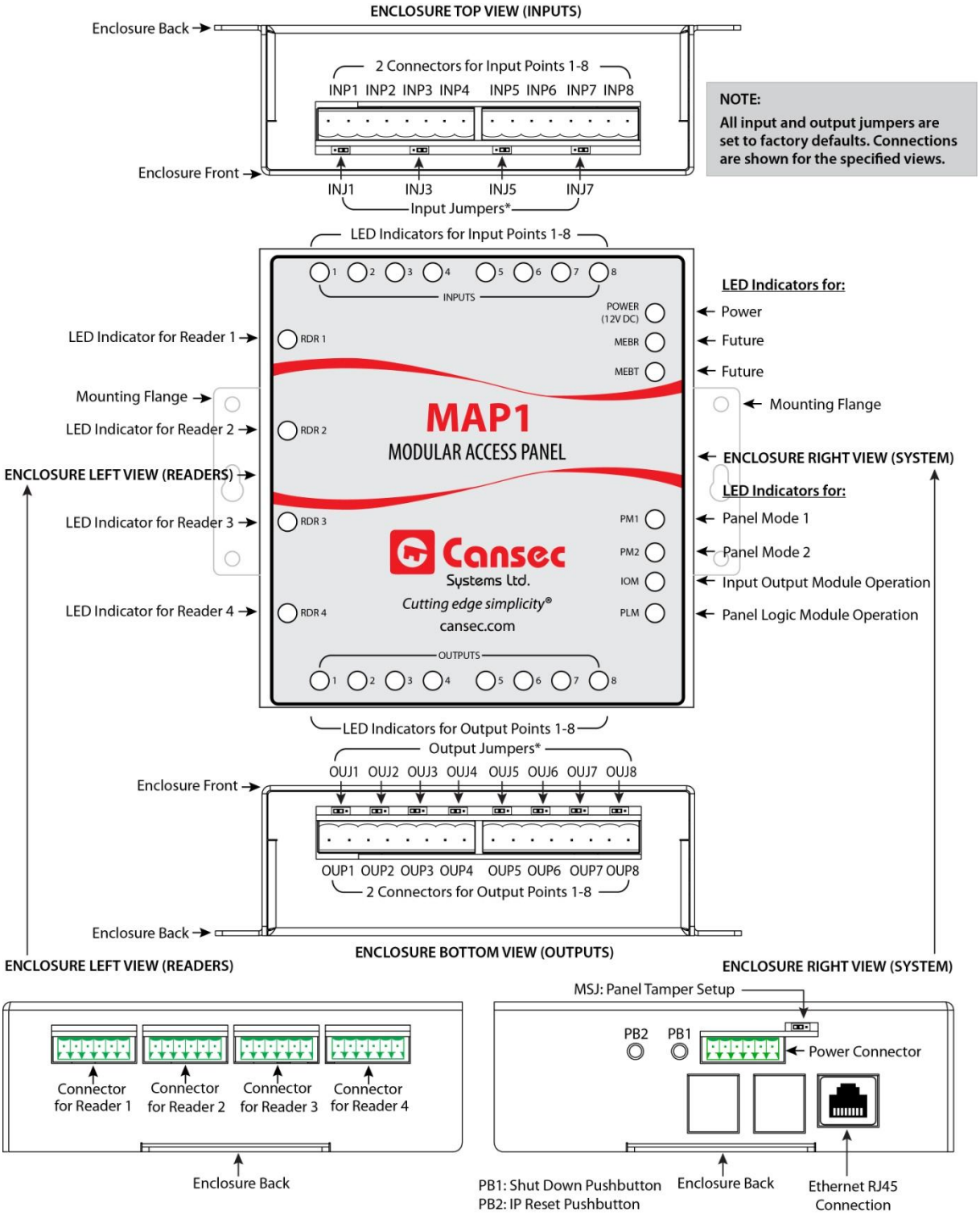


Figure 1

Important Installation Notes

Controller Provisioning Options:

The MAP1 controller is factory provisioned with default 2-door configuration running in **First Access** mode (*First Access software is needed – database stored on computer*). The **Webster** mode (*Web based – database stored on panel and no software is needed*) and the **Cloud Lock** mode (*Cloud based – database stored on cloud server*) can be enabled with an authorized provisioning file obtained from Cansec upon purchase. The MAP1 can run only in one mode at a time and can also be provisioned in one of two options below.

1. **Door controller with or without auxiliary input and output points**
   a. 2–door configuration: 2 lock relays, 2 multi-function relays, 2 REX/RTE, 2 door contacts/DPS, 4 input points and 4 output points.

   OR

   b. 4–door configuration: 4 lock relays, 4 multi-function relays, 4 REX/RTE, 4 door contacts/DPS, 0 input points and 0 output points.

2. **Input and Output controller only. 8 input and 8 output points available. No door combination i.e. no lock relay and no multi-function relay.**

Electrical Information:

1. The MAP1 utilizes a mini-computer and **must be operated using a battery backed up power supply** to protect the hardware, system files and data files from corruption due to power outage. *See Note 1 in Appendix section.*

2. **CAUTION**: Do not unplug the MAP1 Power connector if the system is in operation as data corruption may occur on the MAP1 mini-computer. Please follow the instructions from the section "**PB1 - Shut Down**".

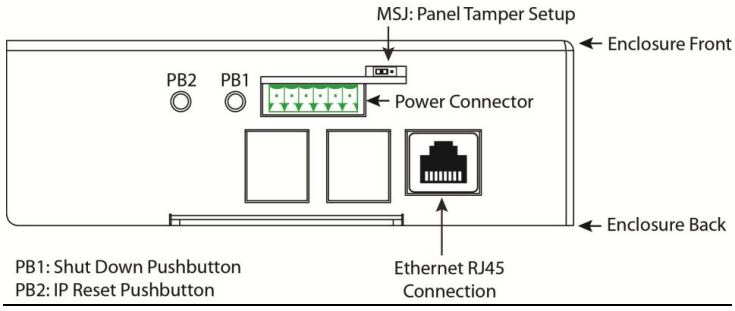


Figure 2

3. The MAP1 allows for the control of up to 4 door combinations. Ensure that adequate 12V DC power and current is available, especially when the same power supply is used for the locks.

4. It is highly recommended to use a separate power supply for locks as they require a high amount of current for proper operation.

Network Information:

1. The MAP1 Controller is set to acquire an IP address automatically **(DHCP).** However, it can be optionally set to a static IP address or reset if necessary. *See Appendix section for more information.*

Mechanical Information:

1. The MAP1 has 2 horizontal mounting flanges, which should be used to attach the product to a stable surface.

2. If required the MAP1 may be mounted inside of a lockable enclosure such as the CA-SLBOX or CA-H1000ENCL if access is to be limited to the external connections.

3. If a Lockable external enclosure is used and a Tamper switch is available as in the CA-SLBOX or CA-H1000ENCL, the MAP1 has a Panel Tamper input connection available. Connecting the Tamper switch, *See figure 14*, to this input will produce an Alarm when opening and closing the enclosure. This Alarm is sent to the Host computer.

Power Issue Indicator:

The controller continuously monitors the main 12 VDC coming into the controller. In an error condition the onboard beeper sound will be as follow:

- Low DC voltage (9 volts or less): 4 one-second beeps then a 2-second pause
- High DC voltage (16 volts or higher): 4 half-second beeps then a 2-second pause.

The beep is continuous until the problem is resolved. Also, a message is sent to the host software e.g. the **First Access** software shows event message like "DC Power Low 9 Volts or Less" or "DC Power High 16 Volts or Higher".

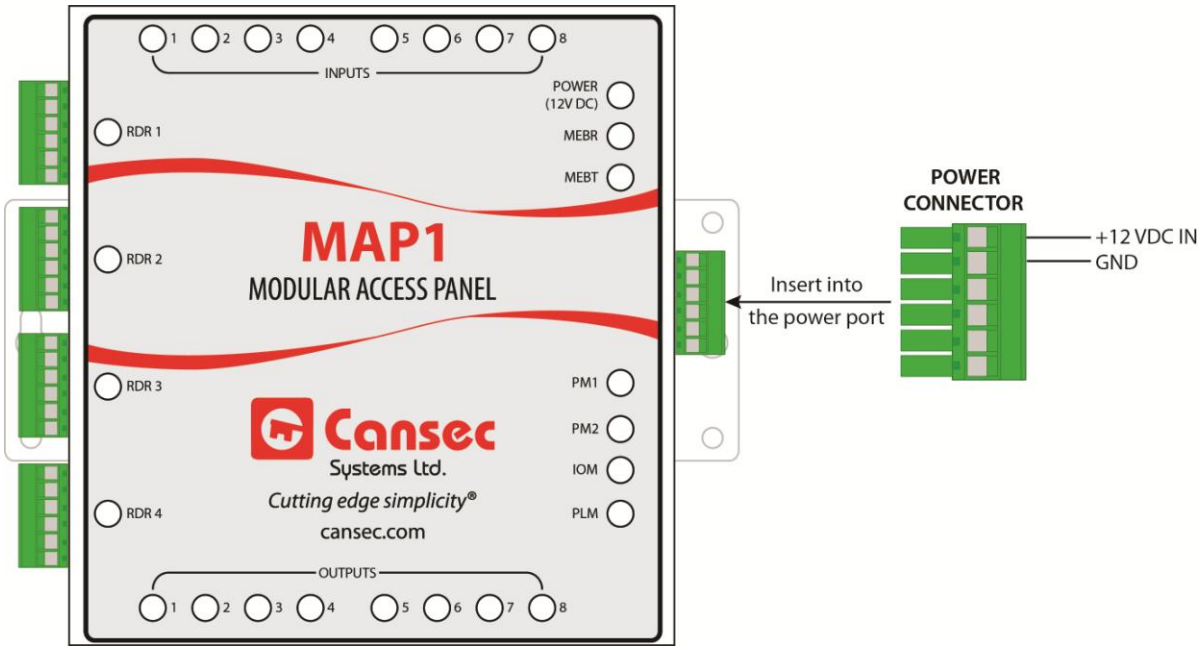
Panel Installation

CONTROLLER POWER CONNECTION

Note: *See Note 1 in Appendix section for suggested power supplies & backup battery.*

The MAP1 requires an external battery backed-up 12 VDC power supply. However, as many devices can be attached to the MAP1 controller, it may be more cost effective to use a separate power supply (battery backed-up) just for the MAP1 Controller and a separate power supply which can be sized to supply the amount of current that the attached high-current devices (locks) will require.

Figure 3



Mode Indicator: *After a complete power up, PM1 LED is on, PM2 LED is off, IOM LED flashes once every second, PLM LED flashes waiting for a host connection and stays steady when a connection is established. MAP1 emits beep to indicate operating mode. Note: Continuous beeps indicate power issue.*

1 Beep – ***First Access***
2 Beeps – ***Webster***
3 Beeps – ***Cloud Lock***

Note: Continuous beeps indicate power issue. Refer to Power Issue section for more information

ENTRY READER WIRING

The following diagram shows entry reader wiring only. For entry and optional exit reader wiring diagram, proceed to the next section.

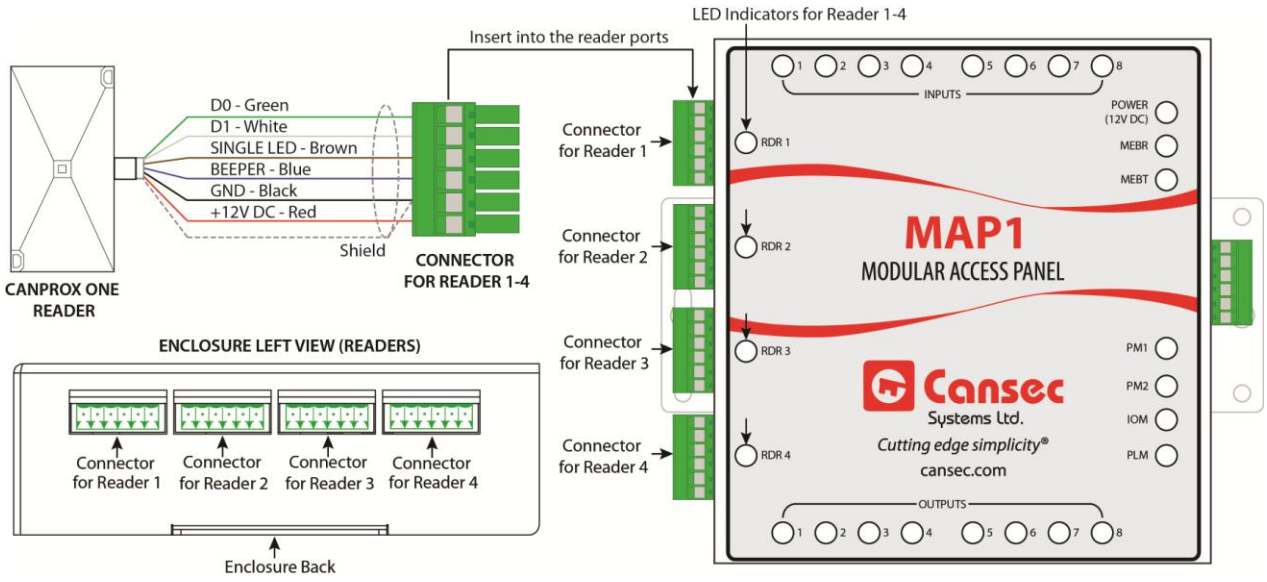


Figure 4

READER LED ON = Reader **Active**. Two Inputs and two Outputs are used for RTE/REX, door contacts well as lock relays and multi-function relays respectively.

READER LED OFF = Reader **Inactive**. Two Inputs and two Outputs are free to be used as independent auxilliary Input and Output points.

ENTRY AND EXIT READER WIRING

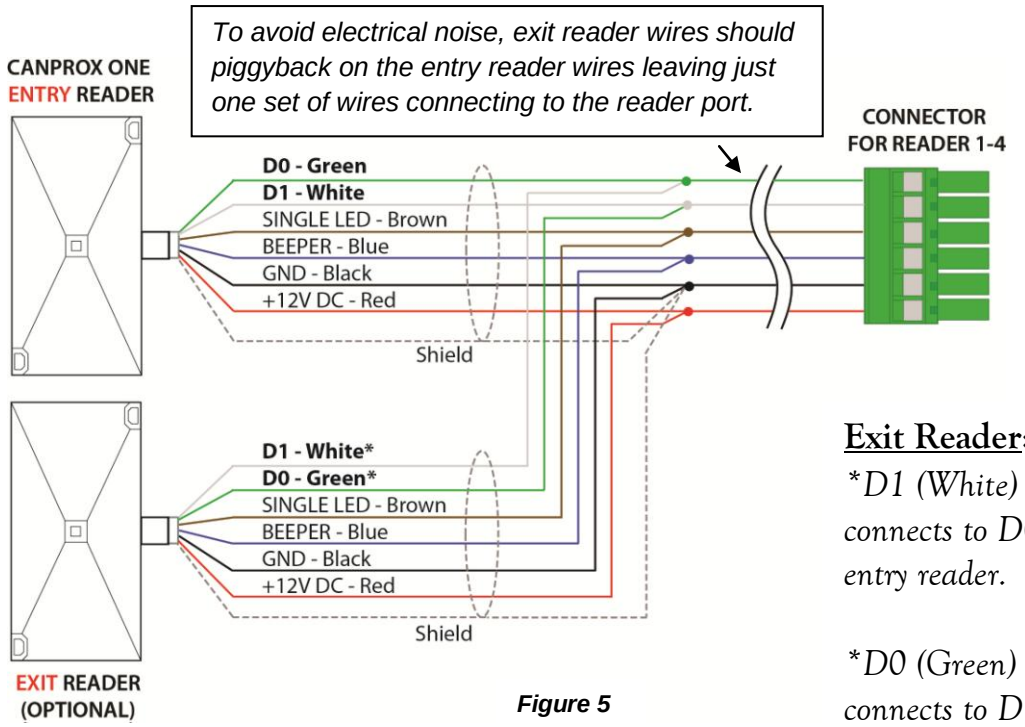


Figure 5

Exit Reader:

**D1 (White) of exit reader connects to D0 (Green) of entry reader.*

**D0 (Green) of exit reader connects to D1 (White) of entry reader.*

EXIT BUTTON AND DOOR CONTACT WIRING

The MAP1 controller can be provisioned for up to 4 doors. The following shows the input usage for each door combination.

Caution: *When moving the MSJx - MicroShunt jumpers (small and easily dropped, accuracy is important during movement) it is advisable to set up the MAP1 Controller prior to attaching it to a surface. It is highly recommended that the MAP1 be removed from the attached surface to do a change of the MSJx position. See figure 6 below.*

Reader 1: uses Input 1 (Door Contact/DPS) and Input 2 (RTE/REX).
Reader 2: uses Input 3 (Door Contact/DPS) and Input 4 (RTE/REX).
Reader 3: uses Input 5 (Door Contact/DPS) and Input 6 (RTE/REX).
Reader 4: uses Input 7 (Door Contact/DPS) and Input 8 (RTE/REX).

Note: *Both door contact and exit button inputs have voltage present on the circuits. Only connect dry contact devices to these inputs.*

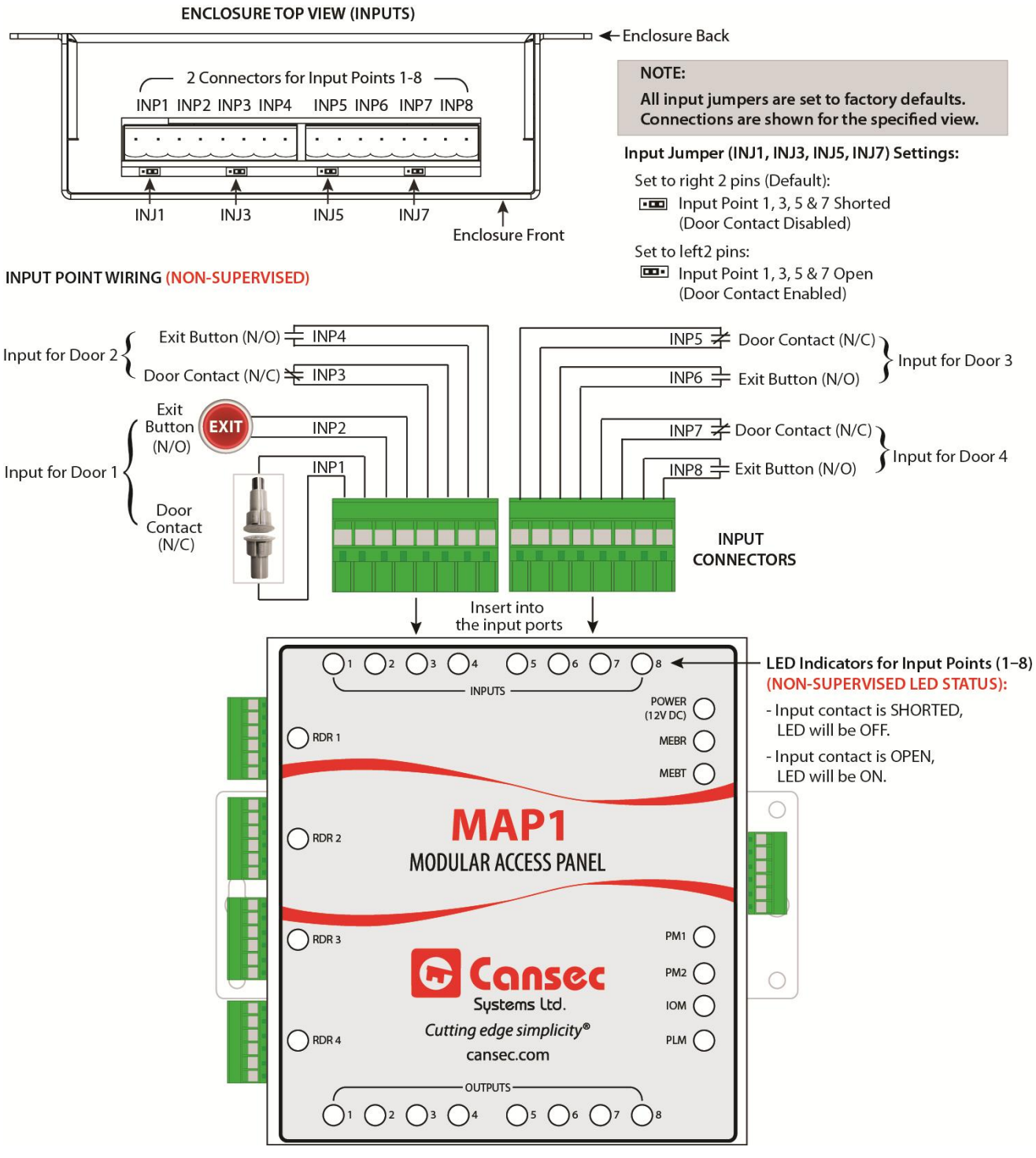

ENCLOSURE TOP VIEW (INPUTS)
Enclosure Back
2 Connectors for Input Points 1-8
INP1 INP2 INP3 INP4 INP5 INP6 INP7 INP8
INJ1 INJ3 INJ5 INJ7
Enclosure Front
NOTE:
All input jumpers are set to factory defaults.
Connections are shown for the specified view.
Input Jumper (INJ1, INJ3, INJ5, INJ7) Settings:
Set to right 2 pins (Default):
Input Point 1, 3, 5 & 7 Shorted
(Door Contact Disabled)
Set to left2 pins:
Input Point 1, 3, 5 & 7 Open
(Door Contact Enabled)
INPUT POINT WIRING (NON-SUPERVISED)
Input for Door 2
Exit Button (N/O)
INP4
Door Contact (N/C)
INP3
Input for Door 1
Exit Button (N/O)
EXIT
INP2
INP1
Door Contact (N/C)
INP5
Door Contact (N/C)
INP6
Exit Button (N/O)
Input for Door 3
INP7
Door Contact (N/C)
INP8
Exit Button (N/O)
Input for Door 4
INPUT CONNECTORS
Insert into the input ports
LED Indicators for Input Points (1–8)
(NON-SUPERVISED LED STATUS):
- Input contact is SHORTED, LED will be OFF.
- Input contact is OPEN, LED will be ON.
INPUTS
POWER (12V DC)
MEBR
MEBT
RDR 1
RDR 2
RDR 3
RDR 4
MAP1
MODULAR ACCESS PANEL
Cansec Systems Ltd.
Cutting edge simplicity®
cansec.com
PM1
PM2
IOM
PLM
OUTPUTS

Figure 6

Supervised

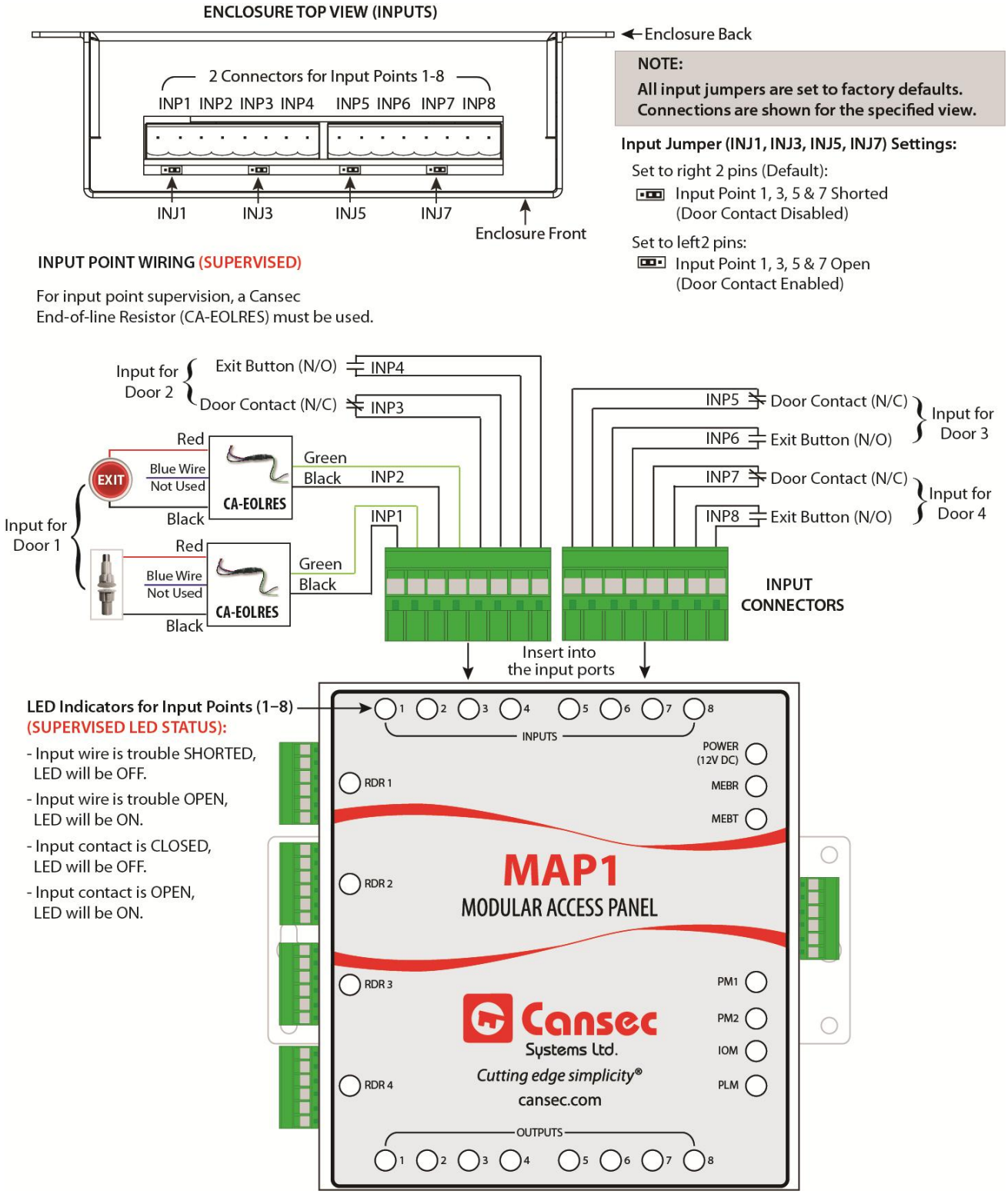


Figure 7

❖ Electric Strike Lock Wiring – Up To 6 Amp, 30VDC MAX

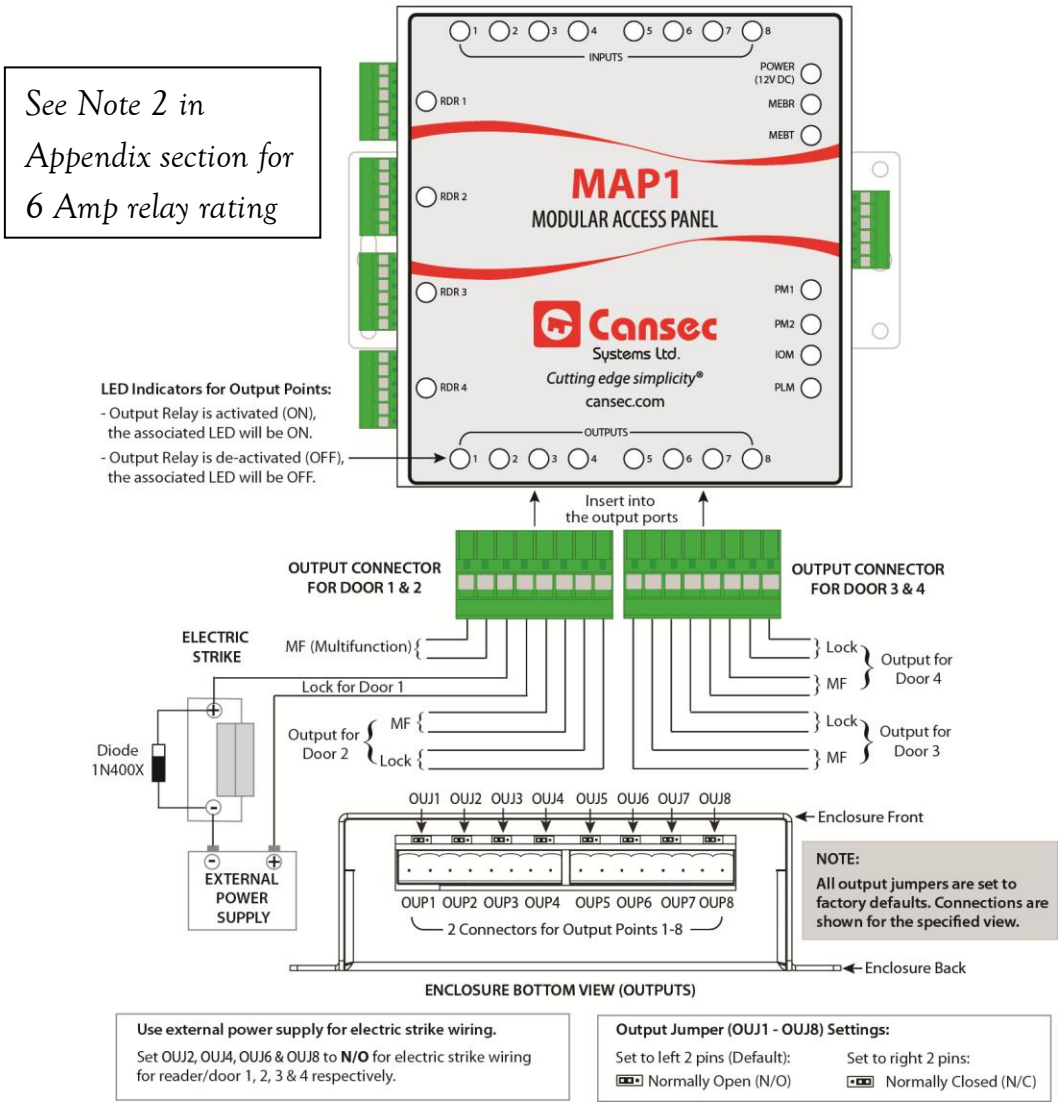


Figure 8

The **Multi-Function (MF)** relay is configured by the user through the host software. This relay can be set to only one of the following options:

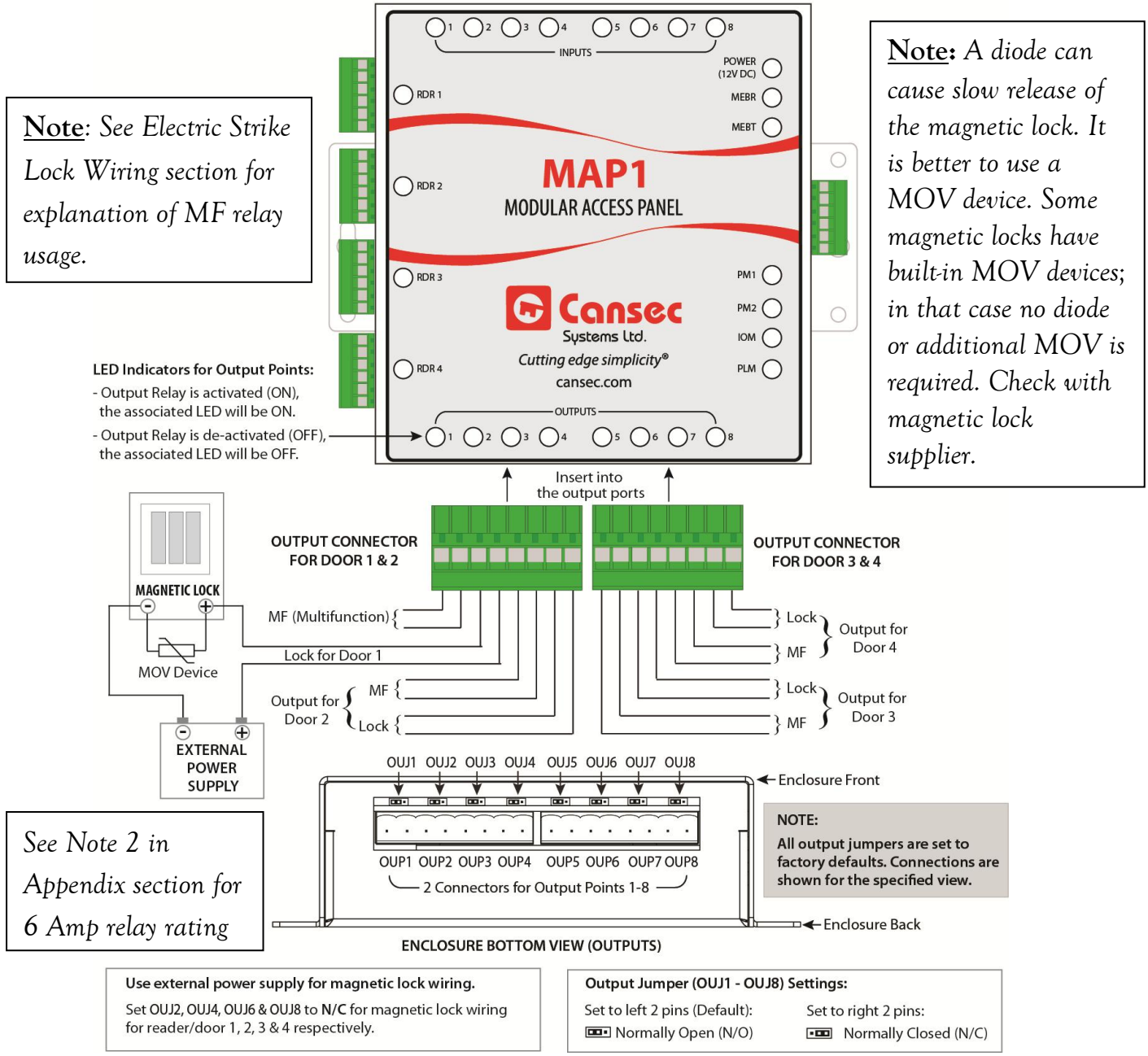
- *Alarm Shunt* – **(factory default)** Shunt the alarm system before opening lock.
- *Door Held Open* – Door has been left open.
- *Forced Entry* – Door opened without access-granted or exit-button-press event.
- *Door Operator_All* – Activated on all cards (Lock Opens first).
- *Door Operator_HC* – Activated on only Handicap cards (Lock Opens first).

❖ Magnetic Lock Wiring – Up To 6 Amp, 30VDC MAX

IMPORTANT: In some jurisdictions, the use of a UL approved power supply and connection to the fire alarm system for emergency release may be required. Installers should contact the local authority having jurisdiction to verify the specific requirements. Also, a building permit may be required in some jurisdictions for the installation of magnetic locks.

Note: *See Electric Strike Lock Wiring section for explanation of MF relay usage.*

Note: *A diode can cause slow release of the magnetic lock. It is better to use a MOV device. Some magnetic locks have built-in MOV devices; in that case no diode or additional MOV is required. Check with magnetic lock supplier.*



See Note 2 in Appendix section for 6 Amp relay rating

Figure 9

General Layout

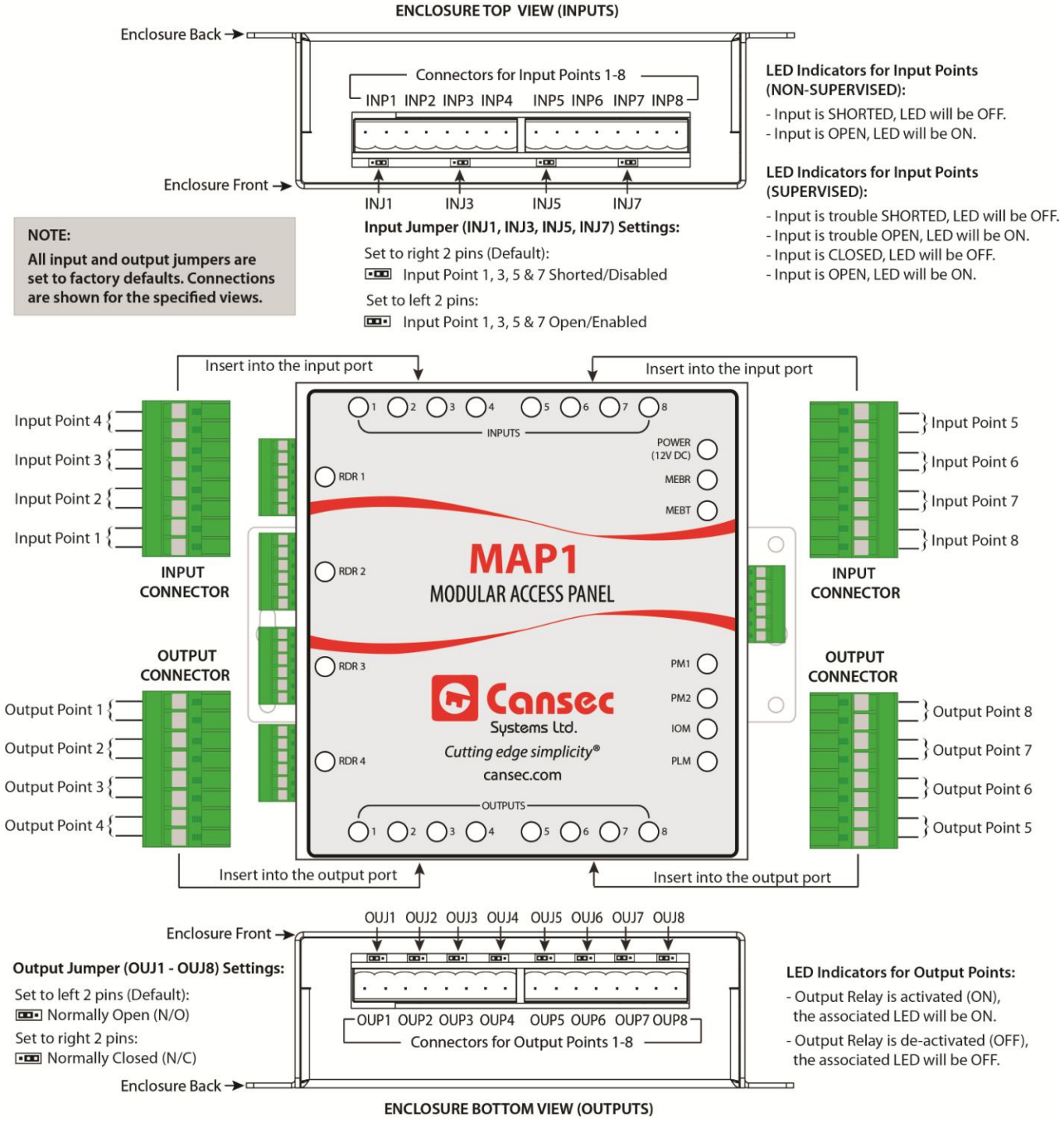


Figure 10

The MAP1 can be provisioned for **all I/O** which allows for 8 input points and 8 output points to be used and no door combination.

The inputs can be individually set through the host software to be supervised or non-supervised. The default input setting is non-supervised. Supervised input points require a Cansec CA-EOL resistor pack to be placed at the device being monitored. Supervised input points will inform the host of 4 supervised states: ***Alarm***, ***Secure***, ***Trouble High*** and ***Trouble Low***

These are the same 8 input points which can be used with the door provisioning combinations, thus devices such as the Door Contact and RTE/REX pushbutton can used in supervised mode of operation if necessary.

- **Input Wiring – Supervised or Non-Supervised**

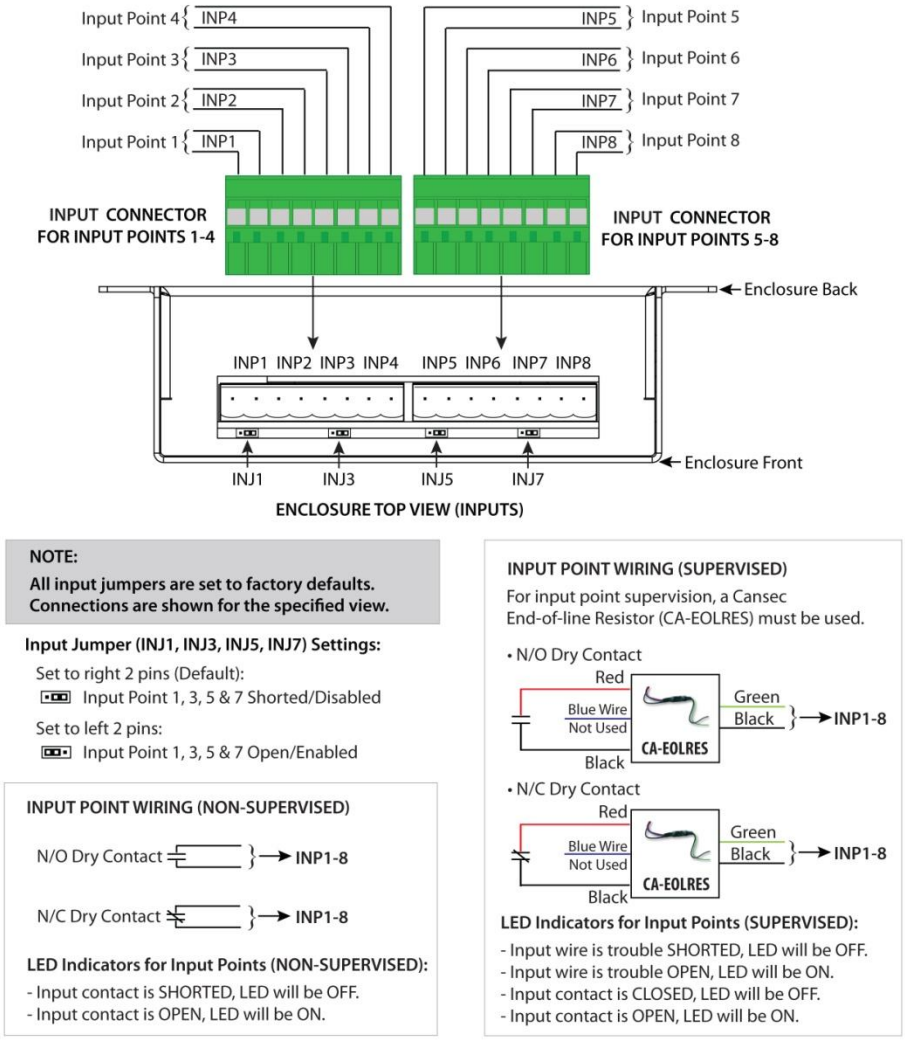


Figure 11

❖ Output Wiring

Caution: *When moving the MSJx - MicroShunt jumpers (small and easily dropped, accuracy is important during movement) it is advisable to set up the MAP1 Controller prior to attaching it to a surface. It is highly recommended that the MAP1 be removed from the attached surface to do a change of the MSJx position.*

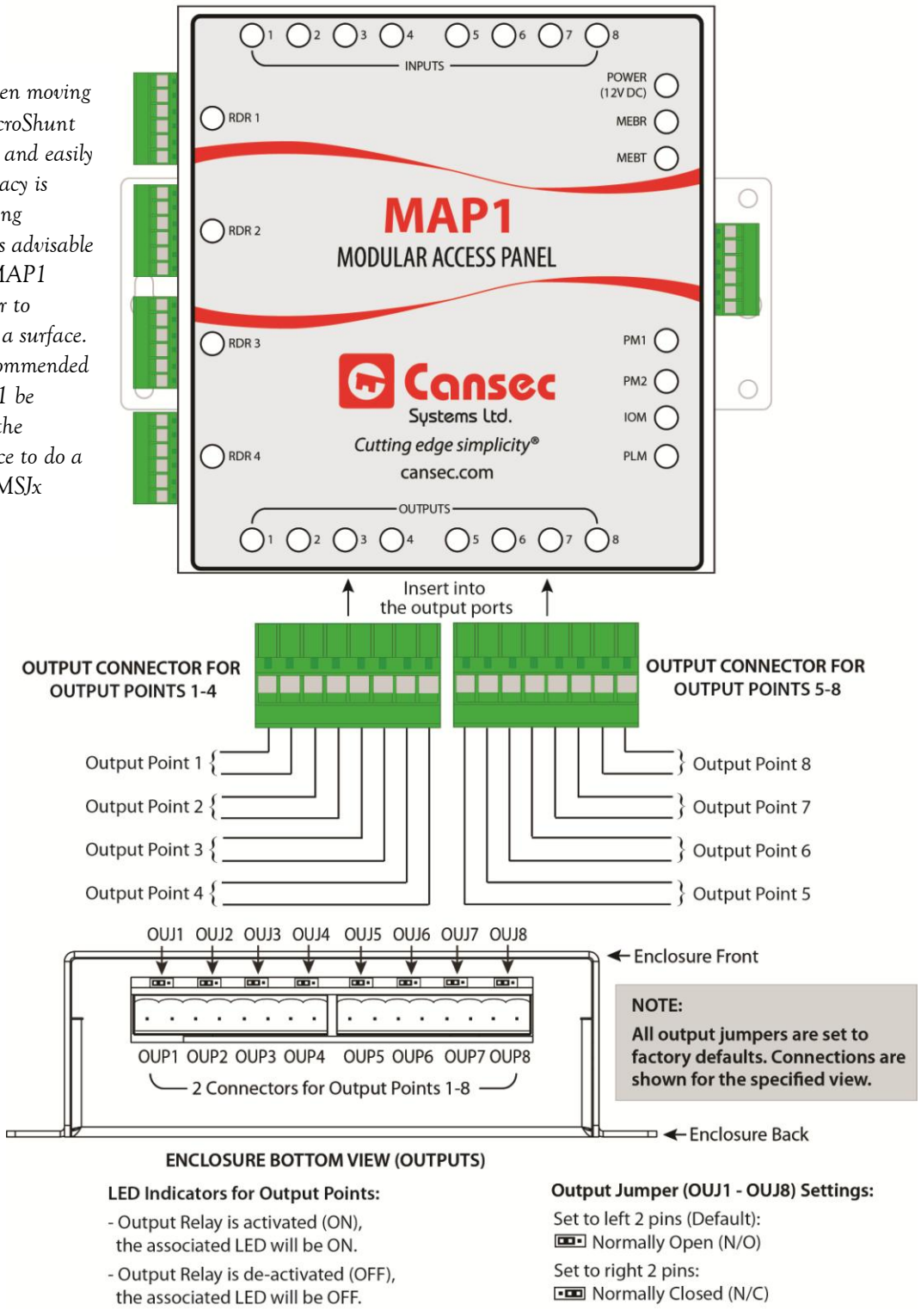


Figure 12

Appendix

Note 1: Suggested Power Supplies & Backup Battery

Part Number	Dimension & Weight H x W x D approx.	Description
CA-EFLOW4N8D  **(battery not included)** Accommodates up to two (2) 12VDC/7AH batteries.	13.5" x 13" x 3.25" (342.9mm x 330.2mm x 82.55mm) 6.7 lbs. (3.04 kg)	**12/24 VDC selectable output, 4 Amp Enclosure Style Power Supply with Backup Battery Charger**. Eight individual class 2 rated power limited outputs rated at 2 Amp. Input 120 VAC, 60 Hz, 3.5 Amp. UL listed.
CA-EFLOW6N8D  **(battery not included)** Accommodates up to two (2) 12VDC/7AH batteries.	13.5" x 13" x 3.25" (342.9mm x 330.2mm x 82.55mm) 6.65 lbs. (3.02 kg)	**12/24 VDC selectable output, 6 Amp Enclosure Style Power Supply with Backup Battery Charger**. Eight individual Class 2 rated power limited outputs rated at 2 Amp per output. Input 120 VAC, 60 Hz, 3.5 Amp. UL listed.
CA-EFLOW102N16D  **(battery not included)** Accommodates up to two (2) 12VDC/7AH batteries.	13.5" x 13" x 3.25" (342.9mm x 330.2mm x 82.55mm) 6.85 lbs. (3.11 kg)	**12 VDC, 10 Amp Enclosure Style Power Supply with Backup Battery Charger**. Sixteen individual Class 2 rated power limited outputs rated at 2 Amp per output. Input 120 VAC, 60 Hz, 3.5 Amp. UL listed.
PA-SLP003 	3.63" x 5.88" x 2.5" (92.20mm x 149.35mm x 63.50mm) 5.00 lbs (2.27 kg)	**Backup Battery 12 VDC 7 Amp Hour.** Provides hours of backup power for above power supplies.

Note 2: 6 Amp Relay Rating

Maximum current that can be switched reliably when connected to a 'non-inductive load' up to 30VDC. Electric strikes and magnetic locks are considered 'inductive loads'. It is important to have diode or MOV attached at the locking device to remove the CEMF pulse that is generated when switching an 'inductive load'. It is advisable to use a 50% switch factor or 3 amps as the maximum switching current for longer relay life. An external relay should be used on larger voltage and current requirements.

IMPORTANT: In some jurisdictions, the use of a UL approved power supply and connection to the fire alarm system for emergency release may be required. Installers should contact the local authority having jurisdiction to verify the specific requirements. Also, a building permit may be required in some jurisdictions for the installation of magnetic locks.

MAP1 SYSTEM INDICATORS

POWER LED: ON indicates 12 volts DC is connected.

MEBR LED, MEBT LED: For future use.

First Access Mode:

- Mode indicator: MAP1 emits 1 beep after powered up.
- **PM1 LED**: ON, **PM2 LED**: OFF

Webster Mode:

- Mode indicator: MAP1 emits 2 beeps after powered up.
- **PM1 LED**: ON, **PM2 LED**: OFF

Cloud Lock Mode:

- Mode indicator: MAP1 emits 3 beeps after powered up.
- **PM1 LED**: ON, **PM2 LED**: OFF

Note: *PM1 and PM2 LED will occasionally and rapidly toggle ON and OFF when host communication is in progress.*

IOM LED: Flashing RED – IOM (Input Output Module) is in normal operation.

PLM LED:

- Flashing GREEN – PLM (Panel Logic Module) is waiting for a connection from the host via Ethernet.
- ON GREEN – PLM (Panel Logic Module) is connected to a host via Ethernet.

POWER CONNECTOR

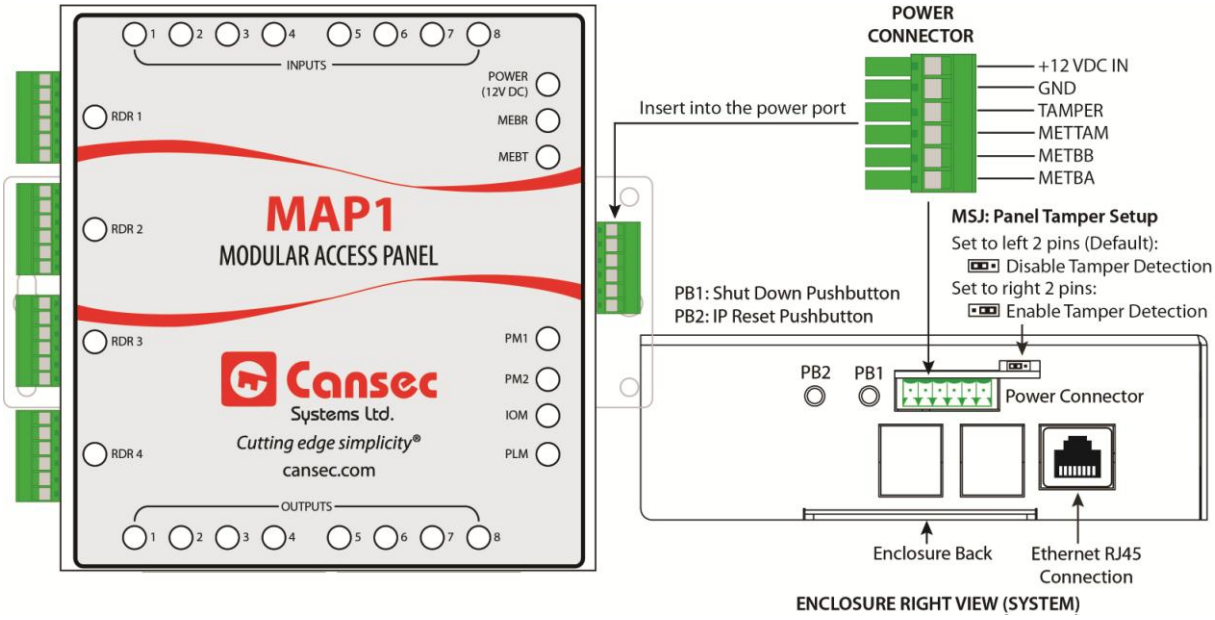
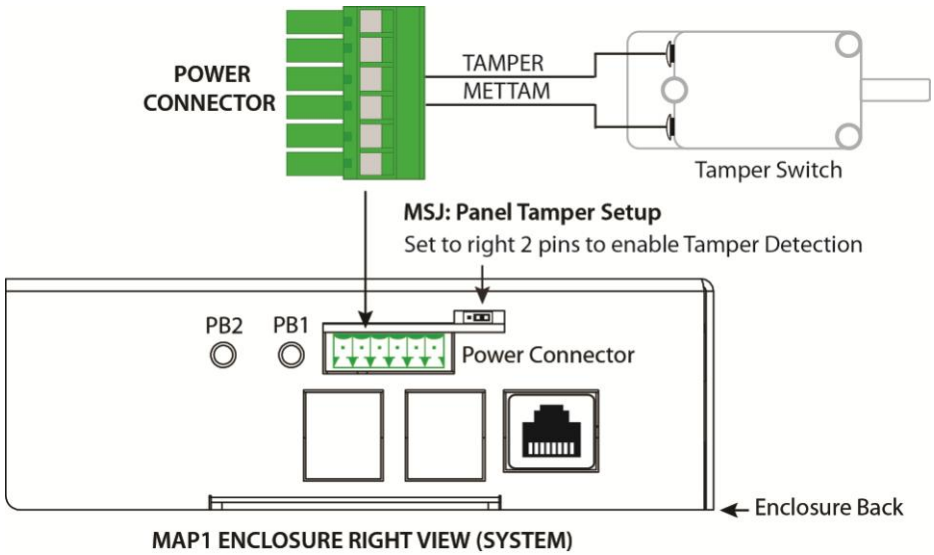


Figure 13

Connections:

- METBA and METBB are for future use. The Shield from METBA and METBB wire would be connected to METTAM.
- TAMPER allows for the connection of an external Enclosure Tamper Switch.
  Note: *The MAP1 has a Tamper MSJx-MicroShunt jumper to the right of this power connector.*

Figure 14



Factory default:

The Tamper jumper is set to disabled.

To activate the Panel Tamper move jumper to the right 2 pins. Connect the switch between TAMPER and the METTAM on the connector.

- GND – this is the 12 volt power supply ground.
- 12VDC IN – Power for MAP1. 12 volt DC battery backed up power supply. This is the power for the MAP1 and readers attached.

PB1 – SHUTDOWN BUTTON

As the MAP1 contains a mini computer, a proper system shutdown is nesscessary to prevent data corruption. **DO NOT simply unplug the power connector.** To shut down follow this procedure:

1. Use a paper clip or a small screw driver, press and hold (4 to 8 seconds) the PB1 pushbutton until the PLM STATUS LED on the front of the enclosure begins a rapid green ON/OFF flash.

2. Release the pushbutton. The system will start a proper shutdown. This will take 15 to 20 seconds.

3. Wait untill all LEDs (except power) are turned off by the system. Then remove the Power Connector.

4. If the Shutdown does not occur, try the procedure again. If it still does not respond correctly as described above, a system fault has occurred. It will be necessary to unplug the Power connector and re-insert it after 10 seconds.

PB2 – IP RESET BUTTON AND STATIC IP ADDRESS CONFIGURATION

Note: *The new panel is factory set to acquire an IP address automatically (DHCP). If the IP address has been changed to static address by an installer but now unknown or forgotten and needs to be reset, follow the instructions below.*

Static IP address is recommended only for Webster mode. Leave it to obtain IP address automatically for other modes.

Alternatively, *see* ***USB IP Configuration Tool section for configuring IP Address using a USB flash drive.***

1. Press and hold (4 to 8 seconds) the IP Reset PB2 pushbutton. Wait until the internal MAP1 beeper sounds then release the button. Beeper stops sounding.

2. The system will reboot. This will take 20 to 45 seconds after which the controller will reset all of its configurations to factory default with DHCP enabled. Existing database will not be reset or erased.
   Note: *The end of the reboot cycle is indicated by a MAP1 turning back on the associated system LEDs and at the end it will emit a series of beeps to indicate its mode e.g.* ***First Access***, ***Cloud Lock*** *or* ***Webster****.*

3. Plug the MAP1 to the network with a DHCP server available.

4. Install and launch **MAP1 IP Configuration Tool** from your computer. This tool is available from the **First Access** software installation package, but is also available as its own separate installation package which can be downloaded from www.cansec.com/downloads.

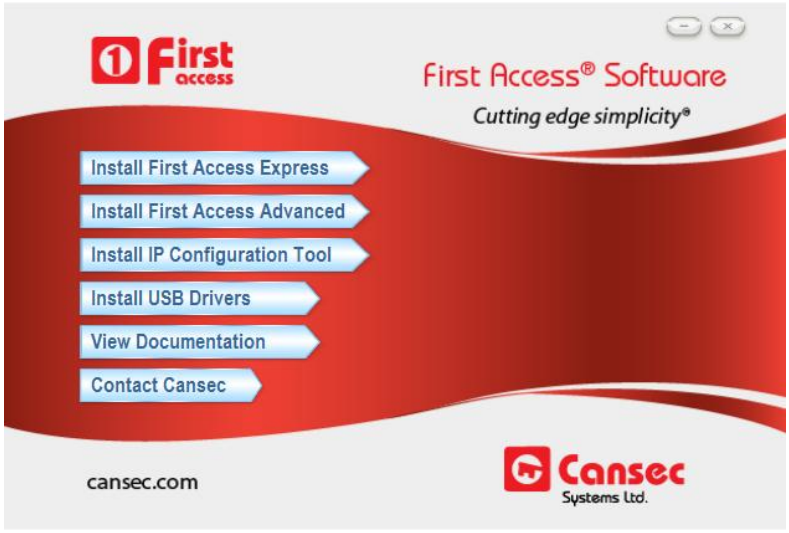


Figure 15

5. In most cases, the **IP Configuration Tool** will detect and display the default IP address range ready to be scanned. However, the IP address range can be manually modified accordingly.

Figure 16

6. Click **Scan** to scan the network for all possible connected MAP1 panels.

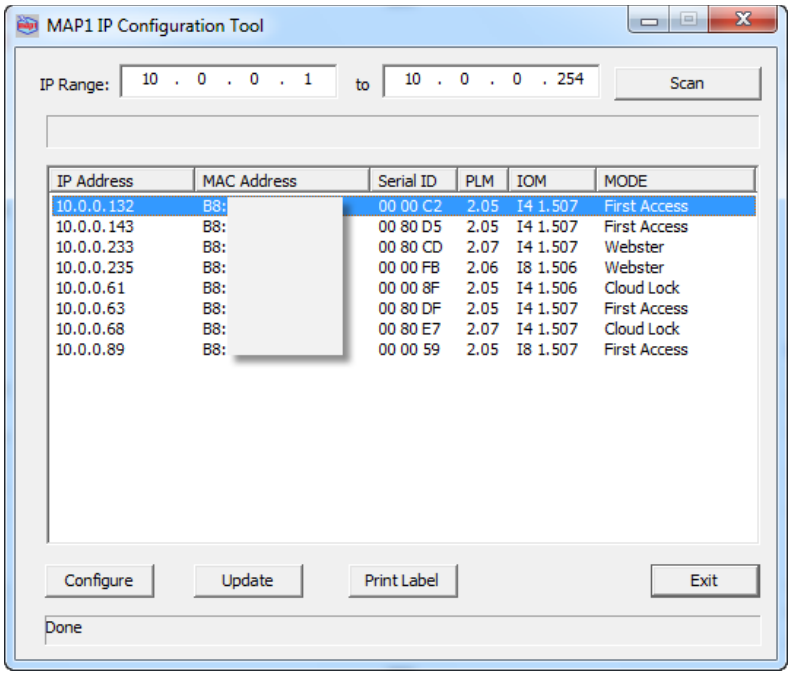


Figure 17

7. Double click on one of the detected panels or select it and click **Configure**.

8. Unselect **Enable DHCP**. Consult with IT personnel and enter the IP address, Subnet Mask, Gateway IP Address and Port numbers.

Note: *The optional Trusted Host IP (see Figure 18) instructs the panel to accept data connection only from the host computer where the First Access software is installed. Other connections for diagnosis and updating are not limited by this Trusted Host IP.*

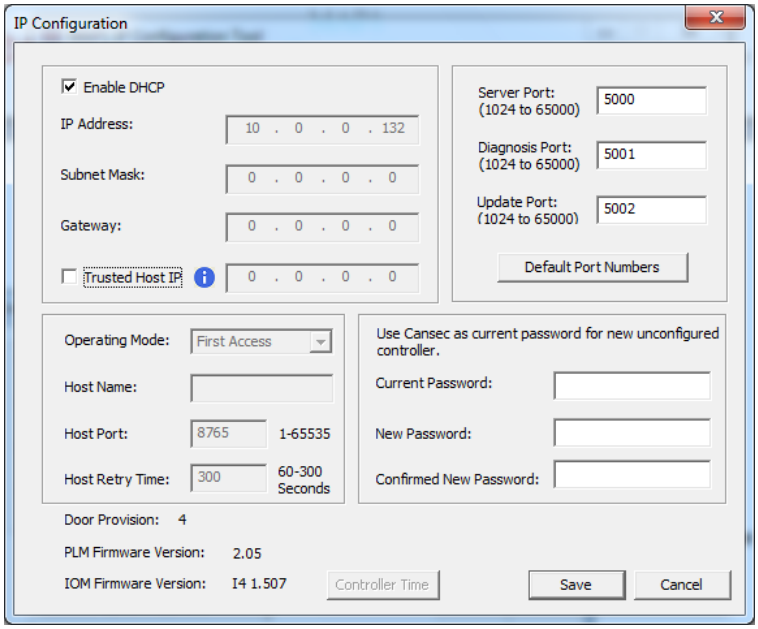


Figure 18

9. The factory default or current password for a new unconfigured MAP1 panel is **Cansec**. The password must be changed to something else other than **Cansec**.

10. Click **Save**. The panel saves the new settings and reboots for the settings to take effect.

USB IP CONFIGURATION TOOL

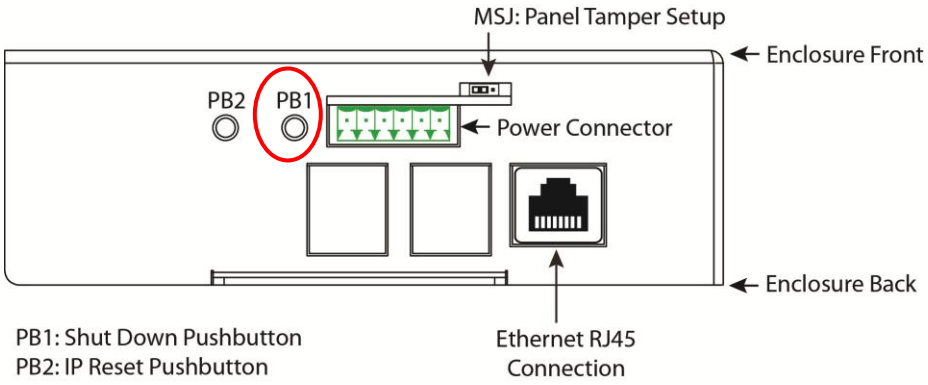


Figure 19

Important: *Shutdown Push Button (PB1) must be used to avoid data corruption on the MAP1 controller.*

1. If the MAP1 controller is powered on, press and hold the PB1 button for a period of 5 to 8 seconds and proceed to step 2. Otherwise, proceed to step 4.

2. When the PLM LED on the front of the MAP1 controller begins a rapid flash, release the Shutdown PB1 button.

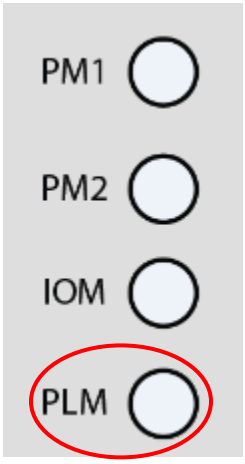


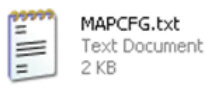
Figure 20

3. Wait until the MAP1 does a complete shutdown, indicated by all MAP1 LEDs going to the OFF state (except the Power LED), and unplug the power connector.

4. Insert a FAT32 formatted USB flash drive into an available USB connector on the MAP1 controller.

5. Insert the power connector into the MAP1 controller. The unit will begin the power up sequence which takes about 30 to 40 seconds. When complete, the MAP1 controller will emit a series of beeps to indicate its mode e.g. **First Access**, **Cloud Lock** or **Webster**.

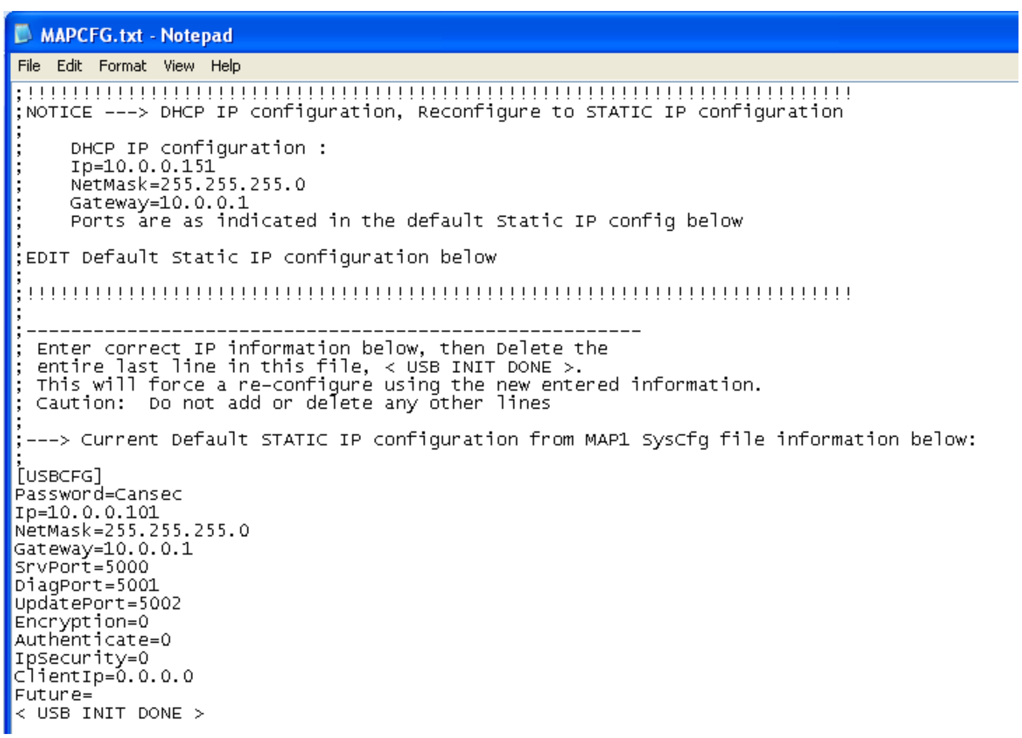
6. Remove the USB flash drive from the MAP1 controller.

7. Insert the flash drive into a USB port on a computer. When ready, launch Windows Explorer or File Explorer. Access the USB drive and edit the file named MAPCFG.txt 

created by the MAP1 controller during boot-up sequence. If the file is not present, repeat from step 1. Otherwise proceed to step 8.

8. A similar file will be displayed when opened in Notepad.

Figure 21



```
MAPCFG.txt - Notepad
File  Edit  Format  View  Help
;!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
;NOTICE ---> DHCP IP configuration, Reconfigure to STATIC IP configuration
;
;    DHCP IP configuration :
;    Ip=10.0.0.151
;    NetMask=255.255.255.0
;    Gateway=10.0.0.1
;    Ports are as indicated in the default Static IP config below
;
;EDIT Default Static IP configuration below
;
;!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
;
;-------------------------------------------------------
; Enter correct IP information below, then Delete the
; entire last line in this file, < USB INIT DONE >.
; This will force a re-configure using the new entered information.
; Caution:  Do not add or delete any other lines
;
;---> Current Default STATIC IP configuration from MAP1 SysCfg file information below:
;
[USBCFG]
Password=Cansec
Ip=10.0.0.101
NetMask=255.255.255.0
Gateway=10.0.0.1
SrvPort=5000
DiagPort=5001
UpdatePort=5002
Encryption=0
Authenticate=0
IpSecurity=0
ClientIp=0.0.0.0
Future=
< USB INIT DONE >
```

Key Section & Name	Value	Description
[USBCFG]	[USBCFG]	*Key section – **DO NOT** change*
Password	Cansec	*Factory default password. Please modify to an appropriate password of your choice other than the default password.*
IP	10.0.0.101	*Factory default IP address. Please Specify the IP address of the host computer having the **First Access Express** software installed.*
Netmask	255.255.255.0	*Factory default subnet mask. Please specify the subnet mask where the host computer is connected to.*
Gateway	10.0.0.1	*Factory default gateway. Please specify the gateway where the host computer is connected to.*
SrvPort	5000	*Factory default server port. You may change it or leave it as default.*
DiagPort	5001	*Factory default diagnostic port. You may change it or leave it as default.*
UpdatePort	5002	*Factory default update port. You may change it or leave it as default.*
Encryption	0	*For future use only.*
Authenticate	0	*For future use only.*
IpSecurity	0	*Specify if trusted host is enabled or disabled. 1=enabled, 0=disabled*
ClientIp	0.0.0.0	*The IP address of the host computer having the **First Access Express** software installed. If IpSecurity is enabled and ClientIp has a valid IP address specified then the MAP1 controller accepts data connection (SrvPort 5000) from only this host computer. Other connections on DiagPort 5001 and UpdatePort 5002 are not affected by this setting.*
Future	blank	*For future use only.*

< USB INIT DONE >	< USB INIT DONE >	*Please remove this line after this file has been correctly modified. The MAP1 controller reads parameters in this file during boot up sequence and configures the IP address accordingly after which it will write <USB INIT DONE> to indicate that the initialization has been done.*

9. Obtain all IP address information from IT personnel and modify the file accordingly. Remove the line <*USB INIT DONE*> and save the file before removing it from your computer.

10. Repeat from step 1 to step 6 then proceed to step 11.

11. Insert the flash drive into a USB port on a computer. When ready, launch Windows Explorer or File Explorer. Access the USB drive and check if there is an error file 

present along with the file 

.

12. If no error file is present skip this step and proceed to step 13. Otherwise edit the error file and review the errors indicated. Correct the errors in the MAPCFG.txt accordingly and save it before removing it from the computer. Repeat step 1 to 6 then proceed to step 11. *See sample error file below.*

```
  UsbCfg MAP1 Startup
USBCFG, Version 1.0, 04-20-21 21:35:42
  Mount point created --usbdrive --success
USBCFG, Version 1.0, 04-20-21 21:35:42
  Drive mounted as usbdrive -- success
USBCFG, Version 1.0, 04-20-21 21:35:42
  Static ip path -MAPCFG.txt found on USB drive --proceeding
USBCFG, Version 1.0, 04-20-21 21:35:42
  Parsing data in MAPCFG.txt
USBCFG, Version 1.0, 04-20-21 21:35:42
  < USB INIT DONE > not found
USBCFG, Version 1.0, 04-20-21 21:35:42
  Parsing data in MAPCFG.txt
USBCFG, Version 1.0, 04-20-21 21:35:42
  Reached End of Config data
USBCFG, Version 1.0, 04-20-21 21:35:42
  MAPCFG.txt correct data
USBCFG, Version 1.0, 04-20-21 21:35:42
  UpdatePort must be >1025 and < 65535
USBCFG, Version 1.0, 04-20-21 21:35:42
  MAPCFG.txt range check error -- exiting
```

Figure 22

13. If no error file is present, it's recommended that the file MAPCFG.txt

be reviewed to ensure that the line <*USB INIT DONE*> has been written by the MAP1 controller indicating that the IP configuration has been successfully saved and initialized.

14. A file named SysInf.txt is also present. This file contains critical information if debugging is required. If this file is not present it is recommended that the controller be updated with the latest firmware.

FORCED ENTRY OUTPUT

To monitor forced-entry or door-held-open alarm conditions, connect a Normally Closed door contact switch or sensor to the door contact input. The **(MF)** multifunction relay, when configured as ***Forced Entry***, will be activated if the door is forced open without either an access-granted or an exit-button event. A message will be transmitted to the host software if the panel is online.

DOOR HELD OPEN OUTPUT

The **(MF)** multifunction relay, when configured as ***Door Held Open***, will be activated if the lock is unlocked and the door is held open longer than the permitted door-held-open time programmed from the host software. The reader beeps to notify the user by first generating a pre-alert beep followed by a solid beep, then a message is also transmitted to the host software if the panel is online.

ALARM SHUNT OUTPUT

The **(MF)** multifunction relay is factory configured as ***Alarm Shunt***. When an access-granted or an exit button event occurs, the alarm shunt output relay is activated first followed by the lock output relay. The relay can be used to bypass an external alarm point. When an access-granted or an exit button event is complete, the lock output is turned off followed by the Alarm Shunt output after a short delay. If a door contact is used then Alarm Shunt output is turned off shortly after the door contact is closed.

DOOR OPERATOR OUTPUT – ALL CARDS

The (**MF**) multifunction relay, when configured as ***Door Operator_All***, will be activated by all cards and by exit button press. The lock relay will be activated first followed by a one second pulse on this **MF** relay which is used to trigger the door operator.

DOOR OPERATOR OUTPUT – HANDICAP CARDS ONLY

The (**MF**) multifunction relay, when configured as ***Door Operator_HC***, will only be activated by cards designated as handicap and by exit button press. The lock relay will be activated first followed by a one second pulse on this **MF** relay which is used to trigger the door operator.

FCC Class A Notice

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

This device may not cause harmful interference.

1. This device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy, and if it is not installed and used in accordance with the instruction manual, it may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense.

ICES-003

ICES-003 Class A Notice - Avis NMB-003, Classe A

This Class A digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.

CE

The product has been tested and found to comply with **CISPR 11:2009 + A1:2010 / EN 55011:2009 +A1:2010, Class A - Industrial, Scientific and Medical Equipment.**