





**CE** 07/2024



### 1. INTRODUCTION

Thank you for purchasing Sentry Interlocks LLC WebLock product. Before you install and use the WebLock system read the precautions on the management and safety of the product.

### 1.1 Scope and identification of the document

This manual is for the users of the WebLock system and it contains all the necessary information for the proper use of all components of the system. Carefully follow the instructions contained in this Guide for the proper functioning of the system. All information is current as of the date of publication.

This Installation Guide is an official document issued by Sentry Interlocks and is an integral part of the system; it is characterized by a release date on the front page.

### 1.2 Reserves

Sentry Interlocks 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 Interlocks 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 Guide, is strictly prohibited without the prior written consent of Sentry Interlocks.

#### 1.4 Use and maintenance manual

The Installation Guide is divided into 10 sections.

The Installation Guide must be read sequentially, from beginning to end, one page after another, in order to fully comprehend how to operate the system and to heed the various warnings. The Installation Guide should be considered an integral part of the system

The Installation Guide must be kept with the utmost care for the life of the system; you must ensure that it is handled properly and that it is not damaged in any way.

It is assumed that the User has a fundamental understanding of door interlocking basics and general information and instructions have been omitted.

### 1.5 Caution Notation

Within this Installation Guide, the Caution symbol shown below is used to identify information where special attention must be dedicated.

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### 1.6 Marking of attention

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.

#### 1.7 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 (Electromegnetic Compatiblity)



### 2. SAFETY

### 2.1 Intended use

WebLock system has been specifically designed to create intelligent door interlock systems in controlled environments.

Any use other than as described in this Guide 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 intended use:

• System for the creation and management of intelligent interlocking for doors in controlled environments within the interior of buildings.

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

### 2.2 Use not allowed

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> All uses not expressly stated in the preceding paragraph shall be considered as not allowed.

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The use of the WebLock system by untrained Users could be considered prohibited. In case of doubt, it is advisable to first consult with Sentry Interlocks.

### 2.3 Recommendations

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The WebLock system components should only be installed by trained personnel in compliance with the laws and regulations that exist in the location of the installation.

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- The Network Bridge and Door Control Modules of the WebLock system are rated 24VDC and are powered by the use of a) 110VAC-230VAC/24VDC power supply provided with each individual component or b) a single 110VAC-230VAC/24VDC power supply to power an integrated assembly. The power supply provided by Sentry Interlocks is protected against short circuit and overload and should not be replaced with any other model without first consulting with Sentry Interlocks.
- The 110VAC-230VAC/24VDC power supply uses a 6 foot long power cord with IEC C13 female connector to the power brick and a NEMA 5-15 plug to the electrical outlet. Any damage to the power cord can affect the safety of use of the connected device and its power supply. Always check the state of the cable and in case of its replacement use an equivalent model.

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The WebLock system operates using 24VDC. Any 3<sup>rd</sup> Party devices (e.g. Electric locks, Door Position Switches, Door Accessories, Access Control etc.) that are used with the WebLock system must be rated 24VDC.



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It is forbidden to open the Network Bridge or Door Control Modules without prior approval of Sentry Interlocks. An unauthorized opening results in the warranty being voided and absolving Sentry Interlocks from any direct or indirect liability caused by the unauthorized access. If approval is granted by Sentry Interlocks to open either device, make sure that the device is unplugged before opening the device. Sentry Interlocks disclaims any liability for any damage and / or injury caused by the opening of the devices while they are powered.

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The enclosure of the Network Bridge and Door Control Modules, if properly positioned and wired, ensures adequate protection of the electronic circuitry inside. You should install the devices in ventilated and dry area, to prevent the formation of condensation internally that could negatively impact its operation.

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The WebLock system and components have been designed to operate in temperatures ranging from 50°F to 104°F and relative humidity no greater than 80% to prevent the formation of condensation.

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> The WebLock system and components cannot be installed in locations classified as combustible with potential explosion hazard.



### 3. COMPONENTS OF THE SYSTEM

The WebLock system works with any type of door or Pass-Thru ~ manual or automated, hinged, sliding or roll-up and normally unlocked or normally locked. Any Electric lock, Door Positioning Sensor and Door Accessories (pushbuttons, Indicators etc) can be used as long as they are rated 24VDC.

### 3.1 Network Bridge

The Network Bridge is the device which creates the connection between the field installed Door Control Modules Nodes and the Facility LAN. The Network Bridge has its own CPU and an internal memory card which allow the flexible configuration of interlocking logic, but also the recording of events ~ opening/closing doors, activating locks, recovery times, door anomalies, etc. The web application running in the Network Bridge is visible through the LAN connection and IP address, without specific software installation to any PC.

### 3.2 Door Control Modules

The Door Control Modules are the devices installed in between the Network Bridge and the controlled doors. These devices have a microcontroller based internal intelligence to run the door interlocking logic. This interlocking logic can be monitored and modified in real-time through the web based software installed in the Network Bridge.

Every Door Control Module can manage up to four (4) doors, with the flexibility of having each door be part of the same interlocking scheme or having all four operating in separate interlocking schemes. Up to quantity 25 Door Control Modules can be daisy chained together to achieve a maximum interlocking scheme of 100 doors. The interlocking of doors is accomplished by having the Module power the Electric lock and Door Positioning Sensor for each connected door.

The Module manages the signals for each connected door:

- Door status: open / close.
- Electric lock status: unlocked / locked.
- Red indicator status: ON / OFF.
- Green indicator status: ON / OFF.
- Buzzer (audible alarm) status: ON / OFF.
- Release button.

The Door Control Modules are also equipped with removable screw terminals to allow the auxiliary connections through eight (8) voltage free digital inputs and four (4) low voltage relay outputs. These connectors allow the use of pilot ventilators, fan filter units, UV lamps directly as well as receiving signals from pushbuttons, access control devices, automatic doors and motion sensors ~ as long as they are rated 24VDC.

The Door Control Module also provides a constant 24VDC auxiliary power supply in case of the need to power an external device that may need a 24VDC power supply.



#### 3.3 Electric Locks and Door Position Sensors

Electric Locks and Door Position Sensors (DPS) are powered by the Door Control Modules so they must be rated 24VDC. These devices are typically provided by the User but Sentry Interlocks can assist in sourcing these devices.

#### 3.4 Door Accessories

Sentry Interlocks offers a line of Door Accessories included colored LED Indicators, Pushbutton, Emergency Overrides and Wave Sensors. 3rd Party Accessories can be used as long as they are rated 24VDC. These devices are powered by the Door Control Module.

#### 3.5 Miscellaneous Devices

Various external devices such as pilot ventilators, blowers, UV lamps, pressure sensors, Fire Alarm systems, Access Control devices to name a few can be integrated into the WebLock system as long as they are dry contact (voltage free) as an input. Removable screw terminals are provided for eight (8) voltage free digital inputs and four (4) low voltage relay outputs.

### 3.6 Wires required (see Section 5 for additional details on Wiring)

The WebLock system offers the ability to use Cat 5 cables on many connections making it easy to install. The wiring options are as follows:

- Network Bridge to the Facility LAN connection is via a Cat 5 UTP cable, 10/100 Base T Ethernet
- Network Bridge to Door Control Modules connection is via Cat 5 UTP cable
- Multiple Door Control Modules daisy chained together via Cat 5 UTP cables
- Electric Locks and DPS to the Door Control Module connection is via wired leads to removable screw terminals
- Door Accessories to the Door Control Module connection is via:
  - Cat 5 UTP cable to RJ45 port if using Sentry Interlock branded Accessories
  - Wired leads to Sentry Interlock Adapter to RJ45 port if using Sentry Interlock or 3<sup>rd</sup> Party accessories with wire leads
- Miscellaneous Devices to the Door Control Module connection is via wired leads to removable screw terminals

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The length of any Cat 5 cable or electrical wiring used in the WebLock system should not exceed a length of 100 feet (30 meters). The positioning of the WebLock components to interlocked doors should be carefully considered to prevent excessive cable/wire runs. If longer lengths are required please consult Sentry Interlock.



### 4. SYSTEM LAYOUT

To ensure that the WebLock Door Interlock system is designed properly, Sentry Interlocks requires all pertinent information be provided in order to develop a detailed wiring schematic showing every aspect of the system layout. This schematic is provided free of charge and must be approved by the User before any product is shipped. This wiring schematic should be used to assist in the installation of the system and is intuitive enough to allow even novice Users to be able to install the system.





### 5. INITIAL INSTALLATION

In order to ensure proper installation of the system it is advisable to follow the step by step instructions provided in this section. Proper installation allows optimum operation and intended life of all components of the system.

### 5.1 Identification of the position of the Network Bridge and Door Control Modules

To determine the best position of the WebLock devices, it is recommended to take into account the following requirements:

- To minimize long cable runs (over 100 feet), the Network Bridge should be located equidistant to the Door Control Modules.
- To minimize long cable runs (over 100 feet), the Door Control Modules should be located equidistant to the doors controlled by them.
- Position the Door Control Modules outside critical areas to allow easy preventive maintenance or check.
- Position the WebLock devices at a suitable distance from other devices in order to ensure adequate ventilation and minimize any electrical interference during use.

### 5.2 Mounting WebLock devices

If you wish to fasten the Network Bridge or Door Control Devices to a wall or ceiling, it is recommended to follow the following steps:

- Use the appropriate mounting holes positioned on the sides of the modules. The Network Bridge has four mounting holes while the Door Control Modules have six mounting holes.
- Identify the fastening position desired by taking into consideration what is stated in point 5.1
- Determine the type of wall/ceiling and the depth you want to attach the hardware to. If the wall is just sheet rock or there are metal/wood studs behind the wall will determine if screws or anchors are required.
- Place the device on the mounting surface and mark the holes present at the sides.
- Drill adequate holes in the wall/ceiling surface chosen for installation and use suitable fasteners and anchors for the mounting.
- Due the variety of hardware that could be required all mounting hardware is the responsibility of the Installer.

### 5.3 Cable/wiring runs.

To connect the Cat 5 cables and wiring to the WebLock devices it is recommended to install appropriate conduits for the housing of said cables/wires in order to ensure the protection during operation / installation / maintenance. If using round conduit the minimum recommended internal diameter is 1"/25mm. While inserting the wiring into the conduits, make sure that every wire end is properly marked so that no confusion will happen during the connection to the WebLock devices, accessories or doors.

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> Avoid placing the WebLock cables/wires in conduits or in close proximity to power cables.



### 5.4 Connection of the control board to the power supply line.

When purchasing WebLock devices to be installed individually a power supply (to be plugged into a 120VAC outlet) is provided for each device. If purchasing Sentry Interlocks' Integration Services, Sentry Interlocks will preinstall the WebLock devices in a chosen NEMA enclosure. Depending on the configuration, Sentry Interlocks will provide a single power supply for all the devices that must be hard wired to AC power.

The individual power supplies has a removable power cord with IEC C13 female plug for insertion into the power brick and a NEMA 5-15 plug for insertion into a 120VAC outlet. The power cord is 6 feet long and is rated 18AWG.



The power brick has a hardwired cable with a female PA80 plug for insertion into the power inlet on the Network Bridge or Door Control Modules.



It is recommended that all of the WebLock devices in each interlocking scheme be powered through the same circuit breaker, so it's possible to turn the individual locking system ON / OFF at the same time.

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> The positioning and wiring of the power socket outlet supplying power to the control board must be performed in compliance with the laws of the country of destination of the plant.

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Complete the full wiring of the system, according to the wiring schematic provided by Sentry Interlocks before turning ON any WebLock device.



### 6. USE OF THE SOFTWARE

Once the Network Bridge, Door Control Modules, Door Accessories and all other miscellaneous components are positioned and wired, it's possible to create the first access to the system by the following preliminary steps:

- Make sure all doors controlled by WebLock system are in closed position.
- Turn the power on to the devices.

#### 6.1 First login to the software

Connection to the Network Bridge is possible via a DHCP IP address; therefore, the Network Bridge must be connected to the company network or to a PC via a router capable of distributing IP addresses in DHCP.

Observe the MAC address of the Network Link Node, shown on a label on the module itself to proceed with identification on the network.



From a computer connected to the same network, using the Google Chrome browser, it will be possible to reach the web-based software residing in the Network Bridge via the IP address assigned in DHCP.

If you want to block the IP address of the Network Link Node, proceed with the so-called IP binding in the router.

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> To identify the IP address assigned to the Network Bridge, it may be necessary to involve a system administrator of the network.

Type in the URL bar of Google Chrome the IP address assigned to the Network Link Node.

Example:

IP address dedicated to the Network Bridge = 192.168.10.120

Type in URL bar of Google Chrome = 192.168.10.120

The following login page will appear:



Sentry Interlocks		
Username Password	1 1	
Sign In		

For the very first login, the username is "admin" and password is "admin".

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After the first login it is best practice to change the username and password to unique credentials rather than continue to use "admin".

The initial username and password can be changed in "Users" section (see section 6.3). It will then be possible to add more Users.

### 6.2 Software layout

After successful login, the first window of the software that appears is called "Dashboard". It shows the general control options of the interlocking system. This window has several key sections:

- [1]: This box identifies who the User is who has logged in
- [2]: This box identifies which door interlock logic is currently managing the doors
- [3]: This section shows the Latest Events for ordinary events of the system

[4]: This section shows the Latest Notifications of anomalies (doors left open too long, doors released by release button, etc.)

[5]: The left sidebar shows the Menu for the four major sections of the software. Depending on the level of the User all or some of these sections will be viewable.





#### 6.3 Users Section

User management is at the discretion of the system manager. It is strongly advisable to change the username and password after the first access from "admin" to a unique login credentials. There are two levels for access to the system ~ "Administrator" or "Viewer". Administrator level has access to the entire system and can add and delete Users. Viewer level can only view the records and layout of the system.

It is also recommended to limit the number of Administrators, or to keep only one Administrator (who performs the first access) in order to avoid unexpected changes in the system by multiple people.

To monitor the statistics of the doors for maintenance purposes, to detect the daily events to analyze the correct work of the personnel, as well as the anomalies created through forced openings or forgotten open doors, simply assign users to the Viewer level. To change the operating logic of the system, on the other hand, it is necessary to have access to the Administrator level.

	Ð	Dashboard	
pard		Users	
	a	System Configuration 〈	
Monitoring <	0	System Monitoring <	

Menu visible by a viewer

Menu visible by an Administrator

To change the password and username of the Administrator User, click on the *icon* on the right side of the Administrator row.

	SentryAdmin	=				Standard logic 🗘	0 Admin User
	11/07/2024 10:59:52	Users					🌡 Users
/	R. Darkhand	+ Add new user					
5	Users	Full name	User name	User level	User status	~	
	A System Manifesting	Admin User	admin	Administrator	×		
	a system isometing						
		Copyright © 2023 Sentry Interlocks. All rights re	served.				Version 1.2.5

The following "Modify User" page will appear:



SentryAdmin ≡		Standard logic 🛛 🗘 👘 Admin User
Insert new name and surname of user	Modify user ×	≜ Users
Example: John Smith	Full name Admin User	
P.II	User name	User status
Insert new username (used for the system access)	admin	✓
Example: Cleanroom 10B	Password	
	Password again	
Insert new password	User level	
	Administrator ~	
	User status	
Do not modify these cells	Enabled	
	Cancel	
Click on "Save" to save the new user da and escape the page.	ata	
Copyright © 2023 Sentry Interlocks. All rights rese	rved.	Version 1.2.5

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After changing the username and password from the initial login, "admin", "admin", it will no longer be possible to access the system without using the new login credentials. It is highly recommended that the new Administrator credentials be recorded and stored in a secure place.

After changing the initial Administrator username and password, you can also create new Users whether they are secondary Administrators or Viewers.

SentryAdmin	=				Standard logic $\Delta$	(2) Admin User
11/07/2024 11:02:29	Users					🛔 Users
aña Dashboard	+ Add new user					
🛓 Users	Full name	User name	User level	User status		
OC System Configuration <	Admin User	admin	Administrator	~	Ø 8	
System Monitoring <						
192.168.1.109	Copyright @ 2023 Sentry Interlocks. All rights re-	served.				Version 1.2.5

In the Users section click on the "+ Add new user" icon.

The following "Modify User" page will appear:



SentryAdmin ≡		Standard logic 🛛 🖓 🗌 Admin User
Insert name and surname of the new user	Modify user ×	▲ Users :
Example: Mary User	Full name	linearthe
Insert username (used for the system access)	User name	Vier status
Example: Sr Lab Technician	Password	
Insert the password	Password again User level	
Chose the type of user (Viewer / Administrator)	User status Enabled Cancel	Choose whether to enable the user who is being created. By chosing "Enabled", the user will be enabled immediately after saving. By choosing "Disabled" the user will be created after saving but will not be able to access the system.
Click on Save to save the new user data and escape the page.		
Copyright © 2023 Sentry Interlocks. All rights re-	erved.	Version 1.2.5

For Administrator level it is always possible to return to the configuration page of a User (Administrator or

icon to change the data or to disable the User. Disabling a User maintains Viewer) by clicking on the

their information but doesn't allow them access to the system. It is also possible to delete a User by clicking

icon. A deleted User will no longer be able to access the software and their information will no on the

longer exist.

### 6.4 System Configuration Section

The Configuration section is where the locking schemes or Functions are stored. From this section you can change from one locking scheme to another, change attributes of each locking scheme or add a new locking scheme altogether.

Click on the System Configuration section and all of the stored Functions will be shown. Unless otherwise requested, the WebLock system is delivered from Sentry Interlocks with two Functions already saved in the Function list. One Function will be the name of the interlocking logic in use, therefore it will present the project settings, while the other Function will be called "No interlock" which is a Function without interlocking correlations. It simply allows all the doors to be opened freely.

It is possible to configure multiple Functions in the list of Functions but only one Function at a time can be used. Whichever Function is required it must first be uploaded to the connected Door Control Modules. Once

uploaded, that Function will have a kin the "in use" column. The remaining Functions will have a in the "in use" column.

Once a Function is uploaded and "in use"	\star it cannot be mo	odified to avoid two i	nconsistent versions
between the software and the Door Control M	lodules. It must be do	eactivated in order to	) be modified.



SentryAdmin	=				Standard logic 🗘 🗋 Admin User
11/07/2024 11:05:16	Functions				System Configuration > Functions
🏜 Dashboard	+ Create new function				
<b>O</b> <sup>®</sup> System Configuration <	Function name	In use	Description	Actions	
A Functions	Standard logic	,	Standard logic	i []] 2 0 0 = 2 1	
📥 Checking modules	No interlock		No interlock	i 🗇 2 0 0 📾 / 🗄 土	
Icon she Control Modul Icon s the archive. T Function uploa	ows that the logic is a es. hows that the logic is he Standard Logic n aded to the Door Cor	actually in use, so u s actually NOT in us nust be deactivated a ntrol Modules.	bloaded to the Door e, it's in stand-by in and the new		
	Copyright © 2023 Sentry Interlocks.	All rights reserved.			Version 12.5

he Description column allows Users to assign unique names to each of their locking schemes or Functions.

The Actions column offers a variety of settings:

#### 6.4.1 Settings

Setting: Settings Information



An active, "in use" Function offers the possibility to check the door settings within the Function. To do this, click on the "Settings Info" icon. The info window will list the Door Control Modules present in the system, the names of the doors, as well as all the parameters of the doors: type of lock, recovery time, initial state of the lock, door forgotten open alarm.

#### Setting: Floor Map Editor



Another possible setting of an active function, "in use" is the configuration of the animated layout. The animated layout is the overlapping of the animated doors on a background image (png image) 1920 x 1080 format. To edit the layout click on the "Floor Map Editor" icon. Once the animated layout is completed and saved, it will be visible in the System Monitoring section under "Floor Map View" tab.





#### Setting: Interlock Configuration



The "Interlock Configuration" icon allows you to change the interlocking relation between the doors. Interlocking relations between doors are defined by a matrix with red and green cells. Each <u>red</u> cell defines an interlocking bond between two doors. Click on the cells to change the color of the cell and consequently define or dissolve an interlocking relation.

When editing is complete, click on the "Back to Functions" icon to return to the Functions list.

SentryAdmin	=						Star	ndard logic 🛛 🗘	(i) Admin User
11/07/2024 11:21:32	Interlock configuration						<b>¢</b> s	ystem Configuration	Interlock configuration
Dashboard								Back	to Eunctions
🚨 Users								Dace	to runcaons y
O <sub>6</sub> <sup>9</sup> System Configuration <	Opening of door	1	2	3	4	5	6	7	8
System Monitoring <	1								
	2								
	3								
	4								
	5								
	6								
	7								
	8								
	Copyright © 2023 Sentry Interlocks. All rights reserved.								Version 1.2.5







By selecting the "Edit Devices/Doors" icon, the following screen opens, with the list of doors in the system.

SentryAdmin	≡			Standard logic 🗘 🤖 Admin User
11/07/2024 11:22:16	Devices			System Configuration > Devices
🙆 Dashboard				
🛎 Users			$\frown$	Back to Functions 🔶
System Configuration <	Module	Port	Device name	
System Monitoring <	1355	Port 1	1	/
	1355	Port 2	2	/
	1355	Port 3	3	/
	1355	Port 4	4	1
	1356	Port 1	5	/
	1356	Port 2	6	
	1356	Port 3	7	/
	1356	Port 4	8	/

Identify the door to which you want to make changes under "Device Name" and click on the icon *less* to open the door parameter settings window.









The "Edit Custom Devices" icon offers the possibility to activate digital inputs and relay outputs.

SentryAdmin	Ξ				Standard logic 🗘 🕒 Admin User
11/07/2024 11:27:33	Devices				System Configuration > Devices
Dashboard					
🎄 Users	+ Add new device				Back to Functions 🔶
O <sup>0</sup> System Configuration <	Module	Port	Device type	Device name	
System Monitoring <	There are no datas in database!				

Click on the "+ Add new device" icon to open the configuration page of the new digital input or relay output.

Select the number of the Door	Add new device ×		
Control Module where you want to activate the output / input.	Module		
	elect an item		
	Device type	[	Select an available port. Each Door
	<u> </u>		Control Module has 4 free inputs (5-8) and 4 free relays (1-4).
<b></b>		× I	(
Chose the type of device: Digital	Device name		
			Give a name to the output / input.
	Cancel Save		
	Select "save" to save and exit. "Cancel" to exit without saving.		

The following example shows one configured "device", a digital input on port 5 of module 1355 called "Door lock input".

SentryAdmin		≡				Standard logic 🗘 🕠 Admin User
11/07/2024 11:31:52		Devices				System Configuration > Devices
🚳 Dashboard						
🛔 Users		+ Add new device				Back to Functions 🔶
📽 System Configuration	¢	Module	Port	Device type	Device nome	
System Monitoring	¢	1355	5	Digital input	Door lock input	1 B







After activating inputs or outputs, the "Edit Custom Events" icon can be used to associate one or more behavior to the input. In the following example we will see how to use a digital input as a door lock signal.

Click on Events" icon and then click on the "+ Add new event" icon to define a digital input functionality.

SentryAdmin	=							Standard logic 🛛 🗘	D Admin Use
11/07/2024 11:34:23	Custom events							System Configu	iration > Custom event
<ul><li>Dashboard</li><li>Users</li></ul>	+ Add new event							Baci	k to Functions 🔶
$\Phi^{\sigma}_{\sigma}$ System Configuration <	Event			Action					
System Monitoring <	Module	Port Device name	Event	Module	Port	Device name	Action	Delay	
	There are no datas in datab	ase!							
Definition of even When the "Digita occurs to the "Do device, we chood the device (in thi "PB-1") performs action. It is also possible time for the exect	nt - action. al input set" even por lock input" se the action the s case the door s the "Lock Door e to select a del eution of the action Select	Add new event Event Device Door lock input Event Digital input set Action Device PB-1 Action Lock door Delay No delay time Cancel et "save" to save and e	contact closed)	exit without	saving.	× × × Save			

Note: In case of digital inputs it's recommended to define a second "Custom Event", which is related to the opening of digital input, so in the above case it would be the unlocking of the door.



### Setting: Edit



Possibility to change the name and description of the Function.

### Setting: Delete



Possibility to delete a Function.

#### Setting: Upload

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Possibility to upload a logic on the Door Control Modules.

#### 6.4.2 Modify function parameters

To modify the parameters of an existing Function it is first necessary to deactivate the Function, or rather replace it with an alternative Function. In the example we will see how to modify the parameters of the "Standard Logic".

The first step is to deactivate the "Standard Logic" Function. Then the "No interlock" Function must be uploaded to the Door control Modules by clicking on the Upload icon under Actions.

SentryAdmin	≡				Standard logic 🗘 🟮 Admin User
11/07/2024 11:14:44	Functions				System Configuration > Functions
🍘 Dashboard	+ Create new function				
🚔 Users					
System Configuration <	Function name	In use	Description	Actions	
📥 Functions	Standard logic	×	Standard logic	i 🖾 🕾 a 👳 🎟 🎤 🏦 ᆂ	
🛔 Checking modules	No interlock	-	No interlock	i (1) 🗈 a 🛛 🔳 🖉 主	
System Monitoring <				$\mathbf{U}$	



SentryAdmin	E		Standard logic 🛛 🗋 Admin User
11/07/2024 11:15:38	Upload Configuration		System Configuration > Upload Configuration
B Dashboard	Exemples		
🚨 Users			
<b>Q</b> <sup>6</sup> <sub>P</sub> System Configuration <			
System Monitoring <	Check modules	Found modules:	
	opioad log		
	4		,

It will take approximately 15 seconds to upload the "No interlock" Function to the Door Control Modules. At the end of the upload, the following notice will appear if the upload was successful:



The "Standard logic" will have the symbol under "In use", while the "No Interlock will have a under "In use". This means the "Standard logic is now disabled and can now be edited. All its icons are will now be active to allow the Administrator to change the locking parameters.

SentryAdmin	=	Standard logic 🛛 🤤 Admin Us
11/07/2024 11:17:18	Functions	System Configuration + Function
2 Dashboard		
🛔 Users	+ Create new function	
0° System Configuration	Concornance Description	Actions
di Functions	Standard logic - Standard logic	
4 Checking modules	No interlock No interlock	
	Active icons	

Once the parameters have been changed, the "Standard logic" can now be uploaded to the Door Control

Modules turning the icon back on for the "Standard logic" Function and deactivating the "No interlock" Function.

# 

Any changes to a Function are in standby mode until the Function is uploaded to the Door Control Modules.

### 6.4.3 Create a new Function

It may be necessary to create a new, alternative Function that can be used instead of the Standard Logic. Click the "Create New Function" icon.



unctions			✿ System Configuration ≥ Function
+ Create new function			
Function name	in use	Description	Actions
.ogic according to wiring diagram "wd.me.20xx.xxx-Revx"	×	Description	i [1] 🕄 D 😰 🎟 🖋 🖻 ±
o interlock	-	No interlock	i []] 🕄 D 📦 🎟 🖌 🖻 土

The window below opens with the Function Name and Description of the Function required. It is important to choose a characteristic name that easily identifies the Function, for example "Basic logic 2019" or "Powder production logic 1", in order to avoid confusion in the event of future function

Function name	
Powder production logic 1	
Description	
Powder production logic 1	Å

Click on "save" to continue.

The next screen is the mapping of the Door Control Modules installed in the system. In order to be able to configure the doors, the Door Control Modules must be connected to each other as per the connection diagram and the manual doors must be closed in order to provide their door closed status signal.

To start the mapping click on "Discover Network".



This exercise will list the Door Control Modules connected in the system according to the wiring schematic shown in Section 4, and show the manual doors that have been connected to the various modules.

Discover network	:					O System Config	uration > Discover networ
A Discover network							Next 🔶
Module 1102				Module 1064			
Device name	Door operation	Port	Actions	Device name	Door operation	Port	Actions
-	Manual door	1			Manual door	1	A (1)
-	Manual door	2			Manual door	2	/
-	Manual door	3					
-	Manual door	4					

# 

> Do not proceed unless all the Door Control Modules and the relative manual doors have been listed.



If some Door Control Modules are not listed, check the correct connection via Cat 5 UTP cables between the Door Control Modules and that all of the Door Control Modules are correctly powered.

If the Door Control Modules are correctly listed but not all manual doors are properly listed, make sure that the doors are closed and the Door Position Sensor is connected correctly.

If necessary, repeat the mapping process until any connection problem is solved.

When all the Door Control Modules are correctly recognized and the manual doors are correctly shown, we can proceed to manually add (if necessary) the automatic doors. Choose the Module that you are connecting the automatic door. Within the "Discover Network" window click on the "+" icon at the top right of the window (or page?) of the Door Control Module which will manage the automatic door.

Discover network				
A Discover network				
Module 1102				+
Device name	Door operation	Port	Actions	
-	Manual door	1		
-	Manual door	2		
-	Manual door	3	e 🗈	

Once the list of doors, manual and automatic, is complete, you can configure and name the doors with their

Device name	Port
	Port 1
Recovery time	Door left open alarm after [sec.]
No delay time	~ 20
Гуре of door lock	
Select an item	
Locking device	Door initial status
Select an item	<ul> <li>✓ Select an item</li> </ul>

characteristics by clicking door by door on the icon



**Recovery time**: If a number different than zero is chosen in this field, when the door is closed again, a recovery cycle will start with the doors locked. This means that the doors within the locking scheme cannot be accessed until recovery time has elapsed.

**Door left open alarm**: This field defines the time allowed for the opening and closing cycle of a door without sounding the alarm (if provided). Alarm timing ranges from 0 seconds up to 250 seconds. Typical setting is 20 seconds unless there is prolonged loading and unloading in which case the timing could be extended. When a door remains open for longer than the value set in this field, an audible alarm goes off at the Sentry branded door indicator or the 3<sup>rd</sup> Party audible alarm (if provided).

**Door Initial Status:** This field defines whether the door in question is normally unlocked (green traffic light) or normally locked (red traffic light). If the door is normally locked, the digital input corresponding to the door number is automatically assigned to unlock it by means of a dry contact.

For manual doors with access control, the doors must be set as "normally locked" doors.

# 

For the connection of access control devices and automatic door signals, follow the wiring schematic supplied by Sentry Interlocks.

It will be possible to proceed to the next page only after all of the required data is filled in.

The following page will present an interlocking matrix with which defines the interlocking correlation of the previously set doors. At the first configuration, all the boxes in the matrix are green, which means that there are no interlocking relations between the doors.

By clicking on a cell, it changes color from green to red, so it defines an interlocking relationship between two doors. To remove the interlock relationship, simply click on the same box again, and it will turn green again.

Once the matrix with all the suitably colored boxes has been defined, you can proceed with the configuration by clicking on the "next" button.



The WebLock program offers additional possibilities to set the use of digital inputs for signals from other systems and to set the use of output relays. For a standard use of the functions previously described, proceed by clicking "next" until the logic is completed. Proceed with the upload.



### 6.4.4 Changing of interlocking logic

Once we have preconfigured at least two logics, it will be possible to choose which logic to apply in the

field. Just click on the "upload" icon at the right of the desired Function line and the Network Bridge will upload the Function to the Door Control Modules. Whichever Function is uploaded will have the symbol

📩 next to it.

### 6.5 System Monitoring Section

This menu provides a several monitoring options. Users can see a visualization of the floor plan with the doors animated in real time. Users can see a list of all the records of recorded events – both ordinary events and anomaly events that are saved in the WebLock internal memory.

### 6.5.1 Floor map view

The animated layout has the purpose of reporting in real time the status of the doors and interlocks. It is a graphic display showing the state of the door opening (shows door physically opened or closed) and lock status (red for locked or green for unlocked). To track the door events it is recommended to refer to the "Dashboard" or "Event list" for a more reliable data collection.



### 6.5.2 Event list

The Event list is the database of the events saved (e.g. opening-closing doors, unlocking-locking doors, recovery times occurred) and no longer displayed in the "Dashboard". The Dashboard retains the last 10 Latest events recorded. It's possible to filter the events by the dedicated cells. Use the most adequate cell to shortlist the desired event to look up. We recommend using the first three filter fields, namely: Device Name, Event and Time.



SentryAdmin	≡				Standard logic 🗘 🔃 Admin User				
11/07/2024 11:51:52	Event list	ivent list							
Lusers	2 Download all records				sSearch				
✿ System Configuration <	Device name	Event 🗐	Time ↓₹	Module 1	Port 🕴				
System Monitoring <	7	Door unlocked	2024-03-26 03:30:42	1356	3				
Floor map view	8	Door opened	2024-03-26 03:30:41	1356	4				
Event list Anomaly list	7	Door locked	2024-03-26 03:30:41	1356	3				
🗠 Statistics	8	Door closed	2024-03-26 03:30:41	1356	4				
📑 Activity log	7	Door unlocked	2024-03-26 03:30:41	1356	3				
	8	Door opened	2024-03-26 03:30:41	1356	4				
	7	Door locked	2024-03-26 03:30:38	1356	3				
	Search: Device name	Search: Event	Search: Time	Search: Module	Search: Port				
				sPrevious 1 .	11 12 13 1421 sNext				
07.000.000	Copyright © 2023 Sentry Interlocks. All rights re	eserved.			Version 1.2.5				

#### 6.5.3 Anomaly list

The anomaly list (e.g. prolonged, forced, simultaneous openings) provides a tool to shortlist the anomalies saved and no longer displayed in the "Dashboard". The Dashboard retains the last 4 Latest Notifications recorded.

#### 6.5.4 Statistics

The statistics menu can be considered as an event counter. Every time an event is repeated, for example a door is opened, the door opening event counter of the specific door increases by one.

#### 6.5.5 Activity log

The activity log provides a useful tool for keeping track of all user activities (whoever logs in, view settings etc) within the software.

#### 6.5.6 Internal memory

The Event and Anomaly records are saved in the internal memory of the Network Bridge in 2 separate databases. Each database has a threshold preset by Sentry Interlocks for the automatic cancelling of old records, deemed no longer necessary. The cancelling occurs once a day and will affect only the excesses beyond the following thresholds:

- > For Event and Anomolies the past 200,000 records are maintained
- > For Activity log records the past 10,000 records are maintained

Each event log page offers the possibility to download the records to your PC in .csv table format.



🄁 Dashboard						
🛓 Users	Download all records					sSearch
System Configuration <	Name	Date ↓	Activity 1	Function 1	Note 1	IP address
System Monitoring <	Admin User	2022-03-22 20:19:00	System Monitoring/Activity list	GET:/systemmonitor/activitylist	View activity list	79.19.57.93
Floor map view	Admin User	2022-03-22 20:16:10	System Monitoring/Statistics	GET:/systemmonitor/statistics	View statistics	79.19.57.93
Anomaly list	Admin User	2022-03-22 20:13:11	System Monitoring/Anomaly list	GET:/systemmonitor/eventlist	View anomaly list	79.19.57.93
M Statistics	Admin User	2022-03-22 20:13:06	Dashboard	GET:/index	Open the dashboard page	79.19.57.93
Activity log	Admin User	2022-03-22 20:13:05	Login page	POST:/login	User logged in	79.19.57.93
Access control statistic	Admin User	2022-03-22 19:06:31	System Monitoring/Floor map view	GET:/systemmonitor/floormapview	View floor map	192.168.1.21
Access Control     <	Admin User	2022-03-22 19:04:38	System Monitoring/Floor map view	GET:/systemmonitor/floormapview	View floor map	192.168.1.21
	Search: Name	Search: Date	Search: Activity	Search: Function	Search: Note	Search: IP address
					sPrevious 1 2	3 4 5 23 sNext



### 7. MAINTENANCE

The WebLock system is virtually maintenance free. The internal battery is the only consummable component of the system.

### 7.1 Replacement of internal battery

The Network Bridge has an internal battery to ensure regular shutdown and data saving of the system in the event of a blackout. The battery will guarantee a safe shutdown for up to 5 years. However, it is recommended to replace the battery once every 3 years. To replace the battery, it is recommended to turn the system OFF. Remove the worn battery on the side of the Network Bridge and replace it with new one.

Use only 12V lead battery, max 1.1 Ah.

The protection fuse for incorrect connection of the polarity is 2A.

### 8. TECHNICAL ASSISTANCE

For any technical assistance please contact Sentry Interlocks:

Sentry Interlocks LLC 3265 Sunset Lane Hatboro, PA 19040 833.663.5625 <u>sales@sentryinterlocks.com</u> www.sentryinterlocks.com

### 9. DISPOSAL

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

Directive 2012/19/EC, known as the WEEE Directive (WEEE), which prescribes the measures as a first 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 the unit if necessary by contacting authorized collection centers in the area.

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The disposal of the components of the WebLock 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.



### **10. WARRANTY**

All components of the system are covered by a 2-year limited warranty.

The warranty is void if:

- Repairs are carried out without the consent of Sentry Interlocks
- The WebLock system is used for purposes other than their intended use.
- Installation doesn't comply with the directions contained in this publication and the wiring schematic provided by Sentry Interlocks.

### 10.1 GENERAL CONDITIONS OF WARRANTY

- The warranty applies to the components of the WebLock system which are defective in construction or assembly based on the opinion of Sentry Interlocks.
- The warranty does not cover parts subject to wear and breakage due to misuse and non-compliance with the rules contained in the Installation Guide or wiring schematic provided by Sentry Interlocks.
- Any components provided as part of a warranty claim are shipped to and from Sentry Interlocks with shipping costs paid by the customer.
- The warranty does not cover the cost of labor required to replace the component.
- The warranty is void in the event of any product tampering, or modifications to the system without the prior written consent of Sentry Interlocks.

End of Installation Guide