



ISOTEC

SYNERGY Multifunction Consoles

Weapons Control Systems, Single & Dual Lane

Dealer Configuration Information

PLC Software: Vi45: 1/22/15, or later
Display Software: Vi43: 1/22/15, or later

***Note: This document is for Dealer Use Only
and is not to be provided to end users***

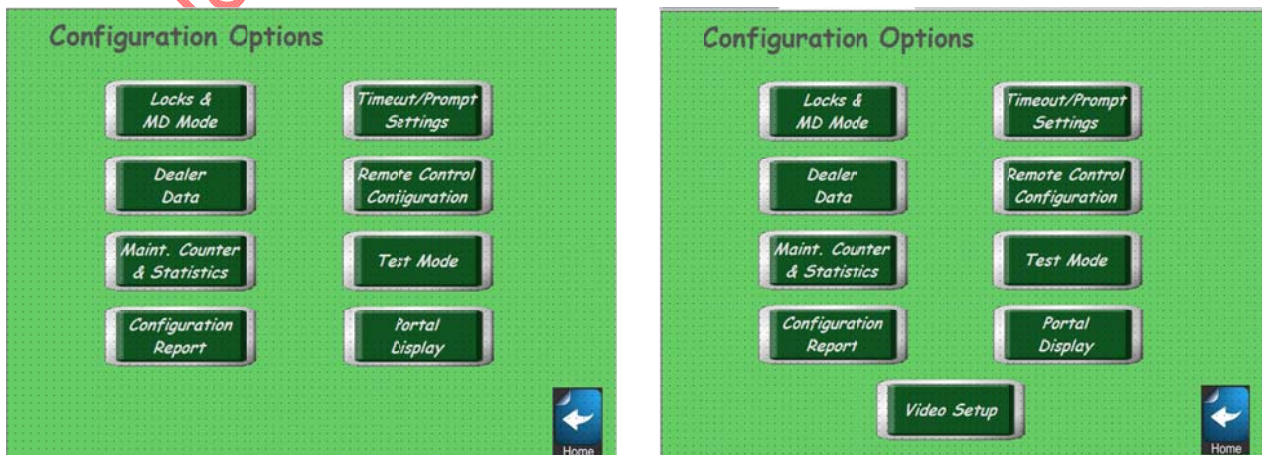
Dealer Configuration Information

Certain operational parameters can be configured by the dealer as part of the installation process by accessing the dealer screens. A dealer access code is required in order to access these screens, to prevent unauthorized access or configuration changes. DEALERS MAY NOT GIVE THE DEALER ACCESS CODE TO ANYONE BESIDES DEALER EMPLOYEES. Contact the Isotec factory Tech Support for dealer access codes.

The dealer access code is entered from the Control Screen, which is accessed by touching the “Next” arrow on the bottom right of the main screen. To enter the password, touch the dealer code value box to bring up a keypad. Enter the 4 digit dealer code, then press the “ENT” key on the lower right corner of the keypad.



If the correct code is entered, The Dealer Setup Options Menu is displayed as shown. “Video Setup” is displayed only if the Media Switch Option is installed.



To set up a particular option set, touch the appropriate button. Touching the small “Home” Arrow will return you to the Main Control Screen.

IMPORTANT NOTE:
**DEALER PERSONNEL MUST ASSURE THAT ANY CONFIGURATIONS
SELECTED MEET THE LOCAL CODES. ISOTEC SECURITY IS NOT
RESPONSIBLE FOR ANY CHANGES NOT MEETING CODE
REQUIREMENTS.**

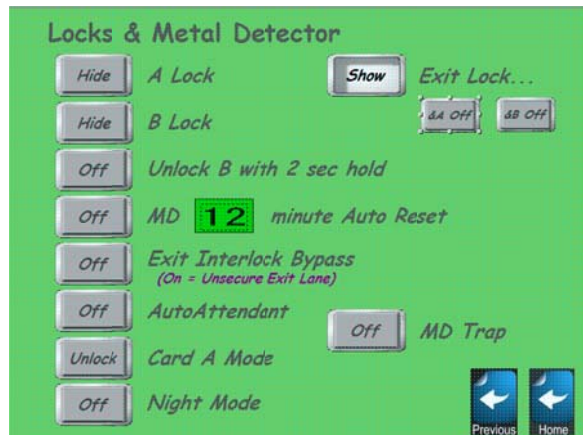
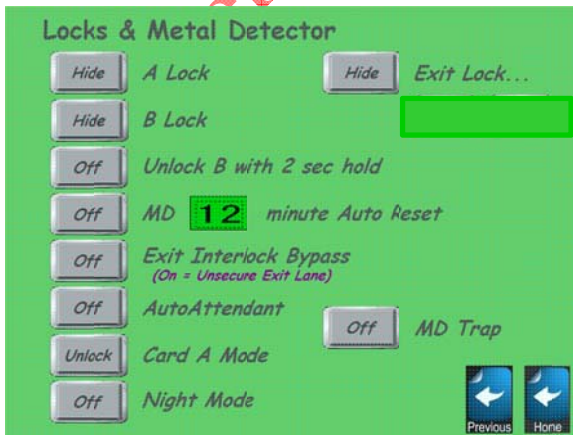
CONFIGURATION REPORT

The Configuration Report button provides access to a screen showing all the configurable parameters in the system on a single page. Nothing can be changed on this page, but it is available for making a record of the system settings. Take a photo of the screen for your records and send a copy to the factory after the installation is completed.

LOCKS AND METAL DETECTOR OPTIONS:

NOTE: Certain of these functions may or may not be allowed by local code authorities, and all such items are turned off in the factory default configuration.

On this screen or any of the other Dealer setup screens, pressing the “Home” button will return you to the Main Control screen. Hitting the “Previous” button will return you to the Dealer Setup Options screen.



A, B, and Exit Locks: Default settings are “Hide”. The upper three selections allow the display of Lock Control Buttons on the Main screen. The A and B lock buttons allow locking the A or B doors independent of the system logic. If both are set to show, it is possible to lock both and trap someone in the entry lane. Common practice is to show one or the other. The Exit lock button allows trapping in the exit lane – the C door will open if the lane is unoccupied, but once someone enters the exit lane and C door closes, if the Exit Lock is on, the D door will not unlock. Touch the “Hide” to change to “Show” as desired for each button.

A and/or B with Exit Lock: the small “&A off” and “&B off” buttons allow setting the system to also lock either the A door, the B door, or both, when the Exit Lock button is pressed. These do not show unless the Exit Lock button is set to “Show”, at which point they can be changed from off to on.

Unlock B with Press and Hold: The system has the capability to allow the operator to unlock the B door by pressing and holding the B Door Lock touchscreen button for 2 seconds. The door will remain unlocked for as long as the button is held on. The A door will also lock if it is closed. The default for this function is “Off”.

MD 30 Minute Reset: normally turned “Off” – When enabled, this function causes the metal detector to automatically reset after a 30 minute (default) timeout. This prevents the system from being totally locked down for entries if the metal detector goes off and no one is in the building to reset the alarm. The 30 minute time may be adjusted by touching the value and entering the new value on the keyboard that will appear. Values allowed are 5 to 60 minutes.

Exit Interlock Bypass: In certain jurisdictions, code authorities have required that the interlock between the C and D door be removed, essentially making the exit lane “unsafe”. If this selection is turned on, the D door will unlock whenever the C door is unlocked. Turning this function ON is not recommended unless specifically required by the application.

Auto Attendant Mode On/Off: This feature can provide substantially reduced workload for the operator. If this feature is enabled, if someone sets off the metal detector and then departs the portal via the A door, once the system determines the door is closed and there is no occupancy (and nothing in the high zone Left Object Detector area, if equipped), the metal alarm will be reset after a few seconds. With this feature enabled, there is also an annunciator in the portal triggered by the metal alarm telling the person to leave the portal and remove additional metal. Also, generally included with this option is a second voice prompt annunciator that tells a person loitering in the A zone to move forward through the metal detector (after about 5 seconds). This further reduces operator involvement. If the “Off” or “On” button is not displayed, this feature has been disabled in the factory settings.

Card A Mode: The system has a customer input that can be used to control the lock on the A door.

If this switch is in the “unlock” position, closing a contact on the Card A Input will unlock the A door independent of the system logic. In the static condition, the A door is normally unlocked by the system logic until there is an occupant in the B zone.

If this switch is in the “card reader” position, the input can be used with a typical access control card reader. In this mode, the A door will normally be locked (unlike the “unlock” mode above), and will only unlock (for 5 seconds) when a contact closure is applied to the Card A Input.

Night Mode Enable: This switch enables or disables the operation of the Night Mode function. Turning this switch to “Enable” will cause a control switch to appear on the main page; when “OFF”, the control switch is not visible. This now-visible Night Mode On/Off control switch allows the operator put the system in Night Mode.



When the system is in Night Mode (control switch on), the A door is locked and requires a contact closure on the A Card Input to unlock the door for 5 seconds. This is normally used with an access control card reader. Also in Night Mode, the metal detector is disabled. Typically this is used to allow cleaning personnel into the facility in the off hours when the entrance is normally locked. Turning the control switch “off” on the menu screen puts the portal back in normal operation, with the A door normally unlocked and the metal detector operational.

MD Alarm Trap - Normal Operation of the portal allows someone entering the entry lane and setting off the Metal Detector to turn around and leave the building via the A door. If “MD Alarm Trap” is turned “On”, then both A and B doors will lock on a metal detection alarm, and the alarm must be reset by the operator to allow exit.

In the US, most jurisdictions will not allow this Trap function to be enabled. The feature is included for units sent to international markets.

Do not enable this function without verifying that it is acceptable to the local code authorities.

TIMEOUT AND PROMPT SETTINGS (DUAL LANE SYSTEM):



This screen allows enabling or disabling the occupancy and door open timeouts as well as changing the default values of the timeout times as desired. To change a timeout value, touch the value box to be changed, enter the new value on the keypad, and press the enter key. Default values are timeouts 'On' and set to 45 seconds (Occupancy) and 15 seconds (Door).

If the Emergency Release is installed, the occupancy timer should be set to 45 - 55 seconds (do not exceed 60 seconds). This will prevent occupancy alarms during the Emergency Release timeout period (up to 30 seconds).

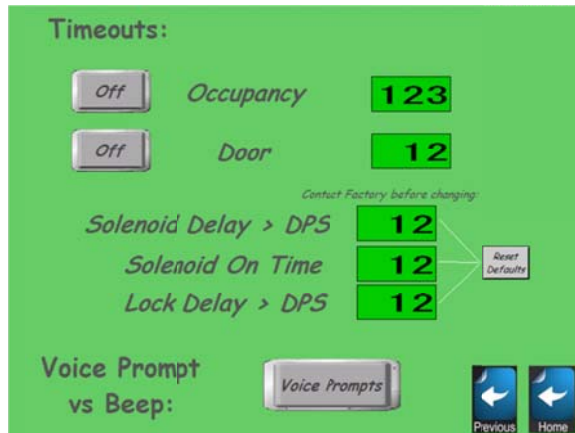
Note: All the configurations on these Dealer Screens are saved when power is removed from the system.

From this screen you can also choose to have the voice prompts operational or to set the system to only Beep on alarm or alerts.

TIMEOUT AND PROMPT SETTINGS (SINGLE LANE SYSTEM):

In addition to the settings show above for Dual Lane systems, the Single Lane Systems also have settings associated with the closer mechanism installed on the "B" door.

For systems with a unidirectional door at the "B" location, the only value that is used is the Lock Delay>DPS, which should be set to the default value of 2.



For systems equipped with the bidirectional door at the “B” location, all 3 values are available for setting the timing of the centering solenoid operation. “Reset Defaults” will change them back to the factory default values.

These values are optimized based on the individual system configuration, and should only be changed or reset under the direction of Isotec factory technical support.

DEALER INFO SCREEN:

Setting the Dealer Password:

The Dealer Password is preset at the factory to the value specified with the order, or to a default value if no value is specified. If you forget the default value, please contact the Isotec factory. To change the current password, access the Dealer Information screen, and touch the Password value box shown. Enter the new password on the keyboard and press the ‘ENT’ key to save the value. Please record the new value in a safe place. If the dealer password is forgotten, please contact the Isotec factory.



Dealer Contact Information:

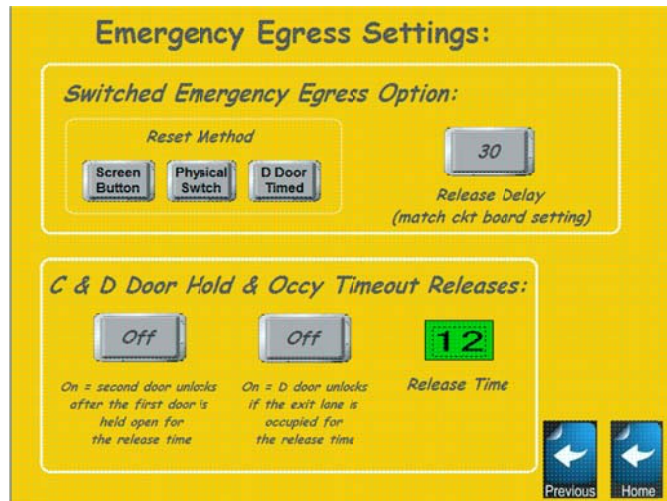
Dealer personnel can enter the name and phone number for the dealer, which will be displayed on the customer Support Information screen. To enter the phone number, touch the area for phone number, and a numeric keyboard will appear. First delete any previous data with CLR button, then enter the phone number (10 digits plus 2 dashes, ie 303-452-0022) and hit the ENT key.

To enter the dealer name, touch the dealer name field, and an alphanumeric keyboard will appear. Delete any undesired data (CUR, BS, CLR), then enter dealer name (20 characters max). Spaces may be entered using the "SP" key. Hit "ENT" to complete the entry.



EMERGENCY EGRESS SETTINGS:

NOTE: The Emergency Egress settings are preset at the factory, or can be changed in the field via a special password that can be obtained from the factory technical support personnel. The factory settings are noted on the Configuration sheet shipped with each system. The system should be ordered with the specific configurations options desired.



Isotec systems can be built and configured with various “emergency egress (or release)” capabilities. These must be specified when the system is ordered, although in some cases these features can be changed in an existing systems via a PLC swap upgrade. The emergency egress function(s) allow a free exit from the building by overriding the exit lane logic in case of an emergency. Note that in any case, the System Override on the system console, as well as the Fire Alarm input, will also release the exit lane locks.

Switched Emergency Egress: The most common emergency egress option (Switched Emergency Release) is implemented using a dedicated UL approved timer board in conjunction with up to two red Emergency Release buttons located at the high sides of the C and D doors. Activating either release unlocks both C and D doors (configurable). Pressing an Emergency Release button starts the display of a countdown timer on the operator console, warning that a release is imminent. It also activates a horn in the exit lane, notifying the person that the countdown has started. An audio message “*Emergency Release initiated*” at the console indicates the countdown is in progress, and “*Emergency Release Activated*” indicates the door is released.

Switched Emergency Release Reset: Used with the dedicated timer board. The default setting is “Screen”, which requires the console operator to clear the Emergency Release via a button on the Emergency Release popup on the Touchscreen. The Exit door(s) will remain unlocked until the event is reset. The second setting is “D Door Timed”, in which case the Emergency Release is cleared after the door has been unlocked for 8 seconds and the D door is closed.

The third option is to clear the release event with an external switch, such as a keyed switch located at the portal area. In this case, the “Physical Switch” setting is used. The external switch is wired to the XDT-24 board in the portal header (+24 and RS inputs).

Isotec has found that different jurisdictions may want certain settings, but the more common is manual reset, which is the system default. Other reset options can be implemented such as a key switch on the inside of the portal – contact the factory if a different reset scenario is needed.

Emergency Release Delay: This is the time delay from pressing the Emergency Release Button and the D door unlocking. Customers generally prefer a long time (so they can respond to the release if needed) while some code authorities prefer shorter times. The default setting is 15 seconds, with an option for 30 seconds.

NOTE THAT BOTH THIS SETTING IN THE CONSOLE, AND THE SWITCH SETTING ON THE EMERGENCY RELEASE TIMER BOARD MUST BE SET TO THE SAME VALUE.

This value of this setting applies only to the dedicated timer board option.

Emergency Release circuit board settings: The default settings are for 15 seconds release delay, with no nuisance delays. The delay time can be changed to 30 seconds by moving switch 1 on the board to the ON position (ie, toward the center of the board) from the OFF position (toward the edge of the board). These settings may be glued at the factory to avoid inadvertent changes in the field. It is not recommended to change the settings of switch 2 thru 4 from the off position.

C & D Door Hold and Occupancy Timeout Releases:

As an alternate to the Timer Board & Switches, several other emergency release scenario can be implemented using these setting. (They are generally not used if the dedicated Emergency Release Timer board is installed.) This section provides two different functions.

The left button controls the C&D open timeout function. For a two lane system, with this option ON, if either the C or D door is held open for the Release Time, both the C and D door will automatically unlock. (For single lane systems, the doors involved are B and A rather than C and D.) Note that this will display an “Exit Breached” alert on the operator console when the timeout has been reached, but the only indication that a release is pending may be the Door Open Too Long Timeout, which should be enabled when this option is being used, and should be set for a shorter time than the Release time. The time delay may be

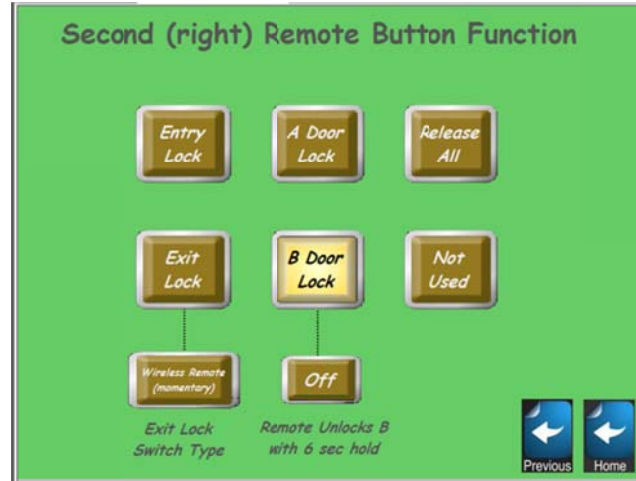
set to a value between 1 and 45 seconds when the system is built at the factory. Default value is 15 seconds and turned off. The system automatically returns to normal operation once both doors are closed.

The second function that may be turned on or off is the Occupancy Timeout Release. In order to assure nobody is delayed inside the portal more than the Release Time, the D door will unlock automatically if either the C zone or the D zone is occupied for that time. The C door remains locked. This is useful in case someone passes out in the C zone, or if the C door bond sensor fails, keeping the D door locked.

The **Release Time** is the same value for either of these two functions, and is set by touching the current value field to the right of the buttons. A keypad will pop up allowing entry of the new time value.

Dealer Use Only - Not for End User

SECOND BUTTON REMOTE FUNCTION



This screen is used when the Two Button Wireless Remote option is installed. It allows selection of the function controlled by the right button on the wireless remote control. The left button on the remote controls the reset of the metal detector alarm, and is a momentary pushbutton. The default setting for the second button is "B Door Lock"; any one of the other choices can be selected.

For all the settings except "RELEASE ALL", the second button on the remote functions as an "alternate action" - pressing once "sets" the function on, and a second press turns the function off. (**see note below**). In order to not forget which the position of this switch, an icon is shown on the main screen that indicates the button is latched on, and a diamond is displayed by the lock that is being controlled.

Note that when one specific remote unit is used to set a function "on", that remote, or any other remote, can reset the function. This is different than prior versions of the system where only the remote that set the function could be used to reset it.

When the second button is used for the "Release All" function, the switch on the remote acts as a momentary pushbutton, and there is a 1.5 second delay before the function activates, to prevent erroneous use. Holding the button down for more than 1.5 seconds unlocks all the doors, and puts the system in an "Override" mode. The button must be held down to stay in this Override mode. This Override mode clears when the button is released. This function is primarily for troubleshooting and generally would not be used for the customer operation.

The other four selection choices for the second button are:

ENTLK: Locks both A and B door

EX LK: Locks the D door, trapping an occupant. The C door will open to let someone in the lane, but will lock when it closes and the lane is occupied.

Lock A: Locks the A door on the entry lane

Lock B: Locks the B door on the entry lane

Remote Unlocks B: The option is provided to allow unlocking the B door when holding the remote button depressed for 6 seconds. The default setting for this is **Off**.

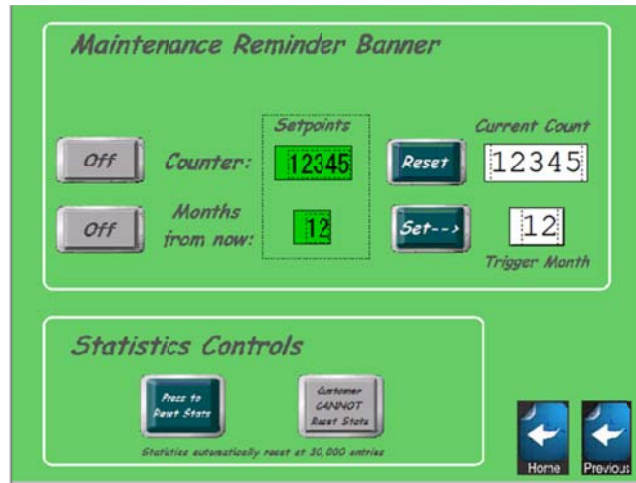
Note on Exit Lock function: The normal configuration for Isotec Systems is to configure the wireless remote receiver as a momentary pushbutton function. This is because some remote transmitters cannot be held on indefinitely. Thus the software toggles each time the remote transmitter is depressed as described above.

The option is available to use a "Toggle Switch" (ie, a typical light switch) for the Exit Lock function. For this to work properly, the configuration must be set to "*Toggle Switch*" rather than "*Wireless Remote Momentary*" on the bottom left of this screen. Note that if a remote receiver is used in parallel with the Toggle switch, it must be held on to keep the Exit Lock in force. Selecting "Toggle Switch" will automatically force the remote mode to Exit Lock.

THIRD REMOTE RECEIVER BUTTON:

The option is available to use a third button on the remote transmitter. This function is hard wired as a "*B Door Lock*" function. The B door will lock when the button is initially pressed, and will unlock the next time it is pressed. This function is independent of the setting of the 2nd remote button, but obviously the 2nd button should not be set for Lock B if the third button is being used for that function.

MAINTENANCE BANNER:



The Console has the option to display a banner along the bottom of the screen for maintenance reminder purposes. This is useful to remind your customer to make an appointment for preventive maintenance on a regular basis.

The Banner can be set to “Off” (never display) or to display upon either a certain number of system cycles (someone completing and entry), or after a defined number of months in the future (1 to 12 months), or both can be used. The default settings from the factory are 20,000 cycles and 6 months, and both options turned ON. If the Counter Enable switch is set to “On”, once the set number of cycles occur, a banner traverses the bottom of the screen, indicating it is time for preventive maintenance and to call your Isotec Dealer. Similarly if the Enable switch for ‘Months from now’ is turned “On”, that many months in the future the banner will appear. The customer counter can be reset using the “Reset” button. The Months from Now counter is restarted when a new value is entered and the “Set” button is pressed. To enter either the Count trigger value or the Months from now value, touch the value and enter the new value on the keyboard that appears.

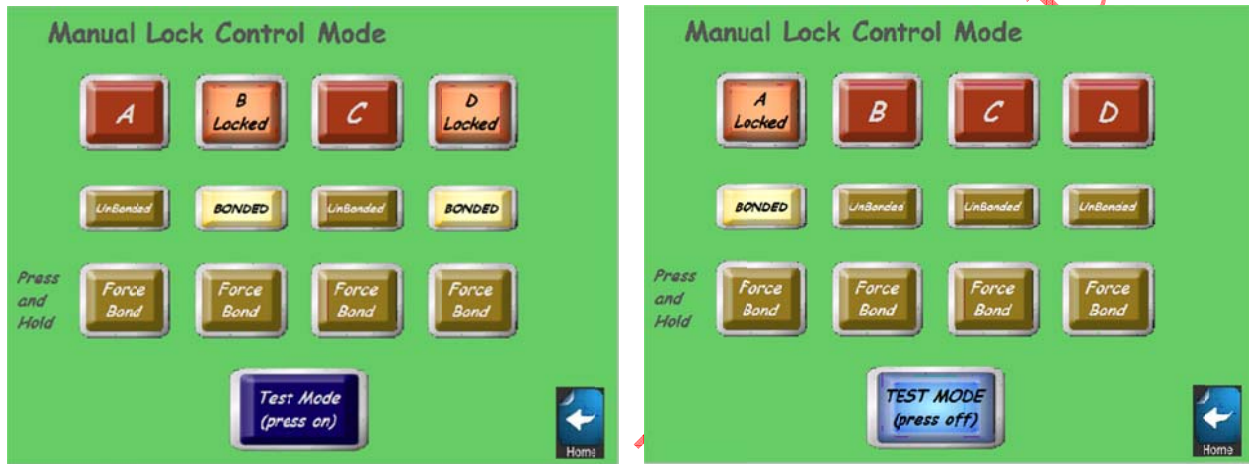
The current count (since last reset) of entrants is shown on the right, as well as the numerical value of the month that the banner will trigger.

The dealer entrant counter will operate independent of whether the banner is enabled, and shows the total number of cycles the system has achieved since new or reset from this screen. The dealer can reset this counter if desired. Resetting this counter will turn off the banner, if it was displayed due to cycle count.

Statistics Controls:

A button is provided to reset the statistics values. A second button is provided to define if the operator can or cannot reset the values from the Statistics page. Default is to allow the operator to reset the values; toggle the right hand button to remove that button from the operator view.

TEST MODE:



This screen is for testing and troubleshooting. Pressing the “TEST MODE” button puts the system in a mode where the normal system operation is disabled. This allows powering each of the door locks individually. Turning on one of the lock buttons in the top row (A, B, C, D) will power that lock, and will allow viewing of whether or not the lock bonded properly by looking at the Unbonded/Bonded symbol directly below the lock buttons. Contact the factory for additional suggestions on how to use this mode.

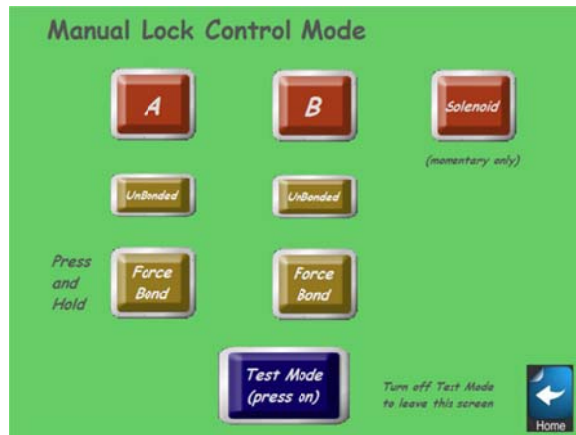
Pressing the “Home” button (Left Arrow) clears the test mode and returns to the main screen. However, it is a good practice to turn Test Mode off before leaving this screen.

Note that this TEST MODE disables the Override alarms. If the portal will be occupied for testing for long time periods, the Occupancy and/or Door Open alarms should also be turned off temporarily using Dealer Screen 2.

In addition to the Test Mode function, buttons are available (third row) that allow a technician to fool the interlock logic by changing the state of the bond input for a particular lock. These buttons work independent of the state of the test mode

switch. If the bond input (displayed above the force bond button) is Unbonded, pressing the button below it will make the portal logic think the lock is bonded. Similarly, if the bond input shows as Bonded, pressing the button makes the system think that the lock is unbonded. This function is useful in troubleshooting the interlock functions, if a maglock appears to be not working properly.

Single Lane systems will have a different Test Mode screen, with only two buttons for the door locks, and an additional button for testing the solenoid operation.



VIDEO SETUP:

The base system comes with the capability to display a single video input, and no switching buttons are displayed on the Video Screen. In this case, no buttons are shown on the Video screen.

If the optional Media Switch is installed, the user can select one of up to 5 video inputs to display on the Video Screen. On the Video Setup screen, the dealer can configure how many of the input buttons are displayed (matching the number of cameras connected) and can provide a label for each of the displayed buttons.

On the Media Switch, the inputs are labeled Video 1 thru Video 5, and these correspond to the setup screen Camera numbers.

In the example below, a two camera setup has been configured, using Video 1 and Video 2. For those two inputs, the "Hide" has been changed to "Show" for the first two buttons. Touching the Label field adjacent to the Show/Hide button will bring up a alphanumeric keyboard to allow entry of up to 10 characters to label the switch with the actual camera location.



Up to 5 camera buttons can be displayed, as shown below. The “\@” would be replaced with the actual text entered on the video setup screen for each button.

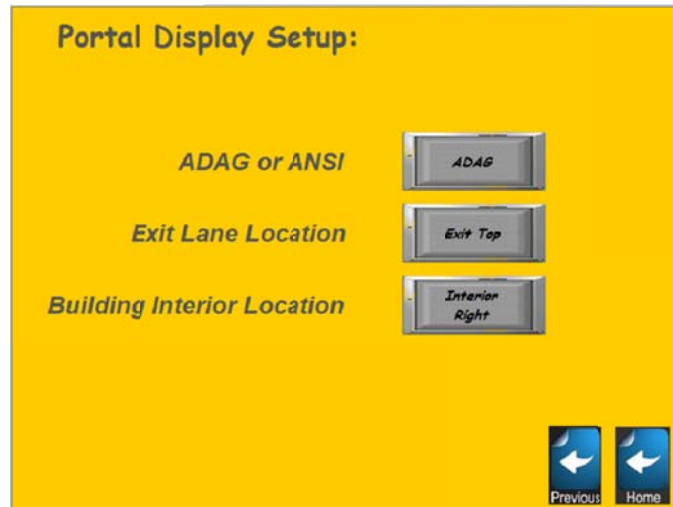
Note that it is not necessary to use the video inputs in sequential order, for example only inputs 2 and 4 could be used, and just those two buttons would be “shown” and labeled.

Video Screen with all 5 buttons “shown”:



PORTAL DISPLAY

Pressing the Portal Display button on the dealer options menu screen brings up a screen that allows selection of the orientation of the Portal icon on the main screen that is most consistent with the actual installation.



ADAG/ANSI Button

Toggling this button will change the main screen portal display from a 9084/ADAG style view to an ANSI view (with the center wall jog).

Exit Location:

Puts the exit lane either on the top or the bottom

Interior Location

Places the interior of the building on either the right or left of the main screen

CARD AND EXIT UNLOCK INPUTS:

The system can be wired in the field such that an external contact closure or closures will cause one or more doors to unlock, overriding the normal software operation.

An example of an application might be to set up the system so that the A door is normally locked with the console lock button. A card reader on the outside of the A door would be connected to the Card A input. Swiping the card would allow someone to enter the portal and proceed to enter the building in the normal manner.

There are three inputs provided (see the schematics for wiring specifics):

Card A	X41	unlocks A door
Card B	X42	unlocks B door
Exit Unlock	X43	unlocks both C and D doors

Wiring Card A and Card B together would unlock the entry lane. Wiring all three inputs together would unlock the whole portal (all four doors) and display the System Override screen.

Before implementing any of these connections, be sure that all potential operational scenarios are evaluated so that personnel are not trapped in the portal or in the building accidentally.

CREDENTIAL RESET:

To install the Credential Reset feature, the output (dry contact closure) from the credential system should be wired to the electrical input designated for this function. See the schematic for wiring.

DUAL CONSOLE (MASTER/SLAVE) INSTALLATIONS:

Dual console systems will be shipped preconfigured from the factory. It is important to use the correct console (Master or Slave) in the proper location in order for the system data communications to work properly. Please refer to the information provided with the system such that the wiring is installed correctly. The Slave Interconnect cable goes from the Slave output connector on the master to the Interconnect input on the Slave unit.

All system setup is done using the Master console, which can be identified by the “next” button on the lower right of the main screen.

When the system is powered up, the Master will be active and the Slave will be inactive. This is toggled using the “Enable” button on the inactive console.



NEED HELP?

Contact Isotec Security Technical Support at 303-452-0022

Dealer Use Only - Not for End User