NetworX

NetworX™ Series

NX-1710E Single Door Control

Installation and Startup Manual

Symbol Legend

Warning	Indicates a procedure, practice, condition, or statement that, if not strictly observed, could result in personal injury. * This symbol indicates electrical warnings and cautions.
Caution	Indicates a procedure, practice, condition, or statement that, if not strictly observed, could result in damage to or destruction of equipment or property. ** This symbol indicates general warnings and cautions.
Note	Indicates an essential or important procedure, instruction, condition, or statement.
Tip	Indicates a user tip. Provides helpful information that is not normally defined in regular use, but from an experienced user.
Enter	Indicates a key or button should be pressed to enter data.

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I.   GENERAL DESCRIPTION

The NetworX NX-1710E is a single door control module used to expand the capabilities of the NetworX control panels.

- Flash-based microprocessor for reprogramming ability via In-Circuit Serial Programming™ header

- +5 VDC and +12 VDC outputs

- 4-position dip switch which allows addressing of up to 16 modules on the NetworX bus

- Box tamper switch tied to tamper terminal

- One zone input to be connected to a door contact for monitoring the door zone.

- On-board relay with Normally Open, Normally Closed, and Common terminals for use in switching power on MagLocks or other door locking mechanisms

- 8Kb of non-volatile RAM for storing programming and card data

- Two sets of terminal inputs/outputs for interfacing with one or two Wiegand card readers:
  o 1 buzzer and 2 LED outputs
  o 1 tamper and 1 egress input
  o 2-wire Wiegand bus interface. ✍ Readers must be able to "speak" Wiegand. The following are supported Weigand formats by default:
    ✓ 26-bit standard Weigand
    ✓ 27-bit Tecom ASC
    ✓ 35-bit HID Corporate 1000
    ✓ 37-bit HID 10304
    ✓ 40-bit with facility code (Casi Rusco 4001)
    ✓ 40-bit without facility code (Casi Rusco 4002)

II.   BOARD LAYOUT

NetworX bus

LED is lit during normal operation.

Programmer

Dip Switches (see pg 7 for specifics.)

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NX1710

III. WIRING TERMINALS

To install the door control, simply wire it into the system. Refer to the following wiring table for details.

✎ *For the purpose of these instructions, the term "door control" refers to the NX-1710E module, and the term "reader" refers to the specific card reader attached to the system.*

		DESCRIPTION	
	DATA	Connect to the NetworX control panel **DATA** terminal. Data-signaling terminal to all the devices on the bus.	
	COM	Connect to the NetworX control panel **COMMON** terminal. Supplies the common side of the power to the door control module.	
	POS	Connect to NetworX control panel **AUX POWER +** terminal. Supplies power to the door control module.	
	+12	Power to reader module, if required.	
	+5	Power to reader module, if required.	
	COM	Connect to common terminal of box tamper.	
	TMPR	Box Tamper	
	N/C	Normally closed relay contact to activate door strike.	**Rating**:
	C	Closed relay contact to activate door strike.	5A 125, 277V AC
	N/O	Normally open relay contact to activate door strike.	5A 30V DC
Reader "A"	**A-EG**	Egress input. To use this feature, connect the normally open egress switch between this terminal and **COM**.	
	A-TM	Tamper input (from Reader "A")	
	A-LR	Red LED (LED2) control (to Reader "A"). Relay. If available, connect to LED control on reader.	
	A-LG	Green LED (LED1) control (to Reader "A"). Relay. If available, connect to LED control on reader.	
	A-BZ	Buzzer control (to Reader "A").	
	A-D1	Wiegand Data 1 terminal (from Reader "A").	
	A-D0	Wiegand Data 0 terminal (from Reader "A").	
	COM	Common dry contact	
Reader "B"	**B-EG**	Egress input. To use this feature, connect the normally open egress switch between this terminal and **COM**.	
	B-RM	Tamper input (from Reader "B")	
	B-LR	Red LED (LED2) control (to Reader "B"). Relay. If available, connect to LED control on reader.	
	B-LG	Green LED (LED1) control (to Reader "B"). Relay. If available, connect to LED control on reader.	
	B-BZ	Buzzer control (to Reader "B").	
	B-D1	Wiegand Data 1 terminal (from Reader "B").	
	B-D0	Wiegand Data 0 terminal (from Reader "B").	
	COM	Common terminal.	
	DOOR	Door contact (requires 3.3K end-of-line resistor).	

IV. ENROLLING

The NetworX control panels have the ability to automatically find and store in memory the presence of all keypads, zone expanders, wireless receivers, output modules, and any other device on the keypad buss. This allows these devices to be supervised by the control panel. To enroll the devices, enter the Program Mode using the procedure outlined in the control panel Installation Manual. When the Program Mode is exited, the NX-8 control will automatically enroll the devices. The enrolling process takes about 12 seconds, during which time the Service LED will illuminate. User codes will not be accepted during the enrolling process. Once a module is enrolled, if it is not detected by the control, the Service LED will illuminate.

V. ADDRESSING

The first thing that must be decided is the address of this particular relay/output module. This is the address that will be selected when programming the auxiliary devices. To set the addresses use the table below.   Refer to Table V-1 that follows for possible addresses.

☞ *The door control unit must be powered down and powered back up in order to read new or modified dip switch settings.*

Table V-1

Bus Address	Dip Switch Setting				Bus Address	Dip Switch Setting			
	1	2	3	4		1	2	3	4
128					136				ON
129	ON				137	ON			ON
130		ON			138		ON		ON
131	ON	ON			139	ON	ON		ON
132			ON		140			ON	ON
133	ON		ON		141	ON		ON	ON
134		ON	ON		142		ON	ON	ON
135	ON	ON	ON		143	ON	ON	ON	ON

VI. PROGRAMMING

USING THE LED KEYPAD

ENTERING THE PROGRAM MODE		
☞ ✱ ❽	· · · · · ·	Enters the Program Mode. *Stay*, *Chime*, *Exit*, *Bypass* & *Cancel* LEDS will flash.
☞ [Go To Program Code] Factory Default is ❾❼❶❸	· · · · · ·	If the "Go To Program Code" is valid, the "Service" LED will flash and the five function LEDs will illuminate steady. You are now in the Program Mode and ready to select the module address.

ENTERING THE MODULE ADDRESS		
Scan a card. ☞ ❶❷❾ # (example only)	· · · · · ·	Enter the module address. Refer to Table V-1 for the address. The Armed LED will illuminate while it is waiting for a programming location to be entered.

LOADING THE FACTORY DEFAULTS (USER PROGRAMMING ONLY)		
☞ ❾❶❿ #	· · · · · ·	The keypad will beep 3 times indicating that the loading is in progress. The loading takes about 6 seconds.

DEFAULTING THE CARD SERIAL NUMBERS		
☞ ❾❷❿ #	· · · · · ·	The keypad will beep 3 times indicating that the loading is in progress.

PROGRAMMING A LOCATION

✎ *If an attempt is made to program an invalid entry for a particular segment, the keypad sounder will emit a triple error beep (beep, beep, beep), and remain in that segment awaiting a valid entry.*

To Enter a Location:

☞ [location] #

· · · · · · The Armed LED will flash. If the location is valid, the "Armed" LED will extinguish, the "Ready" LED will illuminate, and the zone LED's will show the data for the first segment of this location.

To Change Location Data:

☞ [changed data]

· · · · · · The "Ready" LED will flash to indicate a data change in process and will continue until the data is saved.

☞ ✱

· · · · · · The new data is saved.
The keypad will increment and display the next segment's data.

NOTE: Repeat these steps until the last segment is reached.

To Exit a Location:

☞ #

· · · · · · Exits from this location. The "Ready" LED will extinguish. The "Armed" LED will illuminate waiting for a new programming location to be entered.

To Review The Data:

☞ [location] #

· · · · · · The Armed LED will flash. If the location is valid, the "Armed" LED will extinguish, the "Ready" LED will illuminate, and the zone LED's will show the data for the first segment of this location.

☞ ✱

· · · · · · **(Do not enter data.)**

The next segment is displayed. Each time ✱ is pressed, the data of the next segment will be displayed for review.

Shortcuts: ☞ [🔥] Previous location.

☞ [➕] Same location.

☞ [🛡] Next sequential location.

EXITING THE PROGRAM MODE:

☞ EXIT EXIT

· · · · · · Exits this programming level.

USING THE LCD KEYPAD

All steps required for programming are the same as the aforementioned LED keypad. The LCD keypad display will prompt you for the data required. While in the programming mode, and not in a location, the number in parenthesis is the location you were previously changing. For example, if the display reads "Enter location, then # (5)", it is reminding you that location 5 was the last location you programmed. In feature selection data, the numbers of the enabled features will be displayed. The features **not** enabled will display a hyphen (-).

PROGRAMMING DATA TYPES

1. ***Numerical Data*** can take on values from 0-255 or 0-15 depending on the segment size.
2. ***Feature Selection Data*** is used to turn features on or off.

VII. USER CARDS

Adding and de-activating users is done through a combination of entering information at the keypad and scanning cards. Before a card can be entered, one door control on the system must be programmed with User Card Programming enabled (Location 3, Segment 1, Option 1, page 14).
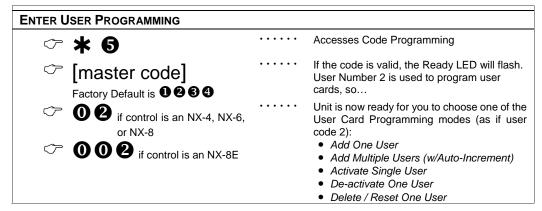
☞ It is recommended that only **one** door control on the system be enabled to modify user cards and that this reader be located near a keypad. This reader will transfer information to all other readers in the system once programming is finished.

Once a door control is enabled to modify users, it must be placed into one of the following five modes:

1) *Add One User*
2) *Add Multiple Users w/ Auto-Increment*
3) *Activate One User*
4) *De-Activate One User*
5) *Delete/Reset One User.*

Modifying users on a door control is similar to modifying user codes at a keypad.

> ✍ *Must be a master user in order to modify user card information.*

ENTER USER PROGRAMMING

☞ ✱ ❺	· · · · · · Accesses Code Programming
☞ [master code] Factory Default is ❶❷❸❹	· · · · · · If the code is valid, the Ready LED will flash. User Number 2 is used to program user cards, so…
☞ ❶❷ if control is an NX-4, NX-6, or NX-8	· · · · · · Unit is now ready for you to choose one of the User Card Programming modes (as if user code 2): • *Add One User* • *Add Multiple Users (w/Auto-Increment)* • *Activate Single User* • *De-activate One User* • *Delete / Reset One User*
☞ ❶❶❷ if control is an NX-8E	

IMPORTANT NOTES

1. Adding or de-activating user cards from a door control will cause the code for User Number 2 to become invalid. Therefore, it will need to be re-entered after all user cards are programmed into the door control.
2. By default, user cards are added and activated.

ADDING ONE USER

☞ [STAY]	· · · · · · Accesses Activation mode
☞ [3-digit user number] Example: ❶❷❹ if 4-digit user code or ❶❶❶❷❹ if 6-digit	· · · · · · If a valid user number is entered, LED1 (Green) on any enabled readers will begin to flash.
Scan the card designated for the user entered in the previous step.	· · · · · · If the user card is not already in the system, it will be added and mapped to the entered user number and LED1 (Green) will flash. If the card is already in the system, the reader will triple beep and LED1 (Green) will continue flashing; the user number is not incremented in this case.

ADDING MULTIPLE USERS WITH AUTO-INCREMENT

☞ [CANCEL]	· · · · · ·	Accesses Activation mode
☞ [3-digit user number] Example: ❶❷❹ if 4-digit user code or ❶❶❶❷❹ if 6-digit	· · · · · ·	If a valid user number is entered, LED1 (Green) on any enabled readers will begin to flash.
Scan the card designated for the user entered in the previous step.	· · · · · ·	If the user card is not already in the system, it will be added and mapped to the entered user number and LED1 (Green) will continue flashing indicating that the next user card can be scanned for the next user number. If the card is already in the system, the reader will triple beep and LED1 (Green) will continue flashing; the user number is not incremented in this case.
Continue scanning user cards until the desired number of cards has been added.	· · · · · ·	After about 30 seconds without a card being scanned, all the readers in the system will be updated with the new user card information.

IMPORTANT NOTE
Activating / De-activating / Resetting Users -- If User Number 0 is entered, t e desired function will be performed on the user associated with the card scanne !.

ACTIVATE ONE USER (SINGLE USER)

☞ [CHIME]	· · · · · ·	Accesses Activation mode
☞ [3-digit user number] Example: ❶❷❹ if 4-digit user code or ❶❶❶❷❹ if 6-digit	· · · · · ·	If a valid user number is entered, LED1 (Green) on any enabled readers will begin to flash.
Scan any card.	· · · · · ·	The card information for the user entered in the previous step will be activated, and LED1 (Green) will stop flashing. After about 30 seconds, all the readers in the system will be updated.

DE-ACTIVATE ONE USER

☞ [BYPASS]	· · · · · ·	Accesses De-activation mode
☞ [3-digit user number] Example: ❶❷❹ if 4-digit user code or ❶❶❶❷❹ if 6-digit	· · · · · ·	If a valid user number is entered, LED1 (Green) on any enabled readers will begin to flash.
Scan any card	· · · · · ·	The card information for the user entered in the previous step will be cleared, and LED1 (Green) will stop flashing. After about 30 seconds, all the readers in the system will be updated.

DELETE / RESET ONE USER	✍ *If an individual keeps the card, it can still be deleted.*

☞ [EXIT]   · · · · · ·   Accesses De-activation mode

☞ [3-digit user number]   · · · · · ·   If a valid user number is entered, LED1
Example: ❶❷❹ if 4-digit user code or   (Green) on any enabled readers will begin
❶❶❶❷❹ if 6-digit   to flash.

Scan any card   · · · · · ·   The card information for the user entered
                                                    in the previous step will be cleared, and
                                                    LED1 (Green) will stop flashing. After
                                                    about 30 seconds, all the readers in the
                                                    system will be updated.

VIII. PROGRAMMING LOCATIONS

> ❓ **For the purpose of these instructions, the term "door control" refers to the NX-1710E module, and the term "reader" refers to the specific card reader attached to the system.**

LOCATION 0	READER "A" SCAN FUNCTIONS & OPTIONS

(8 segments of binary data) Location 0 is used to select the particular function(s) that are activated when a card is scanned at Reader "A". More than one function may be selected. If more than one function is selected, they will execute in order from function 1 to function 8.

> ✍ Functions 1-6 will be performed based on the user's authority as programmed by the [✱] [6] function (refer to keypad user manual).

Segment 1   Single Scan Function
Program the functions that are performed when a card is scanned {one beep}.

LED1 - "On" to send Code Entry function to the control panel.
LED2 - "On" to activate the Armed Away mode.
LED3 - "On" to activate the Armed Stay mode.
LED4 - "On" to send the Disarm function to the control panel.
LED5 - "On" to send Auxiliary Function #1 to the control panel.
LED6 - "On" to send Auxiliary Function #2 to the control panel.
LED7 - "On" to broadcast an X-10 function (see Location 241 for programming).
LED8 - ***"On" to send a Request-to-Exit (RTE) and to activate the onboard relay.*** (Default is "On")

Segment 2   Triple Scan Function
Program the functions that are performed when a card is scanned three times {three beeps}. The descriptions of the options are the same as for Single Scan Function (Segment 1 above). Default is **1.**

Segment 3   Reader Options:
LED1 -   "On" if tamper is inverted.
LED2 -   "On" if tamper is enabled.
LED3 -   "On" if reader buzzer is to follow typical keypad buzzing.
LED4 -   ***"On" if reader automatically issues a beep when the card is scanned.*** Enabling this option prevents the door control from issuing another beep. (Default is "On")
LED5–8   Reserved.

Segment 4   LED1 (Green) Options:
     LED1 -   ***"On" to follow Ready status of system.*** (Default is "On")
     LED2 -   ***"On" to toggle with the relay activation.*** (Default is "On")
     LED3 -   "On" if inverted.
     LED4–8   Reserved.

Segment 5   LED2 (Red) Options:
     LED1 -   ***"On" to follow Armed status of system.*** (Default is "On")
     LED2 -   "On" to toggle with the relay activation.
     LED3 -   "On" if inverted.
     LED4–8   Reserved.

Segments 6 – 8 Reserved

LOCATION 1	READER "B" SCAN FUNCTIONS & OPTIONS

(8 segments of binary data) Location 1 is used to select the particular function(s) that are activated when a card is scanned at Reader "B". More than one function may be selected. If more than one function is selected, they will execute in order from function 1 to function 8.
     ✎ Functions 1-6 will be performed based on the user's authority as programmed by the [✱] [6] function (refer to keypad user manual).

Segment 1   Single Scan Function
Program the functions that are performed when a card is scanned {one beep}.

     LED1 -   "On" to send Code Entry function to the control panel.
     LED2 -   "On" to activate the Armed Away mode.
     LED3 -   "On" to activate the Armed Stay mode.
     LED4 -   "On" to send the Disarm function to the control panel.
     LED5 -   "On" to send Auxiliary Function #1 to the control panel.
     LED6 -   "On" to send Auxiliary Function #2 to the control panel.
     LED7 -   "On" to broadcast an X-10 function (see Location 241 for programming).
     LED8 -   ***"On" to send a Request-to-Exit (RTE); and to activate the onboard relay.*** (Default is "On")

Segment 2   Triple Scan Function
Program the functions that are performed when a card is scanned three times {three beeps}. The descriptions of the options are the same as for Single Scan Function (Segment 1 above). Default is **1.**

Segment 3   Reader Options:
     LED1 -   "On" if tamper is inverted.
     LED2 -   "On" if tamper is enabled.
     LED3 -   "On" if reader buzzer is to follow typical keypad buzzing.
     LED4 -   ***"On" if reader automatically issues a beep when the card is scanned.*** Enabling this option prevents the door control from issuing another beep.   (Default is "On")
     LED5 -   "On" if LEDs to extinguish after 2 minutes without a scan. (**Note**: This option doesn't disable the flashing green LED during card programming.)
     LED6–8   Reserved.

Segment 4   LED1 (Green) Options:
     LED1 -   ***"On" to follow Ready status of system. (Default is "On")***
     LED2 -   ***"On" to toggle with the relay activation. (Default is "On")***
     LED3 -   "On" if inverted.
     LED4–8   Reserved.

Segment 5   LED2 (Red) Options:

LED1 -   ***"On" to follow Armed status of system. (Default is "On")***

LED2 -   "On" to toggle with the relay activation.

LED3 -   "On" if inverted.

LED4–8   Reserved.

Segments 6 – 8 Reserved

LOCATION 2   PROGRAMMING THE X-10 ADDRESS FOR THE SCAN FUNCTIONS

(6 segments of numerical data)

Segment 1   Module Number
Program a number from 0 -15 to represent the corresponding X-10 **Module Number** from the following table. Default is **0**.

Module	*1*	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Seg 1	*0*	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

Segment 2   House Code
Program a number from 0-15 to represent the corresponding X-10 **House code** from the following table. Default is **0**.

X-10 ADDRESS CODES			
0=A	4=E	8=I	12=M
1=B	5=F	9=J	13=N
2=C	6=G	10=K	14=O
3=D	7=H	11=L	15=P

Segment 3   Reader "A" Single Scan Function
Program the X-10 function that is performed when a card is scanned {one beep} at Reader "A". This location only needs to be programmed if Location 0, Segment 1, Option 7 is set. Use the following table. Default is **2**.

Function #	Function performed	Function #	Function performed
0	All units off	4	Dim
1	All lights on	5	Bright
2	*On*	6	All lights off
3	Off	All others	Reserved

Segment 4   Reader "A" Triple Scan Function
Program the X-10 function that is performed when a card is scanned three times {three beeps} at Reader "A". The descriptions of the function codes are the same as for Single Beep Scan Function. This location only needs to be programmed if Location 0, Segment 2, Option 7 is set. Use the above table. Default is **3**.

Segment 5   Reader "B" Single Scan Function
Program the X-10 function that is performed when a card is scanned {one beep} at Reader "B". This location only needs to be programmed if Location 0, Segment 1, Option 7 is set. Use the following table. Default is **2**.

Segment 6   Reader "B" Triple Scan Function
Program the X-10 function that is performed when a card is scanned three times {three beeps} at Reader "B". The descriptions of the function codes are the same as for Single Beep Scan Function. This location only needs to be programmed if Location 0, Segment 2, Option 7 is set. Use the above table. Default is **3**.

LOCATION 3	PROGRAMMING THE OPTIONS AND DOOR CONTROL PARTITIONS

(4 segments of binary data)

Segment 1   Unit Options:
LED1 -   "On" if door control module is enabled for User Card Programming.
LED2 -   "On" if tamper is enabled.
LED3 -   "On" if disabling on-board zone.
LED4 -   Reserved.
LED5 -   "On" if an RTE from a scanned card is to be logged as Code Entry.
LED6 -   "On" if an RTE from a zone or the egress input is logged as Code Entry.
LED7–8   Reserved.

Segment 2   Door Options
LED1 -   "On" if locking mechanism is a Maglock or Drop Bolt.
LED2 -   "On" if access is allowed regardless of Armed status of the system.
LED3 -   "On" if the door is not to be latched unlocked during an open schedule.
LED4 -   "On" if onboard relay only triggers during an open schedule.
LED5 -   "On" if onboard relay only triggers during a close schedule.
LED6 -   "On" if Forced Entry Alarm is logged.
LED7 -   "On" if access allowed without an RTE.
LED8 -   "On" if relay operates normally during off-schedule (outside regular operating hours).

Segment 3   Enabling the Schedules for the Onboard Relay:
LED1 -   ***"On" if driver follows Schedule 1.*** (Default is "On")
LED2 -   ***"On" if driver follows Schedule 2.*** (Default is "On")
LED3 -   ***"On" if driver follows Schedule 3.*** (Default is "On")
LED4 -   ***"On" if driver follows Schedule 4.*** (Default is "On")
LED5 -   ***"On" if driver follows Schedule 5.*** (Default is "On")
LED6 -   ***"On" if driver follows Schedule 6.*** (Default is "On")
LED7 -   ***"On" if driver follows Schedule 7.*** (Default is "On")
LED8 -   ***"On" if driver follows Schedule 8.*** (Default is "On")

Segment 4   Door Control Partition:
LED1 -   ***"On" if door control is in Partition 1.*** (Default is "On")
LED2 -   ***"On" if door control is in Partition 2.*** (Default is "On")
LED3 -   ***"On" if door control is in Partition 3.*** (Default is "On")
LED4 -   ***"On" if door control is in Partition 4.*** (Default is "On")
LED5 -   ***"On" if door control is in Partition 5.*** (Default is "On")
LED6 -   ***"On" if door control is in Partition 6.*** (Default is "On")
LED7 -   ***"On" if door control is in Partition 7.*** (Default is "On")
LED8 -   ***"On" if door control is in Partition 8.*** (Default is "On")

Segment 5   Weigand Format Enables:
LED1 -   ***"On" if Weigand Format #1 is enabled.*** (Default is "On")
LED2 -   ***"On" if Weigand Format #2 is enabled.*** (Default is "On")
LED3 -   ***"On" if Weigand Format #3 is enabled.*** (Default is "On")
LED4 -   ***"On" if Weigand Format #4 is enabled.*** (Default is "On")
LED5 -   ***"On" if Weigand Format #5 is enabled.*** (Default is "On")
LED6 -   "On" if Weigand Format #6 is enabled.
LED7 -   "On" if Weigand Format #7 is enabled.
LED8 -   "On" if Weigand Format #8 is enabled.

LOCATION 4   PROGRAMMING THE ZONES

(2 segments of numerical data)

Segment 1   Door Shunt Zone
Program the zone that will be monitored as a door for access control. This location must be programmed with a valid zone for monitored access control functions to work properly. (Default is **0**)

✍ Additionally, this zone must be configured in the control panel as a Door Shunt zone by programming an unused Zone Type Characteristic in locations 111-169 (Seg 4, Opt 4).

Segment 2   Request To Exit (RTE) Zone
Program the zone that will be monitored to signal an RTE. If this segment is programmed with a valid zone and the zone is faulted, the reader will activate its onboard relay and send the RTE. (Default is **0**)

✍ Additionally, this zone must be configured in the control panel as an RTE zone by programming an unused Zone Type Characteristic in locations 111-169 (Seg 4, Opt 3).

LOCATION 5   PROGRAMMING THE VARIOUS READER TIMERS

(4 segment of numerical data)

Segment 1   Scan Time
Enter the amount of time required to hold a card between beeps to activate the functions programmed in Location 0, Segments 2 and 3. This timer is timed in 1/100-second increments from 0 to 2.55 seconds. (Default is **100** = 1 second).

Segment 2   Relay Active Time
Enter the amount of time the onboard relay is energized once activated. This timer is timed in 1-second increments from 0 to 255 seconds. (Default is **10** = 10 seconds).

Segment 3   Door Fault Warning Time
Enter the amount of time a monitored zone (see Location 4, Segment 1) must be faulted before sounding a warning (local buzzer). The door fault warning is timed in 1-second increments from 0 to 255 seconds. (Default is **30** = 30 seconds).

Segment 4   Door Fault Alarm Time
Enter the amount of time a monitored zone (see Location 4, Segment 1) must be faulted before sending an alarm condition to the control panel. The door fault alarm is timed in 1-second increments from 0 to 255 seconds. (Default is **60** = 60 seconds).

LOCATION 6   PROGRAMMING THE OPENING TIME FOR SCHEDULE 1

(2 segments of numerical data)

Segment 1   Program the hour of the opening time in 24-hour format. (Default is **8** = 8:00 AM)
Segment 2   Program the minutes after the hour of the opening time for Schedule 1. (Default is **0**)

LOCATION 7   PROGRAMMING THE CLOSING TIME FOR SCHEDULE 1

(2 segments of numerical data)

Segment 1   Program the hour of the closing time in 24-hour format. (Default is **20** = 8:00 PM)
Segment 2   Program the minutes after the hour of the closing time for Schedule 1. (Default is **0**)

LOCATION 8   PROGRAMMING THE DAYS FOR SCHEDULE 1

(1 segment of binary data)

LED1 =   "On" if schedule is active on Sunday.
LED2 =   *"On" if schedule is active on Monday.*
LED3 =   *"On" if schedule is active on Tuesday.*
LED4 =   *"On" if schedule is active on Wednesday.*
LED5 =   *"On" if schedule is active on Thursday.*
LED6 =   *"On" if schedule is active on Friday.*
LED7 =   "On" if schedule is active on Saturday.
LED8 =   "On" if schedule is disabled on holidays.

LOCATIONS 9 - 29   PROGRAMMING THE SCHEDULES 2 - 8

Locations 9 – 29 are used to program the opening times, closing times, and days for Schedules 2 - 8. Each schedule has three locations that are programmed with the same steps as Schedule 1 described previously. Refer to Schedule 1 (Locations 6 - 8 above) for specific instructions.

Location 9 – Opening Time for Schedule 2
Location 10 – Closing Time for Schedule 2
Location 11 – Days for Schedule 2
Location 12 – Opening Time for Schedule 3
Location 13 – Closing Time for Schedule 3
Location 14 – Days for Schedule 3
Location 15 – Opening Time for Schedule 4
Location 16 – Closing Time for Schedule 4
Location 17 – Days for Schedule 4
Location 18 – Opening Time for Schedule 5
Location 19 – Closing Time for Schedule 5
Location 20 – Days for Schedule 5

Location 21 – Opening Time for Schedule 6
Location 22 – Closing Time for Schedule 6
Location 23 – Days for Schedule 6
Location 24 – Opening Time for Schedule 7
Location 25 – Closing Time for Schedule 7
Location 26 – Days for Schedule 7
Location 27 – Opening Time for Schedule 8
Location 28 – Closing Time for Schedule 8
Location 29 – Days for Schedule 8

LOCATION 30   PROGRAMMING THE DATE OF HOLIDAYS IN JANUARY

(8 segments of numerical data) Program the day of the month in January that the Opening time in a schedule is suppressed. For example, if the opening should not occur on January 1, program a "1" in Segment 1. This feature can be repeated up to a maximum of 8 holidays per location (month). (Default is **No holidays**)

LOCATIONS 31 - 41   PROGRAMMING THE DATE OF HOLIDAYS FROM FEBRUARY TO DECEMBER

(8 segments of numerical data) Locations 31 - 41 are used to program the day of each month, from February to December, in which the Opening time in a schedule is suppressed. Each location will accommodate up to a maximum of 8 holidays, and programmed with the same steps as Location 30 described previously.

Location 31 – February holidays
Location 32 – March holidays
Location 33 – April holidays
Location 34 – May holidays
Location 35 – June holidays
Location 36 – July holidays

Location 37 – August holidays
Location 38 – September holidays
Location 39 – October holidays
Location 40 – November holidays
Location 41 – December holidays

LOCATION 42   ACTIVATION DATA FOR USER CARDS 1 - 120

(15 segments of binary data)

This location is used to select which user cards 1 through 120 are activated. If the LED is "on", the card is active. Each segment has 8 LEDs corresponding to the 8 possible user cards. Example: Segment 4, LED 2 indicates that user card 26 is active.

Segment 1	User Cards 1 - 8	**Segment 9**	User Cards 65 - 72
Segment 2	User Cards 9 - 16	**Segment 10**	User Cards 73 - 80
Segment 3	User Cards 17 - 24	**Segment 11**	User Cards 81 - 88
Segment 4	User Cards 25 - 32	**Segment 12**	User Cards 89 - 96
Segment 5	User Cards 33 - 40	**Segment 13**	User Cards 97 - 104
Segment 6	User Cards 41 - 48	**Segment 14**	User Cards 105 - 112
Segment 7	User Cards 49 - 56	**Segment 15**	User Cards 113 - 120
Segment 8	User Cards 57 - 64		

LED1 = Card 1
LED2 = Card 2
LED3 = Card 3
LED4 = Card 4
LED5 = Card 5
LED6 = Card 6
LED7 = Card 7
LED8 = Card 8

LOCATION 43   PROGRAMMING ACTIVATION DATA FOR USER CARDS 121 - 240

(15 segments of binary data) This location is used to select which user cards 121 through 240 are activated. If the LED is "on", the card is active. Each segment has 8 LEDs corresponding to the 8 possible user cards. Example: Segment 15, LED 8 indicates that user card 240 is active.

Segment 1	User Cards 121 - 128	**Segment 9**	User Cards 185 - 192
Segment 2	User Cards 129 - 136	**Segment 10**	User Cards 193 - 200
Segment 3	User Cards 137 - 144	**Segment 11**	User Cards 201 - 208
Segment 4	User Cards 145 - 152	**Segment 12**	User Cards 209 - 216
Segment 5	User Cards 153 - 160	**Segment 13**	User Cards 217 - 224
Segment 6	User Cards 161 - 168	**Segment 14**	User Cards 225 - 232
Segment 7	User Cards 169 – 176	**Segment 15**	User Cards 233 - 240
Segment 8	User Cards 177 - 184		

LED1 = Card 1
LED2 = Card 2
LED3 = Card 3
LED4 = Card 4
LED5 = Card 5
LED6 = Card 6
LED7 = Card 7
LED8 = Card 8

LOCATION 44   CODE ENTRY LOGGING PARTITION

(2 segments of numerical data)   This location programs the partition that is logged with the Code Entry message and sent when the following conditions are met:
  ➢ An RTE scan function is selected (Location 0, Segment 1/2, Option 8); and
  ➢ "RTE from a scanned card is to be logged as Code Entry" is enabled (Location 3, Segment 1, Option 5).
Entering a 0 (zero) will send the lowest valid partition of the reader. Entering 1-16 will send the entered value as the partition. (Default is **0**.)

Segment 1	Code Entry Logging Partition for Reader "A"
Segment 2	Code Entry Logging Partition for Reader "B"

LOCATION 45   WEIGAND FORMAT 1 (STANDARD 26 BIT) – DIGITS & BITS

(5 segments of decimal data)   This is the first location used to program the Weigand Format 1. (Loc 45-57)

Segment 1	Number of digits in Facility Code
Segment 2	Number of digits in Badge Number
Segment 3	Number of bits in Facility Code
Segment 4	Number of bits in Badge Number
Segment 5	Total number of bits in complete format (including parity bits)

LOCATION 46   WEIGAND FORMAT 1 – BIT DESCRIPTORS (BITS 1-32)

(32 segments of hex data) This location contains the descriptors for bits 1 – 32 of Weigand Format 1. The available options are: **0=Always Zero; 1=Always One; B=Badge number; D=Parity bit; E=End of format; F=Facility Code bit.** Segment 1 = Bit Descriptor 1; Segment 32 = Bit Descriptor 32.

LOCATION 47   WEIGAND FORMAT 1 – BIT DESCRIPTORS (BITS 33-64)

(32 segments of hex data)   This location contains the descriptors for bits 33 – 64 of Weigand Format 1. The available options are: **0=Always Zero; 1=Always One; B=Badge number; D=Parity bit; E=End of format; F=Facility Code bit.** Segment 1 = Bit Descriptor 33; Segment 32 = Bit Descriptor 64.

LOCATION 48   WEIGAND FORMAT 1 – PARITY TYPE 1

(1 segment of decimal data) This location programs the Partity Type 1 for Weigand Format 1. Available options for this location are **0 = No Parity; 1 = Odd Parity; 2 = Even Parity**. Factory default is 1.

LOCATION 49   WEIGAND FORMAT 1 – PARITY MASK 1

(8 segments of binary data)   This location tells which bits to include for the parity count; and includes the parity bits. It is used in conjunction with Location 48 (Parity Type 1). The factory default is:

Seg 1	Seg 2	Seg 3	Seg 4	Seg 5	Seg 6	Seg 7	Seg 8
12345678	*12345678*	*12345678*	*------78*	*--------*	*--------*	*--------*	*--------*

LOCATION 50   WEIGAND FORMAT 1 – PARITY TYPE 2

(1 segment of decimal data) This location programs the Partity Type 2 for Weigand Format 1. Available options for this location are **0 = No Parity; 1 = Odd Parity; 2 = Even Parity**. Factory default is 2.

LOCATION 51   WEIGAND FORMAT 1 – PARITY MASK 2

(8 segments of binary data)   This location tells which bits to include for the parity count; and includes the parity bits. It is used in conjunction with Location 50 (Parity Type 2). The factory default is:

Seg 1	Seg 2	Seg 3	Seg 4	Seg 5	Seg 6	Seg 7	Seg 8
12345678	*---45678*	*--------*	*--------*	*--------*	*--------*	*--------*	*--------*

LOCATION 52   WEIGAND FORMAT 1 – PARITY TYPE 3

(1 segment of decimal data) This location programs the Partity Type 3 for Weigand Format 1. Available options for this location are **0 = No Parity; 1 = Odd Parity; 2 = Even Parity**. Factory default is 0.

LOCATION 53   WEIGAND FORMAT 1 – PARITY MASK 3

(8 segments of binary data)   This location tells which bits to include for the parity count; and includes the parity bits. It is used in conjunction with Location 52 (Parity Type 3). The factory default is:

Seg 1	Seg 2	Seg 3	Seg 4	Seg 5	Seg 6	Seg 7	Seg 8
--------	*--------*	*--------*	*--------*	*--------*	*--------*	*--------*	*--------*

LOCATION 54	WEIGAND FORMAT 1 – PARITY TYPE 4

(1 segment of decimal data) This location programs the Partity Type 4 for Weigand Format 1. Available options for this location are **0 = No Parity; 1 = Odd Parity; 2 = Even Parity**. Factory default is 0.

LOCATION 55	WEIGAND FORMAT 1 – PARITY MASK 4

(8 segments of binary data) This location tells which bits to include for the parity count; and includes the parity bits. It is used in conjunction with Location 54 (Parity Type 4). The factory default is:

Seg 1	Seg 2	Seg 3	Seg 4	Seg 5	Seg 6	Seg 7	Seg 8
--------	--------	--------	--------	--------	--------	--------	--------

LOCATION 56	WEIGAND FORMAT 1 – PARITY TYPE 5

(1 segment of decimal data) This location programs the Partity Type 5 for Weigand Format 1. Available options for this location are **0 = No Parity; 1 = Odd Parity; 2 = Even Parity**. Factory default is 0.

LOCATION 57	WEIGAND FORMAT 1 – PARITY MASK 5

(8 segments of binary data) This location tells which bits to include for the parity count; and includes the parity bits. It is used in conjunction with Location 56 (Parity Type 5). The factory default is:

Seg 1	Seg 2	Seg 3	Seg 4	Seg 5	Seg 6	Seg 7	Seg 8
--------	--------	--------	--------	--------	--------	--------	--------

LOCATIONS 58 – 70	WEIGAND FORMAT 2 (TECOM ASC 27 BIT)

These locations contain the programming for Weigand Format 2. Refer to the instructions for Locations 45 – 57 regarding the Bit Descriptors, Parity Types and Parity Masks 1-5. Factory defaults are in the worksheets.

LOCATIONS 71 - 83	WEIGAND FORMAT 3 (HID1000)

These locations contain the programming for Weigand Format 3. Refer to the instructions for Locations 45 – 57 regarding the Bit Descriptors, Parity Types and Parity Masks 1-5. Factory defaults are in the worksheets.

LOCATIONS 84 – 96	WEIGAND FORMAT 4 (H10304)

These locations contain the programming for Weigand Format 4. Refer to the instructions for Locations 45 – 57 regarding the Bit Descriptors, Parity Types and Parity Masks 1-5. Factory defaults are in the worksheets.

LOCATIONS 97 - 109	WEIGAND FORMAT 5 (40 BIT W/FACILITY CODE – CASI 4001)

These locations contain the programming for Weigand Format 5. Refer to the instructions for Locations 45 – 57 regarding the Bit Descriptors, Parity Types and Parity Masks 1-5. Factory defaults are in the worksheets.

LOCATIONS 110 - 122	WEIGAND FORMAT 6 (40 BIT W/O FACILITY CODE – CASI 4002)

These locations contain the programming for Weigand Format 6. Refer to the instructions for Locations 45 – 57 regarding the Bit Descriptors, Parity Types and Parity Masks 1-5. Factory defaults are in the worksheets.

LOCATIONS 123 - 135	WEIGAND FORMAT 7 (UNDEFINED)

These locations contain the programming for Weigand Format 7. Refer to the instructions for Locations 45 – 57 regarding the Bit Descriptors, Parity Types and Parity Masks 1-5. Factory defaults are in the worksheets.

LOCATIONS 136 - 148	WEIGAND FORMAT 8 (UNDEFINED)

These locations contain the programming for Weigand Format 8. Refer to the instructions for Locations 45 – 57 regarding the Bit Descriptors, Parity Types and Parity Masks 1-5. Factory defaults are in the worksheets.

IX. PROGRAMMING WORKSHEETS

SEG	DESCRIPTION
LOCATION 0 – READER "A" SCAN FUNCTIONS & OPTIONS	
1	SINGLE SCAN FUNCTION
	1 = "On" to send Code Entry function to the control panel.
	2 = "On" to activate the Armed Away mode.
	3 = "On" to activate the Armed Stay mode.
	4 = "On" to send the Disarm function to the control panel.
	5 = "On" to send Auxiliary Function #1 to the control panel.
	6 = "On" to send Auxiliary Function #2 to the control panel.
	7 = "On" to broadcast an X-10 function (see Location 2).
	8 = ***"On" to send a Request To Exit (RTE); and activate the onboard relay***
2	TRIPLE SCAN FUNCTION
	1 = ***"On" to send Code Entry function to the control panel.***
	2 = "On" to activate the Armed Away mode.
	3 = "On" to activate the Armed Stay mode.
	4 = "On" to send the Disarm function to the control panel.
	5 = "On" to send Auxiliary Function #1 to the control panel.
	6 = "On" to send Auxiliary Function #2 to the control panel.
	7 = "On" to broadcast an X-10 function (see Loc 2).
	8 = "On" to send an RTE & activate the onboard relay.
3	READER OPTIONS
	1 = "On" if tamper is inverted.
	2 = "On" if tamper is enabled.
	3 = "On" if reader buzzer is to follow typical keypad buzzing.
	4 = ***"On" if reader automatically issues a beep when a card is scanned.***
	5-8 Reserved.
4	LED1 (GREEN) OPTIONS
	1 = ***"On" to follow Ready status of system.***
	2 = ***"On" to toggle with the relay activation.***
	3 = "On" if inverted.
	5-8 Reserved.
5	LED2 (RED) OPTIONS
	1 = ***"On" to follow Armed status of system.***
	2 = "On" to toggle with the relay activation.
	3 = "On" if inverted.
	4-8 Reserved.
6-8	RESERVED
LOCATION 1 – READER "B" SCAN FUNCTIONS & OPTIONS	
1	SINGLE SCAN FUNCTION
	1 = "On" to send Code Entry function to the control panel.
	2 = "On" to activate the Armed Away mode.
	3 = "On" to activate the Armed Stay mode.
	4 = "On" to send the Disarm function to the control panel.
	5 = "On" to send Auxiliary Function #1 to the control panel.
	6 = "On" to send Auxiliary Function #2 to the control panel.
	7 = "On" to broadcast an X-10 function (see Location 2).
	8 = ***"On" to send a Request To Exit (RTE); and activate the onboard relay.***
2	TRIPLE SCAN FUNCTION
	1 = ***"On" to send Code Entry function to the control panel.***
	2 = "On" to activate the Armed Away mode.
	3 = "On" to activate the Armed Stay mode.
	4 = "On" to send the Disarm function to the control panel.
	5 = "On" to send Auxiliary Function #1 to the control panel.
	6 = "On" to send Auxiliary Function #2 to the control panel.
	7 = "On" to broadcast an X-10 function (see Loc 2).
	8 = "On" to send an RTE & activate the onboard relay.
3	READER OPTIONS
	1 = "On" if tamper is inverted.
	2 = "On" if tamper is enabled.
	3 = "On" if reader buzzer is to follow typical keypad buzzing.
	4 = ***"On" if reader automatically issues a beep when a card is scanned.***
	5 = ***"On" if LEDs to extinguish after 2 minutes without a scan.***
	6-8 Reserved.
4	LED1 (GREEN) OPTIONS
	1 = ***"On" to follow Ready status of system.***
	2 = ***"On" to toggle with the relay activation.***
	3 = "On" if inverted.
	4-8 Reserved.

SEG	DESCRIPTION
5	**LED2 (RED) OPTIONS**
	1 = **"On" to follow Armed status of system.**
	2 = "On" to toggle with the relay activation.
	3 = "On" if inverted.
	4-8 Reserved.
6-8	**RESERVED**

LOCATION 2 – X10 ADDRESS

SEG	DESCRIPTION
1	**MODULE NUMBER**

0 = **Module 1**	4 = Module 5	8 = Module 9	12 = Module 13
1 = Module 2	5 = Module 6	9 = Module 10	13 = Module 14
2 = Module 3	6 = Module 7	10 = Module 11	14 = Module 15
3 = Module 4	7 = Module 8	11 = Module 12	15 = Module 16

SEG	DESCRIPTION
2	**HOUSE CODE**

0 = **A**	4 = E	8 = I	12 = M
1 = B	5 = F	9 = J	13 = N
2 = C	6 = G	10 = K	14 = O
3 = D	7 = H	11 = L	15 = P

SEG	DESCRIPTION
3	**READER "A" SINGLE SCAN**

0 = All units off	2 = **On**	4 = Dim	6 = All lights off
1 = All lights on	3 = Off	5 = Bright	7 = All others = Reserved

SEG	DESCRIPTION
4	**READER "A" TRIPLE SCAN**

0 = All units off	2 = On	4 = Dim	6 = All lights off
1 = All lights on	3 = **Off**	5 = Bright	7 = All others = Reserved

SEG	DESCRIPTION
5	**READER "B" SINGLE SCAN**

0 = All units off	2 = **On**	4 = Dim	6 = All lights off
1 = All lights on	3 = Off	5 = Bright	7 = All others = Reserved

SEG	DESCRIPTION
6	**READER "B" TRIPLE SCAN**

0 = All units off	2 = On	4 = Dim	6 = All lights off
1 = All lights on	3 = **Off**	5 = Bright	7 = All others = Reserved

LOCATION 3 – OPTIONS & DOOR CONTROL PARTITION

SEG	DESCRIPTION
1	**UNIT OPTIONS**
	1 = "On" if enabled for User Card Programming
	2 = "On" if tamper enabled
	3 = "On" if on-board zone is disabled
	4 = Reserved.
	5 = "On" if an RTE from a scanned card is to be logged as Code Entry
	6 = "On" if an RTE from a zone or the egress input is to be logged as Code Entry
	7-8 = Reserved
2	**DOOR OPTIONS**
	1 = "On" if locking mechanism is a Maglock or Drop Bolt.
	2 = "On" if access is allowed regardless of Armed status of the system.
	3 = "On" if the door is not to be latched unlocked during an open schedule.
	4 = "On" if onboard relay only triggers during an open schedule.
	5 = "On" if onboard relay only triggers during a close schedule.
	6 = "On" if Forced Entry Alarm is logged.
	7 = "On" if access allowed without an RTE.
	8 = "On" if relay operates normally during off-schedule (outside of regular operating hours).
3	**ENABLING THE SCHEDULES FOR THE ONBOARD RELAY**
	1 = **"On" if driver follows Schedule 1.**
	2 = **"On" if driver follows Schedule 2.**
	3 = **"On" if driver follows Schedule 3.**
	4 = **"On" if driver follows Schedule 4.**
	5 = **"On" if driver follows Schedule 5.**
	6 = **"On" if driver follows Schedule 6.**
	7 = **"On" if driver follows Schedule 7.**
	8 = **"On" if driver follows Schedule 8.**
4	**READER PARTITION**
	1 = **"On" if door control is in Partition 1**
	2 = **"On" if door control is in Partition 2**
	3 = **"On" if door control is in Partition 3**
	4 = **"On" if door control is in Partition 4**
	5 = **"On" if door control is in Partition 5**
	6 = **"On" if door control is in Partition 6**
	7 = **"On" if door control is in Partition 7**
	8 = **"On" if door control is in Partition 8**

SEG	DESCRIPTION	
5	WEIGAND FORMAT ENABLES	
1 =	*Weigand format # 1*	
2 =	*Weigand format # 2*	
3 =	*Weigand format # 3*	
4 =	*Weigand format # 4*	
5 =	*Weigand format # 5*	
6 =	Weigand format # 6	
7 =	Weigand format # 7	
8 =	Weigand format # 8	

LOCATION 4 – PROGRAMMING THE ZONES

SEG	DESCRIPTION	
1	DOOR SHUNT ZONE	*Default = 0*
	✍ Additionally, this zone must be configured in the control panel as a Door Shunt zone by programming an unused Zone Type Characteristic in locations 111-169 (Seg 4, Opt 4).	
2	REQUEST TO EXIT (RTE) ZONE	*Default = 0*
	✍ Additionally, this zone must be configured in the control panel as an RTE zone by programming an unused Zone Type Characteristic in locations 111-169 (Seg 4, Opt 3).	

LOCATION 5 – READER TIMERS

SEG	DESCRIPTION	
1	Scan Time (1/100 seconds)	*Default = 100 (1 second)*
2	Relay Active Time (seconds)	*Default = 10*
3	Door Fault Warning Time (seconds)	*Default = 30*
4	Door Fault Alarm Time (seconds)	*Default = 60*

LOCATION 6 – OPENING TIME FOR SCHEDULE 1

SEG	DESCRIPTION	
1	Hour of Opening (24-hr format)	*Default = 8 (8 AM)*
2	Minutes after Hour of Opening	*Default = 0*

LOCATION 7 – CLOSING TIME FOR SCHEDULE 1

SEG	DESCRIPTION	
1	Hour of Closing (24-hr format)	*Default =20 (8 PM)*
2	Minutes after Hour of Closing	*Default = 0*

LOCATION 8 – DAYS FOR SCHEDULE 1

SEG	DESCRIPTION
1 =	"On" if schedule is active on Sunday.
2 =	**"On" if schedule is active on Monday.**
3 =	**"On" if schedule is active on Tuesday.**
4 =	**"On" if schedule is active on Wednesday.**
5 =	**"On" if schedule is active on Thursday.**
6 =	**"On" if schedule is active on Friday.**
7 =	"On" if schedule is active on Saturday.
8 =	"On" if schedule is disabled on holidays.

LOCATION 9 – OPENING TIME FOR SCHEDULE 2

SEG	DESCRIPTION	
1	Hour of Opening (24-hr format)	*Default = 8 (8 AM)*
2	Minutes after Hour of Opening	*Default = 0*

LOCATION 10 – CLOSING TIME FOR SCHEDULE 2

SEG	DESCRIPTION	
1	Hour of Closing (24-hr format)	*Default =20 (8 PM)*
2	Minutes after Hour of Closing	*Default = 0*

LOCATION 11 – DAYS FOR SCHEDULE 2

SEG	DESCRIPTION
1 =	"On" if schedule is active on Sunday.
2 =	**"On" if schedule is active on Monday.**
3 =	**"On" if schedule is active on Tuesday.**
4 =	**"On" if schedule is active on Wednesday.**
5 =	**"On" if schedule is active on Thursday.**
6 =	**"On" if schedule is active on Friday.**
7 =	"On" if schedule is active on Saturday.
8 =	"On" if schedule is disabled on holidays.

LOCATION 12 – OPENING TIME FOR SCHEDULE 3

SEG	DESCRIPTION	
1	Hour of Opening (24-hr format)	*Default = 8 (8 AM)*
2	Minutes after Hour of Opening	*Default = 0*

LOCATION 13 – CLOSING TIME FOR SCHEDULE 3

SEG	DESCRIPTION	
1	Hour of Closing (24-hr format)	*Default =20 (8 PM)*
2	Minutes after Hour of Closing	*Default = 0*

LOCATION 14 – DAYS FOR SCHEDULE 3

SEG	DESCRIPTION
1 =	"On" if schedule is active on Sunday.
2 =	**"On" if schedule is active on Monday.**
3 =	**"On" if schedule is active on Tuesday.**
4 =	**"On" if schedule is active on Wednesday.**
5 =	**"On" if schedule is active on Thursday.**
6 =	**"On" if schedule is active on Friday.**
7 =	"On" if schedule is active on Saturday.
8 =	"On" if schedule is disabled on holidays.

SEG	DESCRIPTION
LOCATION 15 – OPENING TIME FOR SCHEDULE 4	
1 Hour of Opening (24-hr format)	*Default = 8 (8 AM)*
2 Minutes after Hour of Opening	*Default = 0*
LOCATION 16 – CLOSING TIME FOR SCHEDULE 4	
1 Hour of Closing (24-hr format)	*Default =20 (8 PM)*
2 Minutes after Hour of Closing	*Default = 0*
LOCATION 17 – DAYS FOR SCHEDULE 4	
1 = "On" if schedule is active on Sunday.	
2 = **"On" if schedule is active on Monday.**	
3 = **"On" if schedule is active on Tuesday.**	
4 = **"On" if schedule is active on Wednesday.**	
5 = **"On" if schedule is active on Thursday.**	
6 = **"On" if schedule is active on Friday.**	
7 = "On" if schedule is active on Saturday.	
8 = "On" if schedule is disabled on holidays.	
LOCATION 18 – OPENING TIME FOR SCHEDULE 5	
1 Hour of Opening (24-hr format)	*Default = 8 (8 AM)*
2 Minutes after Hour of Opening	*Default = 0*
LOCATION 19 – CLOSING TIME FOR SCHEDULE 5	
1 Hour of Closing (24-hr format)	*Default =20 (8 PM)*
2 Minutes after Hour of Closing	*Default = 0*
LOCATION 20 – DAYS FOR SCHEDULE 5	
1 = "On" if schedule is active on Sunday.	
2 = **"On" if schedule is active on Monday.**	
3 = **"On" if schedule is active on Tuesday.**	
4 = **"On" if schedule is active on Wednesday.**	
5 = **"On" if schedule is active on Thursday.**	
6 = **"On" if schedule is active on Friday.**	
7 = "On" if schedule is active on Saturday.	
8 = "On" if schedule is disabled on holidays.	
LOCATION 21 – OPENING TIME FOR SCHEDULE 6	
1 Hour of Opening (24-hr format)	*Default = 8 (8 AM)*
2 Minutes after Hour of Opening	*Default = 0*
LOCATION 22 – CLOSING TIME FOR SCHEDULE 6	
1 Hour of Closing (24-hr format)	*Default =20 (8 PM)*
2 Minutes after Hour of Closing	*Default = 0*
LOCATION 23 – DAYS FOR SCHEDULE 6	
1 = "On" if schedule is active on Sunday.	
2 = **"On" if schedule is active on Monday.**	
3 = **"On" if schedule is active on Tuesday.**	
4 = **"On" if schedule is active on Wednesday.**	
5 = **"On" if schedule is active on Thursday.**	
6 = **"On" if schedule is active on Friday.**	
7 = "On" if schedule is active on Saturday.	
8 = "On" if schedule is disabled on holidays.	
LOCATION 24 – OPENING TIME FOR SCHEDULE 7	
1 Hour of Opening (24-hr format)	*Default = 8 (8 AM)*
2 Minutes after Hour of Opening	*Default = 0*
LOCATION 25 – CLOSING TIME FOR SCHEDULE 7	
1 Hour of Closing (24-hr format)	*Default =20 (8 PM)*
2 Minutes after Hour of Closing	*Default = 0*
LOCATION 26 – DAYS FOR SCHEDULE 7	
1 = "On" if schedule is active on Sunday.	
2 = **"On" if schedule is active on Monday.**	
3 = **"On" if schedule is active on Tuesday.**	
4 = **"On" if schedule is active on Wednesday.**	
5 = **"On" if schedule is active on Thursday.**	
6 = **"On" if schedule is active on Friday.**	
7 = "On" if schedule is active on Saturday.	
8 = "On" if schedule is disabled on holidays.	
LOCATION 27 – OPENING TIME FOR SCHEDULE 8	
1 Hour of Opening (24-hr format)	*Default = 8 (8 AM)*
2 Minutes after Hour of Opening	*Default = 0*
LOCATION 28 – CLOSING TIME FOR SCHEDULE 8	
1 Hour of Closing (24-hr format)	*Default =20 (8 PM)*
2 Minutes after Hour of Closing	*Default = 0*

SEG	DESCRIPTION							
LOCATION 29 – DAYS FOR SCHEDULE 8								
1 =	"On" if schedule is active on Sunday.							
2 =	**"On" if schedule is active on Monday.**							
3 =	**"On" if schedule is active on Tuesday.**							
4 =	**"On" if schedule is active on Wednesday.**							
5 =	**"On" if schedule is active on Thursday.**							
6 =	**"On" if schedule is active on Friday.**							
7 =	"On" if schedule is active on Saturday.							
8 =	"On" if schedule is disabled on holidays.							
LOCATION 30 – HOLIDAYS IN JANUARY		*Default = 0*			_ _ _ _ _ _ _ _			
LOCATION 31 – HOLIDAYS IN FEBRUARY		*Default = 0*			_ _ _ _ _ _ _ _			
LOCATION 32 – HOLIDAYS IN MARCH		*Default = 0*			_ _ _ _ _ _ _ _			
LOCATION 33 – HOLIDAYS IN APRIL		*Default = 0*			_ _ _ _ _ _ _ _			
LOCATION 34 – HOLIDAYS IN MAY		*Default = 0*			_ _ _ _ _ _ _ _			
LOCATION 35 – HOLIDAYS IN JUNE		*Default = 0*			_ _ _ _ _ _ _ _			
LOCATION 36 – HOLIDAYS IN JULY		*Default = 0*			_ _ _ _ _ _ _ _			
LOCATION 37 – HOLIDAYS IN AUGUST		*Default = 0*			_ _ _ _ _ _ _ _			
LOCATION 38 – HOLIDAYS IN SEPTEMBER		*Default = 0*			_ _ _ _ _ _ _ _			
LOCATION 39 – HOLIDAYS IN OCTOBER		*Default = 0*			_ _ _ _ _ _ _ _			
LOCATION 40 – HOLIDAYS IN NOVEMBER		*Default = 0*			_ _ _ _ _ _ _ _			
LOCATION 41 – HOLIDAYS IN DECEMBER		*Default = 0*			_ _ _ _ _ _ _ _			

LOCATION 42 – ACTIVATION DATA FOR USER CARDS 1 – 120

	LEDs	1	2	3	4	5	6	7	8
1	User Cards 1 - 8	1	2	3	4	5	6	7	8
2	User Cards 9 - 16	9	10	11	12	13	14	15	16
3	User Cards 17 - 24	17	18	19	20	21	22	23	24
4	User Cards 25 - 32	25	26	27	28	29	30	31	32
5	User Cards 33 – 40	33	34	35	36	37	38	39	40
6	User Cards 41 – 48	41	42	43	44	45	46	47	48
7	User Cards 49 – 56	49	50	51	52	53	54	55	56
8	User Cards 57 – 64	57	58	59	60	61	62	63	64
9	User Cards 65 – 72	65	66	67	68	69	70	71	72
10	User Cards 73 – 80	73	74	75	76	77	78	79	80
11	User Cards 81 – 88	81	82	83	84	85	86	87	88
12	User Cards 89 – 96	89	90	91	92	93	94	95	96
13	User Cards 97 – 104	97	98	99	100	101	102	103	104
14	User Cards 105 – 112	105	106	107	108	109	110	111	112
15	User Cards 113 - 120	113	114	115	116	117	118	119	120

LOCATION 43 – ACTIVATION DATA FOR USER CARDS 121 – 240

	LEDs	1	2	3	4	5	6	7	8
1	User Cards 121 - 128	121	122	123	124	125	126	127	128
2	User Cards 129 - 136	129	130	131	132	131	134	135	136
3	User Cards 137 - 144	137	138	139	140	141	142	143	144
4	User Cards 145 - 152	145	146	147	148	149	150	151	152
5	User Cards 153 – 160	153	154	155	156	157	158	159	160
6	User Cards 161 – 168	161	162	163	164	165	166	167	168
7	User Cards 169 – 176	169	170	171	172	173	174	175	176
8	User Cards 177 – 184	177	178	179	180	181	182	183	184
9	User Cards 185 – 192	185	186	187	188	189	190	191	192
10	User Cards 193 – 200	193	194	195	196	197	198	199	200
11	User Cards 201 – 208	201	202	203	204	205	206	207	208
12	User Cards 209 – 216	209	210	211	212	213	214	215	216
13	User Cards 217 – 224	217	218	219	220	221	222	223	224
14	User Cards 225 – 232	225	226	227	228	229	230	231	232
15	User Cards 233 – 240	233	234	235	236	237	238	239	240

LOCATION 44 – CODE ENTRY LOGGING PARTITION

1	Code Entry Logging Partition for Reader "A"	*Default = 0*
2	Code Entry Logging Partition for Reader "B"	*Default = 0*

IMPORTANT: *THE FOLLOWING LOCATIONS ARE CONSIDERED ADVANCED PROGRAMMING AND SHOULD ONLY BE USED BY INSTALLERS WITH A THOROUGH UNDERSTANDING OF WEIGAND FORMATS. DO NOT ATTEMPT TO PROGRAM THESE LOCATIONS IF YOU ARE NOT FAMILIAR WITH WEIGAND PACKETS.*

WEIGAND FORMAT 1

LOCATION 45 – WIEGAND FORMAT 1 (DIGITS & BITS) (DECIMAL DATA)

SEG	DESCRIPTION	DEFAULT	DATA
1	Number of Digits in Facility Code	*5*	
2	Number of Digits in Badge Number	*5*	
3	Number of Bits in Facility Code	*8*	
4	Number of Bits in Badge Number	*16*	
5	Total Number of Bits in Complete Weigand Format (including parity bits)	*26*	

LOCATION 46 – WIEGAND FORMAT 1 (BIT DESCRIPTOR 1 - 32) HEX DATA

0 = Always Zero; 1 = Always One; B = Badge Number Bit; D = Parity Bit; E = End of Format; F = Facility Code Bit

SEG	DESCRIPTION	DEFAULT	DATA	SEG	DESCRIPTION	DEFAULT	DATA
1	Bit 1 Descriptor	*D*		17	Bit 17 Descriptor	*B*	
2	Bit 2 Descriptor	*F*		18	Bit 18 Descriptor	*B*	
3	Bit 3 Descriptor	*F*		19	Bit 19 Descriptor	*B*	
4	Bit 4 Descriptor	*F*		20	Bit 20 Descriptor	*B*	
5	Bit 5 Descriptor	*F*		21	Bit 21 Descriptor	*B*	
6	Bit 6 Descriptor	*F*		22	Bit 22 Descriptor	*B*	
7	Bit 7 Descriptor	*F*		23	Bit 23 Descriptor	*B*	
8	Bit 8 Descriptor	*F*		24	Bit 24 Descriptor	*B*	
9	Bit 9 Descriptor	*F*		25	Bit 25 Descriptor	*B*	
10	Bit 10 Descriptor	*B*		26	Bit 26 Descriptor	*D*	
11	Bit 11 Descriptor	*B*		27	Bit 27 Descriptor	*E*	
12	Bit 12 Descriptor	*B*		28	Bit 28 Descriptor	*E*	
13	Bit 13 Descriptor	*B*		29	Bit 29 Descriptor	*E*	
14	Bit 14 Descriptor	*B*		30	Bit 30 Descriptor	*E*	
15	Bit 15 Descriptor	*B*		31	Bit 31 Descriptor	*E*	
16	Bit 16 Descriptor	*B*		32	Bit 32 Descriptor	*E*	

LOCATION 47 – WIEGAND FORMAT 1 (BIT DESCRIPTOR 33 - 64)

0 = Always Zero; 1 = Always One; B = Badge Number Bit; D = Parity Bit; E = End of Format; F = Facility Code Bit

SEG	DESCRIPTION	DEFAULT	DATA	SEG	DESCRIPTION	DEFAULT	DATA
1	Bit 33 Descriptor	*E*		17	Bit 49 Descriptor	*E*	
2	Bit 34 Descriptor	*E*		18	Bit 50 Descriptor	*E*	
3	Bit 35 Descriptor	*E*		19	Bit 51 Descriptor	*E*	
4	Bit 36 Descriptor	*E*		20	Bit 52 Descriptor	*E*	
5	Bit 37 Descriptor	*E*		21	Bit 53 Descriptor	*E*	
6	Bit 38 Descriptor	*E*		22	Bit 54 Descriptor	*E*	
7	Bit 39 Descriptor	*E*		23	Bit 55 Descriptor	*E*	
8	Bit 40 Descriptor	*E*		24	Bit 56 Descriptor	*E*	
9	Bit 41 Descriptor	*E*		25	Bit 57 Descriptor	*E*	
10	Bit 42 Descriptor	*E*		26	Bit 58 Descriptor	*E*	
11	Bit 43 Descriptor	*E*		27	Bit 59 Descriptor	*E*	
12	Bit 44 Descriptor	*E*		28	Bit 60 Descriptor	*E*	
13	Bit 45 Descriptor	*E*		29	Bit 61 Descriptor	*E*	
14	Bit 46 Descriptor	*E*		30	Bit 62 Descriptor	*E*	
15	Bit 47 Descriptor	*E*		31	Bit 63 Descriptor	*E*	
16	Bit 48 Descriptor	*E*		32	Bit 64 Descriptor	*E*	

LOCATION 48 – WIEGAND FORMAT 1 (PARITY TYPE 1)   0=No Parity; 1=Odd Parity; 2=Even Parity

SEG	DESCRIPTION	DEFAULT	DATA
1	Parity Type 1	*1*	

LOCATION 49 – WIEGAND FORMAT 1 (PARITY MASK 1)

SEG	DESCRIPTION	DEFAULT	DATA	SEG	DESCRIPTION	DEFAULT	DATA
1	Parity Mask 1	*12345678*		5	Parity Mask 5	*--------*	
2	Parity Mask 2	*12345678*		6	Parity Mask 6	*--------*	
3	Parity Mask 3	*12345678*		7	Parity Mask 7	*--------*	
4	Parity Mask 4	*------78*		8	Parity Mask 8	*--------*	

LOCATION 50 – WIEGAND FORMAT 1 (PARITY TYPE 2)   0=No Parity; 1=Odd Parity; 2=Even Parity

SEG	DESCRIPTION	DEFAULT	DATA
1	Parity Type 2	*2*	

LOCATION 51 – WIEGAND FORMAT 1 (PARITY MASK 2)

SEG	DESCRIPTION	DEFAULT	DATA	SEG	DESCRIPTION	DEFAULT	DATA
1	Parity Mask 1	*12345678*		5	Parity Mask 5	*--------*	
2	Parity Mask 2	*---45678*		6	Parity Mask 6	*--------*	
3	Parity Mask 3	*--------*		7	Parity Mask 7	*--------*	
4	Parity Mask 4	*--------*		8	Parity Mask 8	*--------*	

LOCATION 52 – WIEGAND FORMAT 1 (PARITY TYPE 3)   0=No Parity; 1=Odd Parity; 2=Even Parity

SEG	DESCRIPTION	DEFAULT	DATA
1	Parity Type 3	*0*	

SEG	DESCRIPTION	DEFAULT	DATA	SEG	DESCRIPTION	DEFAULT	DATA
LOCATION 53 – WIEGAND FORMAT 1 (PARITY MASK 3)							
1	Parity Mask 1	--------		5	Parity Mask 5	--------	
2	Parity Mask 2	--------		6	Parity Mask 6	--------	
3	Parity Mask 3	--------		7	Parity Mask 7	--------	
4	Parity Mask 4	--------		8	Parity Mask 8	--------	
LOCATION 54 – WIEGAND FORMAT 1 (PARITY TYPE 4)							
1	Parity Type 4	*0*					
LOCATION 55 – WIEGAND FORMAT 1 (PARITY MASK 4)							
1	Parity Mask 1	--------		5	Parity Mask 5	--------	
2	Parity Mask 2	--------		6	Parity Mask 6	--------	
3	Parity Mask 3	--------		7	Parity Mask 7	--------	
4	Parity Mask 4	--------		8	Parity Mask 8	--------	
LOCATION 56 – WIEGAND FORMAT 1 (PARITY TYPE 5)							
1	Parity Type 5	*0*					
LOCATION 57 – WIEGAND FORMAT 1 (PARITY MASK 5)							
1	Parity Mask 1	--------		5	Parity Mask 5	--------	
2	Parity Mask 2	--------		6	Parity Mask 6	--------	
3	Parity Mask 3	--------		7	Parity Mask 7	--------	
4	Parity Mask 4	--------		8	Parity Mask 8	--------	

WEIGAND FORMAT 2

SEG	DESCRIPTION	DEFAULT	DATA
LOCATION 58 – WIEGAND FORMAT 2 (DIGITS & BITS) (DECIMAL DATA)			
1	Number of Digits in Facility Code	*0*	
2	Number of Digits in Badge Number	*9*	
3	Number of Bits in Facility Code	*0*	
4	Number of Bits in Badge Number	*27*	
5	Total Number of Bits in Complete Weigand Format (including parity bits)	*27*	

LOCATION 59 – WIEGAND FORMAT 2 (BIT DESCRIPTOR 1 - 32) HEX DATA

0 = Always Zero; 1 = Always One; B = Badge Number Bit; D = Parity Bit; E = End of Format; F = Facility Code Bit

SEG	DESCRIPTION	DEFAULT	DATA	SEG	DESCRIPTION	DEFAULT	DATA
1	Bit 1 Descriptor	*B*		17	Bit 17 Descriptor	*B*	
2	Bit 2 Descriptor	*B*		18	Bit 18 Descriptor	*B*	
3	Bit 3 Descriptor	*B*		19	Bit 19 Descriptor	*B*	
4	Bit 4 Descriptor	*B*		20	Bit 20 Descriptor	*B*	
5	Bit 5 Descriptor	*B*		21	Bit 21 Descriptor	*B*	
6	Bit 6 Descriptor	*B*		22	Bit 22 Descriptor	*B*	
7	Bit 7 Descriptor	*B*		23	Bit 23 Descriptor	*B*	
8	Bit 8 Descriptor	*B*		24	Bit 24 Descriptor	*B*	
9	Bit 9 Descriptor	*B*		25	Bit 25 Descriptor	*B*	
10	Bit 10 Descriptor	*B*		26	Bit 26 Descriptor	*B*	
11	Bit 11 Descriptor	*B*		27	Bit 27 Descriptor	*B*	
12	Bit 12 Descriptor	*B*		28	Bit 28 Descriptor	*E*	
13	Bit 13 Descriptor	*B*		29	Bit 29 Descriptor	*E*	
14	Bit 14 Descriptor	*B*		30	Bit 30 Descriptor	*E*	
15	Bit 15 Descriptor	*B*		31	Bit 31 Descriptor	*E*	
16	Bit 16 Descriptor	*B*		32	Bit 32 Descriptor	*E*	
LOCATION 60 – WIEGAND FORMAT 2 (BIT DESCRIPTOR 33 - 64)							
1	Bit 33 Descriptor	*E*		17	Bit 49 Descriptor	*E*	
2	Bit 34 Descriptor	*E*		18	Bit 50 Descriptor	*E*	
3	Bit 35 Descriptor	*E*		19	Bit 51 Descriptor	*E*	
4	Bit 36 Descriptor	*E*		20	Bit 52 Descriptor	*E*	
5	Bit 37 Descriptor	*E*		21	Bit 53 Descriptor	*E*	
6	Bit 38 Descriptor	*E*		22	Bit 54 Descriptor	*E*	
7	Bit 39 Descriptor	*E*		23	Bit 55 Descriptor	*E*	
8	Bit 40 Descriptor	*E*		24	Bit 56 Descriptor	*E*	
9	Bit 41 Descriptor	*E*		25	Bit 57 Descriptor	*E*	
10	Bit 42 Descriptor	*E*		26	Bit 58 Descriptor	*E*	
11	Bit 43 Descriptor	*E*		27	Bit 59 Descriptor	*E*	
12	Bit 44 Descriptor	*E*		28	Bit 60 Descriptor	*E*	
13	Bit 45 Descriptor	*E*		29	Bit 61 Descriptor	*E*	
14	Bit 46 Descriptor	*E*		30	Bit 62 Descriptor	*E*	
15	Bit 47 Descriptor	*E*		31	Bit 63 Descriptor	*E*	
16	Bit 48 Descriptor	*E*		32	Bit 64 Descriptor	*E*	

LOCATION 61 – WIEGAND FORMAT 2 (PARITY TYPE 1)		0=No Parity; 1=Odd Parity; 2=Even Parity		
1	Parity Type 1	*0*		

LOCATION 62 – WIEGAND FORMAT 2 (PARITY MASK 1)				
1	Parity Mask 1	--------	5	Parity Mask 5	--------
2	Parity Mask 2	--------	6	Parity Mask 6	--------
3	Parity Mask 3	--------	7	Parity Mask 7	--------
4	Parity Mask 4	--------	8	Parity Mask 8	--------

LOCATION 63 – WIEGAND FORMAT 2 (PARITY TYPE 2)		0=No Parity; 1=Odd Parity; 2=Even Parity		
1	Parity Type 2	*0*		

LOCATION 64 – WIEGAND FORMAT 2 (PARITY MASK 2)				
1	Parity Mask 1	--------	5	Parity Mask 5	--------
2	Parity Mask 2	--------	6	Parity Mask 6	--------
3	Parity Mask 3	--------	7	Parity Mask 7	--------
4	Parity Mask 4	--------	8	Parity Mask 8	--------

LOCATION 65 – WIEGAND FORMAT 2 (PARITY TYPE 3)		0=No Parity; 1=Odd Parity; 2=Even Parity		
1	Parity Type 3	*0*		

LOCATION 66 – WIEGAND FORMAT 2 (PARITY MASK 3)				
1	Parity Mask 1	--------	5	Parity Mask 5	--------
2	Parity Mask 2	--------	6	Parity Mask 6	--------
3	Parity Mask 3	--------	7	Parity Mask 7	--------
4	Parity Mask 4	--------	8	Parity Mask 8	--------

LOCATION 67 – WIEGAND FORMAT 2 (PARITY TYPE 4)				
1	Parity Type 4	*0*		

LOCATION 68 – WIEGAND FORMAT 2 (PARITY MASK 4)				
1	Parity Mask 1	--------	5	Parity Mask 5	--------
2	Parity Mask 2	--------	6	Parity Mask 6	--------
3	Parity Mask 3	--------	7	Parity Mask 7	--------
4	Parity Mask 4	--------	8	Parity Mask 8	--------

LOCATION 69 – WIEGAND FORMAT 2 (PARITY TYPE 5)				
1	Parity Type 5	*0*		

LOCATION 70 – WIEGAND FORMAT 2 (PARITY MASK 5)				
1	Parity Mask 1	--------	5	Parity Mask 5	--------
2	Parity Mask 2	--------	6	Parity Mask 6	--------
3	Parity Mask 3	--------	7	Parity Mask 7	--------
4	Parity Mask 4	--------	8	Parity Mask 8	--------

WEIGAND FORMAT 3

LOCATION 71 – WIEGAND FORMAT 3 (DIGITS & BITS) (DECIMAL DATA)			
	DESCRIPTION	DEFAULT	DATA
1	Number of Digits in Facility Code	*4*	
2	Number of Digits in Badge Number	*7*	
3	Number of Bits in Facility Code	*12*	
4	Number of Bits in Badge Number	*20*	
5	Total Number of Bits in Complete Weigand Format (including parity bits)	*35*	

LOCATION 72 – WIEGAND FORMAT 3 (BIT DESCRIPTOR 1 - 32) HEX DATA

0 = Always Zero; 1 = Always One; B = Badge Number Bit; D = Parity Bit; E = End of Format; F = Facility Code Bit

SEG	DESCRIPTION	DEFAULT	DATA	SEG	DESCRIPTION	DEFAULT	DATA
1	Bit 1 Descriptor	*D*		17	Bit 17 Descriptor	*B*	
2	Bit 2 Descriptor	*D*		18	Bit 18 Descriptor	*B*	
3	Bit 3 Descriptor	*F*		19	Bit 19 Descriptor	*B*	
4	Bit 4 Descriptor	*F*		20	Bit 20 Descriptor	*B*	
5	Bit 5 Descriptor	*F*		21	Bit 21 Descriptor	*B*	
6	Bit 6 Descriptor	*F*		22	Bit 22 Descriptor	*B*	
7	Bit 7 Descriptor	*F*		23	Bit 23 Descriptor	*B*	
8	Bit 8 Descriptor	*F*		24	Bit 24 Descriptor	*B*	
9	Bit 9 Descriptor	*F*		25	Bit 25 Descriptor	*B*	
10	Bit 10 Descriptor	*F*		26	Bit 26 Descriptor	*B*	
11	Bit 11 Descriptor	*F*		27	Bit 27 Descriptor	*B*	
12	Bit 12 Descriptor	*F*		28	Bit 28 Descriptor	*B*	
13	Bit 13 Descriptor	*F*		29	Bit 29 Descriptor	*B*	
14	Bit 14 Descriptor	*F*		30	Bit 30 Descriptor	*B*	
15	Bit 15 Descriptor	*B*		31	Bit 31 Descriptor	*B*	
16	Bit 16 Descriptor	*B*		32	Bit 32 Descriptor	*B*	

LOCATION 73 – WIEGAND FORMAT 3 (BIT DESCRIPTOR 33 - 64)

0 = Always Zero; 1 = Always One; B = Badge Number Bit; D = Parity Bit; E = End of Format; F = Facility Code Bit

SEG	DESCRIPTION	DEFAULT	DATA	SEG	DESCRIPTION	DEFAULT	DATA
1	Bit 33 Descriptor	*B*		17	Bit 49 Descriptor	*E*	
2	Bit 34 Descriptor	*B*		18	Bit 50 Descriptor	*E*	
3	Bit 35 Descriptor	*D*		19	Bit 51 Descriptor	*E*	
4	Bit 36 Descriptor	*E*		20	Bit 52 Descriptor	*E*	
5	Bit 37 Descriptor	*E*		21	Bit 53 Descriptor	*E*	
6	Bit 38 Descriptor	*E*		22	Bit 54 Descriptor	*E*	
7	Bit 39 Descriptor	*E*		23	Bit 55 Descriptor	*E*	
8	Bit 40 Descriptor	*E*		24	Bit 56 Descriptor	*E*	
9	Bit 41 Descriptor	*E*		25	Bit 57 Descriptor	*E*	
10	Bit 42 Descriptor	*E*		26	Bit 58 Descriptor	*E*	
11	Bit 43 Descriptor	*E*		27	Bit 59 Descriptor	*E*	
12	Bit 44 Descriptor	*E*		28	Bit 60 Descriptor	*E*	
13	Bit 45 Descriptor	*E*		29	Bit 61 Descriptor	*E*	
14	Bit 46 Descriptor	*E*		30	Bit 62 Descriptor	*E*	
15	Bit 47 Descriptor	*E*		31	Bit 63 Descriptor	*E*	
16	Bit 48 Descriptor	*E*		32	Bit 64 Descriptor	*E*	

LOCATION 74 – WIEGAND FORMAT 3 (PARITY TYPE 1)   0=No Parity; 1=Odd Parity; 2=Even Parity

SEG	DESCRIPTION	DEFAULT	DATA
1	Parity Type 1	*1*	

LOCATION 75 – WIEGAND FORMAT 3 (PARITY MASK 1)

SEG	DESCRIPTION	DEFAULT	DATA	SEG	DESCRIPTION	DEFAULT	DATA
1	Parity Mask 1	*12345678*		5	Parity Mask 5	*-----678*	
2	Parity Mask 2	*12345678*		6	Parity Mask 6	*--------*	
3	Parity Mask 3	*12345678*		7	Parity Mask 7	*--------*	
4	Parity Mask 4	*12345678*		8	Parity Mask 8	*--------*	

LOCATION 76 – WIEGAND FORMAT 3 (PARITY TYPE 2)   0=No Parity; 1=Odd Parity; 2=Even Parity

SEG	DESCRIPTION	DEFAULT	DATA
1	Parity Type 2	*1*	

LOCATION 77 – WIEGAND FORMAT 3 (PARITY MASK 2)

SEG	DESCRIPTION	DEFAULT	DATA	SEG	DESCRIPTION	DEFAULT	DATA
1	Parity Mask 1	*1-34-67-*		5	Parity Mask 5	*-----6-8*	
2	Parity Mask 2	*-23-56-8*		6	Parity Mask 6	*--------*	
3	Parity Mask 3	*12-45-78*		7	Parity Mask 7	*--------*	
4	Parity Mask 4	*1-34-67-*		8	Parity Mask 8	*--------*	

LOCATION 78 – WIEGAND FORMAT 3 (PARITY TYPE 3)   0=No Parity; 1=Odd Parity; 2=Even Parity

SEG	DESCRIPTION	DEFAULT	DATA
1	Parity Type 3	*2*	

LOCATION 79 – WIEGAND FORMAT 3 (PARITY MASK 3)

SEG	DESCRIPTION	DEFAULT	DATA	SEG	DESCRIPTION	DEFAULT	DATA
1	Parity Mask 1	*-23-567-*		5	Parity Mask 5	*------78*	
2	Parity Mask 2	*12-45-78*		6	Parity Mask 6	*--------*	
3	Parity Mask 3	*1-34-67-*		7	Parity Mask 7	*--------*	
4	Parity Mask 4	*-23-56-8*		8	Parity Mask 8	*--------*	

LOCATION 80 – WIEGAND FORMAT 3 (PARITY TYPE 4)

SEG	DESCRIPTION	DEFAULT	DATA
1	Parity Type 4	*0*	

LOCATION 81 – WIEGAND FORMAT 3 (PARITY MASK 4)

SEG	DESCRIPTION	DEFAULT	DATA	SEG	DESCRIPTION	DEFAULT	DATA
1	Parity Mask 1	*--------*		5	Parity Mask 5	*--------*	
2	Parity Mask 2	*--------*		6	Parity Mask 6	*--------*	
3	Parity Mask 3	*--------*		7	Parity Mask 7	*--------*	
4	Parity Mask 4	*--------*		8	Parity Mask 8	*--------*	

LOCATION 82 – WIEGAND FORMAT 3 (PARITY TYPE 5)

SEG	DESCRIPTION	DEFAULT	DATA
1	Parity Type 5	*0*	

LOCATION 83 – WIEGAND FORMAT 3 (PARITY MASK 5)

SEG	DESCRIPTION	DEFAULT	DATA	SEG	DESCRIPTION	DEFAULT	DATA
1	Parity Mask 1	*--------*		5	Parity Mask 5	*--------*	
2	Parity Mask 2	*--------*		6	Parity Mask 6	*--------*	
3	Parity Mask 3	*--------*		7	Parity Mask 7	*--------*	
4	Parity Mask 4	*--------*		8	Parity Mask 8	*--------*	

WEIGAND FORMAT 4

LOCATION 84 – WIEGAND FORMAT 4 (DIGITS & BITS) (DECIMAL DATA)

SEG	DESCRIPTION	DEFAULT	DATA
1	Number of Digits in Facility Code	*5*	
2	Number of Digits in Badge Number	*6*	
3	Number of Bits in Facility Code	*16*	
4	Number of Bits in Badge Number	*19*	
5	Total Number of Bits in Complete Weigand Format (including parity bits)	*37*	

LOCATION 85 – WIEGAND FORMAT 4 (BIT DESCRIPTOR 1 - 32) HEX DATA

0 = Always Zero; 1 = Always One; B = Badge Number Bit; D = Parity Bit; E = End of Format; F = Facility Code Bit

SEG	DESCRIPTION	DEFAULT	DATA	SEG	DESCRIPTION	DEFAULT	DATA
1	Bit 1 Descriptor	*D*		17	Bit 17 Descriptor	*F*	
2	Bit 2 Descriptor	*F*		18	Bit 18 Descriptor	*B*	
3	Bit 3 Descriptor	*F*		19	Bit 19 Descriptor	*B*	
4	Bit 4 Descriptor	*F*		20	Bit 20 Descriptor	*B*	
5	Bit 5 Descriptor	*F*		21	Bit 21 Descriptor	*B*	
6	Bit 6 Descriptor	*F*		22	Bit 22 Descriptor	*B*	
7	Bit 7 Descriptor	*F*		23	Bit 23 Descriptor	*B*	
8	Bit 8 Descriptor	*F*		24	Bit 24 Descriptor	*B*	
9	Bit 9 Descriptor	*F*		25	Bit 25 Descriptor	*B*	
10	Bit 10 Descriptor	*F*		26	Bit 26 Descriptor	*B*	
11	Bit 11 Descriptor	*F*		27	Bit 27 Descriptor	*B*	
12	Bit 12 Descriptor	*F*		28	Bit 28 Descriptor	*B*	
13	Bit 13 Descriptor	*F*		29	Bit 29 Descriptor	*B*	
14	Bit 14 Descriptor	*F*		30	Bit 30 Descriptor	*B*	
15	Bit 15 Descriptor	*F*		31	Bit 31 Descriptor	*B*	
16	Bit 16 Descriptor	*F*		32	Bit 32 Descriptor	*B*	

LOCATION 86 – WIEGAND FORMAT 4 (BIT DESCRIPTOR 33 - 64)

0 = Always Zero; 1 = Always One; B = Badge Number Bit; D = Parity Bit; E = End of Format; F = Facility Code Bit

SEG	DESCRIPTION	DEFAULT	DATA	SEG	DESCRIPTION	DEFAULT	DATA
1	Bit 33 Descriptor	*B*		17	Bit 49 Descriptor	*E*	
2	Bit 34 Descriptor	*B*		18	Bit 50 Descriptor	*E*	
3	Bit 35 Descriptor	*B*		19	Bit 51 Descriptor	*E*	
4	Bit 36 Descriptor	*B*		20	Bit 52 Descriptor	*E*	
5	Bit 37 Descriptor	*D*		21	Bit 53 Descriptor	*E*	
6	Bit 38 Descriptor	*E*		22	Bit 54 Descriptor	*E*	
7	Bit 39 Descriptor	*E*		23	Bit 55 Descriptor	*E*	
8	Bit 40 Descriptor	*E*		24	Bit 56 Descriptor	*E*	
9	Bit 41 Descriptor	*E*		25	Bit 57 Descriptor	*E*	
10	Bit 42 Descriptor	*E*		26	Bit 58 Descriptor	*E*	
11	Bit 43 Descriptor	*E*		27	Bit 59 Descriptor	*E*	
12	Bit 44 Descriptor	*E*		28	Bit 60 Descriptor	*E*	
13	Bit 45 Descriptor	*E*		29	Bit 61 Descriptor	*E*	
14	Bit 46 Descriptor	*E*		30	Bit 62 Descriptor	*E*	
15	Bit 47 Descriptor	*E*		31	Bit 63 Descriptor	*E*	
16	Bit 48 Descriptor	*E*		32	Bit 64 Descriptor	*E*	

LOCATION 87 – WIEGAND FORMAT 4 (PARITY TYPE 1)   0=No Parity; 1=Odd Parity; 2=Even Parity

1	Parity Type 1	*1*	

LOCATION 88 – WIEGAND FORMAT 4 (PARITY MASK 1)

SEG	DESCRIPTION	DEFAULT	DATA	SEG	DESCRIPTION	DEFAULT	DATA
1	Parity Mask 1	*--------*		5	Parity Mask 5	*---45678*	
2	Parity Mask 2	*--------*		6	Parity Mask 6	*--------*	
3	Parity Mask 3	*123456--*		7	Parity Mask 7	*--------*	
4	Parity Mask 4	*12345678*		8	Parity Mask 8	*--------*	

LOCATION 89 – WIEGAND FORMAT 4 (PARITY TYPE 2)   0=No Parity; 1=Odd Parity; 2=Even Parity

1	Parity Type 2	*2*	

LOCATION 90 – WIEGAND FORMAT 4 (PARITY MASK 2)

SEG	DESCRIPTION	DEFAULT	DATA	SEG	DESCRIPTION	DEFAULT	DATA
1	Parity Mask 1	*12345678*		5	Parity Mask 5	*--------*	
2	Parity Mask 2	*12345678*		6	Parity Mask 6	*--------*	
3	Parity Mask 3	*-----678*		7	Parity Mask 7	*--------*	
4	Parity Mask 4	*--------*		8	Parity Mask 8	*--------*	

LOCATION 91 – WIEGAND FORMAT 4 (PARITY TYPE 3)   0=No Parity; 1=Odd Parity; 2=Even Parity

1	Parity Type 3	*0*	

LOCATION 92 – WIEGAND FORMAT 4 (PARITY MASK 3)

SEG	DESCRIPTION	DEFAULT	DATA	SEG	DESCRIPTION	DEFAULT	DATA
1	Parity Mask 1	*-------*		5	Parity Mask 5	*-------*	
2	Parity Mask 2	*-------*		6	Parity Mask 6	*-------*	
3	Parity Mask 3	*-------*		7	Parity Mask 7	*-------*	
4	Parity Mask 4	*-------*		8	Parity Mask 8	*-------*	

LOCATION 93 – WIEGAND FORMAT 4 (PARITY TYPE 4)

1	Parity Type 4	*0*	

LOCATION 94 – WIEGAND FORMAT 4 (PARITY MASK 4)

SEG	DESCRIPTION	DEFAULT	DATA	SEG	DESCRIPTION	DEFAULT	DATA
1	Parity Mask 1	*-------*		5	Parity Mask 5	*-------*	
2	Parity Mask 2	*-------*		6	Parity Mask 6	*-------*	
3	Parity Mask 3	*-------*		7	Parity Mask 7	*-------*	
4	Parity Mask 4	*-------*		8	Parity Mask 8	*-------*	

LOCATION 95 – WIEGAND FORMAT 4 (PARITY TYPE 5)				
1	Parity Type 5	*0*		

LOCATION 96 – WIEGAND FORMAT 4 (PARITY MASK 5)				
1	Parity Mask 1	--------	5	Parity Mask 5	--------
2	Parity Mask 2	--------	6	Parity Mask 6	--------
3	Parity Mask 3	--------	7	Parity Mask 7	--------
4	Parity Mask 4	--------	8	Parity Mask 8	--------

WEIGAND FORMAT 5

LOCATION 97 – WIEGAND FORMAT 5 (DIGITS & BITS) (DECIMAL DATA)

	DESCRIPTION	DEFAULT	DATA
1	Number of Digits in Facility Code	*6*	
2	Number of Digits in Badge Number	*6*	
3	Number of Bits in Facility Code	*19*	
4	Number of Bits in Badge Number	*19*	
5	Total Number of Bits in Complete Weigand Format (including parity bits)	*40*	

LOCATION 98 – WIEGAND FORMAT 5 (BIT DESCRIPTOR 1 - 32) HEX DATA

0 = Always Zero; 1 = Always One; B = Badge Number Bit; D = Parity Bit; E = End of Format; F = Facility Code Bit

SEG	DESCRIPTION	DEFAULT	DATA	SEG	DESCRIPTION	DEFAULT	DATA
1	Bit 1 Descriptor	*D*		17	Bit 17 Descriptor	*F*	
2	Bit 2 Descriptor	*F*		18	Bit 18 Descriptor	*F*	
3	Bit 3 Descriptor	*F*		19	Bit 19 Descriptor	*F*	
4	Bit 4 Descriptor	*F*		20	Bit 20 Descriptor	*F*	
5	Bit 5 Descriptor	*F*		21	Bit 21 Descriptor	*B*	
6	Bit 6 Descriptor	*F*		22	Bit 22 Descriptor	*B*	
7	Bit 7 Descriptor	*F*		23	Bit 23 Descriptor	*B*	
8	Bit 8 Descriptor	*F*		24	Bit 24 Descriptor	*B*	
9	Bit 9 Descriptor	*F*		25	Bit 25 Descriptor	*B*	
10	Bit 10 Descriptor	*F*		26	Bit 26 Descriptor	*B*	
11	Bit 11 Descriptor	*F*		27	Bit 27 Descriptor	*B*	
12	Bit 12 Descriptor	*F*		28	Bit 28 Descriptor	*B*	
13	Bit 13 Descriptor	*F*		29	Bit 29 Descriptor	*B*	
14	Bit 14 Descriptor	*F*		30	Bit 30 Descriptor	*B*	
15	Bit 15 Descriptor	*F*		31	Bit 31 Descriptor	*B*	
16	Bit 16 Descriptor	*F*		32	Bit 32 Descriptor	*B*	

LOCATION 99 – WIEGAND FORMAT 5 (BIT DESCRIPTOR 33 - 64)

0 = Always Zero; 1 = Always One; B = Badge Number Bit; D = Parity Bit; E = End of Format; F = Facility Code Bit

	DESCRIPTION	DEFAULT	DATA		DESCRIPTION	DEFAULT	DATA
1	Bit 33 Descriptor	*B*		17	Bit 49 Descriptor	*E*	
2	Bit 34 Descriptor	*B*		18	Bit 50 Descriptor	*E*	
3	Bit 35 Descriptor	*B*		19	Bit 51 Descriptor	*E*	
4	Bit 36 Descriptor	*B*		20	Bit 52 Descriptor	*E*	
5	Bit 37 Descriptor	*B*		21	Bit 53 Descriptor	*E*	
6	Bit 38 Descriptor	*B*		22	Bit 54 Descriptor	*E*	
7	Bit 39 Descriptor	*B*		23	Bit 55 Descriptor	*E*	
8	Bit 40 Descriptor	*D*		24	Bit 56 Descriptor	*E*	
9	Bit 41 Descriptor	*E*		25	Bit 57 Descriptor	*E*	
10	Bit 42 Descriptor	*E*		26	Bit 58 Descriptor	*E*	
11	Bit 43 Descriptor	*E*		27	Bit 59 Descriptor	*E*	
12	Bit 44 Descriptor	*E*		28	Bit 60 Descriptor	*E*	
13	Bit 45 Descriptor	*E*		29	Bit 61 Descriptor	*E*	
14	Bit 46 Descriptor	*E*		30	Bit 62 Descriptor	*E*	
15	Bit 47 Descriptor	*E*		31	Bit 63 Descriptor	*E*	
16	Bit 48 Descriptor	*E*		32	Bit 64 Descriptor	*E*	

LOCATION 100 – WIEGAND FORMAT 5 (PARITY TYPE 1)		0=No Parity; 1=Odd Parity; 2=Even Parity		
1	Parity Type 1	*1*		

LOCATION 101 – WIEGAND FORMAT 5 (PARITY MASK 1)				
1	Parity Mask 1	*12345678*	5	Parity Mask 5	*12345678*
2	Parity Mask 2	*12345678*	6	Parity Mask 6	--------
3	Parity Mask 3	*12345678*	7	Parity Mask 7	--------
4	Parity Mask 4	*12345678*	8	Parity Mask 8	--------

LOCATION 102 – WIEGAND FORMAT 5 (PARITY TYPE 2)		0=No Parity; 1=Odd Parity; 2=Even Parity		
1	Parity Type 2	*2*		

SEG	DESCRIPTION	DEFAULT	DATA	SEG	DESCRIPTION	DEFAULT	DATA
LOCATION 103 – WIEGAND FORMAT 5 (PARITY MASK 2)							
1	Parity Mask 1	*12345678*		5	Parity Mask 5	--------	
2	Parity Mask 2	*12345678*		6	Parity Mask 6	--------	
3	Parity Mask 3	*----5678*		7	Parity Mask 7	--------	
4	Parity Mask 4	--------		8	Parity Mask 8	--------	
LOCATION 104 – WIEGAND FORMAT 5 (PARITY TYPE 3)			**0=No Parity; 1=Odd Parity; 2=Even Parity**				
1	Parity Type 3	*0*					
LOCATION 105 – WIEGAND FORMAT 5 (PARITY MASK 3)							
1	Parity Mask 1	--------		5	Parity Mask 5	--------	
2	Parity Mask 2	--------		6	Parity Mask 6	--------	
3	Parity Mask 3	--------		7	Parity Mask 7	--------	
4	Parity Mask 4	--------		8	Parity Mask 8	--------	
LOCATION 106 – WIEGAND FORMAT 5 (PARITY TYPE 4)							
1	Parity Type 4	*0*					
LOCATION 107 – WIEGAND FORMAT 5 (PARITY MASK 4)							
1	Parity Mask 1	--------		5	Parity Mask 5	--------	
2	Parity Mask 2	--------		6	Parity Mask 6	--------	
3	Parity Mask 3	--------		7	Parity Mask 7	--------	
4	Parity Mask 4	--------		8	Parity Mask 8	--------	
LOCATION 108 – WIEGAND FORMAT 5 (PARITY TYPE 5)							
1	Parity Type 5	*0*					
LOCATION 109 – WIEGAND FORMAT 5 (PARITY MASK 5)							
1	Parity Mask 1	--------		5	Parity Mask 5	--------	
2	Parity Mask 2	--------		6	Parity Mask 6	--------	
3	Parity Mask 3	--------		7	Parity Mask 7	--------	
4	Parity Mask 4	--------		8	Parity Mask 8	--------	

WEIGAND FORMAT 6

LOCATION 110 – WIEGAND FORMAT 6 (DIGITS & BITS) (DECIMAL DATA)

	DESCRIPTION	DEFAULT	DATA
1	Number of Digits in Facility Code	*0*	
2	Number of Digits in Badge Number	*11*	
3	Number of Bits in Facility Code	*0*	
4	Number of Bits in Badge Number	*38*	
5	Total Number of Bits in Complete Weigand Format (including parity bits)	*40*	

LOCATION 111 – WIEGAND FORMAT 6 (BIT DESCRIPTOR 1 - 32) HEX DATA

0 = Always Zero; 1 = Always One; B = Badge Number Bit; D = Parity Bit; E = End of Format; F = Facility Code Bit

SEG	DESCRIPTION	DEFAULT	DATA	SEG	DESCRIPTION	DEFAULT	DATA
1	Bit 1 Descriptor	*D*		17	Bit 17 Descriptor	*B*	
2	Bit 2 Descriptor	*B*		18	Bit 18 Descriptor	*B*	
3	Bit 3 Descriptor	*B*		19	Bit 19 Descriptor	*B*	
4	Bit 4 Descriptor	*B*		20	Bit 20 Descriptor	*B*	
5	Bit 5 Descriptor	*B*		21	Bit 21 Descriptor	*B*	
6	Bit 6 Descriptor	*B*		22	Bit 22 Descriptor	*B*	
7	Bit 7 Descriptor	*B*		23	Bit 23 Descriptor	*B*	
8	Bit 8 Descriptor	*B*		24	Bit 24 Descriptor	*B*	
9	Bit 9 Descriptor	*B*		25	Bit 25 Descriptor	*B*	
10	Bit 10 Descriptor	*B*		26	Bit 26 Descriptor	*B*	
11	Bit 11 Descriptor	*B*		27	Bit 27 Descriptor	*B*	
12	Bit 12 Descriptor	*B*		28	Bit 28 Descriptor	*B*	
13	Bit 13 Descriptor	*B*		29	Bit 29 Descriptor	*B*	
14	Bit 14 Descriptor	*B*		30	Bit 30 Descriptor	*B*	
15	Bit 15 Descriptor	*B*		31	Bit 31 Descriptor	*B*	
16	Bit 16 Descriptor	*B*		32	Bit 32 Descriptor	*B*	

LOCATION 112 – WIEGAND FORMAT 6 (BIT DESCRIPTOR 33 - 64)

0 = Always Zero; 1 = Always One; B = Badge Number Bit; D = Parity Bit; E = End of Format; F = Facility Code Bit

SEG	DESCRIPTION	DEFAULT	DATA	SEG	DESCRIPTION	DEFAULT	DATA
1	Bit 33 Descriptor	B		17	Bit 49 Descriptor	E	
2	Bit 34 Descriptor	B		18	Bit 50 Descriptor	E	
3	Bit 35 Descriptor	B		19	Bit 51 Descriptor	E	
4	Bit 36 Descriptor	B		20	Bit 52 Descriptor	E	
5	Bit 37 Descriptor	B		21	Bit 53 Descriptor	E	
6	Bit 38 Descriptor	B		22	Bit 54 Descriptor	E	
7	Bit 39 Descriptor	B		23	Bit 55 Descriptor	E	
8	Bit 40 Descriptor	D		24	Bit 56 Descriptor	E	
9	Bit 41 Descriptor	E		25	Bit 57 Descriptor	E	
10	Bit 42 Descriptor	E		26	Bit 58 Descriptor	E	
11	Bit 43 Descriptor	E		27	Bit 59 Descriptor	E	
12	Bit 44 Descriptor	E		28	Bit 60 Descriptor	E	
13	Bit 45 Descriptor	E		29	Bit 61 Descriptor	E	
14	Bit 46 Descriptor	E		30	Bit 62 Descriptor	E	
15	Bit 47 Descriptor	E		31	Bit 63 Descriptor	E	
16	Bit 48 Descriptor	E		32	Bit 64 Descriptor	E	

LOCATION 113 – WIEGAND FORMAT 6 (PARITY TYPE 1)   0=No Parity; 1=Odd Parity; 2=Even Parity

1	Parity Type 1	1	

LOCATION 114 – WIEGAND FORMAT 6 (PARITY MASK 1)

SEG	DESCRIPTION	DEFAULT	DATA	SEG	DESCRIPTION	DEFAULT	DATA
1	Parity Mask 1	12345678		5	Parity Mask 5	12345678	
2	Parity Mask 2	12345678		6	Parity Mask 6	--------	
3	Parity Mask 3	12345678		7	Parity Mask 7	--------	
4	Parity Mask 4	12345678		8	Parity Mask 8	--------	

LOCATION 115 – WIEGAND FORMAT 6 (PARITY TYPE 2)   0=No Parity; 1=Odd Parity; 2=Even Parity

1	Parity Type 2	2	

LOCATION 116 – WIEGAND FORMAT 6 (PARITY MASK 2)

SEG	DESCRIPTION	DEFAULT	DATA	SEG	DESCRIPTION	DEFAULT	DATA
1	Parity Mask 1	12345678		5	Parity Mask 5	--------	
2	Parity Mask 2	12345678		6	Parity Mask 6	--------	
3	Parity Mask 3	----5678		7	Parity Mask 7	--------	
4	Parity Mask 4	--------		8	Parity Mask 8	--------	

LOCATION 117 – WIEGAND FORMAT 6 (PARITY TYPE 3)   0=No Parity; 1=Odd Parity; 2=Even Parity

1	Parity Type 3	0	

LOCATION 118 – WIEGAND FORMAT 6 (PARITY MASK 3)

SEG	DESCRIPTION	DEFAULT	DATA	SEG	DESCRIPTION	DEFAULT	DATA
1	Parity Mask 1	--------		5	Parity Mask 5	--------	
2	Parity Mask 2	--------		6	Parity Mask 6	--------	
3	Parity Mask 3	--------		7	Parity Mask 7	--------	
4	Parity Mask 4	--------		8	Parity Mask 8	--------	

LOCATION 119 – WIEGAND FORMAT 6 (PARITY TYPE 4)

1	Parity Type 4	0	

LOCATION 120 – WIEGAND FORMAT 6 (PARITY MASK 4)

SEG	DESCRIPTION	DEFAULT	DATA	SEG	DESCRIPTION	DEFAULT	DATA
1	Parity Mask 1	--------		5	Parity Mask 5	--------	
2	Parity Mask 2	--------		6	Parity Mask 6	--------	
3	Parity Mask 3	--------		7	Parity Mask 7	--------	
4	Parity Mask 4	--------		8	Parity Mask 8	--------	

LOCATION 121 – WIEGAND FORMAT 6 (PARITY TYPE 5)

1	Parity Type 5	0	

LOCATION 122 – WIEGAND FORMAT 6 (PARITY MASK 5)

SEG	DESCRIPTION	DEFAULT	DATA	SEG	DESCRIPTION	DEFAULT	DATA
1	Parity Mask 1	--------		5	Parity Mask 5	--------	
2	Parity Mask 2	--------		6	Parity Mask 6	--------	
3	Parity Mask 3	--------		7	Parity Mask 7	--------	
4	Parity Mask 4	--------		8	Parity Mask 8	--------	

WEIGAND FORMAT 7

LOCATION 123 – WIEGAND FORMAT 7 (DIGITS & BITS) (DECIMAL DATA)

	DESCRIPTION	DEFAULT	DATA
1	Number of Digits in Facility Code	0	
2	Number of Digits in Badge Number	0	
3	Number of Bits in Facility Code	0	
4	Number of Bits in Badge Number	0	
5	Total Number of Bits in Complete Weigand Format (including parity bits)	0	

LOCATION 124 – WIEGAND FORMAT 7 (BIT DESCRIPTOR 1 - 32) HEX DATA

0 = Always Zero; 1 = Always One; B = Badge Number Bit; D = Parity Bit; E = End of Format; F = Facility Code Bit

SEG	DESCRIPTION	DEFAULT	DATA	SEG	DESCRIPTION	DEFAULT	DATA
1	Bit 1 Descriptor	*E*		17	Bit 17 Descriptor	*E*	
2	Bit 2 Descriptor	*E*		18	Bit 18 Descriptor	*E*	
3	Bit 3 Descriptor	*E*		19	Bit 19 Descriptor	*E*	
4	Bit 4 Descriptor	*E*		20	Bit 20 Descriptor	*E*	
5	Bit 5 Descriptor	*E*		21	Bit 21 Descriptor	*E*	
6	Bit 6 Descriptor	*E*		22	Bit 22 Descriptor	*E*	
7	Bit 7 Descriptor	*E*		23	Bit 23 Descriptor	*E*	
8	Bit 8 Descriptor	*E*		24	Bit 24 Descriptor	*E*	
9	Bit 9 Descriptor	*E*		25	Bit 25 Descriptor	*E*	
10	Bit 10 Descriptor	*E*		26	Bit 26 Descriptor	*E*	
11	Bit 11 Descriptor	*E*		27	Bit 27 Descriptor	*E*	
12	Bit 12 Descriptor	*E*		28	Bit 28 Descriptor	*E*	
13	Bit 13 Descriptor	*E*		29	Bit 29 Descriptor	*E*	
14	Bit 14 Descriptor	*E*		30	Bit 30 Descriptor	*E*	
15	Bit 15 Descriptor	*E*		31	Bit 31 Descriptor	*E*	
16	Bit 16 Descriptor	*E*		32	Bit 32 Descriptor	*E*	

LOCATION 125 – WIEGAND FORMAT 7 (BIT DESCRIPTOR 33 - 64)

0 = Always Zero; 1 = Always One; B = Badge Number Bit; D = Parity Bit; E = End of Format; F = Facility Code Bit

SEG	DESCRIPTION	DEFAULT	DATA	SEG	DESCRIPTION	DEFAULT	DATA
1	Bit 33 Descriptor	*E*		17	Bit 49 Descriptor	*E*	
2	Bit 34 Descriptor	*E*		18	Bit 50 Descriptor	*E*	
3	Bit 35 Descriptor	*E*		19	Bit 51 Descriptor	*E*	
4	Bit 36 Descriptor	*E*		20	Bit 52 Descriptor	*E*	
5	Bit 37 Descriptor	*E*		21	Bit 53 Descriptor	*E*	
6	Bit 38 Descriptor	*E*		22	Bit 54 Descriptor	*E*	
7	Bit 39 Descriptor	*E*		23	Bit 55 Descriptor	*E*	
8	Bit 40 Descriptor	*E*		24	Bit 56 Descriptor	*E*	
9	Bit 41 Descriptor	*E*		25	Bit 57 Descriptor	*E*	
10	Bit 42 Descriptor	*E*		26	Bit 58 Descriptor	*E*	
11	Bit 43 Descriptor	*E*		27	Bit 59 Descriptor	*E*	
12	Bit 44 Descriptor	*E*		28	Bit 60 Descriptor	*E*	
13	Bit 45 Descriptor	*E*		29	Bit 61 Descriptor	*E*	
14	Bit 46 Descriptor	*E*		30	Bit 62 Descriptor	*E*	
15	Bit 47 Descriptor	*E*		31	Bit 63 Descriptor	*E*	
16	Bit 48 Descriptor	*E*		32	Bit 64 Descriptor	*E*	

LOCATION 126 – WIEGAND FORMAT 7 (PARITY TYPE 1)   0=No Parity; 1=Odd Parity; 2=Even Parity

1	Parity Type 1	*0*					

LOCATION 127 – WIEGAND FORMAT 7 (PARITY MASK 1)

1	Parity Mask 1	--------		5	Parity Mask 5	--------	
2	Parity Mask 2	--------		6	Parity Mask 6	--------	
3	Parity Mask 3	--------		7	Parity Mask 7	--------	
4	Parity Mask 4	--------		8	Parity Mask 8	--------	

LOCATION 128 – WIEGAND FORMAT 7 (PARITY TYPE 2)   0=No Parity; 1=Odd Parity; 2=Even Parity

1	Parity Type 2	*0*					

LOCATION 129 – WIEGAND FORMAT 7 (PARITY MASK 2)

1	Parity Mask 1	--------		5	Parity Mask 5	--------	
2	Parity Mask 2	--------		6	Parity Mask 6	--------	
3	Parity Mask 3	--------		7	Parity Mask 7	--------	
4	Parity Mask 4	--------		8	Parity Mask 8	--------	

LOCATION 130 – WIEGAND FORMAT 7 (PARITY TYPE 3)   0=No Parity; 1=Odd Parity; 2=Even Parity

1	Parity Type 3	*0*					

LOCATION 131 – WIEGAND FORMAT 7 (PARITY MASK 3)

1	Parity Mask 1	--------		5	Parity Mask 5	--------	
2	Parity Mask 2	--------		6	Parity Mask 6	--------	
3	Parity Mask 3	--------		7	Parity Mask 7	--------	
4	Parity Mask 4	--------		8	Parity Mask 8	--------	

LOCATION 132 – WIEGAND FORMAT 7 (PARITY TYPE 4)

1	Parity Type 4	*0*					

LOCATION 133 – WIEGAND FORMAT 7 (PARITY MASK 4)

1	Parity Mask 1	--------		5	Parity Mask 5	--------	
2	Parity Mask 2	--------		6	Parity Mask 6	--------	
3	Parity Mask 3	--------		7	Parity Mask 7	--------	
4	Parity Mask 4	--------		8	Parity Mask 8	--------	

LOCATION 134 – WIEGAND FORMAT 7 (PARITY TYPE 5)					
1	Parity Type 5	*0*			

LOCATION 135 – WIEGAND FORMAT 7 (PARITY MASK 5)					
1	Parity Mask 1	--------	5	Parity Mask 5	--------
2	Parity Mask 2	--------	6	Parity Mask 6	--------
3	Parity Mask 3	--------	7	Parity Mask 7	--------
4	Parity Mask 4	--------	8	Parity Mask 8	--------

WEIGAND FORMAT 8

LOCATION 136 – WIEGAND FORMAT 8 (DIGITS & BITS) (DECIMAL DATA)			
	DESCRIPTION	**DEFAULT**	**DATA**
1	Number of Digits in Facility Code	*0*	
2	Number of Digits in Badge Number	*0*	
3	Number of Bits in Facility Code	*0*	
4	Number of Bits in Badge Number	*0*	
5	Total Number of Bits in Complete Weigand Format (including parity bits)	*0*	

LOCATION 137 – WIEGAND FORMAT 8 (BIT DESCRIPTOR 1 - 32) HEX DATA

0 = Always Zero; 1 = Always One; B = Badge Number Bit; D = Parity Bit; E = End of Format; F = Facility Code Bit

SEG	DESCRIPTION	DEFAULT	DATA	SEG	DESCRIPTION	DEFAULT	DATA
1	Bit 1 Descriptor	*E*		17	Bit 17 Descriptor	*E*	
2	Bit 2 Descriptor	*E*		18	Bit 18 Descriptor	*E*	
3	Bit 3 Descriptor	*E*		19	Bit 19 Descriptor	*E*	
4	Bit 4 Descriptor	*E*		20	Bit 20 Descriptor	*E*	
5	Bit 5 Descriptor	*E*		21	Bit 21 Descriptor	*E*	
6	Bit 6 Descriptor	*E*		22	Bit 22 Descriptor	*E*	
7	Bit 7 Descriptor	*E*		23	Bit 23 Descriptor	*E*	
8	Bit 8 Descriptor	*E*		24	Bit 24 Descriptor	*E*	
9	Bit 9 Descriptor	*E*		25	Bit 25 Descriptor	*E*	
10	Bit 10 Descriptor	*E*		26	Bit 26 Descriptor	*E*	
11	Bit 11 Descriptor	*E*		27	Bit 27 Descriptor	*E*	
12	Bit 12 Descriptor	*E*		28	Bit 28 Descriptor	*E*	
13	Bit 13 Descriptor	*E*		29	Bit 29 Descriptor	*E*	
14	Bit 14 Descriptor	*E*		30	Bit 30 Descriptor	*E*	
15	Bit 15 Descriptor	*E*		31	Bit 31 Descriptor	*E*	
16	Bit 16 Descriptor	*E*		32	Bit 32 Descriptor	*E*	

LOCATION 138 – WIEGAND FORMAT 8 (BIT DESCRIPTOR 33 - 64)

0 = Always Zero; 1 = Always One; B = Badge Number Bit; D = Parity Bit; E = End of Format; F = Facility Code Bit

	DESCRIPTION	DEFAULT	DATA		DESCRIPTION	DEFAULT	DATA
1	Bit 33 Descriptor	*E*		17	Bit 49 Descriptor	*E*	
2	Bit 34 Descriptor	*E*		18	Bit 50 Descriptor	*E*	
3	Bit 35 Descriptor	*E*		19	Bit 51 Descriptor	*E*	
4	Bit 36 Descriptor	*E*		20	Bit 52 Descriptor	*E*	
5	Bit 37 Descriptor	*E*		21	Bit 53 Descriptor	*E*	
6	Bit 38 Descriptor	*E*		22	Bit 54 Descriptor	*E*	
7	Bit 39 Descriptor	*E*		23	Bit 55 Descriptor	*E*	
8	Bit 40 Descriptor	*E*		24	Bit 56 Descriptor	*E*	
9	Bit 41 Descriptor	*E*		25	Bit 57 Descriptor	*E*	
10	Bit 42 Descriptor	*E*		26	Bit 58 Descriptor	*E*	
11	Bit 43 Descriptor	*E*		27	Bit 59 Descriptor	*E*	
12	Bit 44 Descriptor	*E*		28	Bit 60 Descriptor	*E*	
13	Bit 45 Descriptor	*E*		29	Bit 61 Descriptor	*E*	
14	Bit 46 Descriptor	*E*		30	Bit 62 Descriptor	*E*	
15	Bit 47 Descriptor	*E*		31	Bit 63 Descriptor	*E*	
16	Bit 48 Descriptor	*E*		32	Bit 64 Descriptor	*E*	

LOCATION 139 – WIEGAND FORMAT 8 (PARITY TYPE 1)		0=No Parity; 1=Odd Parity; 2=Even Parity			
1	Parity Type 1	*0*			

LOCATION 140 – WIEGAND FORMAT 8 (PARITY MASK 1)					
1	Parity Mask 1	--------	5	Parity Mask 5	--------
2	Parity Mask 2	--------	6	Parity Mask 6	--------
3	Parity Mask 3	--------	7	Parity Mask 7	--------
4	Parity Mask 4	--------	8	Parity Mask 8	--------

LOCATION 141 – WIEGAND FORMAT 8 (PARITY TYPE 2)		0=No Parity; 1=Odd Parity; 2=Even Parity	
1	Parity Type 2	*0*	

SEG	DESCRIPTION	DEFAULT	DATA	SEG	DESCRIPTION	DEFAULT	DATA
LOCATION 142 – WIEGAND FORMAT 8 (PARITY MASK 2)							
1	Parity Mask 1	--------		5	Parity Mask 5	--------	
2	Parity Mask 2	--------		6	Parity Mask 6	--------	
3	Parity Mask 3	--------		7	Parity Mask 7	--------	
4	Parity Mask 4	--------		8	Parity Mask 8	--------	
LOCATION 143 – WIEGAND FORMAT 8 (PARITY TYPE 3)		**0=No Parity; 1=Odd Parity; 2=Even Parity**					
1	Parity Type 3	*0*					
LOCATION 144 – WIEGAND FORMAT 8 (PARITY MASK 3)							
1	Parity Mask 1	--------		5	Parity Mask 5	--------	
2	Parity Mask 2	--------		6	Parity Mask 6	--------	
3	Parity Mask 3	--------		7	Parity Mask 7	--------	
4	Parity Mask 4	--------		8	Parity Mask 8	--------	
LOCATION 145 – WIEGAND FORMAT 8 (PARITY TYPE 4)							
1	Parity Type 4	*0*					
LOCATION 146 – WIEGAND FORMAT 8 (PARITY MASK 4)							
1	Parity Mask 1	--------		5	Parity Mask 5	--------	
2	Parity Mask 2	--------		6	Parity Mask 6	--------	
3	Parity Mask 3	--------		7	Parity Mask 7	--------	
4	Parity Mask 4	--------		8	Parity Mask 8	--------	
LOCATION 147 – WIEGAND FORMAT 8 (PARITY TYPE 5)							
1	Parity Type 5	*0*					
LOCATION 148 – WIEGAND FORMAT 8 (PARITY MASK 5)							
1	Parity Mask 1	--------		5	Parity Mask 5	--------	
2	Parity Mask 2	--------		6	Parity Mask 6	--------	
3	Parity Mask 3	--------		7	Parity Mask 7	--------	
4	Parity Mask 4	--------		8	Parity Mask 8	--------	

X. ORDERING INFORMATION

PART #	DESCRIPTION
NX-1710E	Single Door Control Module
NX-1700E	Proximity Card Reader
NX-848E-KIT	NX-8E Control, NX-148E LED Keypad, 40VA Transformer
NX-848-KIT	NX-8 Control, NX-148E LED Keypad, 40VA Transformer
NX-648-KIT	NX-6 Control, NX-148E LED Keypad, 40VA Transformer

XI. GLOSSARY

TERM	DESCRIPTION
Request To Exit (RTE)……	A zone can be programmed to monitor an open door. The RTE activates the onboard relay and sends a message on the buss. (Refer to Loc 0, Pg 11)
Scan……………………….	To "present" or pass a card or FOB within sensing range of the card reader module.
Single Beep………………..	An audible indicator (beep).
Single Scan…………	When a user card is scanned and held at the reader for 1 beep, the reader will perform the functions as programmed in Loc 0, Pg 11
Triple Beep………………...	An audible indicator (beep, beep, beep).
Triple Scan………….	When a user card is scanned three times at the reader, the reader will perform the functions as programmed in Location 0 & 1, Pgs 11 & 12

XII. FCC INFORMATION

The NX-1710E module has <u>not</u> received any FCC approvals yet.

XIII. UNDERWRITERS LABORATORIES INFORMATION

The NX-1710E module has <u>not</u> received any UL listings yet.

XIV. SPECIFICATIONS

DIMENSIONS	Approx. 3.25"W x 6.00"L x 1"D
OPERATING POWER	12 VDC, Supplied by NX-4, NX-4V2, NX-6, NX-6V2, NX-8, NX-8V2, NX-8E, or NX-320E
CURRENT DRAW	40mA Standby with Green LED 110mA Maximum
OPERATING TEMPERATURE	32 to 120 degrees F
SHIPPING WEIGHT	< 1 lb.