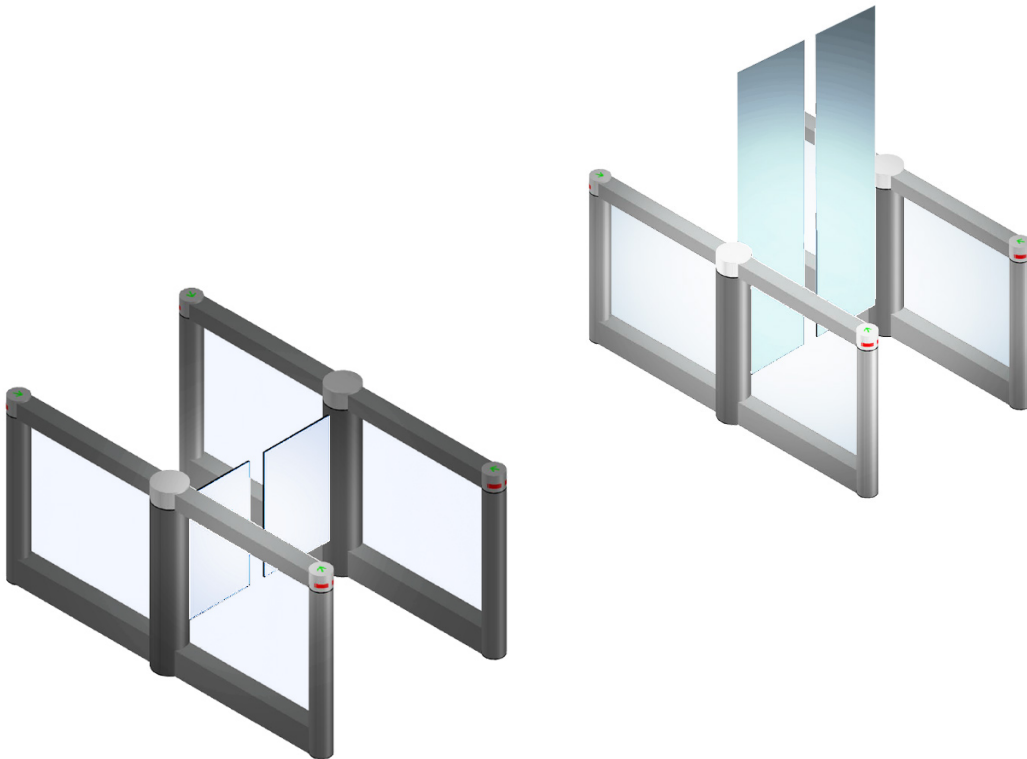


WAIST HIGH OPTICAL
TURNSTILE OPERATION MANUAL



CONTENTS

UNPACKAGING	3
OPERATION CONCEPT	3
OPERATION MODES.....	4
CONTROLLED PASSAGE MODE.....	4
FREE EXIT MODE.....	4
NO PASSAGE MODE	4
ADDITIONAL OPERATION OPTIONS	5
ANTI-TAILGATING.....	5
MULTI-SWIPE.....	5
INSTALLATION INFORMATION.....	6
LANE IDENTIFICATION.....	6
LANE LAYOUT	6
MOUNTING	7
GENERAL WIRING INFORMATION	7
INPUT WIRING.....	8
ADJUSTING MODES AND SETTINGS.....	9
SPECIFICATIONS	13
MATERIAL SPECIFICATIONS.....	13
HIGH VOLTAGE SPECIFICATIONS.....	13
LOW VOLTAGE SPECIFICATIONS	13
OPTIONAL REMOTE LANE CONTROLS	13
COMMISSIONING	14
WARRANTY AND DISCLAIMER.....	15

UNPACKAGING

CABINETS ARRIVE PRE-ASSEMBLED ON A PALLET. TO UNPACKAGE REMOVE OUTSIDE PALLET WALLS. THE CABINETS ARE LAG BOLTED TO THE PALLET FROM THE MOUNTING POINTS INSIDE OF THE CABINETS. REMOVE THE ACCESS COVERS FROM THE INSIDE OF THE LANE TO GET ACCESS TO THE LAG BOLTS. THE ACCESS COVERS ARE ATTACHED WITH BALL STUDS. MAKE SURE TO PULL THE ACCESS COVERS STRAIGHT OUT OR YOU COULD DAMAGE THE BALL STUDS OR RETAINER CLIPS. REMOVE THE LAG BOLTS AND CAREFULLY REMOVE THE LANE FROM THE PALLET.

OPERATION CONCEPT

THE WAIST HIGH OPTICAL TURNSTILES BY OUTLAW INDUSTRIES ARE A BIDIRECTIONAL, MOTORIZED SWING GATE THAT PROVIDE MEDIUM SECURITY WHILE ALLOWING THE PASSAGE OF SEVERAL PEOPLE QUICKLY AND PRECISELY FOR BOTH ENTRY AND EXIT OF A FACILITY. THEY ARE DESIGNED TO OPERATE IN SEVERAL DIFFERENT MODES DEPENDING ON CUSTOMER PREFERENCE. ALL THESE MODES ARE FIELD SELECTABLE AND CAN BE ADJUSTED AT ANY TIME. THEY ARE SHIPPED FROM THE FACTORY WITH ENTRY AND EXIT CONFIGURED IN THE CONTROLLED PASSAGE MODE. ENTRY AND EXIT MODES CAN BE CONFIGURED INDEPENDENTLY. FOR EXAMPLE, YOU CAN SET ENTRY TO BE CONTROLLED, AND THE EXIT TO BE FREE EXIT. THE WAIST HIGH OPTICAL TURNSTILES HAVE INDICATOR LIGHTS AND DIRECTIONAL LIGHTS THAT REACT DIFFERENTLY DEPENDING ON THE MODE SELECTED FOR THAT DIRECTION. THE LIGHTS HELP AID IN THE FLOW OF TRAFFIC BY MAKING IT CLEAR TO THE USER WHEN TO WALK THROUGH THE LANE, IF THE LANE IS USABLE, WHEN TO PRESENT A CARD ETC. THE INDICATOR LIGHTS ARE ON TOP OF THE CABINET AND THE DIRECTIONAL LIGHTS ARE ON THE FACE OF THE CABINET.

OPERATION MODES

CONTROLLED PASSAGE MODE

- A. WHEN A DIRECTION IS SET TO CONTROLLED PASSAGE MODE, THE DIRECTION WILL NOT OPEN WITHOUT AN INPUT FROM AN ACCESS CONTROL SYSTEM OR OTHER RELAY CLOSURE.
- B. THE INDICATOR LIGHT WILL HAVE A GREEN SQUARE WHEN IN THIS MODE. THIS GREEN SQUARE SYMBOLIZES “SWIPE YOUR CARD HERE”. ONCE SOMEONE SWIPES THEIR CARD AND TRIGGERS THE INPUT THE INDICATOR LIGHT CHANGES TO A GREEN ARROW SIGNALING THE USER TO GO THROUGH THE PASSAGE. THE GLASS DOORS OPEN AND ALLOW PASSAGE.
- C. THE DIRECTIONAL LIGHT WILL HAVE A GREEN ARROW SIGNALING THE LANE IS OPEN FOR USE.

FREE EXIT MODE

- D. WHEN A DIRECTION IS SET TO FREE EXIT MODE, THE GLASS DOORS AUTOMATICALLY OPEN WHEN SOMEONE ENTERS THE LANE AND TRIGGERS THE FIRST PHOTO EYE.
- E. THE INDICATOR LIGHT WILL HAVE A GREEN ARROW IN THIS MODE. THE GREEN ARROW SYMBOLIZES THEY ARE FREE TO ENTER THE LANE WITHOUT PRESENTING A CARD OR OTHER CREDENTIAL.
- F. THE DIRECTIONAL LIGHT WILL HAVE A GREEN ARROW SIGNALING THE LANE IS OPEN FOR USE.

NO PASSAGE MODE

- G. WHEN A DIRECTION IS SET TO NO PASSAGE MODE, THE DOORS WILL NOT OPEN FROM THAT DIRECTION.
- H. THE INDICATOR LIGHT WILL HAVE A RED X IN THIS MODE, SYMBOLIZING THE LANE IS NOT OPEN FOR PASSAGE.
- I. THE DIRECTIONAL LIGHT WILL ALSO HAVE A RED X SYMBOLIZING THE LANE IS NOT OPEN FOR PASSAGE.

ADDITIONAL OPERATION OPTIONS

ANTI-TAILGATING

- A. ANTI-TAILGATING CAN ONLY BE USED IN THE CONTROLLED PASSAGE MODE.
- B. ANTI-TAILGATING AIDS IN ALLOWING ONE PERSON TO GO THROUGH THE PASSAGE AT A TIME. IF THE LANE DETECTS SOMEONE TRYING TO ENTER BEHIND ANOTHER PERSON AN ALARM WILL GO OFF.

MULTI-SWIPE

- C. THE MULTI-SWIPE FEATURE CAN ONLY BE USED IN THE CONTROLLED PASSAGE MODE.
- D. MULTI-SWIPE ALLOWS MULTIPLE INPUTS TRIGGERS TO HELP AID IN MULTIPLE PEOPLE BEING ABLE TO SWIPE A CARD AND GO THROUGH THE TURNSTILE WITHOUT WAITING FOR THE DOORS TO CLOSE TO SWIPE THEIR CARD. (ONE RIGHT BEHIND ANOTHER). THIS HELPS SPEED UP THE FLOW OF TRAFFIC SO THAT USERS DO NOT HAVE TO WAIT FOR THE GLASS DOORS TO CLOSE FOR THE NEXT PERSON TO GO THROUGH.
- E. THIS MODE CANNOT BE USED IN CONJUNCTION WITH ANTI-TAILGATING.

INSTALLATION INFORMATION

LANE IDENTIFICATION

- A. THERE ARE 2 DIFFERENT BODY STYLES FOR CABINETS. END CABINETS AND MIDDLE CABINETS. END CABINETS ONLY HAVE 1 MOTORIZED BARRIER. MIDDLE CABINETS HAVE TWO MOTORIZED BARRIERS. MIDDLE CABINETS ARE USED IF YOU HAVE MORE THAN ONE LANE IN AN “ARRAY” OF OPTICAL TURNSTILES. FOR EXAMPLE, IF YOU HAVE AN ARRAY OF 2 LANES YOU WILL HAVE 3 CABINETS, 2 END CABINETS AND ONE MIDDLE CABINET. IF YOU HAVE AN ARRAY OF 3 LANES YOU WILL HAVE 2 END CABINETS AND 2 MIDDLE CABINETS.
- B. THERE ARE TWO DIFFERENT PASSAGE WIDTHS AVAILABLE. A STANDARD PASSAGE WIDTH (24”), AND AN ADA PASSAGE WIDTH (36”).
- C. EACH LANE HAS A MASTER SIDE AND A SLAVE SIDE. THE MASTER SIDE HOUSES ALL MAIN ELECTRONICS SUCH AS THE PLC, THE HMI, MOTOR FOR THE BARRIER ON THAT SIDE, AND THE RECEIVERS. THE SLAVE SIDE HOUSES THE TRANSMITTERS AND THE MOTOR FOR THE BARRIER ON THAT SIDE OF THE LANE.

LANE LAYOUT

- D. FOR LANE LAYOUT PLEASE REFERENCE THE DRAWINGS FROM YOUR DISTRIBUTOR. EVERY JOB HAS A SPECIFIC LAYOUT AND IS DESIGNED BASED OFF CUSTOMER NEEDS. IF ADA AND STANDARD PASSAGE WIDTH TURNSTILES ARE USED IN THE SAME ARRAY, THINGS CAN GET VERY CONFUSING, AND CABINETS CAN GET MIXED UP EASILY. THEREFORE, DRAWINGS ARE PROVIDED FOR EACH JOB AND THE CABINETS ARE LABELED.

MOUNTING

- E. THERE ARE 4 MOUNTING HOLES INSIDE OF EACH CABINET 5/8" IN DIAMETER AND SLOTTED TO ALLOW FOR SLIGHT ADJUSTMENT. 1/2" STAINLESS STEEL WEDGE ANCHORS ARE PROVIDED. IF NOT INSTALLING ON CONCRETE USE THE CORRECT FASTENERS FOR THE SUBSTRATE YOU ARE MOUNTING TOO.**
- F. THERE ARE 3" DIAMETER HOLES ON EACH SIDE OF THE CABINET FOR CONDUIT. CONDUIT SHOULD BE INSTALLED PRIOR TO INSTALLING THE TURNSTILES BASED OFF A CONDUIT LOCATION DETAIL FOR YOUR JOB. ALSO, YOU CAN ASK THE DISTRIBUTOR FOR PLASTIC TEMPLATES OF THE CABINETS TO AID IN THE INSTALLATION OF THE CONDUIT AND CABINETS.**
- G. IT IS CRUCIAL THAT THE CABINETS ARE INSTALLED SQUARE AND LEVEL SO THAT THE PHOTO EYES ALIGN PROPERLY. IF THE PHOTO EYES ARE NOT ALIGNED THE LANE WILL NOT FUNCTION PROPERLY. THE HOME SCREEN OF THE HMI WILL DISPLAY A LAYOUT OF THE PHOTO EYES WHEN POWERED UP. ALL PHOTO EYES ON THIS LAYOUT SHOULD BE LIT UP GREEN DURING INITIAL POWER UP.**
- H. IT IS CRUCIAL THAT THE CABINETS ARE SPACED PROPERLY FOR THE PASSAGE WIDTH. FOR ADA CABINETS THERE IS A 36" PASSAGE WIDTH, AND FOR THE STANDARD CABINETS THERE IS A 24" PASSAGE WIDTH.**

GENERAL WIRING INFORMATION

- I. 115V POWER WILL NEED TO BE RAN TO EACH MASTER CABINET. IT IS RECOMMENDED THAT AT LEAST 1 20AMP CIRCUIT BE RAN FOR EACH "ARRAY" OF OPTICAL TURNSTILES.**
- J. FROM EACH MASTER CABINET THERE WILL BE A COMMUNICATION/LOW VOLTAGE POWER CABLE THAT RUNS TO**

THE SLAVE UNIT TO POWER THE MOTOR, TRANSMITTERS, AND LIGHTS.

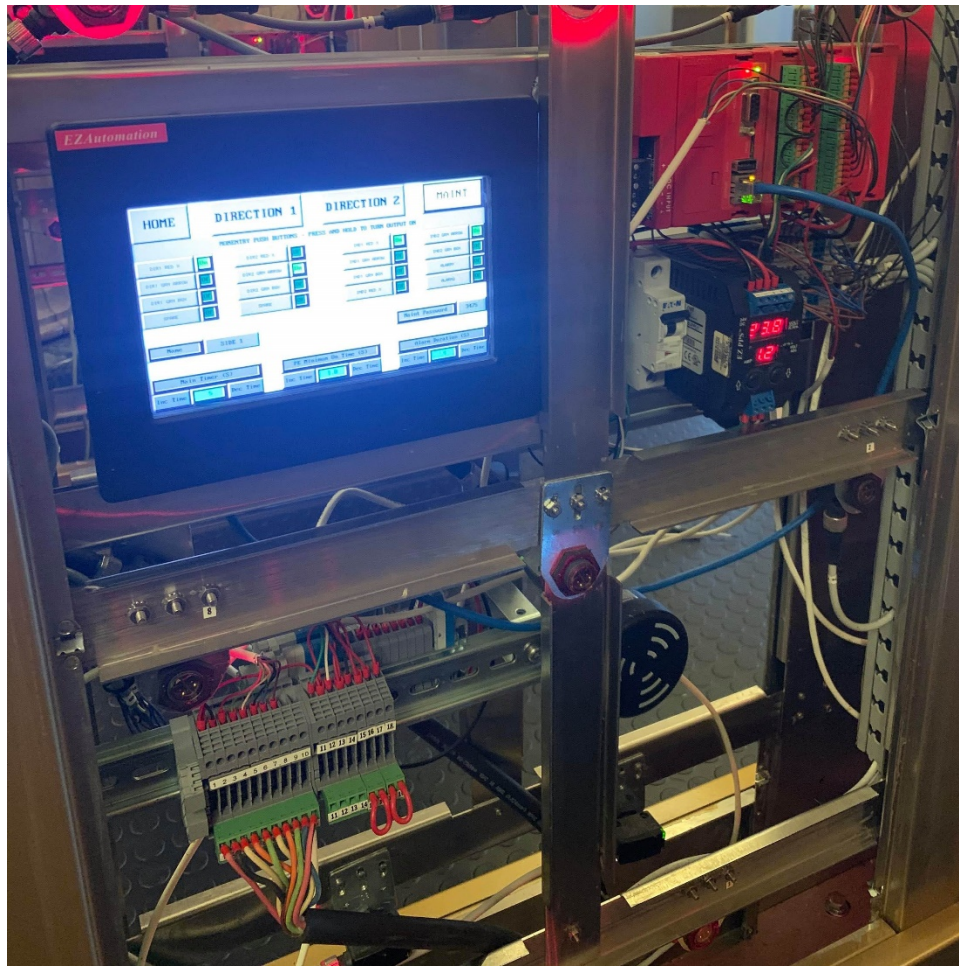
K. THE COMMUNICATION CABLE IS PREMADE, ALREADY WIRED TO THE MASTER CABINET, AND CUT TO LENGTH.

L. IF REMOTE LANE CONTROLS ARE USED, THEN AN ETHERNET CABLE MUST BE RAN FROM EACH LANE TO THE SAME LAN THAT THE COMPUTER IS CONNECTED TOO.

INPUT WIRING

M. THERE ARE 4 INPUTS, DIRECTION 1 TRIGGER, DIRECTION 2 TRIGGER, DIRECTION 1 FIRE ALARM CONTROL PANEL OVERRIDE, DIRECTION 2 FIRE ALARM CONTROL PANEL OVERRIDE. THE INPUT WIRING TERMINAL BLOCK IS LOCATED NEXT TO THE COMMUNICATION CABLE TERMINAL BLOCK IN THE MASTER UNIT UNDER THE HMI.

INPUT	TERMINAL BLOCK #'S	CONTACT TYPE
DIRECTION 1 TRIGGER	11-12	NO DRY CONTACT (DO NOT APPLY ANY VOLTAGE)
DIRECTION 2 TRIGGER	13-14	NO DRY CONTACT (DO NOT APPLY ANY VOLTAGE)
DIRECTION 1 FACP	15-16	NO DRY CONTACT (DO NOT APPLY ANY VOLTAGE)
DIRECTION 2 FACP	17-18	NO DRY CONTACT (DO NOT APPLY ANY VOLTAGE)



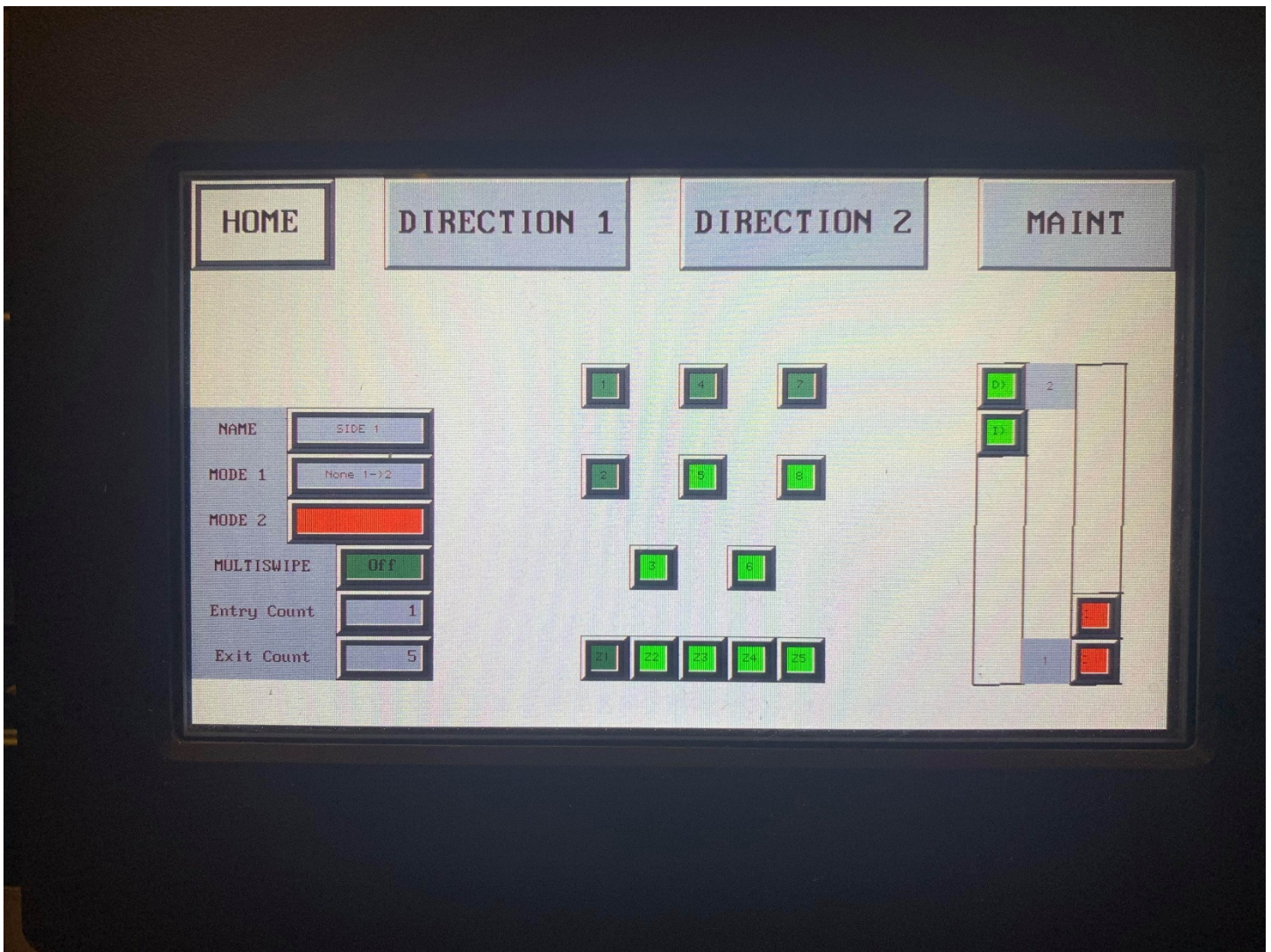
ADJUSTING MODES AND SETTINGS

N. NAVIGATING THE HMI

1. THERE ARE 4 MAIN SCREENS TO THE HMI. THE HOME SCREEN, DIRECTION1 SETTINGS SCREEN, DIRECTION 2 SETTINGS SCREEN, AND THE MAINTENANCE SCREEN.

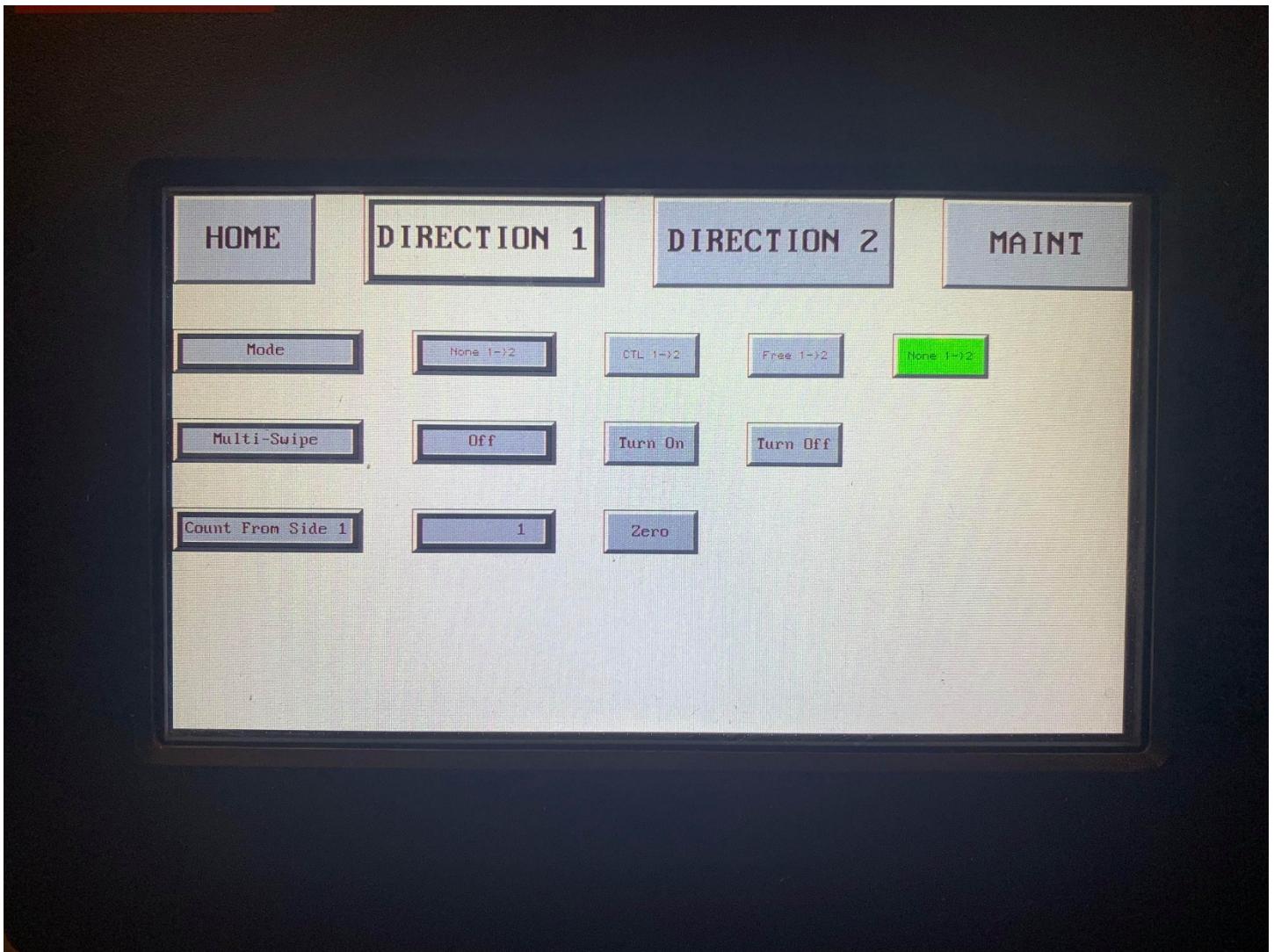
O. HOME SCREEN

1. THE HOME SCREEN DISPLAYS THE CURRENT OVERALL SETTINGS/STATUS FOR THE LANE. IT TELLS YOU WHAT MODE EACH DIRECTION IS IN, THE STATUS OF THE PHOTO EYES, ENTRY AND EXIT COUNT, A DIAGRAM OF THE LANE, AND THE STATUS OF THE ZONES.



P. DIRECTION SCREENS

- I. TO ACCESS THE DIRECTION 1 SCREEN, PRESS THE DIRECTION 1 OR 2 TABS.
- II. THE DIRECTION SCREENS ALLOW YOU TO CHANGE THE MODE FOR THAT DIRECTION, ENABLE MULTI-SWIPE FOR THE DIRECTION, AND ZERO THE COUNT FOR THAT DIRECTION.



Q. MAINTENANCE SCREEN

- I. TO ACCESS THE MAINTENANCE SCREEN, PRESS THE MAINTENANCE TAB.
- II. YOU WILL NEED TO ENTER THE DEFAULT PASSWORD TO MAKE CHANGES TO THE SETTINGS IN THE MAINTENANCE TAB. THE DEFAULT PASSWORD IS 3475.
- III. THE MAINTENANCE TAB IS USED TO MAKE FINE ADJUSTMENTS TO THE LANE, SUCH AS SENSITIVITY.



- IV. MAIN TIMER – THE MAIN TIMER IS THE AMOUNT OF TIME SOMEONE IS ALLOWED TO BE IN THE LANE WITHOUT TRIGGERING AN ALARM. THIS TIME STARTS WHEN SOMEONE ENTERS THE LANE AND ENDS WHEN THEY EXIT THE LANE REGARDLESS OF WHEN THE TIME IS SET TOO.
- V. PE MINIMUM ON TIME – THIS ADJUSTMENT IS USED TO ADJUST THE “SENSITIVITY” OF THE LANE. THE LOWER THE NUMBER THE MORE SENSITIVE THE LANE IS.

- VI. ALARM DURATION – THIS ADJUSTS HOW LONG THE ALARM STAYS ON WHEN THE ALARM IS TRIGGERED.
- VII. NAME – THIS IS USED IF YOU WANT TO NAME THE LANE, THIS ALSO CHANGES THE NAME OF THE LANE ON THE HOME SCREEN.
- VIII. MAINT PASSWORD – THIS CHANGES THE PASSWORD USED TO ACCESS THE MAINTENANCE SCREEN.

SPECIFICATIONS

MATERIAL SPECIFICATIONS

COMPONENT	MATERIAL
CABINETS	304 #4 STAINLESS STEEL
LENS COVERS	TINTED POLYCARBONATE OR ACRYLIC
BRACKETS, LOCKS, SCREWS	ZINC COATED STEEL, 18-8 STAINLESS

HIGH VOLTAGE SPECIFICATIONS

INPUT VOLTAGE	FREQUENCY	MAX AMP DRAW
115V	50-60HZ	5 AMPS (PER LANE)

LOW VOLTAGE SPECIFICATIONS

COMPONENT	INPUT VOLTAGE
PLC	24VDC
HMI	24VDC
LED LIGHT ARRAY	24VDC
ALARM	24VDC
MOTOR	24VDC

OPTIONAL REMOTE LANE CONTROLS

- R. THE LANE CAN BE CONTROLLED REMOTELY VIA A COMPUTER WITH SOFTWARE THAT INTERACTS WITH THE HMI.
- S. THIS GIVES YOU THE ABILITY TO MONITOR THE STATUS OF THE LANE AS WELL AS OPEN THE LANE IN EITHER DIRECTION.

COMMISSIONING

EVERY JOB MUST BE COMMISSIONED WITH THE MANUFACTURER TO OBTAIN A WARRANTY. IF THIS COMMISSION SHEET IS NOT SIGNED OFF BY THE MANUFACTURER AND THE INSTALLER, THEN THE WARRANTY IS NULL AND VOID.

I READ THROUGH THE ENTIRE INSTALLATION MANUAL, JOB DRAWINGS, CONDUIT LOCATION DETAIL BEFORE PREFORMING THE INSTALLATION.

INSTALLER, NAME, SIGNATURE, DATE	MANUFACTURER NAME, SIGNATURE, DATE

WHILE INSTALLING THE TURNSTILES I FOLLOWED THE INSTALLATION MANUAL AND OTHER DOCUMENTS PERTAINING THE JOB.

INSTALLER, NAME, SIGNATURE, DATE	MANUFACTURER NAME, SIGNATURE, DATE

THE COMMISSIONING CHECKLIST HAS BEEN FILLED OUT, VERIFIED BY THE MANUFACTURER, AND SIGNED BY THE INSTALLER AND MANUFACTURER.

INSTALLER, NAME, SIGNATURE, DATE	MANUFACTURER NAME, SIGNATURE, DATE

WARRANTY AND DISCLAIMER

WARRANTY

THANK YOU FOR YOUR INTEREST IN THE PRODUCTS AND SERVICES.

THIS LIMITED WARRANTY APPLIES TO PHYSICAL GOODS, AND ONLY FOR PHYSICAL GOODS, PURCHASED FROM TURNSTILES.US.

WHAT DOES THIS LIMITED WARRANTY COVER?

THIS LIMITED WARRANTY COVERS ANY DEFECTS IN MATERIAL OR WORKMANSHIP UNDER NORMAL USE DURING THE WARRANTY PERIOD.

DURING THE WARRANTY PERIOD, WE WILL REPAIR OR REPLACE, AT NO CHARGE, PRODUCTS OR PARTS OF A PRODUCT THAT PROVES DEFECTIVE BECAUSE OF IMPROPER MATERIAL OR WORKMANSHIP, UNDER NORMAL USE AND MAINTENANCE.

WHAT WILL WE DO TO CORRECT PROBLEMS?

WE WILL REPAIR THE PRODUCT AT NO CHARGE, USING NEW OR REFURBISHED REPLACEMENT PARTS.

HOW LONG DOES THE COVERAGE LAST?

THE WARRANTY PERIOD FOR PHYSICAL GOODS PURCHASED IS 18 MONTHS FROM THE DATE OF SHIPMENT TO THE END USER.

WHAT DOES THIS LIMITED WARRANTY NOT COVER?

THIS LIMITED WARRANTY DOES NOT COVER ANY PROBLEM THAT IS CAUSED BY:

- CONDITIONS, MALFUNCTIONS OR DAMAGE NOT RESULTING FROM DEFECTS IN MATERIAL OR WORKMANSHIP
- SHIPPING COST FOR REPAIR, OR DAMAGE FROM SHIPPING

WHAT DO YOU HAVE TO DO?

TO OBTAIN WARRANTY SERVICE, CONTACT US TO DETERMINE THE PROBLEM AND THE MOST APPROPRIATE SOLUTION FOR YOU. IF DEFECTS ARE CONSIDERED PRODUCT MUST BE SHIPPED BY CUSTOMER TO THE MANUFACTURER, IF DEFECTS ARE COVERED UNDER WARRANTY PRODUCT WILL BE REPAIRED AND SHIPPED BACK TO CUSTOMER BY THE MANUFACTURER.