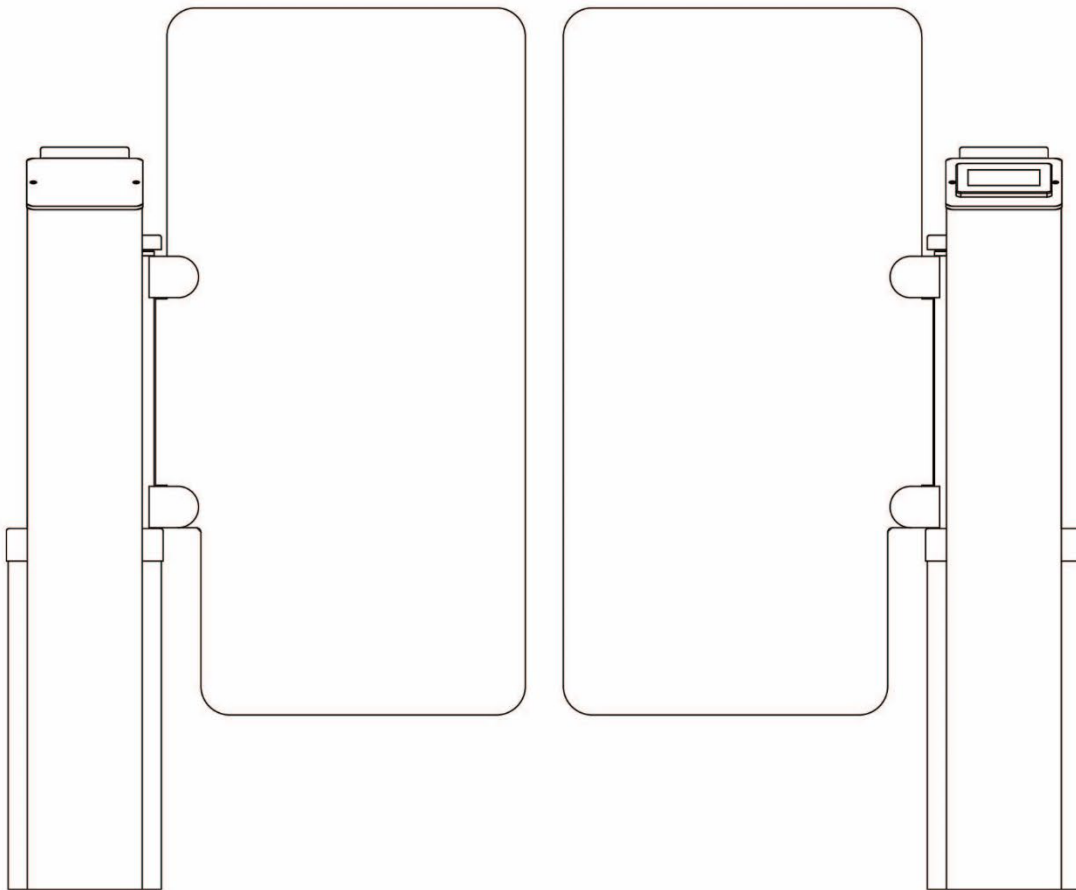




# In-stile Series IS-9900

Barrier Optical Swing Gate Lane

## Service & Installation Manual



**Note: Successful turnstile installation depends on reading this manual.**

*Please keep this service manual after installation. If an installation is done by a construction company or outside installer, please pass this book along to the end user. This book is required for maintenance, troubleshooting & repairs.*

# **IS-9900 Settings & Statistics Menu**

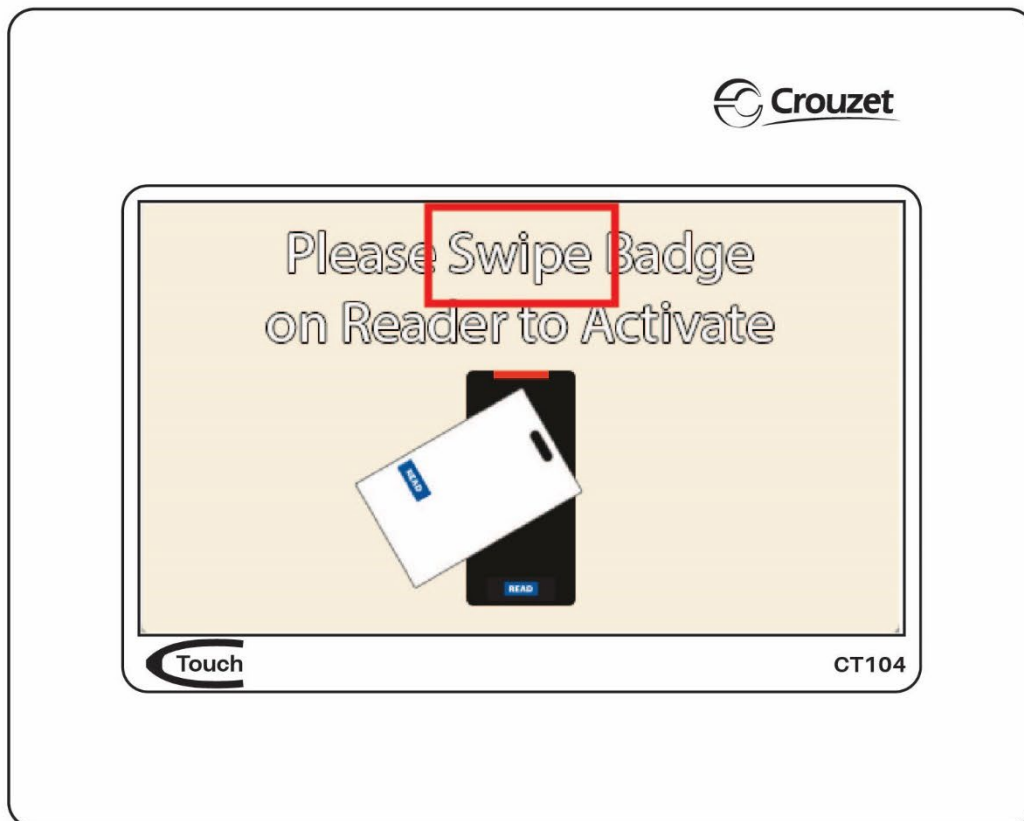
## **Your System Passcode is:**

### **Accessing the settings via the HMI's:**

To access the system settings using either of the HMI's (Human Machine Interface / LCD Display) requires the screen to be pressed in the area highlighted in red for 5 seconds. When the long press has been accepted, the HMI will beep once, after which the settings passcode screen will appear. If you don't hear a beep within 5 seconds, take your finger off of the screen for a few seconds and try again. Please be patient as the screen change to the passcode screen is not instantaneous.



**Note: See IS-9900 Settings & Statistics Section (Pg. 22) For Accessing Settings VIA Hidden Toggle Button**



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# **IS-9900 Barrier Optical Turnstile**

## **Theory of Operation**

The IS-9900 barrier optical swing gate lane is designed to control traffic with an intuitive motorized barrier design. This is accomplished with through-beam type sensors to detect where a person is inside of the lane. Crossing and uncrossing certain beams at certain times will evaluate a passage to be either authorized or unauthorized.

Within each lane there are two primary zones of sensors. Each zone acts as a "limit". Upon a valid entry (card read, push button, keypad, etc.), the lane recognizes authorization and swings open to allow passage through in the direction requested. Indication LEDs and animations will display on the HMI's (Human Machine Interface/LCD screens) to indicate that passage is allowed. Once passage is complete, the arms return to their home position.

Should a user pass in the incorrect direction or has not been authorized for passage, an audible alarm will pulse, red LEDs will illuminate the lane, and the HMI's will display which alarm state has been triggered. An additional solid state output (O2) during alarm scenarios also exists for integration into other security systems.

In addition to the two sensor zones mentioned previously, a third sensor zone exists for crawl-through detection using a LiDAR sensor. If anyone attempts to crawl through the lane under the arms, this sensor zone detects them and an alarm state occurs. The LiDAR sensor has 2 zones that overlap in the middle of the lane. This overlapping of the 2 zones acts as an anti-crawl through sensor. The LiDAR sensor is comprised of 2 zones which serves as an anti-crawl through sensor, safety sensor, and a free passage sensor. See "Sensor Designations Cont. LiDAR Sensor Information" for more information on the LiDAR sensor on page 13.

IS-9900 lanes are designed to allow heavy flows of traffic. With an adjustable swipe queue, one user can request passage through the lane while another is already inside. This negates the need to wait for the lane to return to a secured status before the next person can pass.

Physically, a lane of IS-9900 consists of two cabinets: a primary and a secondary. From this base pair, additional ADA (2 arm) and single arm lanes can be added. This is accomplished by changing the rear of the cabinet to accept transmitter sensors for the next primary cabinet to create a lane (for single lanes) or additional transmitter sensors and an additional motor for the next primary cabinet to create an additional ADA lane.

On each end of the primary cabinet, an HMI (Human Machine Interface / LCD Display) will allow the end user to adjust a variety of settings for the lane to facility preferences. The settings are accessed by inputting a passcode (set up from the factory) on one of the HMI's or by pressing the hidden toggle button on the primary cabinet. See Settings & Statistics section on page 22 for details.

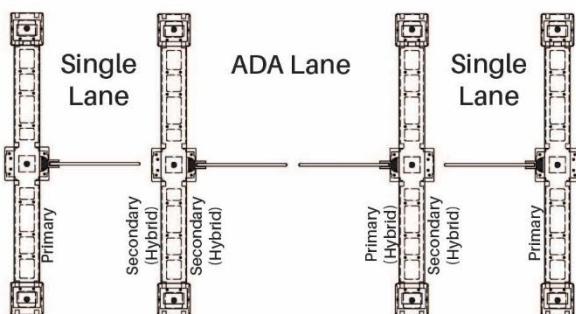


# Lane Functionality

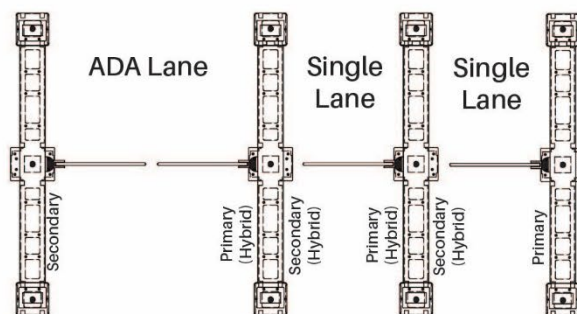
## Lane configuration:

Each base lane consists of two different types of cabinets; a primary cabinet and a secondary cabinet. In instances where additional ADA or single arm lanes are added to an array, the rear side of each cabinet opposite of the lane's cabinet with the arm becomes a secondary panel to the primary cabinet of that lane. See sample layout below.

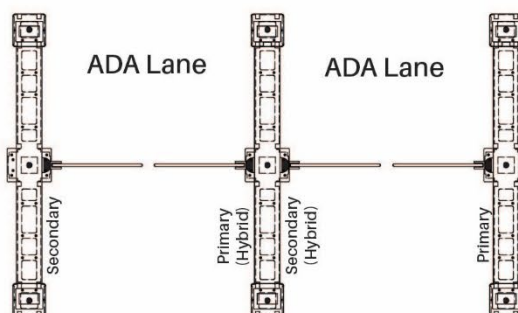
Sample Layout 2 Singles & ADA



Sample Layout 2 Singles & ADA



Sample Layout 2 ADA's



The base ADA lane's secondary cabinet communicates with the primary cabinet with a provided 18 AWG 12 conductor cable, 22 AWG 12 conductor cable, and 16 AWG 3 conductor cable. This allows the primary cabinet to operate the indicator lights and motor of the secondary cabinet.

The secondary cabinet also contains 7 optical transmitters which the primary cabinet uses to evaluate lane passage via receivers. This is also applicable for each single arm lane within an array.

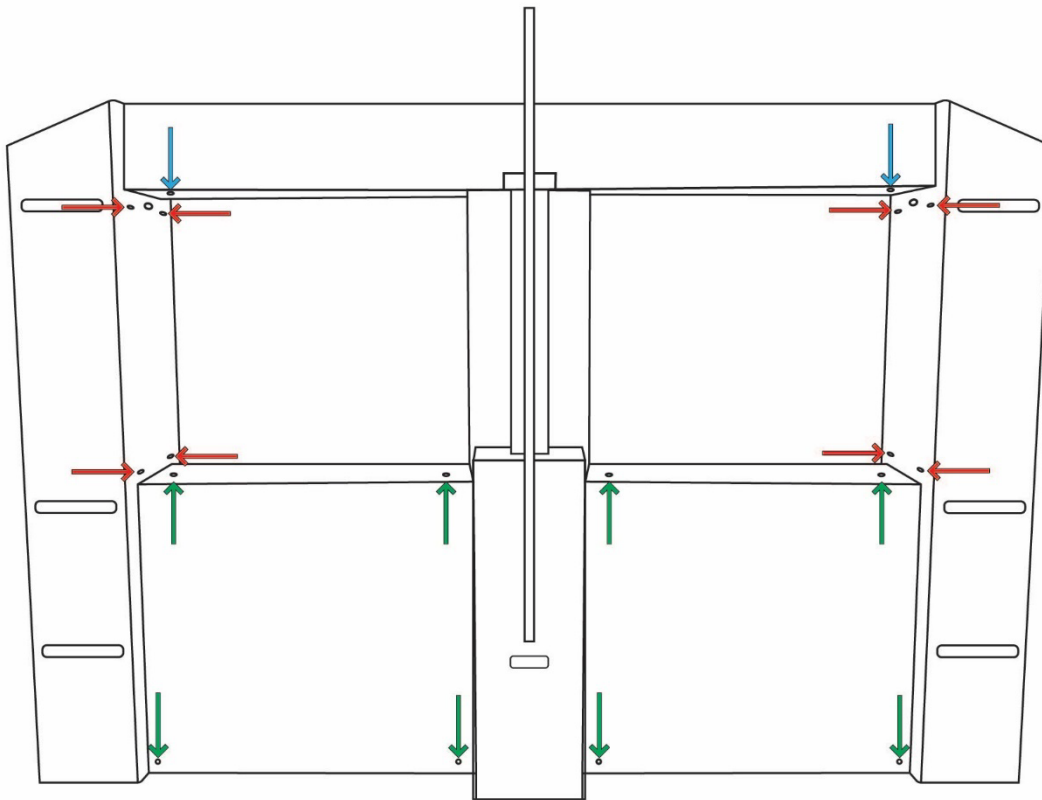
From the factory, each cabinet in an array is preconfigured to the requested operation and layout. Each lane has two directions of passage, each of which can be configured for controlled passage, free passage or no passage. This configuration can be changed in the field via settings on each lane's HMI's located on each end of the primary cabinet.

www.TURNSTILES.us | patrick.mcallister@TURNSTILES.us | 303-670-1099

## **Pre-Installation Preparation**

In order to install an IS-9900 lane, each cabinet needs to be opened up. Once opened, anchor holes for concrete mounting as well as conduit access for electrical work can be accessed. Each cabinet has two removable leg closure panels and two removable lower cabinet panels.

The first panels to remove are the two leg closure panels which are fastened onto the inner frame of the cabinet. Each leg closure panel is held into place with four 10-32 stainless steel phillips flat head screws (shown below in Red). The next panels to be removed are the two lower cabinet panels which will expose the internal structure of the cabinet where you can find the anchor mounting holes and conduit access areas. These panels are held on by four 10-32 stainless steel phillips flat head screws (shown below in Green).



Removal of the lid may or may not be required depending on where card readers may be installed. The lid will be held on with four 10-24 stainless steel button head screws located underneath the upper section of the cabinet (shown in Blue).



## **Pre-Installation Preparation (cont.)**

### **Pre-Installation Alignment:**

Before anchoring the cabinets to the floor, we recommend laying out the lane and testing alignment.

Place the cabinets in their approximate end location and connect the 2 conductor cable inside of the primary cabinet to the end in the secondary cabinet. Plug in the primary cabinet to AC voltage to power up the lane.

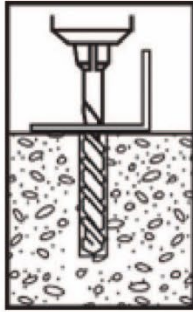
Inside of the primary cabinet, there is a series of 7 total photo cell sensors. Each of these sensors is equipped with two LED's on the rear. One of them is green and should always be lit. The other should be solid orange while the beam is uncrossed and off while the beam is crossed.

If the orange LED is blinking in any case, you will need to adjust the sensor alignment, shift the cabinets so that they are straight to each other, or shim the cabinets so that they are level.

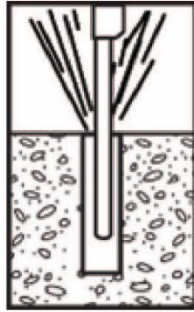
See the sensor alignment section of this manual for advice on how to ensure the transmitter's light reaches the receiver properly.



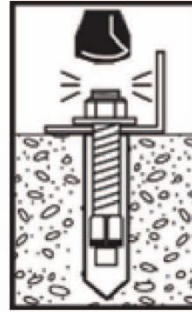
# Wedge Type Concrete Anchor Instructions



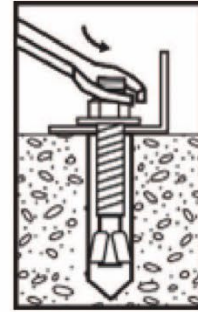
**1**



**2**



**3**





**4**

- 1** Select a carbide drill bit with a diameter equal to the anchor diameter. Drill hole at least 1/4" deeper than nominal anchor embedment.
- 2** Clean hole with pressurized air or vacuum to remove any excess dust/debris.
- 3** Using the washer and nut provided, assemble the anchor, leaving nut one half turn from the end of anchor to protect threads. Drive anchor through fixture to be fastened until washer is flush to the surface of fixture.
- 4** Expand anchor by tightening nut to the specified setting torque - see Table (approx 3 to 5 full revolutions).

Anchor Diameter & Drill Bit Size	Installation Torque Ft. lbs.*	Minimum Anchor Embedment	Minimum Hole Diameter in Fixture
3/8"	25	1-7/8"	1/2"
1/2"	45	2-1/2"	5/8"
5/8"	90	2-3/4"	3/4"

\* Setting torque only applies at the time of installation.

Warning!

-  Use in concrete ONLY. Not recommended for use in lightweight masonry such as block or brick.
-  Always wear safety glasses and other necessary protective devices or apparel when installing or working with anchors.

Caution: Use of core drills is not recommended to drill holes for use with this anchor.

Do not use an impact wrench to set or tighten the anchor. Not recommended for use in concrete which has not had sufficient time to cure.

The use of carbide drill bits manufactured with ANSI B212.15 drill bit diameter requirements is recommended for installation of this anchor. Anchor spacing and edge distance (anchor installation locations) are the responsibility of the engineer of record.

Installing product in oversized holes is not recommended. Product will not set properly or achieve full designed load in oversized holes.

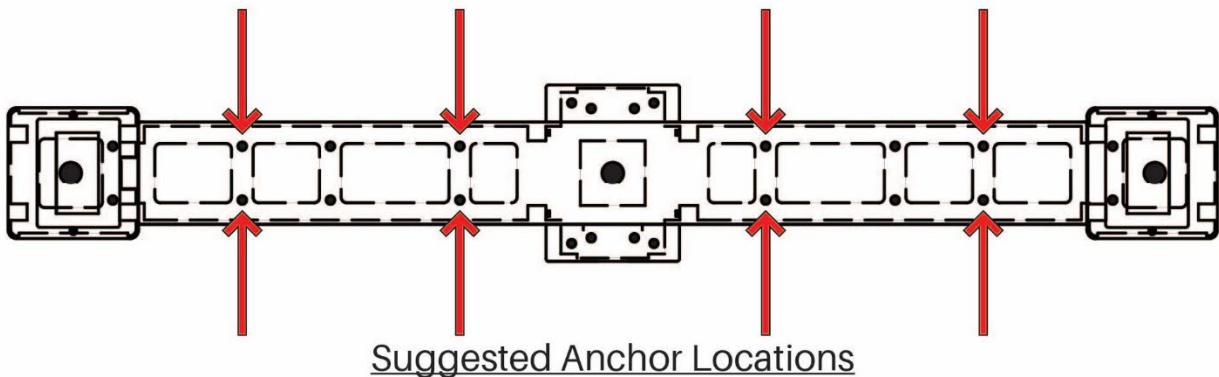
# Installation Instructions

1. Floor should be level +/- 1/16". If not, each cabinet must be shimmed.



**Note:** Anchoring optical lanes to an uneven ground most likely will cause serious issues in unit operation.

2. Install conduit for 100-240 VAC to primary cabinet, conduit for access control integration (if applicable), and a 1" conduit in between the primary and secondary cabinet for cabling to the secondary cabinet.
3. With each cabinet in the exact position to be mounted, use a center punch to mark location of the eight suggested anchor holes to be drilled in the floor.



**Note:** Make sure each cabinet is square to each other, otherwise operation will be inconsistent

4. If necessary, move cabinets out of the way. Drill four 3/8" holes 4" deep per cabinet and remove all concrete dust from the holes.
5. Place cabinet in the correct location and install SS wedge type anchors supplied. Torque the nuts to a minimum of 50 foot pounds.
6. Plug the power supply in the main cabinet into 100-240 VAC (single phase) minimum 5 amp GFI circuit.
7. The sensors we use are a through-beam type: they require a transmitter and receiver in order to operate. In order to accomplish this, you must connect 24VDC power(2.5A supply) to the secondary cabinet. This is accomplished with a provided 18 AWG 12 conductor cable which carries 24VDC(2.5A supply) and light control wires. See the wiring diagrams for more information.
8. Connect access control as required to direction inputs on the logic controller. See wiring diagrams for more information.

# **Sensor Alignment**

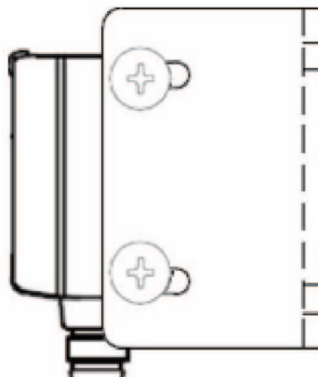
The IS-9900 series is equipped with visible target laser through-beam sensors. The transmitter sensors (located in the secondary cabinet) shine much like a flash light. The target from the transmitters can be visibly seen by simply placing a piece of white paper onto the target area. All of the sensors are pre-aligned during manufacturing but, some adjustment after installation may be required.

Each photo cell is mounted onto a bracket which is screwed onto the frame of the lane.



Loosening the screws holding the bracket to the panel will allow for some range of motion left and right. Also, since the brackets are aluminum, each sensor bracket can be bent left or right for adjusting individual sensors.

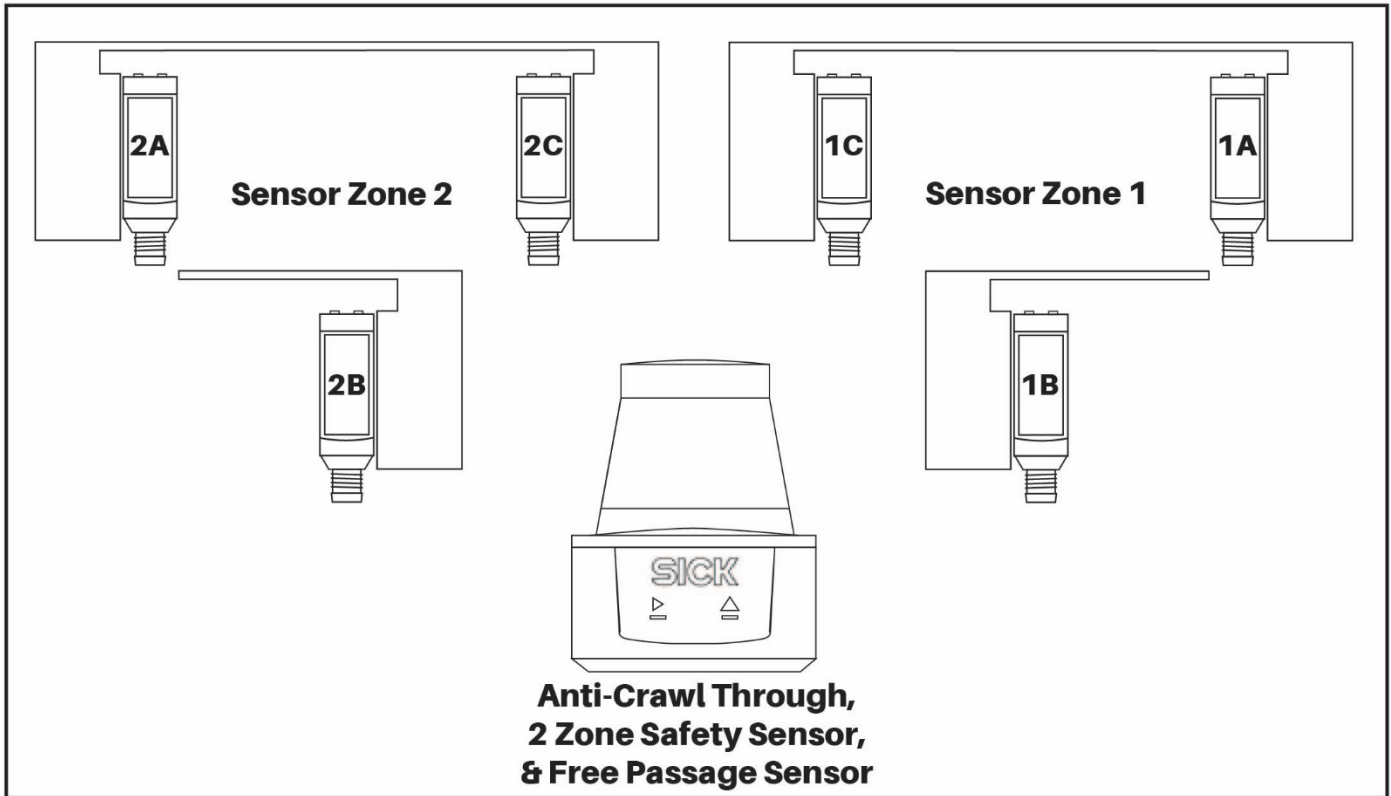
The sensors can also be tilted on the brackets themselves to provide an up-to-down alignment adjustment. Simply loosen the screws holding the bracket to the sensor and tilt in the desired direction.



**Note:** The light from the transmitters will actually be larger than the surface area of the receivers. This makes alignment much easier. Try to center out the targets to the receiver as close as possible.



# **Sensor Designations**



Above is a diagram which illustrates each sensor's position. There are 7 sensors on each cabinet total, separated into 3 "zones".

The zone designated as "Sensor Zone 1" is part of the intelligence behind whether or not authorized access has been granted. For example, if the zone 1 sensors have been tripped but direction 2 was the direction that authorization was granted, an alarm will trigger.

The zone called Sensor Zone 2 does the same thing as Sensor Zone 1, but in the opposite direction.

The sensor zones have another function as well. On free flow mode, when the sensor zone for the appropriate direction is actuated, access is granted for that direction.

The third zone is a LiDAR sensor which acts as a 2 zone safety sensor to prevent the arms from closing on obstruction and where the 2 zones overlap in the middle, it will serve as an anti-crawl through sensor. This will detect unauthorized people who are attempting to crawl underneath the main zones. This LiDAR sensor will also serve as a free passage sensor. See the next page for more information on the LiDAR sensor.



## **Sensor Designations Cont.**

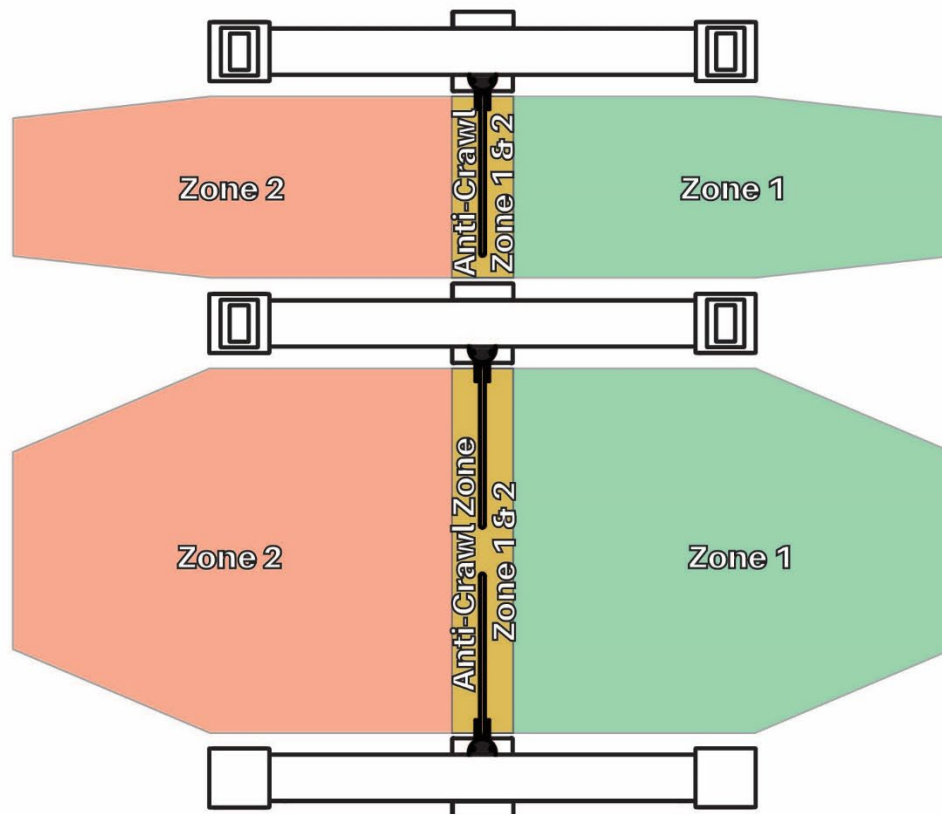
### **LiDAR Sensor Information**

Each IS-9900 lane has an infrared LiDAR sensor that scans the entire passage area which is comprised of 2 main zones. Zone 1 is the area scanned for the direction 1 passage area. Zone 2 is the area scanned for the direction 2 passage area. These 2 main zones overlap each other in the center of the passageway to create a 3rd zone. This 3rd zone acts as an anti-crawl through detection sensor.

If the lane has not been activated to open in either direction and the anti-crawl through zone is active, the lane will then alert with an audible beeper, lane lights will change to red, and the HMI's will display a crawl-through event has occurred. To clear this alarm state, the passage areas of the lane (zone 1 & 2) must be cleared for the amount of time indicated on the "Alarm Expire Timer" in the settings (see Settings & Statistics Menu section). Factory default is 1 second.

This 2 zone LiDAR sensor acts as a "safety" sensor. The lane will not close after entry or exit has been activated until both zone 1 and zone 2 has been cleared. The lane will give a "linger" alarm state if the lane has not been cleared within the amount of time indicated on the "Main Timer Values" in the settings(see Settings & Statistics Menu section). Factory default for Direction 1 & 2 main timer values is 7 Seconds.

This 2 zone LiDAR sensor also acts as a "free passage" sensor. If the lane is set up for a free passage, depending on which direction the free passage is for, either zone 1 or zone 2 will activate the lane to open for a free passage. If the opposing zone is active when the zone is entered, the lane will not open until you have reached the sensor array located on the end of the cabinet where the HMI (LCD Screen) is located.



## IS-9900 Wiring Introduction

While very elaborate on the back end, the IS-9900 installation wiring is actually pretty simple. Most of the wiring is performed in the factory. In an effort to keep the diagrams more readable, several diagrams covering multiple aspects of the product are provided just in case.

However, during installation, the only wiring to be done is for access control, main voltage, and interconnection from the primary side of a lane to the secondary. In terms of access control, a contact closure between 24VDC + and the desired input is needed from a relay (there could be as many as six relay inputs needed depending on how the product is intended to be used.)

Interconnection between primary and secondary cabinets is achieved with an 18 AWG 12 conductor cable(24VDC 2.5A power & indicator lights), a 22 AWG 12 conductor cable(motion control of secondary arm), and a 16 AWG 3 conductor cable(24VDC 10A/20A motor power) for ADA lanes. For single arm lanes, it is an 18 AWG 12 conductor cable(24VDC 2.5A power & indicator lights). In the factory, we terminate both ends of this cable during assembly, then snip off a short length on the secondary side for easy wire color matching. Some wires may not be used and can be used for other purposes such as adding devices to the unit.

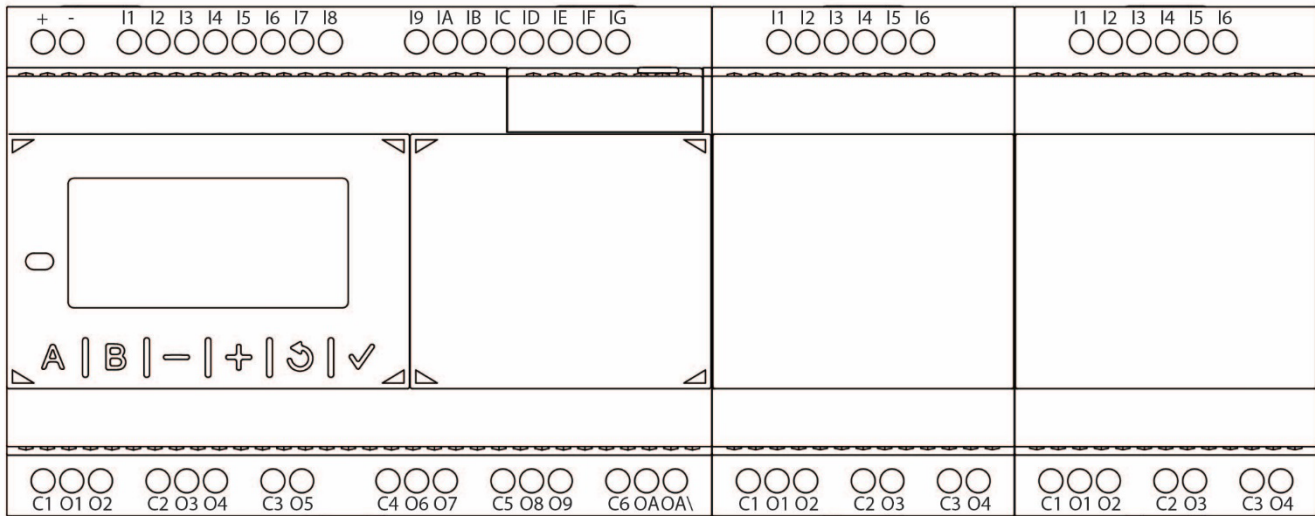
Refer to the following diagrams provided for reference, but keep in mind that most of these terminations are already made for you.

The next page will act as a wiring legend to illustrate what each terminal on the PLC does. This diagram is followed by actual wiring schematics. The first 3 wiring diagrams cover the access control and the interconnection between the primary and secondary cabinets.

The first schematic labeled "Access Control and Indication" shows where all the access control terminations are supposed to land while the second diagram labeled "ADA Lane Secondary Cabinet Wiring Diagram" which shows the terminals to connect the interconnection cables to. The third diagram labeled "Single Lane Secondary Cabinet Wiring Diagram" shows the terminals to connect the interconnection cable to.

All other wiring diagrams provided are for troubleshooting and reference only.

## IS-9900 Wiring Legend



### Main PLC Inputs

+ - Input 24VDC +  
 -- Input 24VDC -  
 I1 - Direction 1 Input  
 I2 - Direction 2 Input  
 I3 - Direction 1 Override  
 I4 - Direction 2 Override  
 I5 - Sensor 1A  
 I6 - Sensor 1B  
 I7 - Sensor 1C  
 I8 - Not Used  
 I9 - Sensor 2A  
 IA - Sensor 2B  
 IB - Sensor 2C  
 IC - Motor 1 CW  
 ID - Motor 2 CW  
 IE - Motor 1 Unhomed  
 IF - Motor 2 Unhomed  
 IG - Motor 1 Position Reached

### Main PLC Outputs

C1 - Connect to 24VDC+  
 O1 - Motor(s) 1 & 2 Torque PWM  
 O2 - Solid State Alarm  
 C2 - Connect to 24VDC +  
 O3 - Motor(s) Dir 1 Signal  
 C3 - Connect to 24VDC +  
 O4 - Motor(s) Dir 2 Signal  
 O5 - Motor(s) Home Position Signal  
 C4 - Connect to 24VDC +  
 O6 - Motor(s) Homing  
 O7 - Motor(s) Enable  
 C5 - Connect to 24VDC +  
 O8 - Dir 1 Completed Passage  
 O9 - Dir 2 Completed Passage  
 OA - Pulsed Alarm Output  
 OA/ - N/C Pulsed Alarm Output  
 (Opposite Signal of OA)

### Expansion 1 Inputs

I1 - Motor 2 Position Reached  
 I2 - Motor 1 Error  
 I3 - Motor 2 Error  
 I4 - Direction 1 Safety Sensor  
 I5 - Direction 2 Safety Sensor  
 I6 - Settings Toggle Button  
 (Admin Input)

### Expansion 2 Inputs

I1 - Dir 1 Mode Toggle  
 I2 - Dir 2 Mode Toggle  
 I3 - Not Used  
 I4 - Not Used  
 I5 - Not Used  
 I6 - Not Used

### Expansion 1 Outputs

C1 - Connect to 24VDC -  
 O1 - Dir 1 Red LED  
 O2 - Dir 1 Green LED  
 C2 - Connect to 24VDC -  
 O3 - Dir 1 Blue LED  
 C3 - Connect to 24VDC -  
 O4 - Dir 1 Amber LED

### Expansion 2 Outputs

C1 - Connect to 24VDC -  
 O1 - Dir 2 Red LED  
 O2 - Dir 2 Green LED  
 C2 - Connect to 24VDC -  
 O3 - Dir 2 Blue LED  
 C3 - Connect to 24VDC -  
 O4 - Dir 2 Amber LED

All inputs are PNP type transistor inputs - apply local 24VDC + (2.5A Supply) to terminal for PLC to register.

Installations may use as few as one contact closure and as many as six depending on the complexity of the application.

To activate multiple lanes at the same time, each lane must source its input from the same power supply it comes from. Add ice cube relays to trigger multiple lanes together to ensure the power for the input is coming from the same power supply the PLC is.

All outputs are relay outputs. Many of these share commons. The commons on the main PLC are all tied to 24VDC+. The commons on the expansions are all tied to 24VDC-

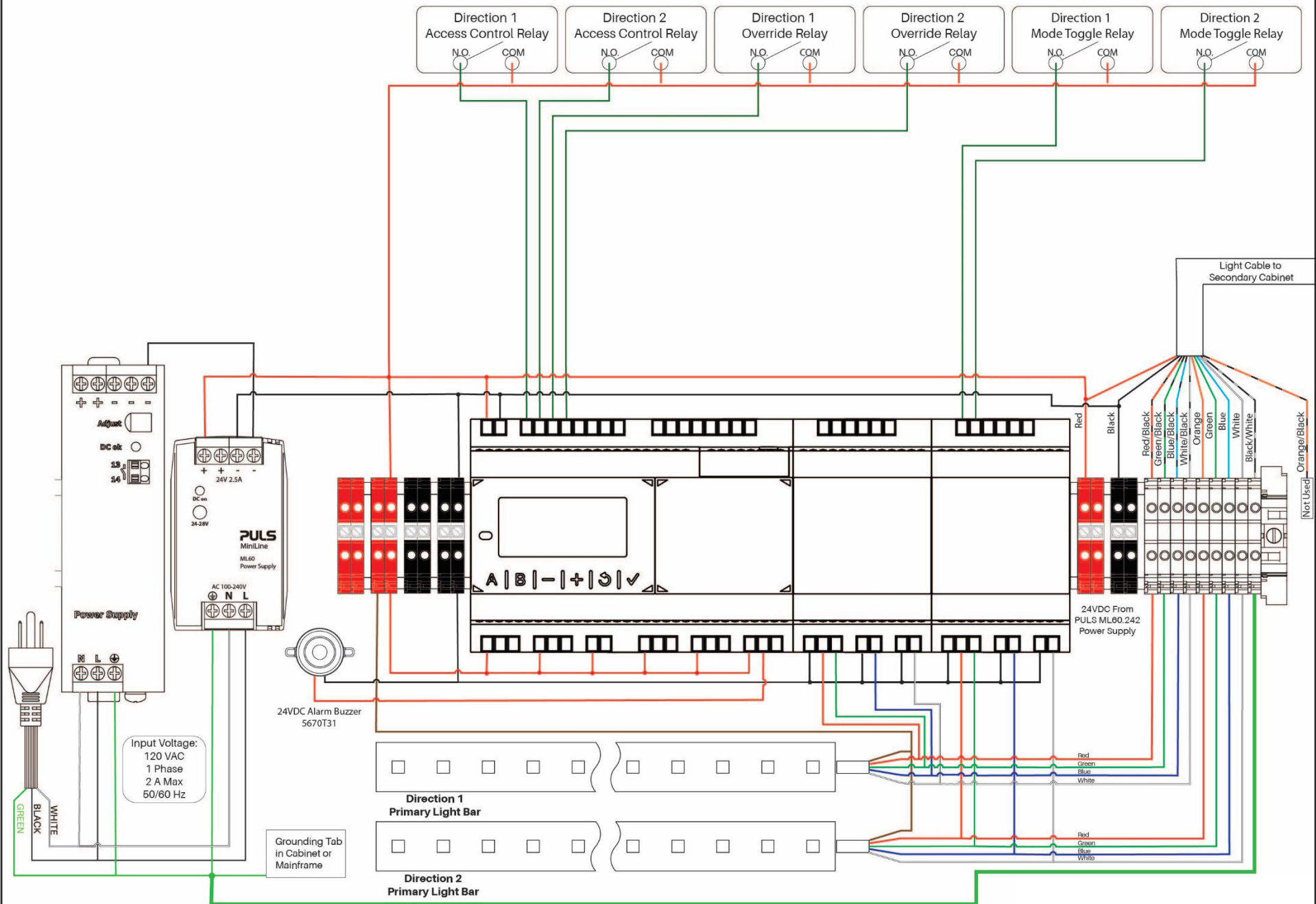
You may piggyback onto one of the common terminals to get 24VDC to operate other devices.

Other notes: Direction 1 is with the primary cabinet on your right, Direction 2 is the primary cabinet on the left.

Single arm lanes will not use as many terminals. Anything relayed to Motor 2 will be missing in this instance.



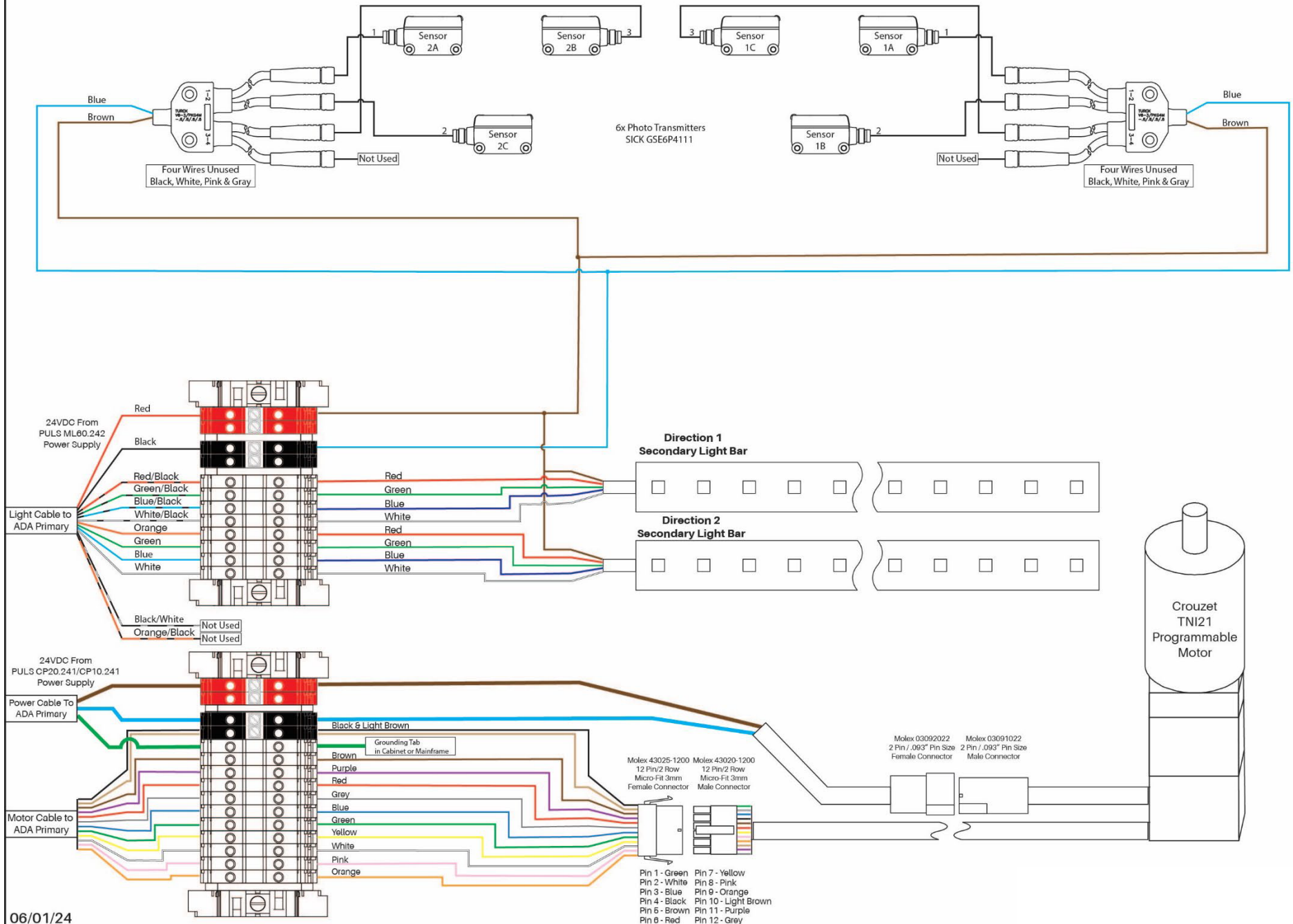
# IS-9900 Access Control & Indicator Light Wiring Diagram



06/01/24

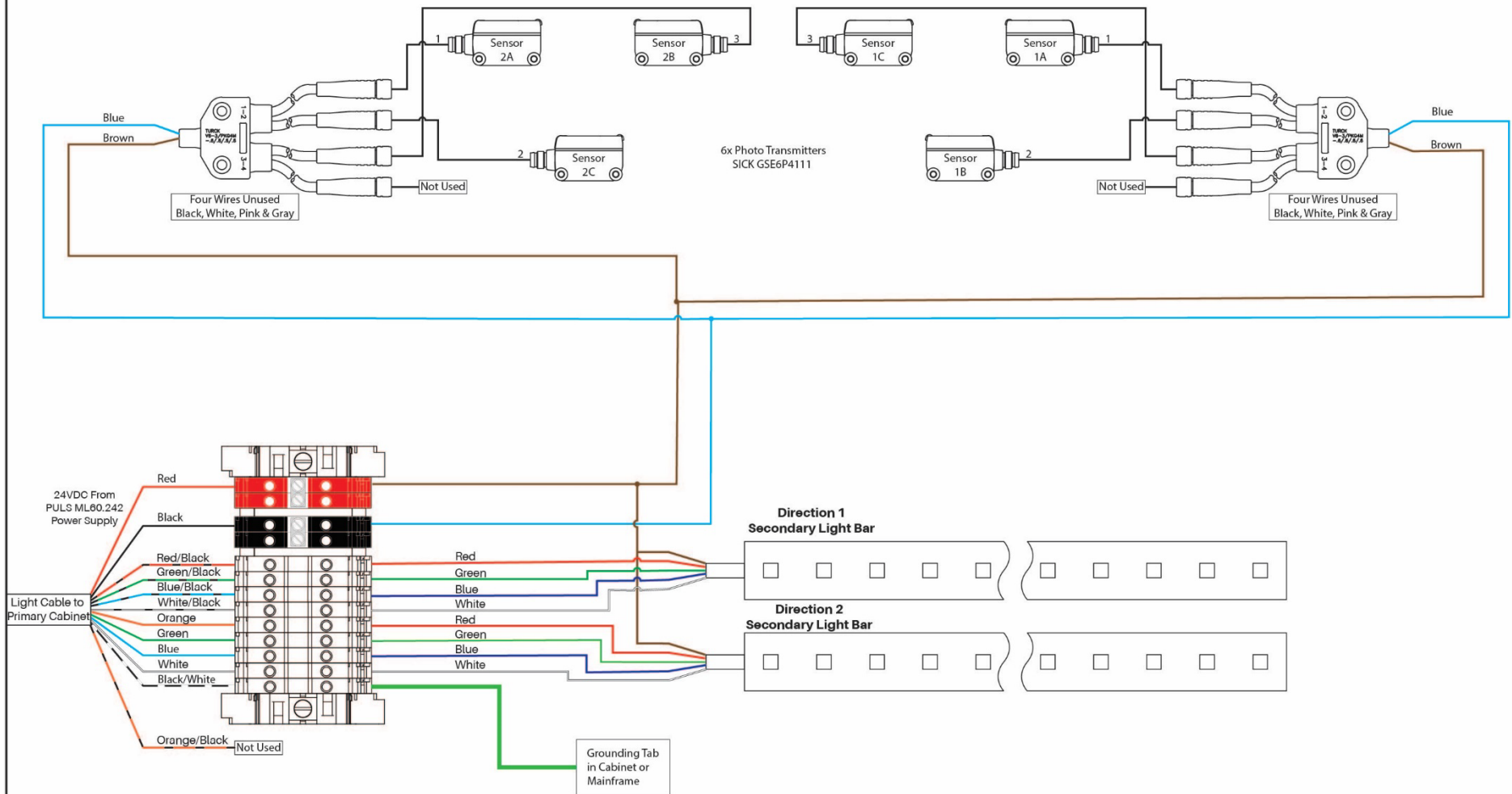


# IS-9900 ADA Lane Secondary Cabinet Wiring Diagram



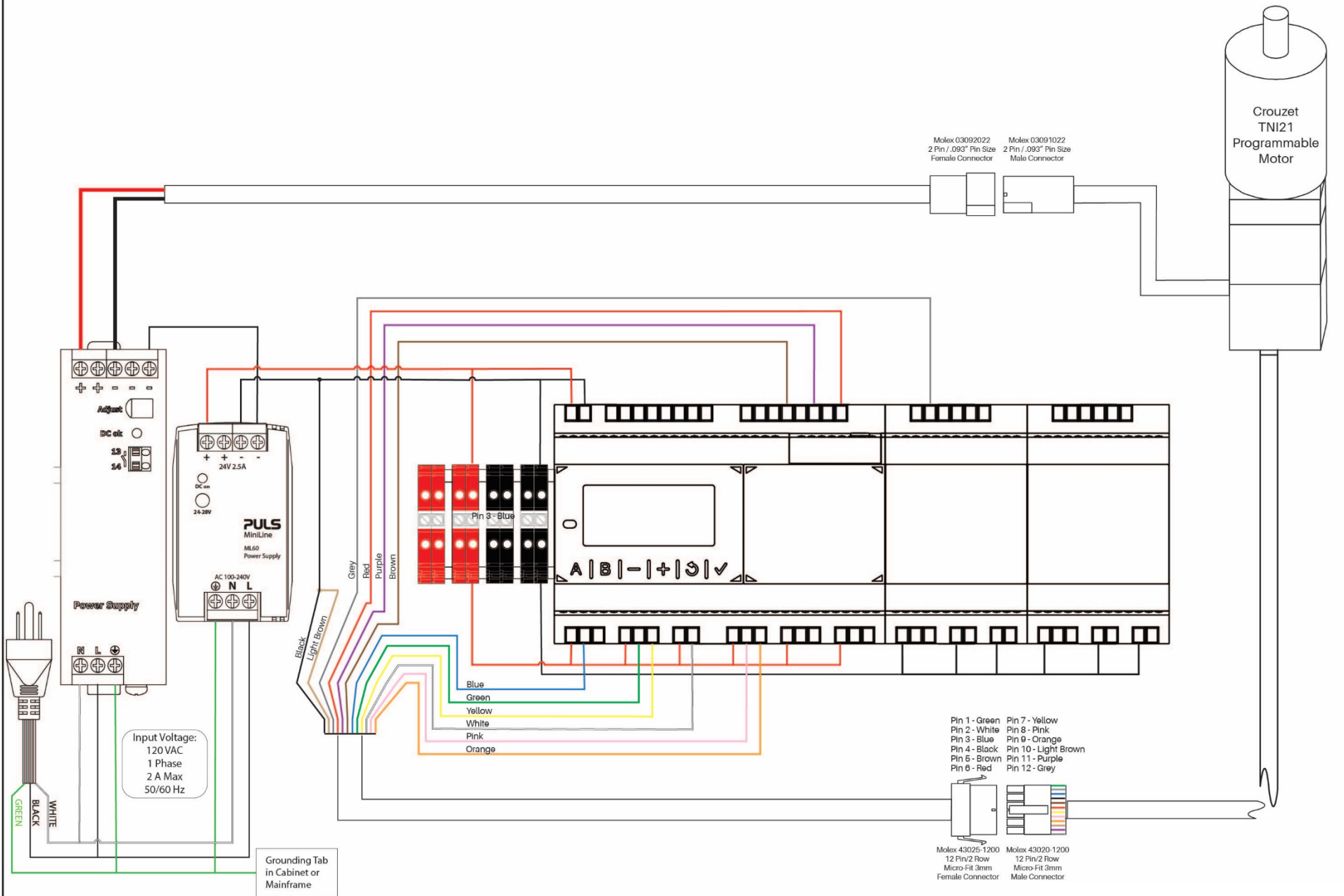
06/01/24

# IS-9900 Single Lane Secondary Cabinet Wiring Diagram



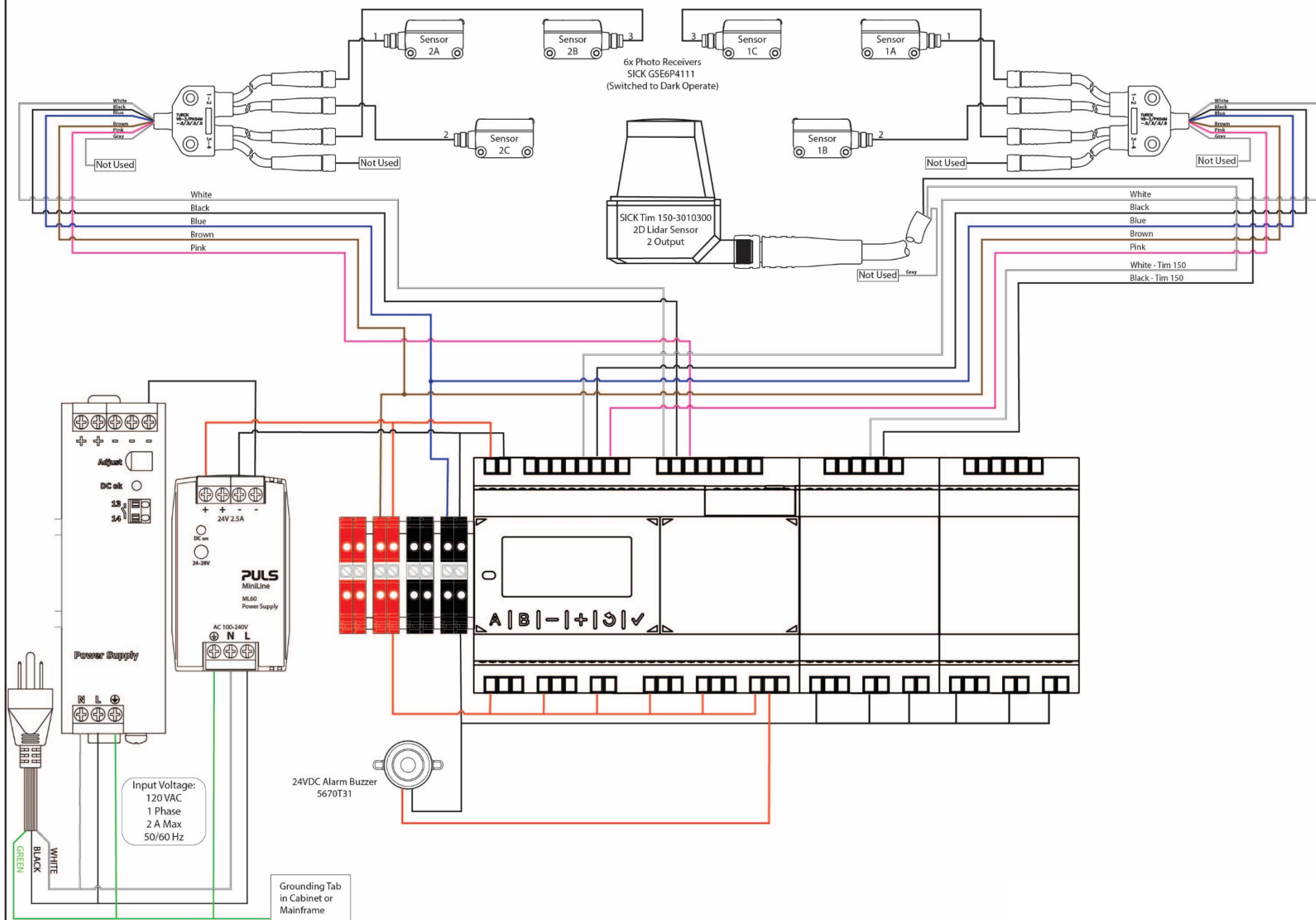
06/01/24

# IS-9900 Primary Cabinet Motion Control Wiring Diagram



06/01/24

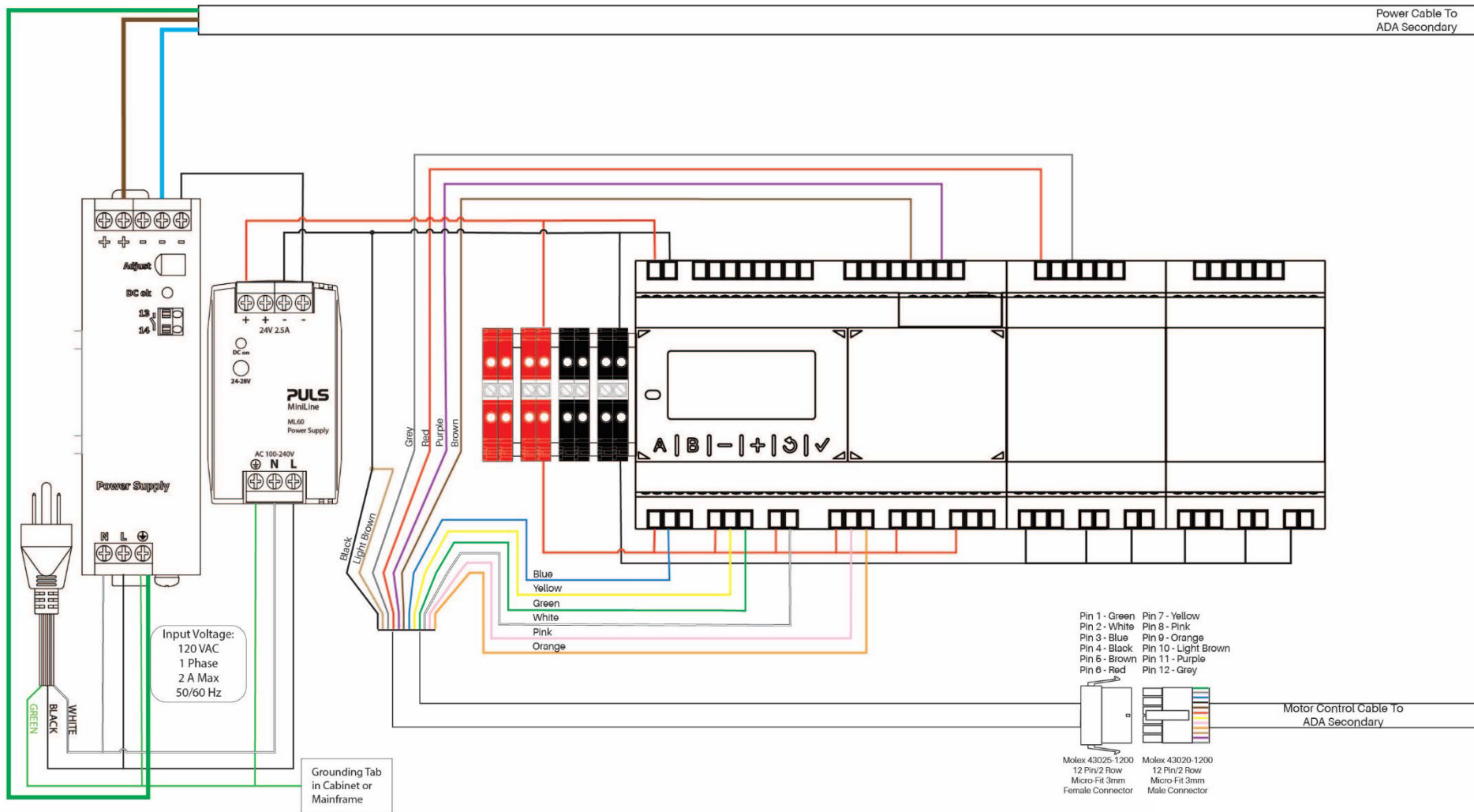
# IS-9900 Primary Cabinet Optical Sensor Wiring Diagram



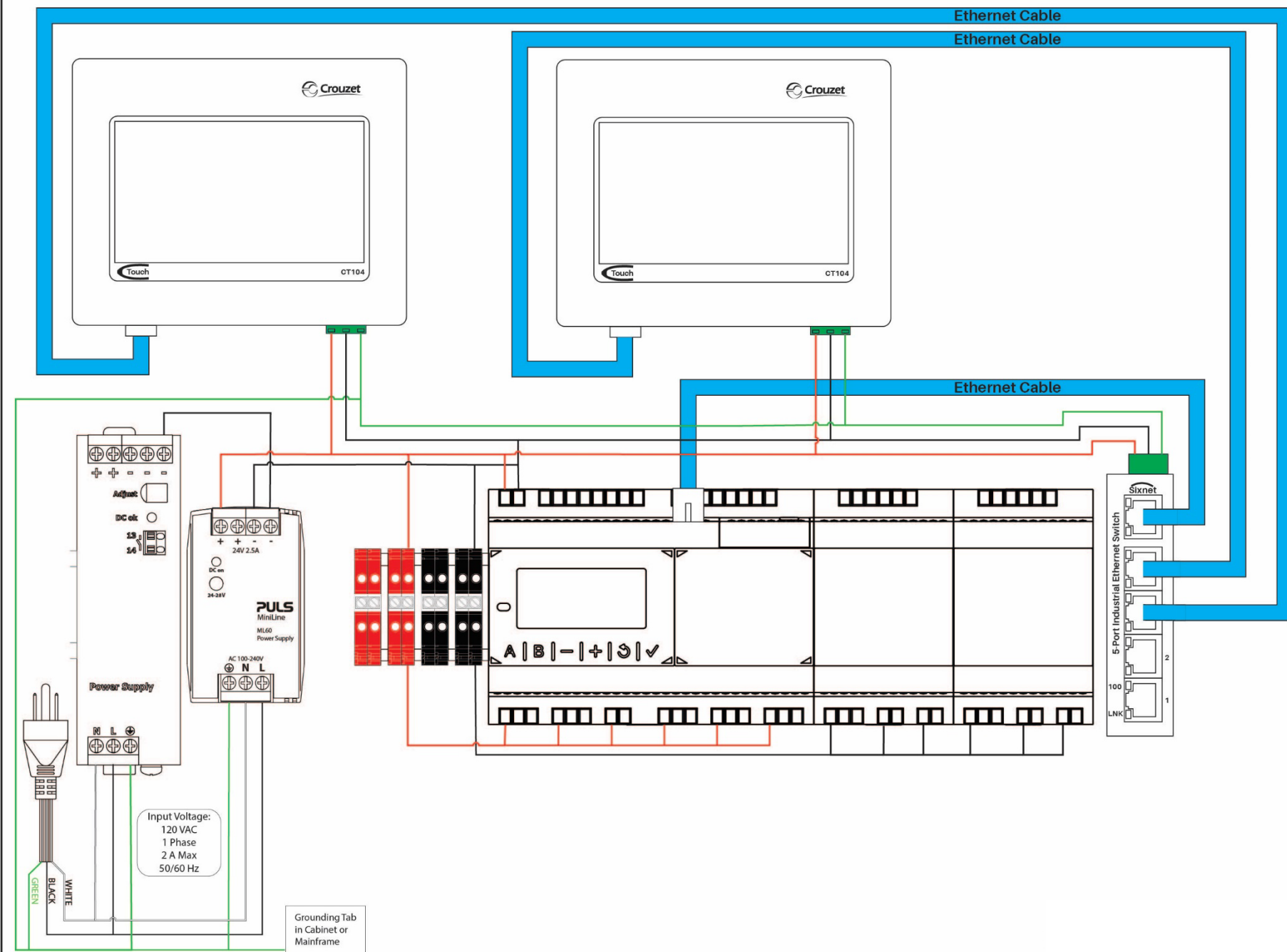
06/01/24



# IS-9900 ADA Lane Primary to Secondary Cabinet Motion Control Interconnection Wiring Diagram



# IS-9900 Primary Cabinet Ethernet Switch & HMI's Wiring Diagram



06/01/24

# **IS-9900 Settings & Statistics Menu**

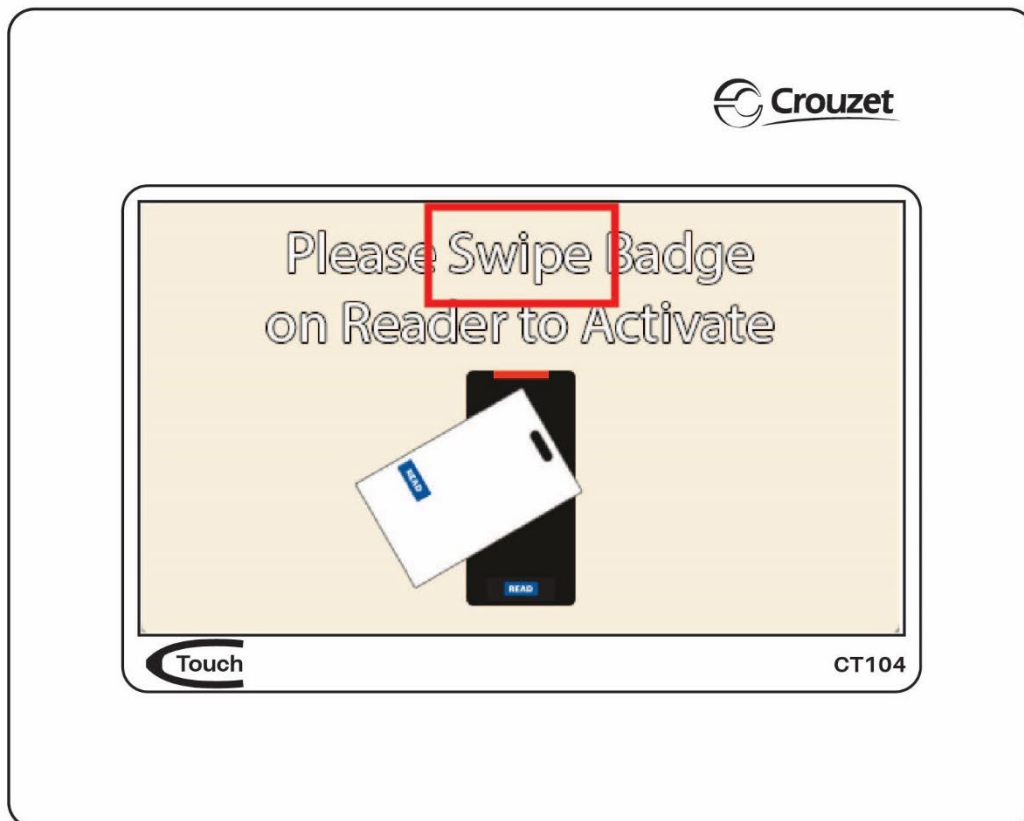
## **Your System Passcode is:**

### **Accessing the settings via the HMI's:**

To access the system settings using either of the HMI's (Human Machine Interface / LCD Display) requires the screen to be pressed in the area highlighted in red for 5 seconds. When the long press has been accepted, the HMI will beep once, after which the settings passcode screen will appear. If you don't hear a beep within 5 seconds, take your finger off of the screen for a few seconds and try again. Please be patient as the screen change to the passcode screen is not instantaneous.



**Note: See Next Page For Accessing Settings VIA Hidden Toggle Button**

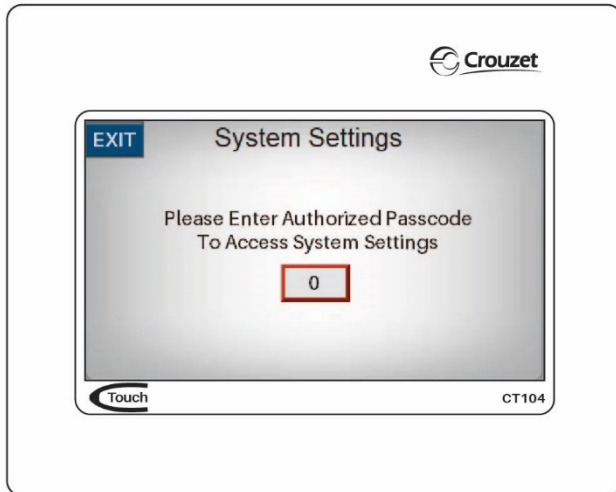




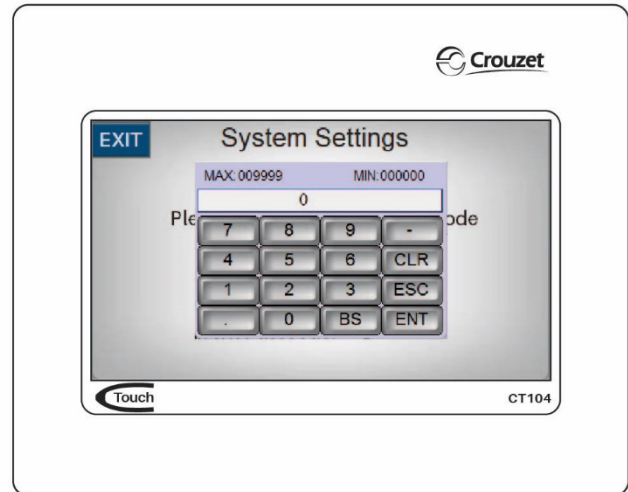
# **IS-9900 Settings & Statistics Menu**

## **Inputting the System Passcode:**

To enter the passcode to access the system settings, simply press on the red box on the passcode screen. A popup window will appear that will allow you to input the passcode. After the code is typed in, press enter on the popup window to submit the code.



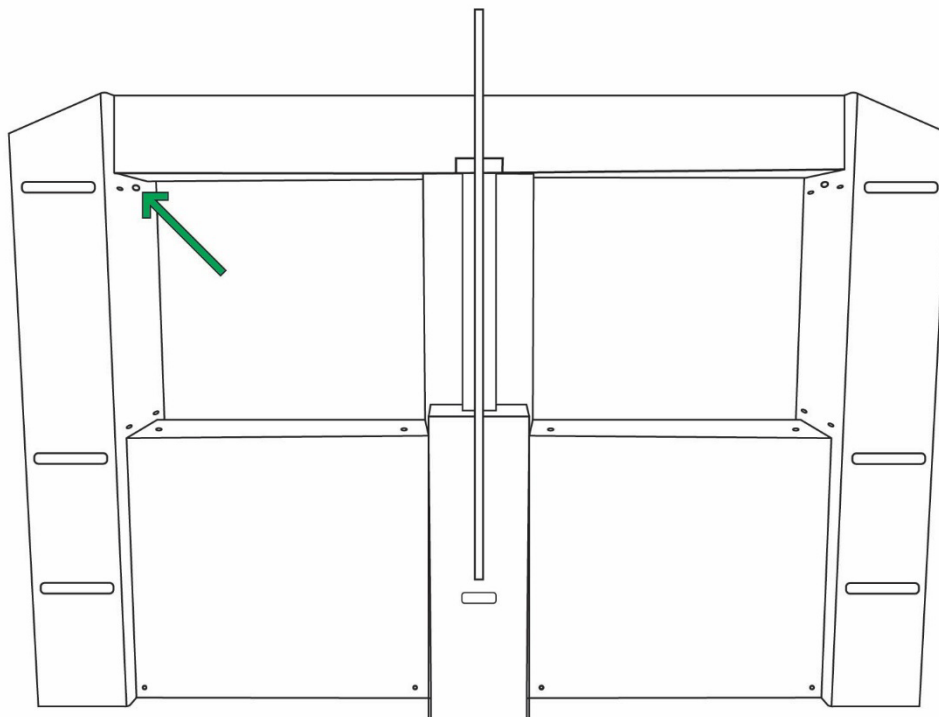
**Passcode Screen**



**Popup Window**

## **Accessing the settings via the hidden toggle button:**

On the left leg closure panel of the primary cabinet, there is a hole large enough to fit a pencil or screwdriver into. Inside of this hole is a hidden toggle button that can be used to access the system settings instead of using the passcode. This toggle button will surpass the passcode screen and start at the first settings screen. See example below of where to find this toggle button.



# IS-9900 Settings & Statistics Menu

The IS-9900 has a large number of settings that can be adjusted to accommodate many scenarios as well as a lengthy set of statistical data it logs for troubleshooting and maintenance purposes. It is important to note that all settings come from the factory preconfigured based on job specific requirements as well as typical environment usage. Most settings will never need to be adjusted but can be just in case some aspect of the installation needs tweaked.

## Main Timer Values

EXIT Timer Values Help

Direction 1 Timer: 7

Direction 2 Timer: 7

Alarm Expire Timer: 2

Next

From this screen, each directional timer can be adjusted. These timers are how long someone has to pass through the lane before it cancels and returns to the home position. Passage through the lane also cancels the timer. The default is 7 seconds for either direction. The duration of the audible alarm (after source of alarm has been cleared) to sound is also adjusted here. To adjust, simply press on the red boxes displaying the values to bring up the popup key pad. From here, values can be entered and saved by pressing enter. The factory suggests 7 seconds on either directional timer and 2 seconds for the alarm timer.

## Direction 1 Settings

Direction 1 Settings Help

Direction 1 Mode: Controlled Passage

Direction 1 Device: RFID Card

Direction 1 Mode (Secondary): Free Passage

Prev Next

Direction 1 Mode defines the operation of Direction 1. Controlled Passage is activated by an access control device. Free Passage lets anyone through who enters the lane in this direction. No Passage indicates that the lane is not open.

Direction 1 Device is a graphical illustration of access control used. Animations are: RFID Card, RFID Key Fob, and a Concealed Card Reader. This option is hidden unless Direction 1 Mode is Controlled Passage.

Direction 1 Mode Secondary defines the secondary operation of this direction. Upon applying voltage to Direction 1 Mode Toggle input(i2.1), the lane will switch to the secondary mode of operation. This is handy for facilities that frequently need to change the mode of operation.

## Direction 2 Settings

Direction 2 Settings Help

Direction 2 Mode: Controlled Passage

Direction 2 Device: RFID Card

Direction 2 Mode (Secondary): Free Passage

Prev Next

Direction 2 Mode defines the operation of Direction 2. Controlled Passage is activated by an access control device. Free Passage lets anyone through who enters the lane in this direction. No Passage indicates that the lane is not open.

Direction 2 Device is a graphical illustration of access control used. Animations are: RFID Card, RFID Key Fob, and a Concealed Card Reader. This option is hidden unless Direction 2 Mode is Controlled Passage.

Direction 2 Mode Secondary defines the secondary operation of this direction. Upon applying voltage to Direction 2 Mode Toggle input(i2.2), the lane will switch to the secondary mode of operation. This is handy for facilities that frequently need to change the mode of operation.

## Anti-crawl Through

Anticrawl Thru Settings Help

Anticrawl Mode: Enabled

Delay (.1 s): 5

Prev Next

The anti-crawl mode defines if the anti-crawl through alarm is functional on the lane. The delay defines how long the sensor under the arm needs to be blocked before the anti-crawl alarm scenario starts. Measured in .1 second intervals. Default is .5 seconds. This setting is hidden if the feature is disabled. Most facilities would benefit from leaving this on. However, environments with a lot of low to the ground traffic (gym bags and drag behind carts) may want to disable this setting.

## Sensor Filter & Linger Settings

Sensor Filter & Linger Delay Help

Sensor Filter Delay (.s): 1

Linger Delay (.s): 20

Prev Next

The Sensor Delay Value defines how long sensors must be blocked before registering. Lessening the timer will make the units more sensitive. Typically, a range of 1 to 3 is a good setting here. This filters out quick accidental beam crosses without allowing too much through.

The Linger Delay defines how much time someone has to get out of the path of the beams once the lane has determined someone has passed through it. Increasing this timer can be beneficial for slow moving people but the caveat is that it decreases security to do so.

## Swipe Queue Settings

Swipe Queue Help

Direction 1 Swipe Queue: 2 Swipes

Direction 2 Swipe Queue: 2 Swipes

Prev Next

The swipe queue for Direction 1 & 2 allows the number of people who can swipe their card ahead of time. Most installations would benefit from a value of 2, but more secure areas may wish to reduce this to 1. Very fast paced installations may wish a value of 3, but as a person passes through another access control request is allowed.

# IS-9900 Settings & Statistics Menu Cont.

## Approach Forgiveness



Approach Forgiveness Help

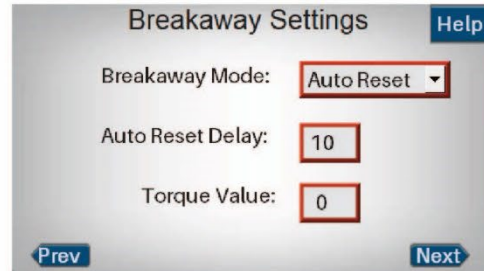
Direction 1 Delay (s):

Direction 2 Delay (s):

Prev Next

The setting is only applicable to controlled passage directions. If the lane is in the home position, the unit will wait for the duration listed before setting the lane into alarm. The reason for this is many times in their haste, people will walk into the lane before swiping their badge. If the arm is open or closing at the time of entry, the alarm will sound regardless of this setting.

## Breakaway Settings



Breakaway Settings Help

Breakaway Mode:

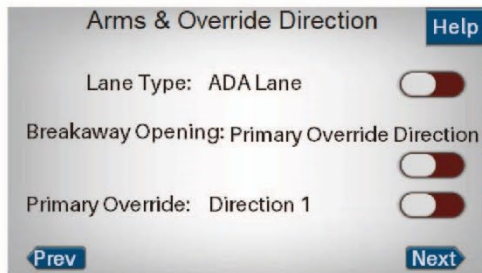
Auto Reset Delay:

Torque Value:

Prev Next

Disabled: Arms will continue to resist against attempts to force through. Intrusion alarm scenario will be given and dedicated output will go high for guard use.  
Breakaway Mode: Arms will cease to resist effort to push against someone forcing through. Once the photo sensors are cleared, the arms will automatically open to the set override position.  
Either the arms will Auto Reset based on the timer value that is selected if configured to do so. With or without the auto-reset timer, the breakaway can be canceled with the Admin Input (I1.6).

## Arms & Override



Arms & Override Direction Help

Lane Type: ADA Lane ☒

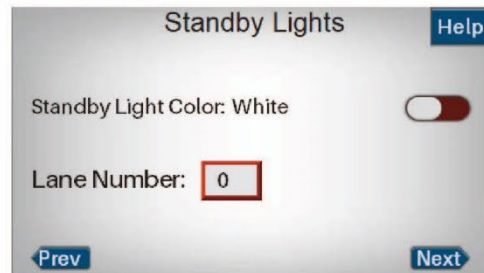
Breakaway Opening: Primary Override Direction ☒

Primary Override: Direction 1 ☒

Prev Next

Lane Type: This settings shouldn't need adjusting. The software used for these lanes is meant to be universal for both ADA or Single Lanes.  
Primary Override Direction: This is going to vary from facility to facility. In the event both directional override inputs are activated, the lane will disable monitoring and the arms will swing to either Direction 1 or Direction 2.  
Breakaway Opening: determines where the arms will go if the breakaway feature is used once all the sensors are cleared.

## Standby Lights



Standby Lights Help


Standby Light Color: White ☒

Lane Number:

Prev Next

The standby lights settings will change the lights used when the lane is in home position. Default setting is white light but, can be changed to illuminate amber if desired.

## Cabinet Sensor Alignment

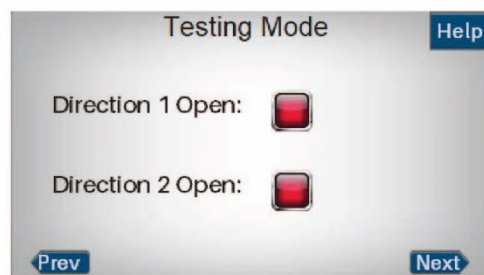


Cabinet Sensor Alignment Help

Prev Next

Cabinet Sensor Alignment: This screen displays information on the sensor array for the cabinet. If one or more of the red indicators are showing on the screen, the corresponding sensor is out of alignment, blocked, or not functioning properly. Note: There is a delay for when the sensors will appear on the screen.

## Testing Mode



Testing Mode Help

Direction 1 Open: ☒

Direction 2 Open: ☒

Prev Next

This screen allows for the lane to be activated in either direction based on how the lane is set up. The lane will not activate from this window if a direction is set to free passage. Press the on screen buttons to trigger an opening in either direction. Multi-swipes are also allowed from this window based on the Swipe Queue setting



# IS-9900 Settings & Statistics Menu Cont.

## System Statistics

System Statistics		Help
Direction 1 Valid Passages:	0	
Direction 1 25K Passages:	0	
Direction 2 Valid Passages:	0	
Direction 2 25K Passages:	0	
Intrusion Alarms:	0	
Breakaways:	0	
Prev		Next

This screen has a readout showing how many people have passed through the lane in direction 1 and direction 2 (outside of a double override scenario). It is good information for maintenance. Also shown is the number of intrusion alarms and breakaway alarms. These are there for troubleshooting purposes.

## System Statistics

System Statistics		Help
Direction 1 Wrong Way Alarms:	0	
Direction 2 Wrong Way Alarms:	0	
Obstructions Count:	0	
Direction 1 Piggyback Alarms:	0	
Direction 2 Piggyback Alarms:	0	
Prev		Next

This screen shows how many of the various alarms states have occurred since the installation. These are there for troubleshooting purposes.

## System Statistics

System Statistics		Help
Direction 1 No Swipe Alarms:	0	
Direction 2 No Swipe Alarms:	0	
Motor 1 Error Count:	0	
Motor 2 Error Count:	0	
Anti-Crawl Alarms:	0	
Linger Alarms:	0	
Prev		Next

This screen shows how many of the various alarms states have occurred since the installation. These are there for troubleshooting purposes.

## System Information

System Information	
Model #:	IS9900 -ADA
System Initilized On:	0 / 0 / 0
Order Number:	AACO 0
Prev	

This is the system information screen. This will display the model number, whether it is an ADA or Single arm lane, the date the system was initialized at the factory, and the original order number of the lane. The order number is used as a serial number for the installation as well as the last 4 digits of the order number is also the system settings passcode set from the factory.



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## **IS-9900 Warranty Information**

Seller warrants the goods against defective workmanship and materials provided that Buyer notify Seller within one (1) year after receipt by Buyer of the goods of any claim under this Warranty. The liability of Seller shall be limited to replacing or repairing defective goods returned by Buyer and delivered to the factory of the Seller, transportation charges prepaid.

Replaced or repaired goods will be redelivered freight prepaid to the address of Buyer shown hereon. Except for the Warranty contained herein, there shall be no other warranties, such as warranties of fitness and merchantability or otherwise express or implied, written or verbal, and Seller shall not be liable for consequential damages in any event.