

EZ Modlock® Installation Guide



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EZ Modlock® Installation Guide

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1. Introduction

Thank you for purchasing the EZ Modlock system from Sentry Interlocks. Before you install and use the EZ Modlock system please read this User Manual in its entirety.

1.1 Scope and identification of the document

This manual is for the users of the EZ Modlock Door Interlocking system and it contains all the necessary information for the proper use of all components of the system. Carefully read this manual and comply strictly with all the notes and provisions contained in this document. This will ensure the product is applied properly, functions as intended and provides a safe operating environment.

This User Manual is an official document issued by Sentry Interlocks (herein named Sentry) and is an integral part of the system. All information is current as of the date of publication. It is characterized by a release date on the front page.

1.2 Changes

Sentry reserves the right to change, at any time and without notice, the specifications of the hardware and software of the system described in this publication. Sentry reserves the right to make changes to this manual at any time without prior notice.

1.3 Confidentiality

The reproduction, transmission, transcription, storing, in whole or in part, or translated into other languages, in any form, this manual and documents related to it, is strictly prohibited without the prior written consent of Sentry.

1.4 User Manual

The manual is divided into 10 sections. The manual should be read sequentially, from beginning to end, paying particular attention to the various caution warnings.

It is considered that the end user is a qualified person in the use of a door interlocking system and certain information may be omitted assuming it is common knowledge.

The manual should be kept for the entire life of the system. The end user is responsible for the immediate replacement of the manual if it is damaged, lost or becomes partially or totally incomprehensible.

1.5 Marking of attention

The symbol shown below will be used highlight information to which special attention must be dedicated. This information will indicate situations that can be potentially hazardous to users.



The user is responsible for the immediate replacement of labels, stickers, panels etc., applied to components of the system, which have been lost or damaged or that have become totally or partially incomprehensible.

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1.6 References regulations

The contents of this publication are drawn up in accordance with the requirements of the following standards:

EN 60950-1:2006-04

EN 60950-1/A11:2009-03

EN 61000-6-1:2007-01

EN 61000-6-3:2007-01

in compliance with European Directives

LVD 2006/95/CE (Low Voltage Directive)

EMC 2004/108/EC (Electromagnetic Compatibility)

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2. Safety

2.1 Intended use

The EZ Modlock system has been specifically designed to enable the design and management of an intelligent door interlocking system.

The EZ Modlock Interlocking system can be used on doors that are normally locked or unlocked. Door operation can be manual hinged, swinging doors, sliding doors or automated hinged, swinging or roll-up doors. EZ Modlock can also be used on static or dynamic Pass-Throughs. Compatible accessories include Door Indicator LEDs, Door Access Pushbuttons, Emergency Override Pushbuttons, Access Control Devices with dry contact output (e.g. card swipe, badge reader, numeric keypad) and Wave Sensors. All electric locks are powered and controlled by the Modules and must be fail safe operation. Custom designs are available if fail secure operation is required.

All devices connected to EZ Modlock must operate on 24VDC.

Any use other than as described in this manual or performed by untrained personnel is to be considered prohibited and should be avoided in order to preserve the proper functioning of the system and the safety of the user.

The use of the EZ Modlock system by untrained users is not recommended. All users should read this manual or be trained by end user personnel knowledgeable about the system.

CAUTION

It's absolutely forbidden to use the system for any use other than that permitted and specified herein.

2.2 Recommendations

CAUTION

- The Modules, accessories and associated wiring should only be installed by trained personnel in compliance with the laws, standards and regulations in force in the countries and municipalities of installation.
- The standalone EZ Modlock system ships with a UL listed 1.5A rated power supply that can operate with 90-264VAC and 47-63Hz input. The output is 24VDC to the Modules. The power cord is 6.5 feet/2 meters long with a NEMA 5-15 grounded male plug. This power supply is protected against short circuit and overload and should not be replaced with any other power supply unless approved by Sentry.
- The power cord should be plugged into a properly installed grounded outlet and not hard wired. Any damage or alterations to the power cord can affect the safety of use of the EZ Modlock Module and its power supply. Always check the condition of the cable and in case of its replacement check with Sentry for an approved replacement.
-



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- Sentry offers an integration service where multiple Modules can be installed in a NEMA rated box. Sentry may choose to offer a single hard-wired power supply rated to handle the number of Modules installed in the NEMA box.
- It is forbidden to open the EZ Modlock Modules without prior approval of Sentry. An unauthorized opening will void the warranty. Sentry disclaims any liability for any damage and or injury caused by the unauthorized opening of the Module.
- The EZ Modlock Modules must be installed in a controlled indoor environment to properly ensure the protection of the electronic circuitry. The Modules should be installed in a ventilated and dry place, with temperatures ranging from 50°F to 104°F (10°C to 40°C) and relative humidity no greater than 80% to prevent the formation of condensation.
- All the Modules and accessories related to them cannot be installed in locations classified as Class I or Class II by the NEC classification system.
- The EZ Modlock system has been tested and follows the requirements regarding the emission levels and immunity to electromagnetic interference.

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3. Components of the EZ Modlock system

The Sentry Interlocks EZ Modlock system consists of a range of Plug and Play Modules that are designed to provide interlocking control between a series of doors that create a Personnel or Material Airlock. Each Module can control 2 doors and up to five Modules can be connected together to control a maximum of 10 doors within a single interlocking scheme. Sentry branded Accessories or 3rd Party Accessories can be used to provide door status indication, door actuation and emergency action.

Listed below are a sampling of Sentry products available today. The most current component listing can be found on the Sentry Interlocks website – www.sentryinterlocks.com.

Modules:

EZ Modlock - 2 Door Module (3.75”H x 1.5” D x 4.3” W)

Manages two normally unlocked, manual doors without Access Control. By adding an EZ Modlock - 2 Door Expansion module you can control a 3rd or 4th door



EZ Modlock - 2 Door Expansion Module (3.75”H x 1.5” D x 4.3” W)

Manages two normally unlocked, manual doors. Must be used with the EZ Modlock – 2 Door Module for the 3rd or 4th door

EZ Modlock - 2 Door Timer Module (3.75”H x 1.5” D x 4.3” W)

Manages two normally unlocked, manual doors with optional 0-60 second time delay and no Access Control

EZ Modlock - Multi Door Basic Module (3.75”H x 1.5” D x 6.3” W)

Manages 2 normally unlocked, manual doors. An additional 4 Multi Door Basic Modules can be daisy chained together to manage a total of 10 doors in one security scheme

EZ Modlock Multi Door Access Module (3.75”H x 1.5” D x 6.3” W)

Manages 2 normally unlocked or normally locked doors, manual, automated or roll-up doors and doors using Access control devices. An additional 4 Multi Door Access Modules can be daisy chained together to manage a total of 10 doors in one security scheme



EZ Modlock Multi Door Timer Module (3.75”H x 1.5” D x 6.3” W)

Manages 2 normally unlocked or normally locked manual doors and doors using Access control devices. Has 2 separate time delays for delayed opening and activations for UV lamp and/or blower activation. An additional 4 Modules can be daisy chained together to manage a total of 10 doors in one security scheme

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Module Matrix

Feature	2 Door	2 Door Expansion	2 Door Timer	Multi Door Basic	Multi Door Access	Multi Door Timer
Manual Doors	Y	Y	Y	Y	Y	Y
Automated Doors	N	N	N	N	Y	N
Access Control Devices	N	N	N	N	Y	Y
Normally unlocked Doors	Y	Y	Y	Y	Y	Y
Normally locked Doors	N	N	N	N	Y	Y
# doors connected per module	2	2	2	2	2	2
# doors managed per module	2 *	0	2	up to 10	up to 10	up to 10
Master-Slave logic	N	N	N	Y	Y	Y
Opening Logic	L1	L1, L2, L3	L1	L1, L2, L3, L4	L1, L2, L3, L4	L1, L2, L3, L4
# Dip Switches	4	0	2	6	12	8
# Rotary timer switch	n/a	n/a	1	n/a	n/a	2
Blower/UV Lamp control	n/a	n/a	n/a	n/a	n/a	Y

* (4 with 2 Door Expansion)

Accessories:

NEMA rated box

Sentry can provide any commercially available NEMA rated enclosure to house EZ Modlock components. Sentry will work with you to design the optimized layout of each box.



Wall Mount LED Indicator

Wall mounted Indicator with separate red LED and green LED door lock status indicators and audible alarm with 304 stainless steel cover. Connections are via Cat 5 cable or standard electrical wiring.



Wall Mount LED Indicator/Pushbutton

Wall mounted Indicator with combination red/green LED door lock status indicators, "Push to Open" pushbutton and audible alarm with 304 stainless steel cover. Connections are via Cat 5 cable or standard electrical wiring.



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Wall Mount LED Indicator/EO Pushbutton

Wall mounted Indicator with separate red LED and green LED door lock status indicators, “Emergency Exit” mushroom head pushbutton and audible alarm with 304 stainless steel cover. Connections are via Cat 5 cable or standard electrical wiring for the LED and standard electrical wiring for the Emergency Override pushbutton.



Wall Mount LED Indicator/Pushbutton/EO Pushbutton

Wall mounted Indicator with combination red/green LED door lock status indicator, “Push to Open” pushbutton, “Emergency Exit” mushroom head pushbutton and audible alarm with 304 stainless steel cover. Connections are via Cat 5 cable or standard electrical wiring for the LED and standard electrical wiring for the Emergency Override pushbutton.



Wall Mount Emergency Override

Wall mounted “Emergency Exit” mushroom head pushbutton with 304 stainless steel cover. Connections are via standard electrical wiring.



Wall Mount Wave Sensor

Wall mounted touchless actuator with illuminated LED ring and stainless steel cover. Single or double gang models are available. Connections are via standard electrical wiring.



8pin to RJ45 Adapter

When using 3rd party Door Indicators (24VDC only), this adapter connects to the RJ45 termination on each Module and provides 8 pin terminations for the Electric lock, Door Position Sensor (DPS) and 3rd party Door Indicator.





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4. Installation and Wiring

Proper installation results in the EZ Modlock system performing as designed and provides optimal operation. In this section recommendations and instructions are provided so that, if followed, will result in the proper installation of the system.

4.1 Position of the Modules and/or NEMA rated box

To determine the best position of the Modules it is recommended to consider the following recommendations and instructions:

- The Modules can be mounted most anywhere indoors as long as they are installed in a ventilated and dry place, with temperatures ranging from 50°F to 104°F and relative humidity no greater than 80% to prevent the formation of condensation.
- It is recommended to mount the Modules outside critical areas allowing easy and undisturbed access when conducting preventive maintenance, troubleshooting or adjustment to interlocking scheme via the on-board dip switches.
- It is best practice to place the Module equidistance between the doors it controls to standardize the length of the wiring. The length of the Cat 5 cable or electrical wiring used to connect Modules in a multi door configuration or to connect each Module to Door Accessories should not exceed 100 feet (30 meters)

4.2 Fastening of the Modules and/or NEMA rated box

The Modules can be mounted to any nonflammable substrate such as dry wall, mortar, cinder blocks or concrete.

- The hardware appropriate for these substrates as well as the tools used are provided by the installer or end user. The hardware must fit the mounting ears on the Modules or mounting holes on the NEMA box.
- Place the Module or NEMA box in the intended location. While not critical to operation it is best practice to level the device on the substrate. Mark the substrate with the location of mounting ears/holes.
- Drill the holes in the substrate or studs and use wall anchors where appropriate to ensure the devices are held firmly to the substrate
- Fasten the Module or NEMA box to the wall.
- The dip switches to adjust interlocking schemes are on the back side of the Modules. Whether attaching the EZ Modlock components directly to the wall or in a NEMA enclosure, it is best to use hardware that is easily removed and reattached after any dip switch adjustment.

4.3 Wiring of the Module and Accessories

For each configuration of the system it is necessary to install to connect the Module to optional Sentry accessories or other 3rd party accessories (e.g. 24VDC failsafe electric locks such as Maglock/strike plate, DPS, optional Sentry Door Position Indicators, 3rd party Door Position Indicators, Access control devices, blowers/UV lamps). EZ Modlock utilizes Cat 5 cable for some connections allowing easy plug and play connections. Other 3rd party connections require standard electrical wiring. The size, type and length of electrical wiring required is the responsibility of the installer or end user and is dictated by the device used.

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- Module to Module connection for multi door configurations - uses Cat 5 cable.
- Module to optional Sentry branded Door Indicators connection - uses Cat 5 cable with RJ45 connectors for the LEDs and Door pushbuttons. Optional standard electrical wiring connections are available but must use the 8pin to RJ45 adapter.
- Module to optional Sentry branded Emergency Override Switches connection – uses standard electrical wiring.
- Module to 3rd party Door Indicators connection – uses standard electrical wiring and 8pin to RJ45 adapter.
- Module to Electric Locks and DPS connection – uses standard electrical wiring (2 Door Modules require an additional adapter).
- Module to Building Management Systems (BMS) Connections - the BMS connection is via a RJ45 termination on the top of the Module. Using a Cat 5 cable, a BMS system can connect to each Module with the Module sending a dry contact signal indicating whether the Door is open or shut.
- Module to Fire Alarm System connection - the Fire Alarm connection is via electrical wiring on the screw terminal 5-6-7-8 on top of the Module. In the event of a Fire or Alarm condition the Module can receive a dry contact signal from the Fire Alarm system to have the Module disengage all the connected electrical locks.

For Cat 5 connections insert the Cat 5 cable into the RJ45 female connector until you hear an audible click. Give a gentle tug on the Cat 5 cable to ensure it is fully engaged.

For electrical wiring connections to the Modules clamp style screw terminal strips are provided on the Module. The screws must be loosened using a 1/8" flat bladed screwdriver (provided by others). The wire insulation should be stripped allowing 0.25" of exposed wire. Place the exposed wire inside the clamp style terminal strip and tighten the screw down. Give a gentle tug on the wire to ensure it is firmly held in place.

CAUTION

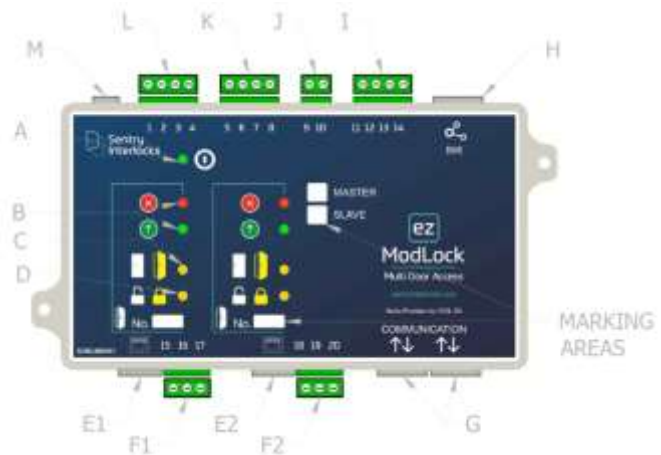
- It is recommended to install appropriate conduit and wiring that meet the NEC and local municipal codes.
- If using round conduit, the minimum recommended internal diameter is 25mm.
- Avoid placing the wiring in ducts or conduit where there are power cables to avoid electrical interference.
- While inserting the wiring into the conduits, make sure that all wire ends are properly identified to eliminate errors when making the connections. This will allow quick identification of which door is related to which Module avoiding confusion when wiring multiple quantities of doors to be interlocked.

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Faceplate and termination descriptions for the 2 Door and Multi Door Modules are as follows:



- A. POWER LED (ILLUMINATED GREEN WHEN POWERED)
- B. DOOR INDICATOR LED_s CONFIRMING PROPER SETUP (RED/GREEN)
- C. DOOR STATUS LED_s (ILLUMINATED WHEN OPEN)
- D. LOCK STATUS LED_s (ILLUMINATED WHEN LOCKED)
- E. RJ45 (ETHERNET) PORT TO DOOR INDICATORS
- F. RJ45 (ETHERNET) PORT TO BUILDING MANAGEMENT SYSTEM
- G. RJ45 PORTS FOR 2-DOOR EXPANSION COMMUNICATION
- H. MODULE POWER INPUT JACK (24 VDC - 2.1mm)



- A. POWER LED (ILLUMINATED GREEN WHEN POWERED)
- B. DOOR INDICATOR LED_s CONFIRMING PROPER SETUP (RED/GREEN)
- C. DOOR STATUS LED_s (ILLUMINATED WHEN OPEN)
- D. LOCK STATUS LED_s (ILLUMINATED WHEN LOCKED)
- E. RJ45 (ETHERNET) PORT TO DOOR INDICATORS
- F. TERMINALS FOR ELECTRIC LOCKS AND DOOR POSITION SENSORS
- G. RJ45 PORTS FOR MULTI DOOR COMMUNICATION
- H. RJ45 (ETHERNET) PORT TO BUILDING MANAGEMENT SYSTEM
- I. TERMINALS FOR DOOR RELEASE IF NORMALLY LOCKED
- J. TERMINALS FOR POWER SOURCE
- K. TERMINALS FOR N.C. FIRE ALARM AND/OR MANUAL E.O. SWITCH (N.C.)
- L. TERMINALS FOR AUTOMATIC DOOR OPENING CONSENT
- M. MODULE POWER INPUT JACK (24 VDC - 2.1mm)

4.4 Connection of the power supply line to the Modules

The EZ Modlock Modules (in a standalone configuration) are supplied with a UL listed 90-264VAC to 24VDC power supply. The power cord is 6.5 feet/2 meters long with a NEMA 5-15 grounded male plug. The female plug (PA80) should be inserted in the power input jack on top of each Module. The NEMA 1-15 male plug should be inserted in a 120VAC outlet.

The EZ Modlock Modules provide the power to the Door Indicators and the 24VDC DPS and electric locks (maximum 2 DPS and 2 electric locks rated a maximum 300mA each) as well as the power/signaling to the Door accessories

Sentry offers a custom integration service where multiple Modules can be pre-installed in a NEMA rated box. Sentry will work with the client to optimize the design of each box. A single hard wired Power Supply may be used to power all of the Modules within a NEMA box.

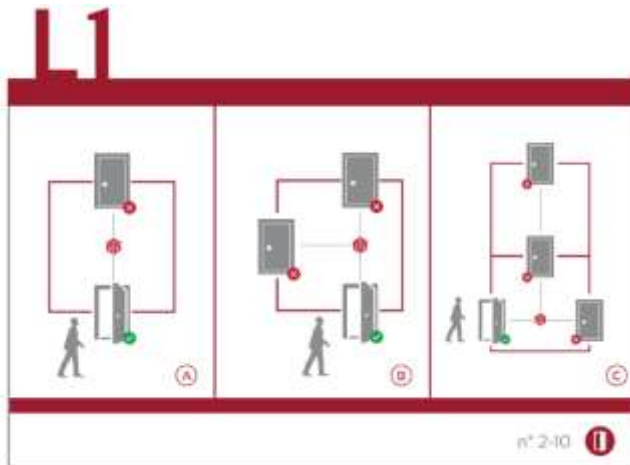
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5. Interlocking Logic and Adjustment

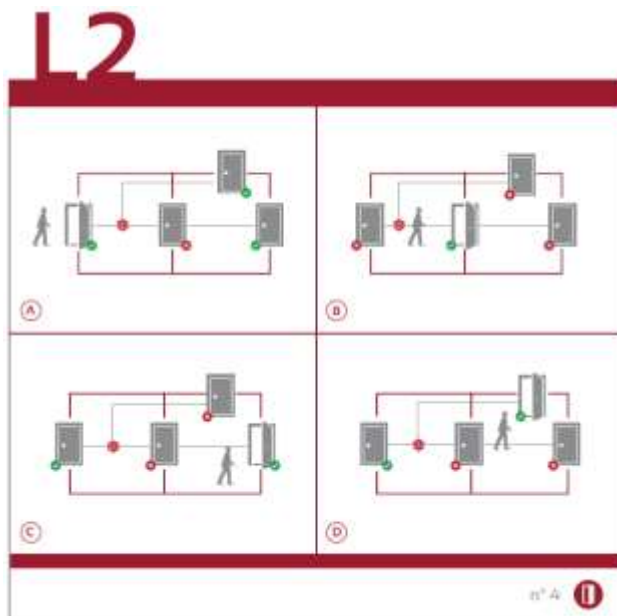
The interlocking logics executable by the system are contained in the memory of the microcontroller residing within the Modules.

The standard logic implemented on the Modules are the following:

5.1 Opening Logic L1

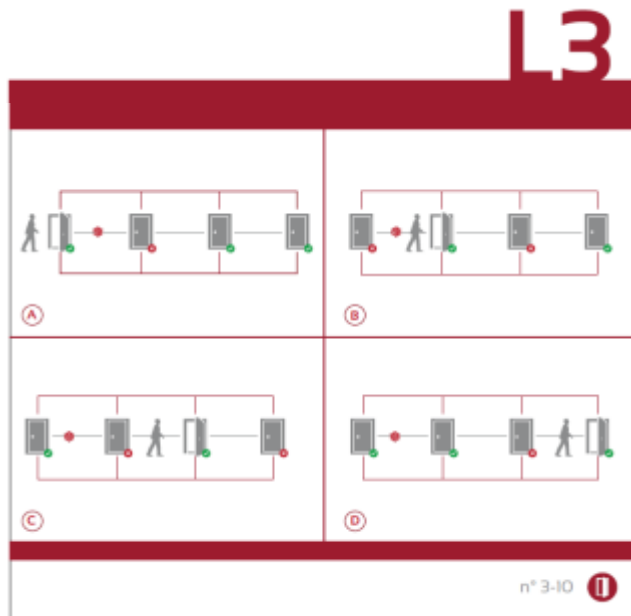


5.2 Opening Logic L2



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5.3 Opening Logic L3

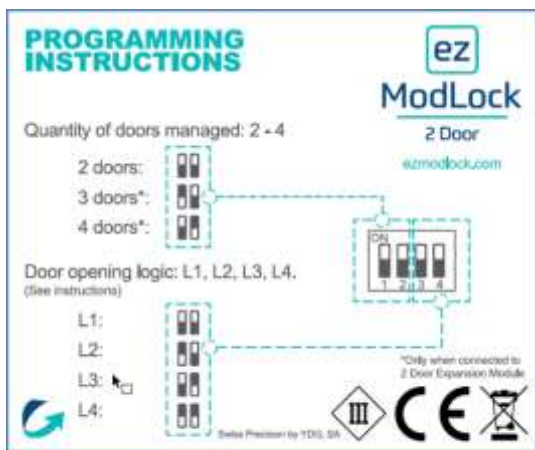


5.4 Opening Logic L4

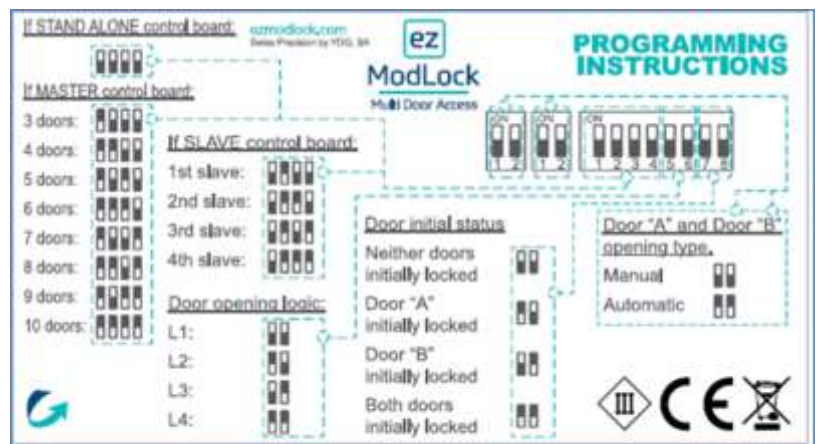
Custom logic – called Logic L4 – is available upon request.

5.5 Adjustments

The desired logic on each Module can be adjusted at any time (after turning off the Module) by adjusting the series of dip switches located on the rear of each Module. The dip switches also allow users to choose the quantity of doors and identify the Master-Slave arrangement. The dip switches are accessible by lifting the loose half of the instruction label on the rear side of the Module (do not permanently attach the loose half of the label). The logic is determined by manually positioning the individual switch in either the up (ON) or down (OFF) position. Each Module's dip switch schematics are provided in Appendix B.



2 Door Logic

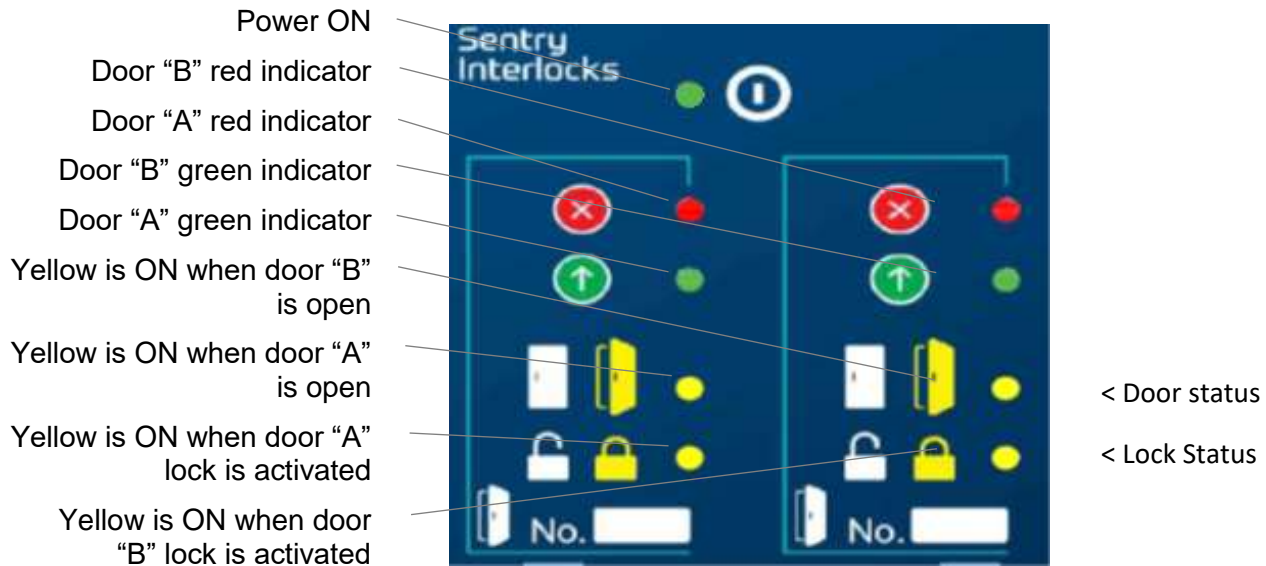


Multi Door Logic









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6. LED Indicators

The 9 LED indicators on the front of each Modules provide useful information during the installation phase.



The LEDs have the following ON / OFF / Flashing options:

LED OFF	
RED ON	
GREEN ON	
YELLOW ON	
RED QUICK FLASHING	
RED SLOW FLASHING	
GREEN QUICK FLASHING	
GREEN SLOW FLASHING	

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6.1 LED indications during normal operation

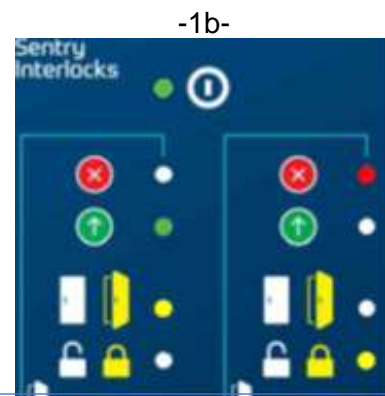
Default – normally unlocked doors

- Both doors are manual
- Both doors are normally unlocked
- Both doors are closed
- No interlock activated



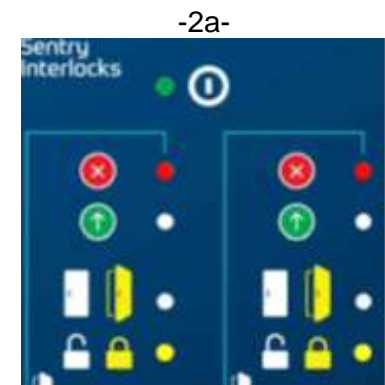
Door “A” is opened

- Both doors are manual
- Both doors are normally unlocked
- Door “A” is opened, Door “B” interlock is activated



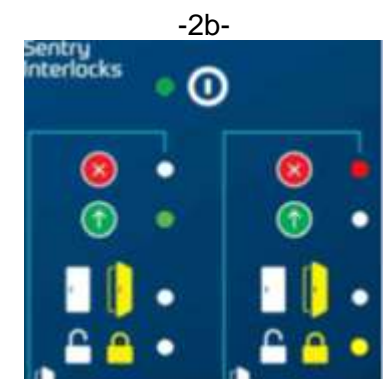
Default – normally locked doors

- Both doors are manual
- Both doors are normally locked
- Both doors are closed
- No interlock activated.



Door “A” is released but not opened

- Both doors are manual
- Both doors are normally locked.
- Door “A” released by digital input by push button or access control device connected on terminal # 13-14
- Door “B” interlock is activated.

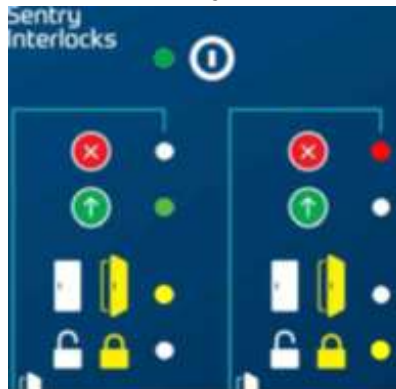


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Door “A” is released and opened

- Both doors are manual
- Both doors are normally locked
- Door “A” was released and now is opened
- Door “B” interlock remains activated

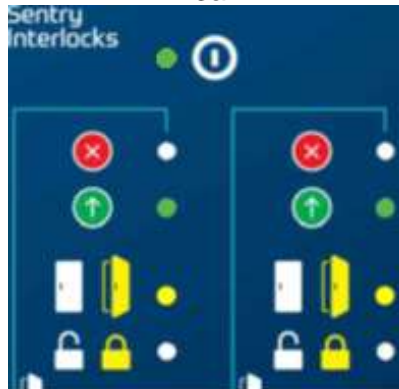
-2c-



Default – automatic doors

- Both doors are automatic
- Both doors are closed
- No interlock activated

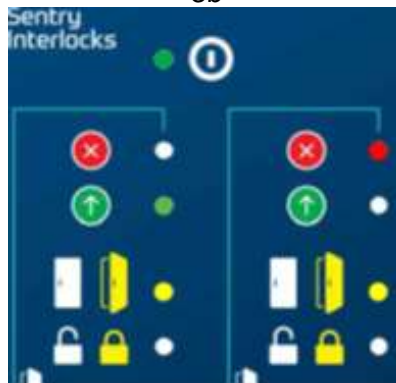
-3a-



-3b-

Door “A” is opened

- Both doors are automatic
- Door “A” is opened
- Door “B” is interlocked



-4-

Red LEDs are slowly flashing simultaneously with 1 second intermittence while doors are locked

- The recovery time period is running



7. Diagnostic/Troubleshooting Tools

Upon completion of the placement and wiring of the various components of the system, Users can perform a diagnostics test. When the Module is initially switched on, the system will perform a self-test procedure (lasting a few seconds) to ensure all the connections have been made correctly and that all doors are in the closed position.

This self-test procedure will include:

- Testing the red LEDs built into Sentry Door Indicators and Modules for about half a second.
- If there is a Master-Slave arrangement, then the master Module will verify the proper connection of all connected slave Modules. For each connected Module you will hear a number of beeps corresponding to the slave Module. (1 beep for the first slave, 2 beeps for the second slave, 3 beeps for the third slave and 4 beeps for the fourth and last slave.
- After scanning all slave Modules connected to the master Module a long beep will sound to close the procedure.
- All connected door accessories will be verified, the test is indicated by two consecutive short flashes of the green LED corresponding to the door verified.
- If during the verification phase of accessories there's an open door or a Door Position sensor malfunction is found, the red LED will flash on the Module as well as on the optional Sentry Door Indicator and the audible alarm will emit a continuous beeping sound.

If the entire test is successfully completed, verifying that all doors controlled by the system are closed and properly connected, the system goes into standby condition according to the set program.



Every time after a "GENERAL RELEASE" or "FORCED DOOR OPENING" the Module checks that all the controlled doors are in the closed position.

The system can detect and report some states of malfunction that may occur during normal operating use:

7.1 A simultaneous opening

In all cases when the interlocked doors are normally unlocked, it is rare, but possible to simultaneously open two or more interlocked doors. In this case, the audible alarm on the optional Sentry Door Indicator will emit an intermitting beeping sound and red LED will flash on the Module as well as on the optional Sentry Door Indicator. All electric locks mounted on the related doors will be released. The fault condition is automatically restored upon closing of all doors that were opened.

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7.2 Extended opening

When a door is held open for more than 20 sec. the system activates an audible alarm built into the optional Sentry Pushbuttons. The alarm automatically resets once the door is closed. During this alarm the red/green door lock status indicators do not change color or start flashing.

7.3 Forced opening

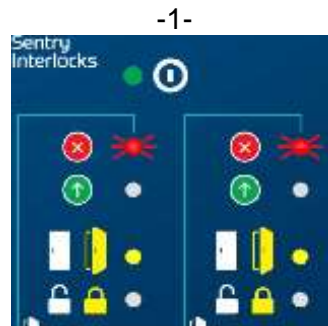
In all systems where there's no electric lock mounted on the doors, but the control is done only by the red/green LED indicators mounted on the Module and optional Sentry Pushbuttons. It is possible to open a door even if the red LED indicator is ON.

Such opening of the door activates intermitting audible alarm and the red flashing on red/green indicators. The alarm automatically resets once the door is closed.

7.4 LED indications during initial troubleshooting

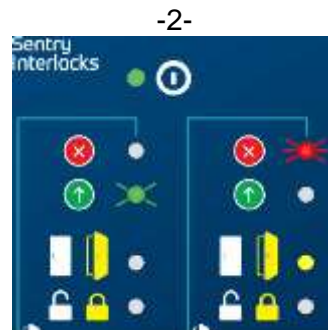
Both doors' red LEDs quickly flashing simultaneously and both door status yellow LEDs are ON

- Door Position sensors not recognized → system not starting regular operation
- Check Door Position sensors connection
- Door Position sensors must provide closed contact



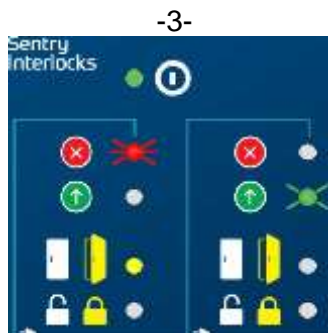
Door "A" green LED slowly flashing and door "B" red LED quickly flashing and only Door "B" door status yellow LED is ON

- Door "B" Door Position sensor not recognized → system not starting regular operation
- Check door "B" Door Position sensor connection
- Door Position sensors must provide closed contact



Door "B" green LED slowly flashing and door "A" red LED quickly flashing and only Door "A" door status yellow LED is ON

- Door "A" Door Position sensor not recognized → system not starting regular operation
- Check door "A" Door Position sensor connection
- Door Position sensors must provide closed contact

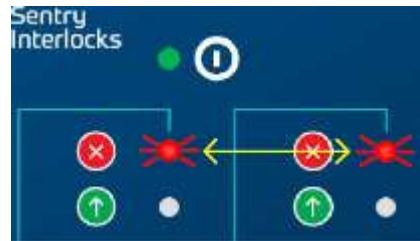


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-4-

Both doors' red LEDs alternate quickly flashing "left – right"

- Module is set as a master unit, but it's not recognizing its slave unit(s) → system not starting regular operation
- Check if slave units are correctly set as slave by dip switches and if slave(s) is properly connected to master by Cat 5 cable



-5-

Both doors' red and green LEDs alternate quickly flashing "up and down"

- Module(s) is set as a slave unit, but it's not recognizing its master unit → system not starting regular operation
- Check if master unit is correctly set as master by dip switches and if slave(s) is properly connected to master by Cat 5 cable



-6-

Both doors' green LEDs slowly flashing

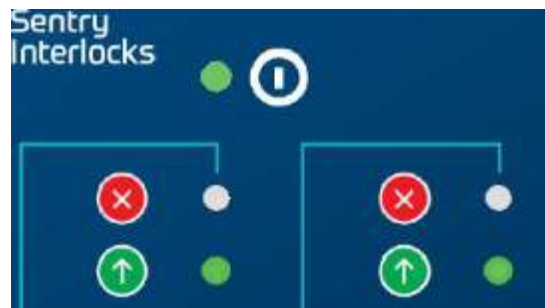
- This condition happens only in case of master – slave configurations and shows that both doors are correctly recognized, but there is some other module which is in the "1", "2", or "3" condition



-7-

Both doors' green LEDs are on and no other LED is flashing

- The system is properly wired and the interlocking logic, as set, is in effect



8. Disposal

The disposal of any system components must be carried out in compliance and in accordance with applicable laws in the country of use.

The European Directive 2012/19/EC, known as the WEEE Directive (WEEE), which prescribes the measures as a priority to prevent the production of waste electrical and electronic equipment.

In compliance with the requirements laid down in Directive 2012/19/EC on waste electrical and electronic equipment (WEEE), as amended; the device must be disposed through differential waste collection.

In particular, the user is encouraged to dispose of the unit, if necessary, to an authorized collection center.



The abandonment of the components of the EZ Modlock system outside of areas specifically designed for this purpose is contrary to the principles of respect and protection of the environment and in some countries is punishable by fines and penalties.



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9. Technical Support and Service

Please contact Sentry Interlocks directly to answer any questions you may have.

Equipment and trained personnel are available to meet any demand.

Sentry Interlocks, LLC
3265 Sunset Lane
Hatboro, PA 19040

Toll Free: 1.833.MOD.LOCK
Email: sales@sentryinterlocks.com
Website: www.sentryinterlocks.com



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10. Warranty

This EZ Modlock Limited Product Warranty applies to the products sold by Sentry Interlocks, LLC (Sentry) and supplements the Terms & Conditions outlined in Sentry quotations.

Warranty

Sentry warrants that the Product(s) will operate in accordance with the applicable specifications for such Product(s) and will be free from defects in materials and workmanship, provided that the Product(s) are applied, installed and maintained in accordance with Sentry documentation.

If a Product(s) does not perform in accordance with this Warranty, the Customer must promptly notify Sentry, specifying the non-performance in reasonable detail. Following Sentry's verification of non-performance with this Warranty, Sentry will, at its sole discretion, repair, replace or make appropriate adjustment to the non-performing Product(s).

Duration

This Warranty shall cover Product(s) for a period of two (2) years from the date of shipment from Sentry.

Exclusions from Warranty

1. This Warranty is not a warranty of satisfaction.
2. This Warranty does not apply to conditions resulting from the Product(s) being altered, abused, misused, damaged by accident or negligence or being repaired without Sentry's authorization.
3. This Warranty does not cover Product(s) subject to normal wear and tear.
4. This Warranty does not apply to conditions resulting from improper use or installation by the Customer or an agent of the Customer outside of Sentry's control.
5. This Warranty does not apply to conditions resulting from improper modifications made to the Product(s) without Sentry's authorization.
6. This Warranty does not cover the cost of labor required to replace or repair the Product(s).

Exclusion of Incidental & Consequential Damages

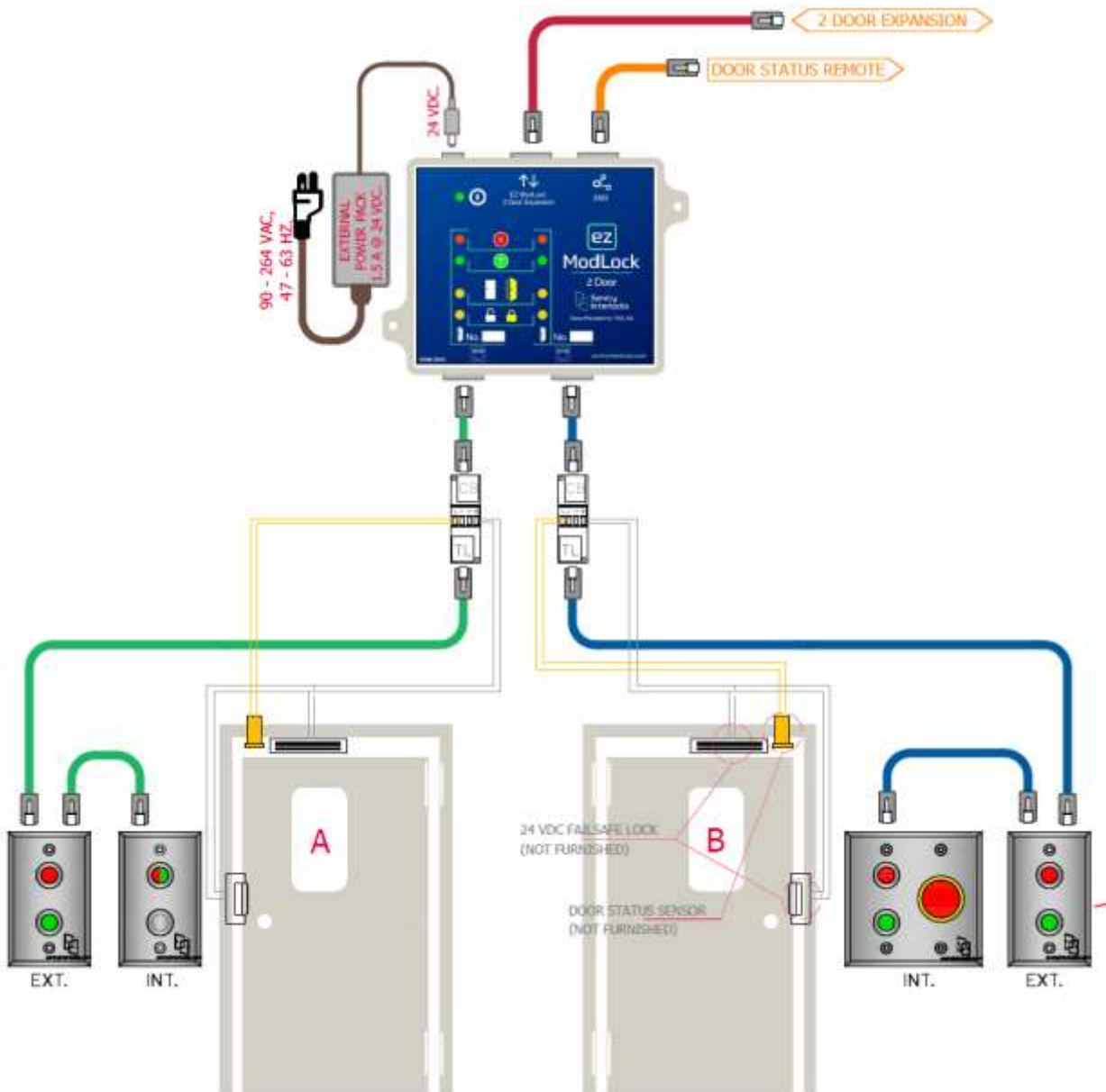
SENTRY IS NOT RESPONSIBLE FOR ANY SPECIAL, ENHANCED, PUNITIVE, ECONOMIC, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM BREACH OF THIS WARRANTY, WHETHER EXPRESS OR IMPLIED, INCLUDING NY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

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Appendix A – Schematics

The following are representative schematics. Specific wiring schematics are provided with every order.

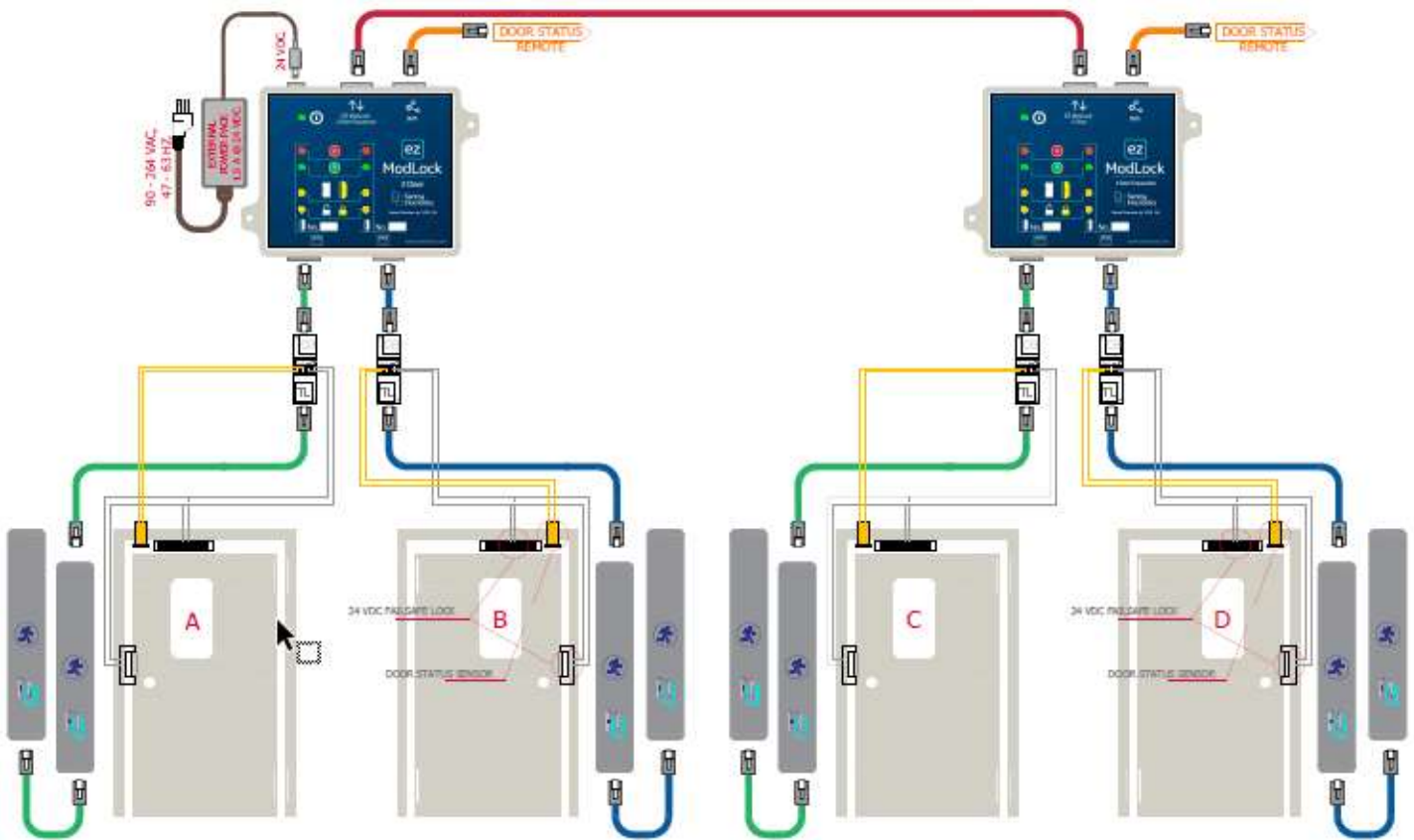
EZ Modlock – 2 Door



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Appendix A – Schematics (continued)

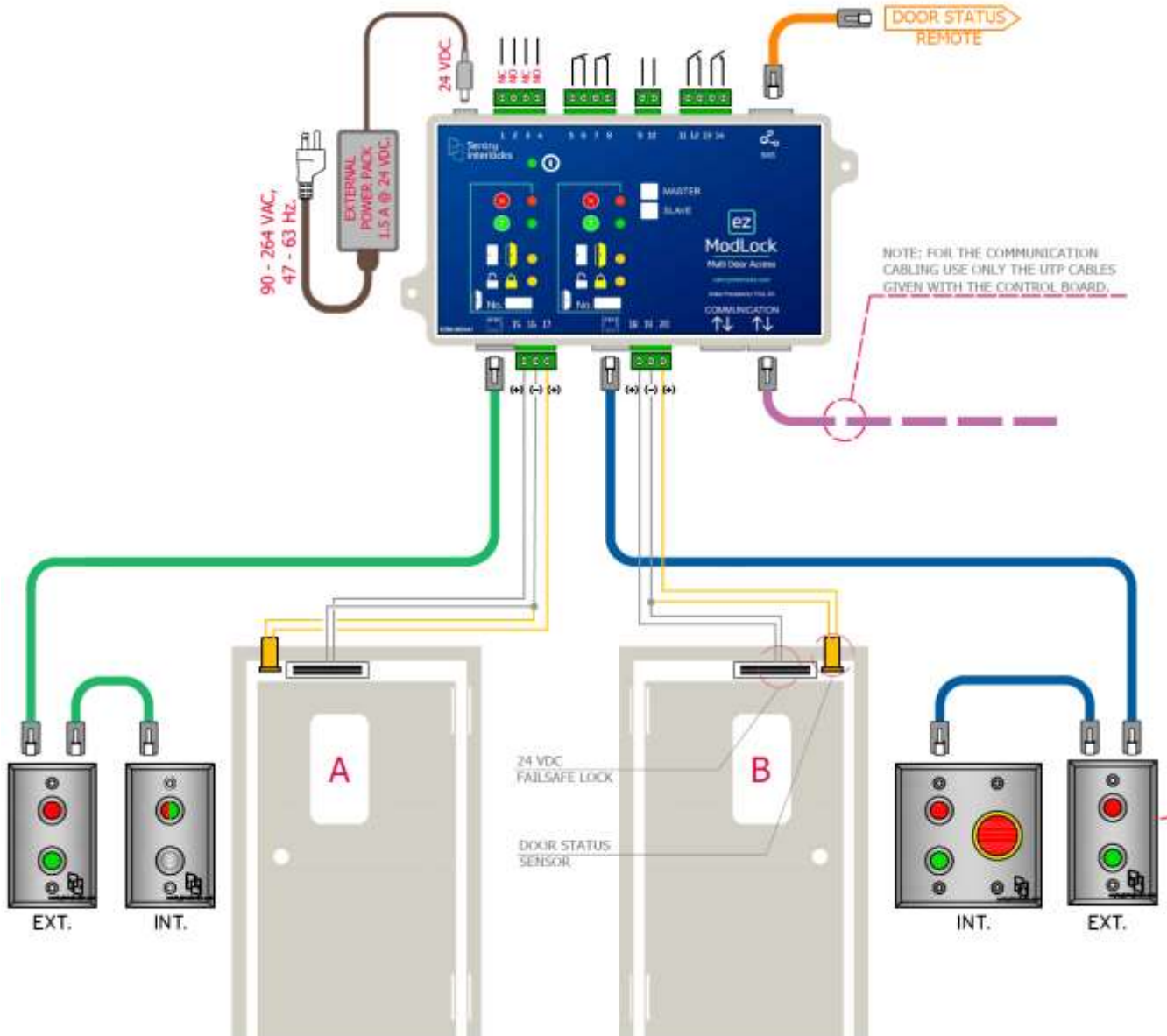
EZ Modlock – 2 Door Expansion



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Appendix A – Schematics (continued)

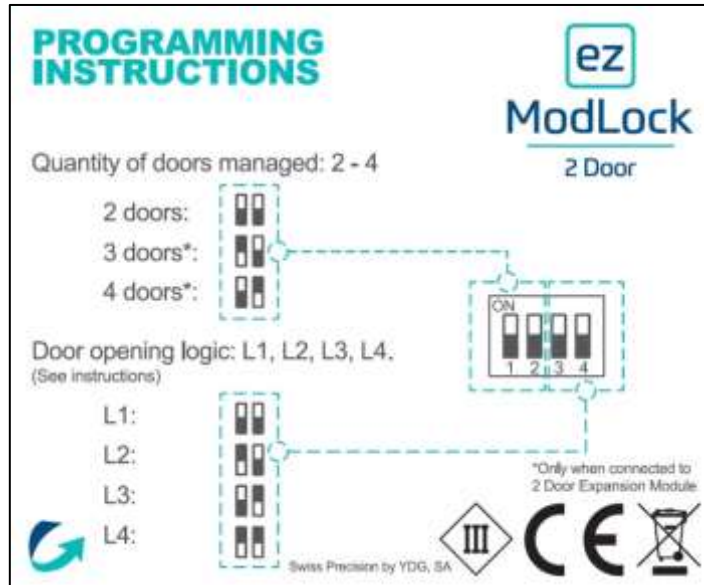
EZ Modlock – Multi Door Access



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Appendix B – Dip Switch settings

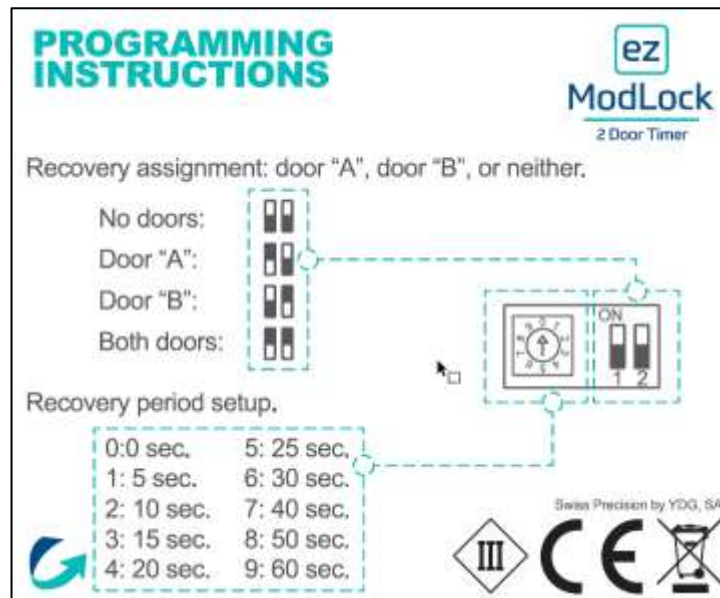
EZ Modlock – 2 Door:



The black box represents the position of the dip switch

EZ Modlock – 2 Door Expansion: uses 2 Door Dip switches to set logic

EZ Modlock – 2 Door Timer:

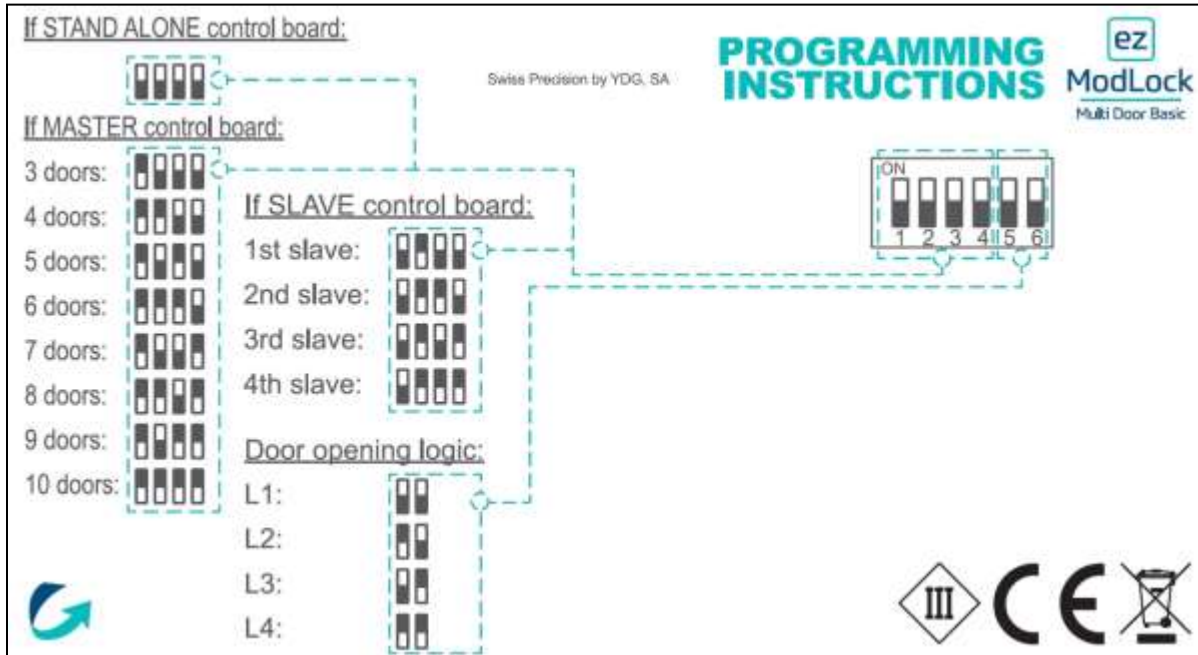


The black box represents the position of the dip switch

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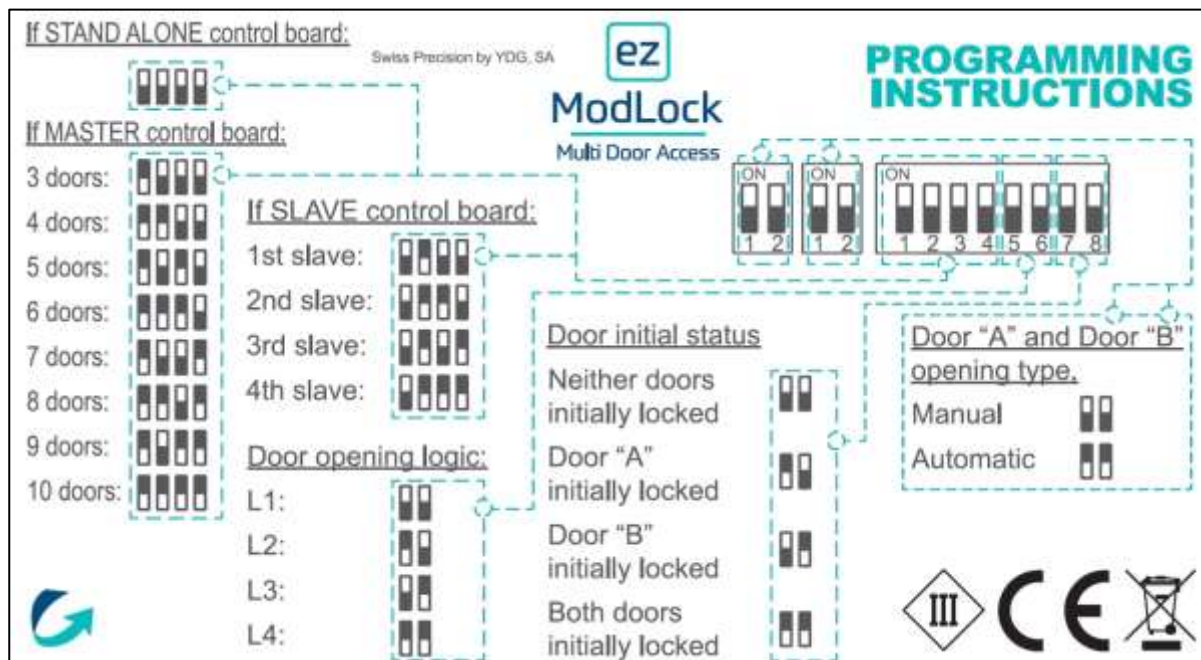
Appendix B – Dip Switch settings (continued)

EZ Modlock – Multi Door Basic:



The black box represents the position of the dip switch

EZ Modlock – Multi Door Access:

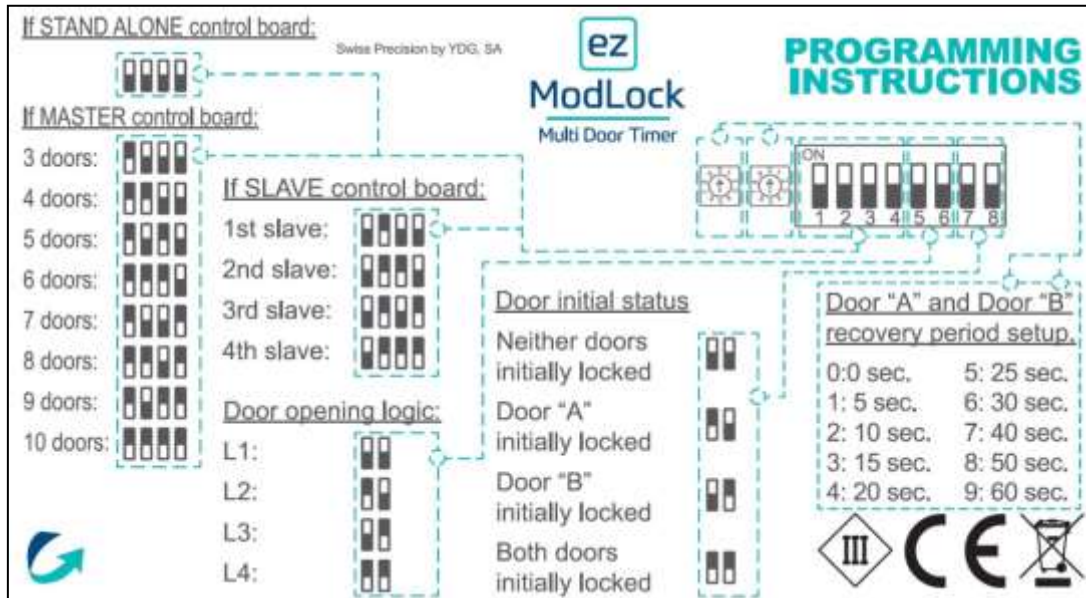


The black box represents the position of the dip switch

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Appendix B – Dip Switch settings (continued)

EZ Modlock Timer:



The black box represents the position of the dip switch